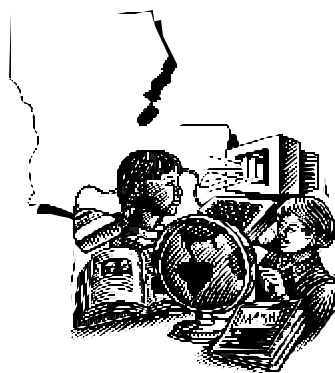


LOUISIANA K-12 EDUCATIONAL TECHNOLOGY STANDARDS

Adapted from the National Educational Technology Standards



Louisiana Department of Education
Cecil J. Picard, Superintendent

Approved by BESE
February 2003

reaching for
results 

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Mission Statement

This document provides a framework for the integration of technology across the curriculum.

Philosophy

The Louisiana K-12 State Educational Technology Standards are based on the National Educational Technology Standards and the Louisiana State Content Standards. These technology standards support the beliefs set forth by the state educational technology goal: *“All educators and learners will have access to technologies that are effective in improving student achievement.”*

The Louisiana K-12 State Educational Technology Standards parallel the foundation skills and core understandings embodied in the Louisiana Content Standards. Additionally, the standards are designed to reflect the conviction that technology is best understood and taught in a realistic and integrated setting in a variety of curriculum areas. The alignment of the technology standards with the foundation skills provides for such integration across all content areas. Consequently, these standards and the associated performance indicators are to be integrated in all aspects of the curriculum and not taught in isolation, utilizing fully the resources of the classroom, the school, and the community. The technology standards promote the development of technology/information literate students, including those with disabilities, to be self-directed learners, who individually and collaboratively use technology/information responsibly to create quality products and to be productive citizens. The focus is on learning with information and technology rather than learning about technology. Integration of these standards will be varied and dynamic, reflecting the diversity of instructional and student needs in our schools and districts.

Definition

Technology consists of any electronic tool used for solving problems, communicating clearly, processing information, increasing productivity, accomplishing a task, making informed decisions, and enhancing the quality of life.

The Louisiana Content Standards Initiative recognizes technology as a valuable tool in the education process. Establishing standards for technology and for secondary computer/technology courses will enhance the effective integration of technology in standards-based curricula.

K-12 Educational Technology Standards

- 1. Technology Communication Tools (*Communication Foundation Skill*)**
 - ◆ Students use telecommunications to collaborate, publish, and interact with peers, experts and other audiences.
 - ◆ Students use a variety of media and formats to communicate and present information and ideas effectively to multiple audiences.

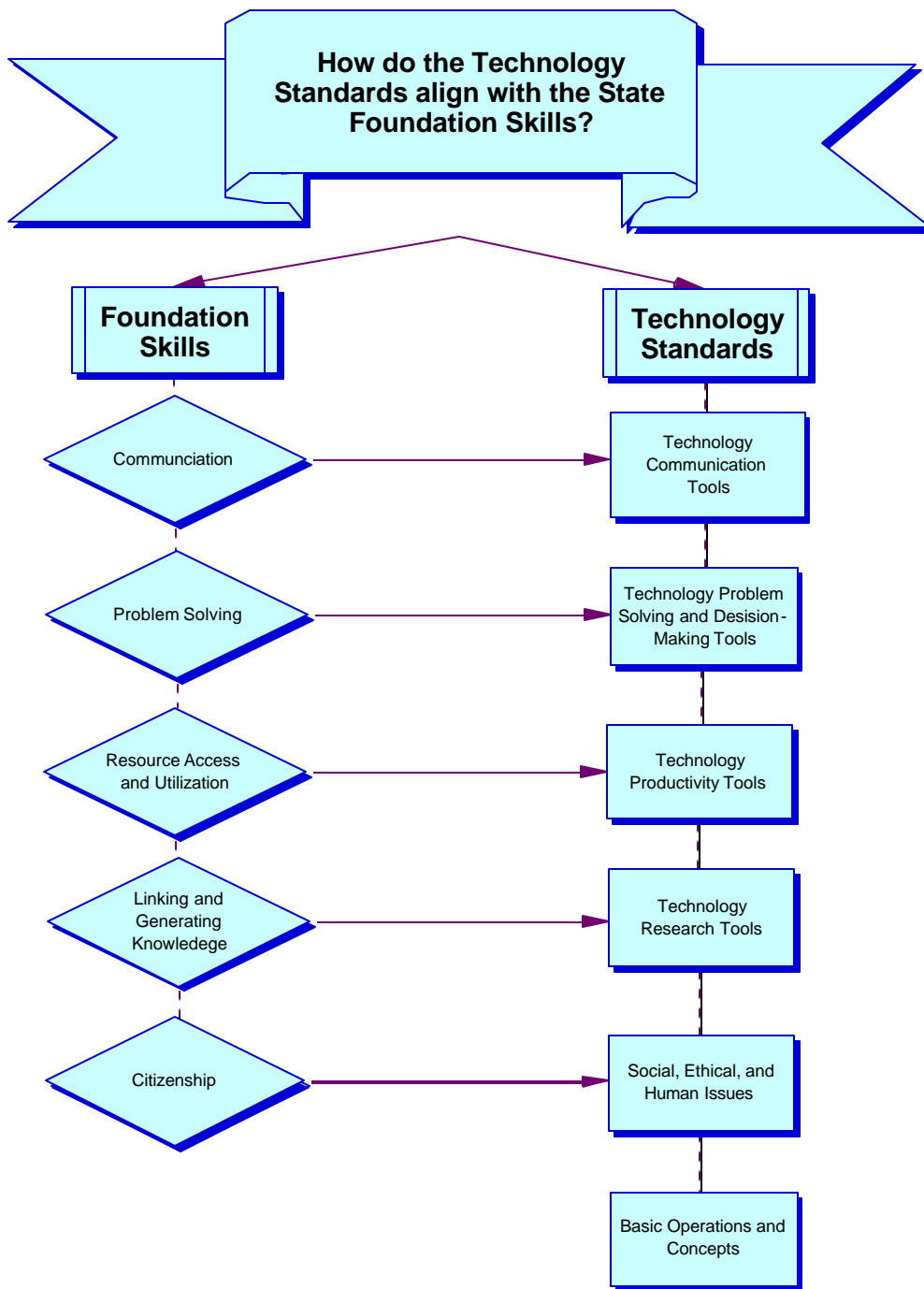
- 2. Technology Problem-Solving and Decision-Making Tools (*Problem Solving Foundation Skill*)**
 - ◆ Students use appropriate technology resources for solving problems and making informed decisions.
 - ◆ Students employ technology for real world problem solving.
 - ◆ Students evaluate the technology selected, the process, and the final results through the use of informed decision-making skills.

- 3. Technology Productivity Tools (*Resource Access and Utilization Foundation Skill*)**
 - ◆ Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - ◆ Students use productivity tools to work collaboratively in developing technology-rich, authentic, student-centered products.

- 4. Technology Research Tools (*Linking and Generating Knowledge Foundation Skill*)**
 - ◆ Students use appropriate technology to locate, evaluate, and collect information from a variety of sources.
 - ◆ Students use technology tools to process data and report results.
 - ◆ Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

- 5. Social, Ethical, and Human Issues (*Citizenship Foundation Skill*)**
 - ◆ Students understand the ethical, cultural, and societal issues related to technology.
 - ◆ Students practice responsible use of technology systems, information, and software.
 - ◆ Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

- 6. Basic Operations and Concepts**
 - ◆ Students demonstrate a sound understanding of the nature and operation of technology systems.
 - ◆ Students are proficient in the use of technology.



Performance Indicators for Grades K-4

The following performance indicators should be used as standards in integrating technology into the content standards.

- A. Identify, explain, and effectively use input, output and storage devices of computers and other technologies (e.g., keyboard, mouse, scanner, adaptive devices, monitor, printer floppy disk, hard drive). (5,6)
 - B. Use accurate and developmentally appropriate terminology (e.g., cursor, software, hardware, pull down menu, window, disk drive, hard drive, CD-ROM, laser disc) when referring to technology. (6)
 - C. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (5,6)
 - D. Discuss basic issues related to responsible use of technology and information; and describe personal consequences of inappropriate use. (5)
 - E. Use a variety of developmentally appropriate resources and productivity tools (e.g., logical thinking programs, writing and graphic tools, digital cameras, graphing software) for communication, presentation, and illustration of thoughts, ideas, and stories (e.g., signs, posters, banners, charts, journals, newsletters, and multimedia presentation.) (1,3,4)
 - F. Use technology tools (e.g., publishing, multimedia tools, and word processing software) for individual and for simple collaborative writing, communication, and publishing activities for a variety of audiences. (1,3)
 - G. Gather information and communicate with others using telecommunications (e.g., email, video conference, internet) with support from teachers, family members, or peers. (1,4,5,6)
 - H. Utilize search strategies employing keywords, phrases, and Boolean operators (and, or, not) to access and retrieve information. (4)
 - I. Evaluate electronic information for accuracy, relevance, appropriateness, comprehensiveness, and bias. (2,4,5)
 - J. Use technology resources to assist in problem-solving, self-directed learning, and extended learning activities. (2,4)
1. ***Technology Communication Tools***
 2. ***Technology Problem Solving and Decision-Making Tools***
 3. ***Technology Productivity Tools***
 4. ***Technology Research Tools***
 5. ***Social, Ethical, and Human Issues***
 6. ***Basic Operations and Concepts***

Performance Indicators for Grades 5-8

The following performance indicators should be used as standards in integrating technology into the content standards.

- A. Identify and define computer and networking terms (e.g. modem, file server, client station, LAN, Internet/Intranet, data storage device). (6)
- B. Understand and apply common troubleshooting techniques. (6)
- C. Demonstrate the operations of a computer (e.g., touch-keyboarding skills, save, organize and back-up files) and other peripheral devices (scanner, digital and video cameras, VCR, laser disc player) at an intermediate level. (6)
- D. Compose and edit a multi-page document with appropriate formatting using word-processing skills. (e.g., menu, tool bars, dialog boxes, spell check, thesaurus, page layout, headers and footers, word count, margins, tabs, spacing, columns, page orientation) (1, 3, 6)
- E. Use information, media, and technology in a responsible manner which includes following the school's acceptable use policy, adhering to copyright laws, respecting the rights of others, and employing proper etiquette in all forms of communication. (4, 5)
- F. Recognize the importance of information technology and its effect on the workplace and society. (5)
- 1. **Technology Communication Tools**
 - G. Use multimedia tools and desktop publishing to develop and present computer-generated projects for directed and independent learning activities. (1,3)
- 2. **Technology Problem Solving and Decision-Making Tools**
 - H. Use technology tools (e.g., multimedia authoring, writing tools, digital cameras, drawing tools, web tools) to gather information for problem solving, communication, collaborative writing and publishing to create products for various audiences. (1,3,4)
- 3. **Technology Productivity Tools**
 - I. Demonstrate intermediate e-mail skills (e.g., sending attachments, organizing an address book, forwarding messages). (1,4)
- 4. **Technology Research Tools**
 - J. Understand Internet concepts (e.g., website, hypertext link, bookmarks, URL addresses) and apply intermediate on-line searching techniques (e.g., employ keyword, phrases, and Boolean Operators). (1,4)
- 5. **Social, Ethical, and Human Issues**
 - K. Use telecommunications and online resources efficiently and effectively to collaborate with peers, experts, and others to investigate curriculum-related problems, issues, and information and to develop solutions or products for various audiences. (1,2,3,4)
- 6. **Basic Operations and Concepts**
 - L. Communicate information using spreadsheets and databases to visually represent data and integrate into other documents (e.g., entering data, formatting using formulas, analyzing data, and sorting). (1,2,3,4)
 - M. Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (2)
 - N. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information. (2,4,5)

Performance Indicators for Grades 9-12

The following performance indicators should be used as standards in integrating technology into the content standards.

- A. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (6)
 - B. Make informed choices among technology systems, resources, and services. (5,6)
 - C. Demonstrate knowledge and skills of Internet use and other resources consistent with acceptable use policies including the legal consequences of plagiarism and the need for authenticity in student work through an understanding of copyright issues. (5)
 - D. Demonstrate and advocate legal and ethical behaviors among peers, family, and community regarding the use of technology and information. (5)
 - E. Explain and use advanced terminology, tools, and concepts associated with software applications, telecommunications, and emerging technologies. (1,3)
 - F. Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence). (1,3)
 - G. Refine knowledge and enhance skills in keyboarding, word processing, desktop publishing, spreadsheets, databases, multimedia, and telecommunications in preparing and presenting classroom projects. (3,6)
 - H. Collaborate (e.g., desktop conferencing, e-mail, on-line discussions) with peers, experts, and others to compile, synthesize, produce and disseminate information, models, and other creative works. (1,2,3,5)
 - I. Evaluate technology-based options for lifelong learning. (4)
 - J. Use appropriate technology to locate, retrieve, organize, analyze, evaluate, and communicate information for problem solving and decision making. (1,2,4)
 - K. Evaluate the usage of technology and the processes involved during and upon completion of individual and group projects. (2,5)
1. **Technology Communication Tools**
2. **Technology Problem Solving and Decision-Making Tools**
3. **Technology Productivity Tools**
4. **Technology Research Tools**
5. **Social, Ethical, and Human Issues**
6. **Basic Operations and Concepts**

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