

**Technology Standards
v1.0**



Sacred Heart Parish School

Hollister, CA

Technology Scope and Sequence

August 15, 2007

Technology Standards v1.0

PHILOSOPHY

At Sacred Heart Parish School, technology is a tool to leverage learning and to support students' ability to communicate their thinking. In our computer lab technology skills are integrated into the curriculum to meet Academic Standards. It is the philosophy that technology is a tool for thinking that Sacred Heart does not teach computers as a subject discipline.

Learning experiences are designed to use technology to amplify selected teaching and learning practices such as higher - order thinking, creativity, and knowledge construction.

The strength of technology is that it provides an excellent platform where students can collect information in multiple formats and then organize, link, and discover relationships between facts and events. An array of tools for acquiring information and for thinking and expression allows more students more ways to enter the learning enterprise successfully and to live productive lives in the global, digital, and information-based future they all face.

Computer/Technology Skills become building blocks with which to meet the challenges of personal and professional life. To become technologically proficient, the student must develop the skills over time, through integrated activities in all content areas K-8, rather than through one specific course. These skills are necessary for all students and should be introduced and refined collaboratively by all K-8 teachers as an integral part of the learning process.

Technology Standards v1.0

ORGANIZATION OF CURRICULUM

Competency Goals 1 and 2 generally apply in grades K-8.
Competency Goal 3 is at the application of skills level and does not apply in grades K-2.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

This goal addresses the role of technology in society now and in the future. Students must understand the impact of computer technology on information management, job skills needed in the work place, communications, transportation, education, healthcare, and personal information needs. Students must understand issues of personal safety, responsible, and ethical use of technology resources and information. Students must be able to adapt and transfer knowledge and skills. Students must be able to evaluate resources and information for content and usefulness. Students must be able to select and use most appropriate technology tools and resources to meet their needs.

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

This goal is concerned with fundamental computer operations and application software use that make students independent, productive, users of computer technology. Students must master certain computer operations, application software skills, know computer terms and functions, demonstrate basic keyboarding skills, and be able to use software correctly. The application software skills identified include word processing, database management, spreadsheet, multimedia production, and the Internet. Knowledge and skills that can be adapted and transferred as technology changes and evolves overtime.

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

This goal focuses on the application of computer/technology skills. Students will access information using search strategies and analyze information using database, spreadsheet, and graphing software. They will then communicate and share findings in a variety of ways

Technology Standards v1.0

(e.g., desktop publishing, multimedia, video-conferencing, telecommunications) with audiences near and far.

The objectives under each of the three goals describes the progressive development of knowledge and skills in six strands:

- 1) Societal/Ethical Issues
- 2) Database
- 3) Spreadsheet
- 4) Keyboard Utilization/Word Processing/Desktop Publishing
- 5) Multimedia/Presentation
- 6)Internet

The number at the end each individual objective denotes the Strand. Each Strand follows the same pattern from grade to grade (see chart). In the primary grades, the objectives focus on the essential skills; in the upper elementary and middle grades, the objectives build upon those skills.

The objectives at these grade levels are organized by subject area, allowing students to employ, expand, and internalize the proficiencies that they have already developed.

Technology Standards v1.0

FOCUS AREAS BY GRADE

Kindergarten

- Parts of the computer and how to operate
- Keyboard familiarity
- Grouping and sequencing
- Respect for the work of others
- Responsible care of resources
- Exploring multimedia
- Observing online resources
- Using drawing tools

Grade 1

- Respecting computer work of others
- Using technology at home and school
- Gathering, organizing, and displaying data
- Using word processing
- Exploring multimedia
- Responsible care of resources
- Observing online resources
- Using drawing tools

Grade 2

- Using technology in the community
- Respecting the computer work of others
- Observing online resources

Technology Standards v1.0

Grade 2

- Using electronic database to locate information
- Responsible care of resources
- Building word processing skills
- Collecting, sorting, and displaying data
- Exploring multimedia tools
- Using drawing tools
-

Grade 3

- Awareness of Copyright Law
- Responsible and safe use of resources
- Exploring information technologies
- Building word processing techniques
- Using multimedia tools
- Exploring spreadsheets
- Developing word processing document using proper keyboarding techniques
-

Grade 4

- Using databases
- Using spreadsheets
- Responsible and safe use of online resources
- Locating information on the Internet
- Evaluating information found through telecommunications
- Developing word processing documents

Technology Standards v1.0

Grade 4

- Identifying ways technology has changed California
- Developing word processing document using proper keyboarding techniques
-

Grade 5

- Using search strategies
- Responsible and safe use of online resources
- Awareness of Copyright and Fair Use Guidelines
- Exploring the need for protection against viruses and vandalism
- Participating in curriculum-based telecommunication projects
- Developing word processing document using proper keyboarding techniques
- Developing multimedia presentation citing sources
- Developing a product using a database
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools
-

Grade 6

- Responsible and safe use of online resources
- Using Copyright and Fair Use guidelines
- Refining application skills
- Using formulas in a spreadsheet
- Using search strategy two or more criteria in a database
- Developing multimedia presentation citing sources

Technology Standards v1.0

Grade 6

- Increasing productivity and accuracy in keyboarding
- Using word processing, spreadsheet, database, and multimedia for assignments in all subject areas
- Locating and retrieving information using telecommunications
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Grade 7

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Refining application skills
- Using formulas in a spreadsheet
- Using search strategy with two or more criteria in a database
- Increasing productivity and accuracy in keyboarding
- Using word processing, spreadsheet, database, and multimedia for assignments in all subject areas
- Locating and retrieving information using telecommunications
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools
-

Grade 8

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Using spreadsheets and databases relevant to classroom assignments

Technology Standards v1.0

Grade 8

- Choosing charts/tables or graphs to best represent data
- Conducting online research and evaluating the information found
- Using word processing/desktop publishing for classroom assignments/projects
- Selecting and using a variety of technological tools to develop projects in content areas

Technology Standards v1.0

COMPUTER/TECHNOLOGY SKILLS :: KINDERGARTEN KINDERGARTEN

Focus Areas

- Parts of the computer and how to operate
- Keyboard familiarity
- Grouping and sequencing
- Respect for the work of others
- Responsible care of resources
- Exploring multimedia
- Observing online resources
- Using drawing tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify the computer as a machine that helps people work and play. (1)

1.02 Identify, discuss, and use common hardware terms/concepts (e.g., CPU, monitor, keyboard, mouse). (1)

1.03 Identify and discuss correct and responsible use and care of computers and resources (1)

1.04 Demonstrate respect for the work of others. (1)

Technology Standards v1.0

1.05 Identify and discuss common features and functions of computer software (e.g., file, open, save, retrieve, draw). (1)

1.06 Identify graphing as a tool for organizing information as a class. (3)

1.07 Identify and discuss terms/concepts such as collect, organize, and classify. (3)

1.08 Identify basic word processing terms (e.g., file, menu bar, cursor, open, save, print). (4)

1.09 Identify and discuss characteristics of multimedia (e.g., text, sound, images, color) as a class. (5)

1.10 Identify and discuss multimedia terms/concepts beginning, middle, and end by arranging pictures in linear/sequential order as class/group. (5)

1.11 Recognize and discuss responsible use of multimedia resources and why it is important as a class. (5)

1.12 Discuss ownership of created works as a class/group. (5)

1.13 Identify and discuss the Internet as a source of information at school and home. (6)

1.14 Identify and discuss terms/concepts (online, digital information, Internet, links). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Use manipulatives and graphing software to organize and display data as a class. (3)

2.02 Identify, discuss, and use word processing as a tool to

Technology Standards v1.0

enter letters, numbers and words. (4)

2.03 Identify, locate and use special keys (e.g., arrow keys, space bar, Shift, Enter/Return, Backspace, Delete), letters, and numbers on the keyboard. (4)

2.04 Use multimedia software to identify and practice letters, numbers, shapes, and colors as a class/group. (5)

2.05 Use teacher-selected Internet resources/information to explore, identify, and discuss responsible use as a class activity. (6)

2.06 Use teacher-selected Internet resources/information to discuss ownership of creative works of individuals/groups/companies as a class activity. (6)

Technology Standards v1.0

COMPUTER/TECHNOLOGY SKILLS :: GRADE 1

GRADE 1

Focus Areas

- Respecting computer work of others
- Using technology at home and school
- Gathering, organizing, and displaying data
- Using word processing
- Exploring multimedia
- Responsible care of resources
- Observing online resources
- Using drawing tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss, and represent visually uses of technology (e.g., computers, cell phones, digital cameras) at school and home. (1)

1.02 Identify and discuss physical components of a computing device (e.g., CPU, monitor, keyboard, disk drive, printer, mouse). (1)

1.03 Recognize and discuss safe and responsible use and care of technology resources. (1)

Technology Standards v1.0

- 1.04 Discuss ownership of computer-created work. (1)
- 1.05 Identify graphing as a tool for organizing information. (3)
- 1.06 Identify and discuss graphing software terms/concepts (e.g., graph, patterns, display). (3)
- 1.07 Recognize the rights of ownership of computer-created work of others. (4)
- 1.08 Recognize the characteristics of multimedia (e.g., text, audio, images, video). (5)
- 1.09 Identify and discuss multimedia terms/concepts (e.g., slide/card, link/button, text box, navigate, transition) as a class/group activity. (5)
- 1.10 Recognize and discuss responsible use of multimedia resources. (5)
- 1.11 Recognize, discuss, and cite various types of resources as a class. (5)
- 1.12 Identify and discuss terms/concepts (e.g., bookmarks/favorites, information). (6)
- 1.13 Identify and discuss ownership of creative work online of individuals/groups/companies and the importance of citing sources as a class. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

- 2.01 Use common computing devices and resources in class activities. (1)
- 2.02 Observe, discuss, and use software to enter, calculate, display data, and interpret results as a class/group. (3)

Technology Standards v1.0

2.03 Identify, discuss, and use word processing as a tool to enter numbers, words, and phrases. (4)

2.04 Identify and use basic word processing terms (e.g., file, open, close, menu bar, save, print). (4)

2.05 Locate and use letters, numbers, and special keys (e.g., arrow keys, space bar, insert Enter/Return, Backspace, Delete) on the keyboard. (4)

2.06 Identify, discuss, and use menu/tool bar functions in word processing applications. (4)

2.07 Use multimedia software to illustrate words/phrases/concepts. (5)

2.08 Explore Internet resources and information using teacher-created bookmarks/favorites and discuss the variety and types of information found as a class activity. (6)

2.09 Use teacher-selected Internet resources/information to identify, discuss, and chart elements that make an online resource useful, appropriate, and safe as a class. (6)

Technology Standards v1.0

GRADE 2 Focus Areas

- Using technology in the community
- Respecting the computer work of others
- Observing online resource
- Using electronic database to locate information
- Responsible care of resources
- Building word processing skills
- Collecting, sorting, and displaying data
- Exploring multimedia tools
- Using drawing tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss and visually represent uses of digital technology in the community (e.g., bar code scanners, handhelds, mobile phones, optical storage devices, GPS's). (1)

1.02 Demonstrate correct use of common technology terms (e.g., hardware, software, CD, hard drive). (1)

1.03 Identify and discuss appropriate and safe behaviors online. (1)

Technology Standards v1.0

1.04 Recognize individual's rights of ownership of created works. (1)

1.05 Identify and discuss print and electronic databases (e.g., phone book, automated circulation system, CD-ROM encyclopedias) as a way to collect, organize, and display data. (2)

1.06 Identify and discuss terms/concepts sort, search/filter, keyword using electronic databases (e.g., automated circulation system, electronic encyclopedias). (2)

1.07 Identify spreadsheets as a tool to organize, calculate, and graph data to make predictions. (3)

1.08 Identify and discuss spreadsheet terms/concepts (e.g., sort, classify, line graphs). (3)

1.09 Recognize an individual's rights of ownership to computer-generated work. (4)

1.10 Identify and use multimedia terms/concepts (e.g., storyboard, linear/sequential, audio/video clips, images). (5)

1.11 Identify and discuss issues (e.g., personal information, images, appropriateness and accuracy of information) to consider in selection and use of materials for multimedia projects. (5)

1.12 Identify terms/concepts (e.g., online, browser, navigation, resources, web address, webpage, weblinks). (6)

1.13 Identify responsible and safe online behavior and discuss why it is important. (6)

1.14 Identify online resources as the work of individuals/groups/companies and discuss why citing resources is necessary. (6)

Technology Standards v1.0

1.15 Identify and discuss Internet as a tool for communication and collaboration as a class. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Recognize, discuss and use the features/functions of computing devices (e.g., creating, retrieving, saving, printing data). (1)

2.02 Recognize, discuss, and use word processing as a tool to enter/edit, print, and save assignments. (4)

2.03 Use and discuss basic word processing terms/concepts (e.g., desktop, menu/tool bar, document, text). (4)

2.04 Identify and use correct finger placement for home row keys. (4)

2.05 Identify and use menu/tool bar features/functions in word processing documents. (4)

2.06 Identify and use multimedia tools to combine text and graphics as a class/group assignment. (5)

2.07 Identify, discuss, and cite resources for a class/group multimedia project. (5)

2.08 Modify/edit an existing linear/sequential multimedia story to include student narration as a class/group activity. (5)

2.09 Use teacher-selected Internet resources to locate, discuss, and compare information about your local community as a class/group. (6)

Technology Standards v1.0

NETS-S

National Educational Technology Standards for Students Profile for Technology Literate Students

PERFORMANCE INDICATORS FOR TECHNOLOGY - LITERATE STUDENTS GRADES Pre-K-2

**All students should have opportunities to demonstrate the
following performances.**

Prior to completion of Grade 2, students will:

1. Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successfully operate computers, VCRs, audiotapes, and other technologies. (1)
2. Use a variety of media and technology resources for directed and independent learning activities. (1, 3)
3. Communicate about technology using developmentally appropriate and accurate terminology. (1)
4. Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias) to support learning. (1)
5. Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (2)
6. Demonstrate positive social and ethical behaviors when using technology. (2)
7. Practice responsible use of technology systems and software. (2)
8. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (3)
9. Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (3, 4, 5, 6)

Technology Standards v1.0

10. Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners. (4)

Numbers in parentheses indicate NETS-S categories.

Reprinted with permission from National Education Technology Standards for Students - Connecting Curriculum and Technology, copyright (c) 2000, ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved. Permission does not constitute an endorsement by ISTE.

**Technology Standards
v1.0**

COMPUTER/TECHNOLOGY SKILLS :: GRADE 3

GRADE 3

Focus Areas

- Awareness of Copyright Law
- Responsible and safe use of resources
- Exploring information technologies
- Building word processing techniques
- Using multimedia tools
- Exploring spreadsheets
- Developing word processing document using proper keyboarding techniques

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss, and chart uses of technology in the community (e.g., farmers, grocery, restaurant, veterinarian, medical and emergency services). (1)

1.02 Identify the function of common computing devices (e.g., input, output, processing). (1)

1.03 Recognize, discuss, and use responsible and safe behavior in the use of technology resources. (1)

1.04 Demonstrate knowledge of individual's rights of ownership of created works by citing sources. (1)

Technology Standards v1.0

- 1.05 Identify, discuss, and visually represent uses of databases in the community (e.g., school, grocery, pharmacy, business) to collect, organize, and display information. (2)
- 1.06 Identify, discuss, and use database terms (e.g., data entry, field, record, list, sort, search/filter, keyword). (2)
- 1.07 Recognize spreadsheets as a tool to organize, calculate, and graph information to make predictions. (3)
- 1.08 Identify and discuss spreadsheet terms/concepts (e.g., cell, column, row, values, labels, chart, graph). (3)
- 1.09 Identify and use formatting terms/concepts (e.g., font size/style, line spacing, margins, italic). (4)
- 1.10 Recognize that Copyright Laws protect creative works of individuals/groups/companies. (4)
- 1.11 Identify and discuss guidelines for media (e.g., personal information, images, content, language) to consider in developing multimedia projects as a class. (5)
- 1.12 Identify and discuss Copyright and Fair Use Guidelines as a class. (5)
- 1.13 Identify and discuss use of rubrics to define and evaluate elements (e.g., content, purpose, usefulness) of class multimedia projects. (5)
- 1.14 Identify, discuss, and use terms/concepts (e.g., web browser, URL, keyword, search engine, weblinks). (6)
- 1.15 Recognize, discuss, and demonstrate responsible and safe online behavior as a class/group. (6)
- 1.16 Cite sources of information (print and nonprint) for a class project. (6)

Technology Standards v1.0

1.17 Identify and discuss collaborative tools (e.g., email, messaging, videoconferencing). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Select and use appropriate features and functions of hardware and software for class assignments. (1)

2.02 Discuss and select appropriate technology tools (e.g., digital cameras, handhelds) to collect, analyze, and display data. (1)

2.03 Use prepared databases to search/filter and sort alphabetically/numerically in ascending/descending order. (2)

2.04 Modify prepared databases to enter/edit additional information and cite the source. (2)

2.05 Plan, discuss, and use keyword search/filter using one criterion in prepared databases. (2)

2.06 Enter/edit data in a prepared spreadsheet to perform calculations. Identify and discuss the changes that occur as a class/group. (3)

2.07 Demonstrate correct finger placement for home row keys. (4)

2.08 Use menu/tool bar functions (e.g., font size/style, line spacing) to format and change the appearance of word processing documents as a class/group. (4)

2.09 Identify, discuss, and use multimedia tools (e.g., capture, create, edit and publish). (5)

2.10 Modify/edit an existing multimedia project to include branching and identify added sources as a class. (5)

Technology Standards v1.0

2.11 Investigate teacher-selected Internet resources about communities; discuss and compare findings for usefulness as a class. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Recognize, discuss, and use graphs to display and interpret data in prepared spreadsheets; identify and cite sources. (3)

3.02 Enter/edit data in a prepared spreadsheet to perform calculations and determine which graph best represents the data as a class/group. (3)

3.03 Use word processing as a tool to write, edit, and publish sentences, paragraphs, and stories. (4)

3.04 Identify, discuss, and use multimedia to present ideas/concepts/information in a variety of ways as a class. (5)

Technology Standards v1.0

COMPUTER/TECHNOLOGY SKILLS :: GRADE 4

GRADE 4

Focus Areas

- Using databases
- Using spreadsheets
- Responsible and safe use of online resources
- Locating information on the Internet
- Evaluating information found through telecommunications
- Developing word processing documents
- Identifying ways technology has changed California
- Increasing productivity and accuracy in keyboarding
-

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss, and visually represent ways technology has changed the lives of people in California. (1)

1.02 Recognize, discuss, and use network terms/concepts (e.g., stand alone, network, file server, LANs, network resources). (1)

1.03 Recognize, discuss, and use responsible, ethical, and safe behaviors when using technology resources (AUP/IUP). (1)

Technology Standards v1.0

1.04 Recognize that Copyright Laws protect creative work of individuals/groups/companies by citing sources. (1)

1.05 Identify and discuss the benefits of non-networked and networked computers. (1)

1.06 Explore and discuss occupations/careers that use computers/technology tools in California. (1)

1.07 Identify, discuss, and visually represent how and why databases are used in California (e.g., schools, government, business, and science) to collect and organize information. (2)

1.08 Identify and discuss how spreadsheets are used to calculate and graph data in a variety of settings (e.g., schools, government, business, industry). (3)

1.09 Recognize and discuss the importance of citing sources of copyrighted materials in documents. (4)

1.10 Use published documents (e.g., letter, memo, newspaper) to identify and discuss document design and layout as a class. (4)

1.11 Identify and discuss the use of multimedia tools to report content area information. (5)

1.12 Recognize, discuss, and use multimedia terms/concepts (e.g., navigation buttons, transitions, links/hyperlinks, animation). (5)

1.13 Recognize, discuss, and use Copyright and Fair Use Guidelines in multimedia projects by explaining selection and use of resources as a class. (5)

1.14 Recognize and discuss telecommunications terms/concepts (e.g., browser, keyword, URL, hypertext, www). (6)

Technology Standards v1.0

1.15 Recognize, discuss, and model responsible and safe behavior using online resources as a class/group/individual. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Sort and search/filter a prepared content area database for information and use correct terms/concepts to explain strategies used as a class activity. (2)

2.02 Plan and use two criteria to search/filter prepared databases to locate and organize information for content assignments. (2)

2.03 Identify, discuss, and use the spreadsheet terms/concepts (e.g., cell, column, row, values, labels, graph, formula). (3)

2.04 Enter/edit data in prepared spreadsheets to perform calculations using simple formulas (+, -, *, /) and observe the changes that occur. (3)

2.05 Use spreadsheets and graphs to organize, calculate, and display data in content areas. (3)

2.06 Identify, discuss, and use terms/concepts of menu/tool bar (e.g., print preview, WYSIWIG, page setup, Spell Check, thesaurus) in word processing documents as a class. (4)

2.07 Recognize, discuss, and use proper keyboarding techniques. (4)

2.08 Use menu/tool bar features (e.g., print preview, Spell Check, thesaurus) to edit and make corrections to documents as a class/group activity. (4)

Technology Standards v1.0

2.09 Recognize and discuss guidelines for media (e.g., personal information, images, content, language) to consider in developing multimedia projects as a class/group. (5)

2.10 Storyboard and modify multimedia projects with menus, branching and/or multiple outcomes for content areas, citing sources as a group activity. (5)

2.11 Recognize, discuss, and use rubrics to evaluate elements (e.g., content, organization, appropriateness of materials, citations) of multimedia projects/products. (5)

2.12 Plan, discuss, and use search strategies with two or more criteria to find information online about California as a class/group. (6)

2.13 Identify, discuss, and use online collaborative tools (e.g., email, surveys, videoconferencing) to collect data for content area assignments/projects. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use technology tools (e.g., digital camera, scanners) to collect, analyze, and display information for content assignments. (1)

3.02. Use databases to analyze and evaluate information in content areas and cite sources. (2)

3.03 Discuss, plan, and develop simple databases in content area to enter/edit, collect, organize, and display content data as a class. (2)

3.04 Enter data into prepared spreadsheets and select graph to best represent data and cite sources of data. (3)

3.05 Use spreadsheet data and graphs to make predictions,

Technology Standards v1.0

solve problems, and make decisions in content areas as a class/group. (3)

3.06 Use word processing as a tool for writing, editing, and publishing paragraphs, stories, and assignments. (4)

3.07 Locate, select, organize, and present content area information from the Internet for a specific purpose and audience, citing sources. (6)

3.08 Use a rubric as a guide to select and evaluate digital resources and information for content and usefulness in content area assignments as a class. (6)

**Technology Standards
v1.0**

COMPUTER/TECHNOLOGY SKILLS :: GRADE 5

GRADE 5

Focus Areas

- Using search strategies
- Responsible and safe use of online resources
- Awareness of Copyright and Fair Use Guidelines
- Exploring the need for protection against viruses and vandalism
- Participating in curriculum-based telecommunication projects
- Developing word processing document using proper keyboarding techniques
- Developing multimedia presentation citing sources
- Developing a product using a database
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Recognize, discuss, and visually represent changes in information technologies and the impact changes have in schools, workplace, and society in the United States. (1)

1.02 Recognize, discuss, and use terms/concepts related to

Technology Standards v1.0

the protection of computers, networks and information (e.g., virus protection, network security, passwords, firewalls, privacy laws). (1)

1.03 Recognize, discuss and use appropriate behavior related to computers, networks, digital information (e.g., security, privacy, passwords, personal information), and identify possible consequences of unethical behavior. (1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and discuss consequences of misuse. (1)

1.05 Recognize and discuss methods used to protect computers, networks, and information from viruses, vandalism and intrusion. (1)

1.06 Identify and discuss appropriate technology tools (virus software) to protect computers, networks, and information from vandalism and intrusion. (1)

1.07 Explore and discuss occupations/careers that use computers/technology as a class/group. (1)

1.08 Recognize and discuss how and why databases are used in society. (2)

1.09 Recognize, discuss, and explore how spreadsheets are used to calculate, graph, and represent data in a variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.10 Recognize and explain the advantages and disadvantages of using word processing to create content area projects/products. (4)

1.11 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

Technology Standards v1.0

1.12 Recognize and explain the advantages and disadvantages of using multimedia to develop content area projects/products. (5)

1.13 Identify and discuss multimedia terms/concepts (e.g., menu, branching, navigation, multimedia, design). (5)

1.14 Demonstrate knowledge of Copyright and Fair Use Guidelines by explaining selection and use of resources in content projects/assignments. (5)

1.15 Recognize, discuss, and use online terms/concepts (e.g., search strategies, citing resources, filters, AUP/IUP). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Use knowledge of database terms/concepts and functions to find information in prepared content area databases and describe strategies used. (2)

2.02 Cite sources of information from content area databases used in assignments. (2)

2.03 Create/modify simple content area databases to enter/edit, collect, organize, and display content data for class/group assignment/project, citing resources. (2)

2.04 Use spreadsheet terms/concepts and functions (e.g., median, range, mode) to calculate, represent, and explain content area assignments. (3)

2.05 Modify/create and use spreadsheets to solve problems by performing calculations using simple formulas and functions (e.g., +, -, *, /, average). (3)

2.06 Create/modify simple content area spreadsheets to

Technology Standards v1.0

enter/edit, calculate, organize, and display content data for class/group assignment/project, citing resources. (3)

2.07 Identify, discuss and use WP menu/tool bar terms/concepts (e.g., import, portrait, landscape, copy and paste between two documents) to describe assignments/projects. (4)

2.08 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.09 Demonstrate knowledge of WP tools to develop documents, which include data imported from a spreadsheet/database as a class/group. (4)

2.10 Select and use WP menu/tool bar features to edit/revise and change existing documents/projects/assignments. (4)

2.11 Use menus and branching to modify/create non-linear projects/products in content areas. (5)

2.12 Use student-generated rubrics to evaluate multimedia presentations for elements (e.g., organization, content, design, presentation, citation). (5)

2.13 Plan, discuss, and use search strategies with two or more criteria to find information for assignments/projects/products about the Western Hemisphere. (6)

2.14 Model and explain the importance of ethical, responsible, and safe behavior when using networked digital information (e.g., Internet, mobile phone, wireless, LANs). (6)

2.15 Select, discuss and evaluate digital resources and information for content, accuracy, usefulness and cite sources. (6)

2.16 Recognize, discuss, and/or use email/videoconferencing/webconferencing as a means of

Technology Standards v1.0

interactive communications. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use search strategies with two or more criteria in prepared databases to locate, organize, and present information for content area assignments. (2)

3.02 Use content area databases to analyze, evaluate, organize, and compare information for assignments. (2)

3.03 Modify/edit databases to organize, analyze, interpret data, and create reports (e.g., documents, multimedia project, webpages). (2)

3.04 Cite sources of copyrighted data used in spreadsheets to analyze, interpret, and display findings in content areas. (3)

3.05 Enter/edit data into a spreadsheet to test simple "what if..." statements to solve problems and make decisions in content area. (3)

3.06 Recognize, discuss, and establish ethical guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

3.07 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

**Technology Standards
v1.0**

COMPUTER/TECHNOLOGY SKILLS :: NETS-S

NETS-S

**National Educational Technology Standards for Students Profile
for Technology Literate Students**

**PERFORMANCE INDICATORS FOR TECHNOLOGY - LITERATE
STUDENTS GRADES 3-5**

**All students should have opportunities to demonstrate the
following performances.**

Prior to completion of Grade 5, students will:

1. Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (1)
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (1, 2)
3. Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (2)
4. Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (3)
5. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3, 4)
6. Use telecommunications efficiently to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. (4)
7. Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (4, 5)

Technology Standards v1.0

8. Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities. (5, 6)
9. Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (5, 6)
10. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. (6)

Numbers in parentheses indicate NETS-S categories.

Reprinted with permission from National Education Technology Standards for Students - Connecting Curriculum and Technology, copyright (c) 2000, ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved. Permission does not constitute an endorsement by ISTE.

Technology Standards v1.0

COMPUTER/TECHNOLOGY SKILLS :: GRADE 6

GRADE 6

Focus Areas

- Using search strategies
- Responsible and safe use of online resources
- Awareness of Copyright and Fair Use Guidelines.
- Exploring the need for protection against viruses and vandalism Refining application skills
- Using formulas in a spreadsheet
- Using search strategy two or more criteria in a database
- Participating in curriculum-based telecommunication projects
- Developing word processing document using proper keyboarding techniques
- Developing multimedia presentation citing sources
- Developing a product using a database
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Recognize, discuss, and visually represent changes in information technologies and the impact changes have in

Technology Standards v1.0

schools, workplace, and society in the United States. (1)

1.02 Recognize, discuss, and use terms/concepts related to the protection of computers, networks and information (e.g., virus protection, network security, passwords, firewalls, privacy laws). (1)

1.03 Recognize, discuss and use appropriate behavior related to computers, networks, digital information (e.g., security, privacy, passwords, personal information), and identify possible consequences of unethical behavior. (1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and discuss consequences of misuse. (1)

1.05 Recognize and discuss methods used to protect computers, networks, and information from viruses, vandalism and intrusion. (1)

1.06 Identify and discuss appropriate technology tools (virus software) to protect computers, networks, and information from vandalism and intrusion. (1)

1.07 Explore and discuss occupations/careers that use computers/technology as a class/group. (1)

1.08 Recognize and discuss how and why databases are used in society. (2)

1.09 Recognize, discuss, and explore how spreadsheets are used to calculate, graph, and represent data in a variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.10 Recognize and explain the advantages and disadvantages of using word processing to create content area projects/products. (4)

Technology Standards v1.0

1.11 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

1.12 Recognize and explain the advantages and disadvantages of using multimedia to develop content area projects/products. (5)

1.13 Identify and discuss multimedia terms/concepts (e.g., menu, branching, navigation, multimedia, design). (5)

1.14 Demonstrate knowledge of Copyright and Fair Use Guidelines by explaining selection and use of resources in content projects/assignments. (5)

1.15 Recognize, discuss, and use online terms/concepts (e.g., search strategies, citing resources, filters, AUP/IUP). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Use knowledge of database terms/concepts and functions to find information in prepared content area databases and describe strategies used. (2)

2.02 Cite sources of information from content area databases used in assignments. (2)

2.03 Create/modify simple content area databases to enter/edit, collect, organize, and display content data for class/group assignment/project, citing resources. (2)

2.04 Use spreadsheet terms/concepts and functions (e.g., median, range, mode) to calculate, represent, and explain content area assignments. (3)

2.05 Modify/create and use spreadsheets to solve problems by performing calculations using simple formulas and functions

Technology Standards v1.0

(e.g., +, -, *, /, average). (3)

2.06 Create/modify simple content area spreadsheets to enter/edit, calculate, organize, and display content data for class/group assignment/project, citing resources. (3)

2.07 Identify, discuss and use WP menu/tool bar terms/concepts (e.g., import, portrait, landscape, copy and paste between two documents) to describe assignments/projects. (4)

2.08 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.09 Demonstrate knowledge of WP tools to develop documents, which include data imported from a spreadsheet/database as a class/group. (4)

2.10 Select and use WP menu/tool bar features to edit/revise and change existing documents/projects/assignments. (4)

2.11 Use menus and branching to modify/create non-linear projects/products in content areas. (5)

2.12 Use student-generated rubrics to evaluate multimedia presentations for elements (e.g., organization, content, design, presentation, citation). (5)

2.13 Plan, discuss, and use search strategies with two or more criteria to find information for assignments/projects/products about the Western Hemisphere. (6)

2.14 Model and explain the importance of ethical, responsible, and safe behavior when using networked digital information (e.g., Internet, mobile phone, wireless, LANs). (6)

2.15 Select, discuss and evaluate digital resources and information for content, accuracy, usefulness and cite sources. (6)

Technology Standards v1.0

2.16 Recognize, discuss, and/or use email/videoconferencing/webconferencing as a means of interactive communications. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use search strategies with two or more criteria in prepared databases to locate, organize, and present information for content area assignments. (2)

3.02 Use content area databases to analyze, evaluate, organize, and compare information for assignments. (2)

3.03 Modify/edit databases to organize, analyze, interpret data, and create reports (e.g., documents, multimedia project, webpages). (2)

3.04 Cite sources of copyrighted data used in spreadsheets to analyze, interpret, and display findings in content areas. (3)

3.05 Enter/edit data into a spreadsheet to test simple "what if..." statements to solve problems and make decisions in content area. (3)

3.06 Recognize, discuss, and establish ethical guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

3.07 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

Technology Standards v1.0

COMPUTER/TECHNOLOGY SKILLS :: GRADE 7

GRADE 7

Focus Areas

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Refining application skills
- Using formulas in a spreadsheet
- Using search strategy with two or more criteria in a database
- Using word processing, spreadsheet, database, and multimedia for assignments in all subject areas
- Locating and retrieving information using telecommunications
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Identify and describe the effect technological changes have had on business, transportation, communications, industry, and agriculture in a global society. (1)

1.02 Use network terms and concepts related to local and wide area networks (LANs, WANs) and Internet connectivity.

Technology Standards v1.0

(1)

1.03 Use ethical, safe, and responsible behavior relating to issues (e.g., security, privacy, passwords, personal information) and recognize possible consequences of misuse.

(1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and identify and discuss consequences of misuse. (1)

1.05 Investigate technology knowledge and skills needed for the workplace now and in the future. (1)

1.06 Demonstrate knowledge of why databases are used to collect, organize, and report information in a variety of settings.

(2)

1.07 Use knowledge of database terms/concepts, functions, and operations to describe and explain content area findings.

(2)

1.08 Cite sources of information used in content area databases. (2)

1.09 Demonstrate knowledge that spreadsheets are used to process information in a variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.10 Use spreadsheet and graphing terms/concepts to present and explain content area assignments. (3)

1.11 Cite sources of information used in content area spreadsheets. (3)

1.12 Demonstrate knowledge of the advantages/disadvantages of using word processing to develop, publish, and present information to a variety of audiences. (4)

Technology Standards v1.0

1.13 Demonstrate knowledge and use of WP terms/concepts (e.g., columns, tables, using multiple files and/or applications) to create and publish assignments/projects. (4)

1.14 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

1.15 Demonstrate knowledge of multimedia tools/concepts used by media (e.g., games, video, radio/TV broadcasts, websites) to entertain, sell, and influence ideas and opinions. (5)

1.16 Demonstrate knowledge of multimedia by using terms/concepts to describe and explain content projects/products. (5)

1.17 Recognize, discuss, and establish ethical guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

1.18 Recognize, discuss, and model correctly formatted citations for copyrighted materials and adhere to Fair Use Guidelines. (5)

1.19 Recognize and use terms/concepts (e.g., IP address, Intranet, private networks, discussion forum, threaded discussion). (6)

1.20 Demonstrate knowledge of responsible, safe, and ethical use of networked digital information (e.g., Internet, mobile phone, wireless, LANs). (6)

1.21 Demonstrate knowledge of Copyright and Fair Use Guidelines by explaining selection and use of Internet resources in content projects/assignments. (6)

Competency Goal 2: The learner will demonstrate

Technology Standards v1.0

knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Demonstrate knowledge of strategies for identifying and solving minor hardware and software problems. (1)

2.02 Enter/edit data and use spreadsheet features and functions to project outcomes and test simple “what if…” statements in content assignments. (3)

2.03 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.04 Demonstrate knowledge and use of WP/DTP features (e.g., columns, tables, headers/footers) to format and publish content projects/products. (4)

2.05 Use a variety of collaborative tools to survey, collect, and communicate information for content area assignments. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use appropriate technology tools to solve problems and make decisions in content areas. (1)

3.02 Select and use two or more criteria to organize, interpret, and display content data and explain strategies used. (2)

3.03 Modify/edit databases to organize, analyze, and interpret data, and to create reports (e.g., documents, multimedia project, webpages). (2)

3.04 Evaluate and use database data and reports to solve problems and make decisions in content areas. (2)

3.05 Modify/create spreadsheets and graphs/charts to analyze

Technology Standards v1.0

and interpret data for content assignments. (3)

3.06 Create/modify spreadsheets to test simple “what if…” statements to solve problems and make decisions in content areas. (3)

3.07 Demonstrate use of WP features/functions to design, format, layout, and publish assignments. (4)

3.08 Plan, design, and develop a multimedia product using data (e.g., graphs, charts, database reports) to present content information in the most effective way, citing sources. (5)

3.09 Create/modify and use rubrics to evaluate multimedia presentations for elements (e.g., organization, content, design, appropriateness for target audience, effectiveness, ethical use of resources). (5)

3.10 Select, evaluate, and use a variety of digital resources and information to research and present findings about Eastern Hemisphere: Africa, Asia, and Australia. (6)

3.11 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

**Technology Standards
v1.0**

COMPUTER/TECHNOLOGY SKILLS :: GRADE 8

GRADE 8

Focus Areas

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Using spreadsheets and databases relevant to classroom assignments
- Choosing charts/tables or graphs to best represent data
- Conducting online research and evaluating the information found
- Using word processing/desktop publishing for classroom assignments/projects
- Selecting and using a variety of technological tools to develop projects in content areas

Strands: 1= Societal/Ethical Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

Objectives:

1.01 Demonstrate, discuss, and visually represent knowledge of changes in information technologies and the effect those changes have on California and society. (1)

1.02 Use technology terms/concepts to describe and explain strategies used to collect, organize, and present findings for assignments/projects. (1)

1.03 Model ethical behavior relating to security, privacy, passwords, and personal information, and recognize possible

Technology Standards v1.0

consequences of misuse. (1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and identify and discuss consequences of misuse. (1)

1.05 Investigate computer/technology-related careers/occupations in California, past, present, and future. (1)

1.06 Demonstrate knowledge of and explain how databases are used in an information-intensive society. (2)

1.07 Use knowledge of database terms/concepts, functions, and operations to explain strategies used to organize, analyze, and report information in content area assignments. (2)

1.08 Cite sources of information used in content area databases. (2)

1.09 Recognize, discuss, and investigate how spreadsheets in a variety of settings (e.g., schools, government, business, industry, transportation, communications). (3)

1.10 Use spreadsheet and graphing terms/concepts to present and explain content area assignments. (3)

1.11 Cite sources of information used in content area spreadsheets. (3)

1.12 Demonstrate knowledge of the advantages/disadvantages of using word processing to develop, publish, and present information to a variety of audiences. (4)

1.13 Review and use WP terms/concepts to describe and explain how assignments/projects were created. (4)

1.14 Demonstrate appropriate use of copyrighted materials in word processing documents used for content

Technology Standards v1.0

projects/assignments. (4)

1.15 Demonstrate knowledge of multimedia tools/concepts used by media (e.g., games, video, radio/TV broadcasts, websites) to entertain, sell and influence ideas and opinions. (5)

1.16 Use multimedia terms/concepts correctly to describe and explain projects/products. (5)

1.17 Recognize, discuss, and establish ethical guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

1.18 Recognize, discuss, and model correctly formatted citations for copyrighted materials and adhere to Fair Use Guidelines. (5)

1.19 Use appropriate terms/concepts to describe telecommunications tools and resources used to develop and complete assignments. (6)

1.20 Demonstrate knowledge of responsible, safe, and ethical use of networked digital information (e.g., Internet, mobile phone, wireless, LANs). (6)

1.21 Demonstrate knowledge of Copyright and Fair Use Guidelines by explaining selection and use of Internet resources in content projects/assignments. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Recognize and describe strategies for identifying, solving, and preventing minor hardware and software problems. (1)

2.02 Modify/create and use databases to organize, report, and

Technology Standards v1.0

display data. (2)

2.03 Select and use spreadsheet formulas and functions to solve problems in content areas. (3)

2.04 Use spreadsheet features/functions to calculate and present findings for content area assignments. (3)

2.05 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.06 Select and justify use of appropriate collaborative tools to survey, collect, share, and communicate information in content areas. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use a variety of technology tools to collect, analyze, and present information. (1)

3.02 Select and use appropriate database features and functions to collect and organize information to solve problems in content areas and explain strategies used. (2)

3.03 Modify/create and use databases to analyze, interpret, and evaluate data and report findings. (2)

3.04 Create/modify spreadsheets to analyze and interpret information, test simple "what if..." statements, solve problems, and make decisions in content areas. (3)

3.05 Select and use WP features/functions to develop, edit/revise, and publish documents/assignments. (4)

3.06 Develop and use rubrics to evaluate the quality of published documents/projects for content, design, and appropriate use of resources. (4)

Technology Standards v1.0

3.07 Plan, design, and develop a multimedia product using data (e.g., graphs, charts, database reports) to present content information. (5)

3.08 Create/modify and use rubrics to evaluate multimedia presentations for content, design, appropriateness for target audience, and effective and ethical use of resources. (5)

3.09 Plan, select, evaluate, interpret and use a variety of digital resources to develop assignments/projects about California History. (6)

3.10 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

Technology Standards v1.0

NETS-S

National Educational Technology Standards for Students Profile for Technology Literate Students

PERFORMANCE INDICATORS FOR TECHNOLOGY - LITERATE STUDENTS GRADES 6-8

All students should have opportunities to demonstrate the following performances.

Prior to completion of Grade 8, students will:

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (1)
2. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (2)
3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2)
4. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (3)
5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3, 6)
6. Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6)
7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5)

Technology Standards v1.0

8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6)
9. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (1, 6)
10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6).

Numbers in parentheses indicate NETS-S categories.

Reprinted with permission from National Education Technology Standards for Students - Connecting Curriculum and Technology, copyright (c) 2000, ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved. Permission does not constitute an endorsement by ISTE.