

PERFORMANCE INDICATORS FOR TECHNOLOGY-LITERATE STUDENTS

GRADES 6–8

All students should have opportunities to demonstrate the following performances.

Numbers in parentheses following each performance indicator refer to the standards category to which the performance is linked. The categories are:

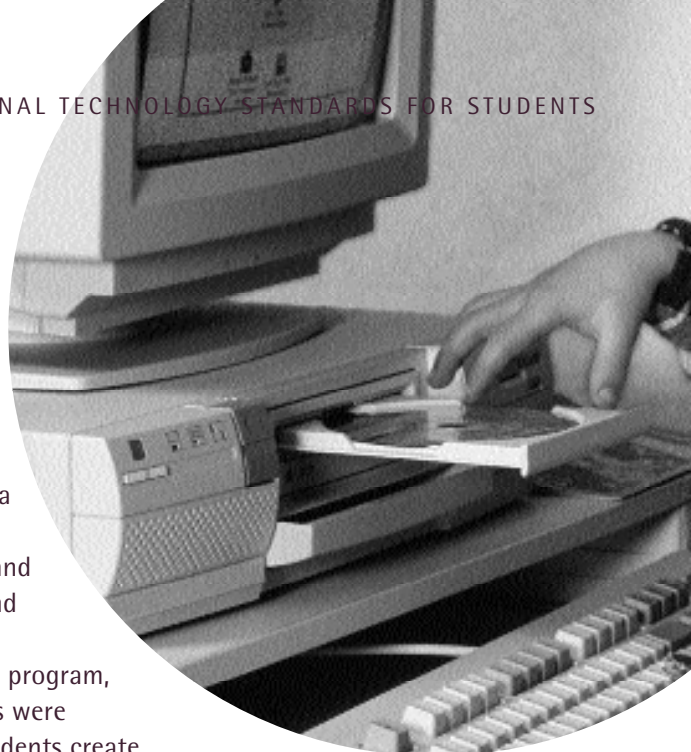
1. Basic operations and concepts
2. Social, ethical, and human issues
3. Technology productivity tools
4. Technology communications tools
5. Technology research tools
6. Technology problem-solving and decision-making tools

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)*
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)*
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)*

CURRICULUM EXAMPLES AND SCENARIOS

GRADES 6–8



Scenario 1:
*Using Technology
to Learn about
Rocks and Minerals*

Grade Levels: 8

Technology Profile
Performance Indicators:
4, 5, 6, 7

Subject Areas:
Science, Social Studies

Source:
Hemmer, J. (1998,
November/December).
Lakeisha's year in eighth
grade: Technology
integration vignette, part 3.
*Learning & Leading with
Technology*, 25 (7), 27–31.

Lakeisha's eighth-grade class began a rocks and minerals. They explored topics using CD-ROM encyclopedias and stored the information they found and results from their laboratory sessions, including a weeklong rock simulation program, in their databases. When their studies were complete, Mrs. Perkins helped the students create HyperStudio presentations to share with the class. After she found an Internet site called "Ask a Geologist," Lakeisha and her classmates were able to e-mail questions about rocks and minerals to the geologists who were sponsoring the site. Lakeisha and her friends were fascinated with the information they received on rocks and minerals in their native area. Lakeisha's science teacher organized a local geologic dig to help students begin their own rock and mineral collections.

Scenario 2:
*The Louisiana Labor
Market Lesson*

Grade Levels: 8

Technology Profile
Performance Indicators:
5, 6, 7, 8

Subject Areas:
Mathematics, Social Studies

Source:
Callaway, B. (1997). Teacher
and students present
Louisiana labor lesson at
the BESE meeting. *Louisiana
Challenge Grant Newsletter*,
2 (1), 9.*

*Full plan at:
www.challenge.state.la.us/k12act/lp/index.html

At Marthaville Elementary, a small rural K–8 school, Laura Strahan and her eighth-grade students studied the Louisiana labor market in their math class. Students used the Internet to access the Louisiana Department of Labor's Web site: (www.ldol.state.la.us) and search for the top 20 projected occupations in the state. The U.S. Department of Labor receives and distributes labor information from each state and updates its statistics daily.

Students were divided into groups. Each group selected five occupations and developed a survey for them. Each survey was used to query other individuals regarding the estimated annual income for those occupations. The students then assisted in analyzing the survey results, comparing results to actual salaries as reported on the Department of Labor and other Internet sites, calculating averages of estimates, and displaying the information in appropriate graph format. Students from Ms. Strahan's class presented their results to the Board of Elementary and Secondary Education to illustrate the importance of providing technology resources to schools in Louisiana.

This lesson provides numerous opportunities to use technology to access, analyze, and present information. Information is accessed using telecommunications then analyzed and presented using word-processing, database, spreadsheet, graphing, and multimedia software. The Web is used to share findings with a larger audience.