

**LIBRARY/MEDIA CURRICULUM GUIDE**

**K - 8**

**2009**

**Office of Curriculum and Instruction**

**North Haledon School District**

**Office of Curriculum and Instruction**

**515 High Mountain Road**

**North Haledon, NJ 07508**

**LIBRARY/MEDIA CURRICULUM COMMITTEE  
2009**

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## **PREFACE**

The faculty and staff of the North Haledon School District supports the instructional process in all content fields, teach essential skills for information literacy, and create and maintain Library/Media facilities that serve as the centers of their respective schools. It is through their efforts, in partnership with classroom teachers, that students learn to use resources, access information of all types, apply higher-level thinking, and develop a love of reading.

The skills developed through experiences in the Library/Media center also enhance the personal growth of students by improving communication abilities and by functioning as essential tools to further learning in all subjects. The collaborative work done by the library media specialists in all curriculum areas helps to enable students to reach the progress indicators listed in the *New Jersey Core Curriculum Content Standards* (New Jersey Department of Education, 2004). Additionally, these important skills advance cultural and societal development by enriching the human spirit and producing the critical and creative thinking required for collective progress (Cobb & Wolfel, 2004).

The North Haledon Schools library media specialist along with grade level teachers have created this first K-8 comprehensive *Library/Media Curriculum Guide*. They are commended for embracing this groundbreaking initiative. Previously, their work was embedded in the *Language Arts Curriculum Guide* and other curriculum guides. While the language arts guide does indicate areas where the library media specialists support language arts curriculum implementation, this new document lists specific learner objectives in (a) library/media center orientation, (b) books, (c) technological resources, (d) non-reference collections, (e) reference collections, and (f) bibliographic citations.

### **Acknowledgments**

The North Haledon School District *Library/Media Curriculum Guide* represents the efforts of a committee composed of representatives from the district. The committee worked by conducting research, discussing national trends, studying the New Jersey standards, and ultimately writing this guide. The committee members devoted countless hours to this innovative undertaking and their efforts are most appreciated.

This guide was created under the direction of the North Haledon Administrators, as part of the continuous process of curriculum revision, implementation, and evaluation. The North Haledon Administrators provided assistance by facilitating the work of the committee.

### **References**

Cobb, C., & Wolfel, C. (2004). *Language arts: A chapter in the curriculum handbook*. Alexandria, VA: Association for Supervision and Curriculum Development Press.

New Jersey Department of Education (2004). *New Jersey core curriculum content standards for language arts literacy*. Trenton, NJ: Author.

## **VISION STATEMENT**

The mission of the school library media center program is to prepare students to become effective and efficient users of resources, ideas, information and other intellectual properties. The school library media program promotes a love of reading and is strongly committed to helping students to become lifelong readers and learners. In the school library media center, students develop critical thinking, problem solving and communication skills as they use a variety of resources to meet the demands of today's curriculum.

The school library media center is a vital and integral hub of the school and as a result reflects the philosophy and goals of the school and the district. It is also a unique instructional site in which certified school library media specialists collaboratively design and implement instructional strategies to insure that students master the critical skills for information literacy.

School library media specialists work in partnership with the school community. They offer opportunities to support all curriculum areas, with particular emphasis on Technology and Language Arts. Through collaboration, the school library media specialists incorporate the goals and objectives of the New Jersey Core Curriculum Content Standards (NJCCS) and the National Information Literacy Standards for Student Learning.

*Library/Media Curriculum Committee*

## PHILOSOPHY OF THE SCHOOL LIBRARY MEDIA PROGRAM

The school library media center is a vital and integral hub of the school and as a result reflects the philosophy and goals of the school and the district. In an age of information, information literacy skills and lifelong reading and learning are paramount. In the school library media center, students develop critical thinking, problem solving, and communication skills as they use a variety of resources to meet the demands of today's curriculum.

The school library media program does not exist in isolation. The school library media specialist works in partnership with students, teachers, administrators, board of education members, and the school community to develop the school library media program. Through collaboration, the school library media program also incorporates the goals and objectives of the *New Jersey Core Curriculum Content Standards* (NJCCCS) and the *National Information Literacy Standards* for Student Learning as prepared by AASL and AECT. The combined vision supports the goal for educational excellence and the concept of intellectual freedom.

The principles\* for learning and teaching of school library media programs have been identified and developed by the Information Power Vision Committee. (*Information Power: Building Partnerships for Learning* 58)

- ⌚ *Principle 1:* The library media program is essential to learning and teaching and must be fully integrated into the curriculum to promote students' achievement of learning goals.
- ⌚ *Principle 2:* The information literacy standards for student learning are integral to the content and objectives of the school's curriculum.
- ⌚ *Principle 3:* The library media program models and promotes collaborative planning and curriculum development.
- ⌚ *Principle 4:* The library media program models and promotes creative, effective, and collaborative teaching.
- ⌚ *Principle 5:* Access to the full range of information resources and services through the library media program is fundamental to learning.
- ⌚ *Principle 6:* The library media program encourages and engages students in reading, viewing, and listening for understanding and enjoyment.
- ⌚ *Principle 7:* The library media program supports the learning of all students and other members of the learning community who have diverse learning abilities, styles, and needs.
- ⌚ *Principle 8:* The library media program fosters individual and collaborative inquiry.
- ⌚ *Principle 9:* The library media program integrates the uses of technology for learning and teaching.
- ⌚ *Principle 10:* The library media program is an essential link to the larger learning community.

\*Adapted from *Information Power: Building Partnerships for Learning* by American Association of School Librarians and the Association for Educational Communications and Technology. Copyright 1998 American Library Association and Association for Educational Communications and Technology. Reprinted by permission of the American Library Association.

Information and technology skills are most meaningful when learned within a subject area, within an interdisciplinary unit, or within a unit which addresses an authentic, real-life need or problem. Students must be prepared to acquire materials and resources to meet their current and lifelong needs. They will need to know how to access, evaluate, and choose from a constantly changing and growing reservoir of information for educational, personal, and recreational purposes.

### **PHILOSOPHY OF INSTRUCTION\***

The school library media center staff collaborates with the faculty to integrate information literacy skills with content area instruction and learning activities across the pre-K through twelfth grade curriculum by providing:

- ⌚ equitable access to information;
- ⌚ scheduling that enables all students to have access to the school library media center, its staff and resources;
- ⌚ resources and sequential instruction in the concepts necessary for students to become independent, lifelong learners, as well as discerning readers, viewers and listeners;
- ⌚ opportunities for an active collaboration and partnership with teachers and administrators in working toward shared instructional goals;
- ⌚ resources that extend beyond the confines of a textbook;
- ⌚ technology for information retrieval; and
- ⌚ opportunities for ongoing and meaningful assessment of student learning.

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## **SCHOOL LIBRARY MEDIA PROGRAM GOALS\***

The student centered school library media program focuses on the development of a community of learners. A creative and energetic program includes the following goals:

- ⌚ To foster information literacy and provide intellectual access to information through integrated learning activities and strategies that help students
  - (a) select and retrieve information
  - (b) analyze and evaluate information
  - (c) synthesize, create, and communicate new information.
  
- ⌚ To provide physical access to information through
  - (a) a carefully selected and systematically organized local collection of diverse learning resources that represent a wide range of subjects, levels of difficulty, and formats
  - (b) a systematic procedure for acquiring information and materials from outside the school library media center and the school through such mechanisms as electronic networks, interlibrary loan, and cooperative agreements with other information agencies; and
  - instruction in using a range of equipment for accessing local and remote information in any format.
  
- ⌚ To provide learning experiences that encourage students and others to become discriminating consumers and skilled creators of information through comprehensive instruction related to the full range of communications media and technology.
  
- ⌚ To provide leadership, collaboration, and assistance to teachers and others in applying principles of instructional design to the use of instructional and information technology.
  
- ⌚ To provide resources and activities that contribute to lifelong learning while accommodating a wide range of differences in teaching and learning styles, methods, interests, and capacities.
  
- ⌚ To provide a program that functions as the information center of the school, both through offering a locus for integrated and interdisciplinary learning activities within the school and through offering access to a full range of information for learning beyond this locus.
  
- ⌚ To provide resources and activities for learning that represent a diversity of experiences, opinions, and social and cultural perspectives.
  
- ⌚ To support the concepts that intellectual freedom and access to information are prerequisites to effective and responsible citizenship in a democracy.

\*Adapted from *Information Power: Building Partnerships for Learning* by American Association of School Librarians and Association for Educational Communications and Technology. Copyright 1998 American Library Association and Association for Educational Communications and Technology. Reprinted by permission of the American Library Association.



## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### I. ORIENTATION

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Understand the role of the media specialist as a teacher and resource person in the following context:										
1. Storyteller	I	I	M	M	M	M	M	M	M	M
2. Literature consultant	I	I	M	M	M	M	M	M	M	M
3. Reference source	I	I	I	I	I	I	M	M	M	M
4. Research Consultant	I	I	M	M	M	M	M	M	M	M
5. Selector/Purchaser	I	I	M	M	M	M	M	M	M	M
6. Technology Consultant	I	I	M	M	M	M	M	M	M	M

\* See New Jersey Core Curriculum Content Standards Matrix located in Addendum Binder



## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### II. BOOKS

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Identify, locate, and utilize the following:										
1. Cover/dust jacket	I	T	T	M	M	M	M	M	M	M
2. Title	I	T	T	M	M	M	M	M	M	M
3. Author(s)	I	T	T	M	M	M	M	M	M	M
4. Illustrator(s)	I	T	T	M	M	M	M	M	M	M
5. Spine		I	T	M	M	M	M	M	M	M
6. Spine label		I	T	M	M	M	M	M	M	M
7. Title page/half title page		I	I	I	T	T	T	T	M	M
8. Verso page/"copyright page"		I	I	I	T	T	T	T	M	M
9. Publisher		I	I	I	T	T	T	T	M	M

10. Place of Publication		I	I	I	T	T	T	T	M	M
11. Copyright Date		I	I	I	T	T	T	T	M	M
12. Dedication/credits		I	I	I	T	T	T	T	M	M
13. Preface/Forward/Introduction					I	I	T	T	M	M
14. Table of Contents					T	T	T	T	M	M

## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### II. BOOKS (continued)

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Identify, locate, and utilize the following:										
15. Text						I	I	T	M	M
16. Illustrations/Graphics	I	T	T	T	T	T	T	T	M	M
17. Captions	I	T	T	T	T	T	T	T	M	M
18. Footnotes/Endnotes								T	T	T
19. Index				I	T	T	M	M	M	M
20. Glossary				I	T	T	M	M	M	M
21. Appendix						I	I	T	T	M
22. Bibliography/Works used						I	I	T	T	M

B. Understand that fiction and nonfiction books can be used as resources for research and class assignments				I	T	T	T	M	M	M
C. Understand that fiction and nonfiction books can be used as resources for recreational reading	I	I	T	T	M	M	M	M	M	M
D. Understand that all libraries provide a diverse collection of information presenting many viewpoints							I	T	M	M

## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### III. TECHNOLOGICAL RESOURCES

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Understand and utilize operating systems (Windows, etc) as needed 8.1.(4)A.2		T	M	M	M	M	M	M	M	M
B. Understand and utilize computer applications and software (databases, spreadsheets, presentations, and word processing), as needed 8.1.(4) A.2		T	M	M	M	M	M	M	M	M
C. Understand and utilize the Online Public Access Catalog (OPAC) operations 8.1.(4)A.2			I	T	T	M	M	M	M	M
1. Perform a basic search by (a) Author, Title, Subject; (b) Keyword			I	T	T	M	M	M	M	M
2. Assess search results				I	I	T	M	M	M	M



## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### IV. NON-REFERENCE/CIRCULATING COLLECTION

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Identify, locate, select, and utilize materials by Dewey  Decimal System										
1. Easy/Picture books (Author's style, Illustrations, Caldecott Medals/Other medals)	I	I	T	M	M	M	M	M	M	M
2. Fiction/Story Collections (Author's style, Genre, Newbery Medals/Other medals)			I	T	T	M	M	M	M	M
3. Nonfiction/Information Books										
a. Organization by Dewey Decimal Classification System divisions		I	I	T	M	M	T	M	M	M
b. Evaluation of information (1) Thinking levels: understanding, application, analysis, synthesis, judgment					I	T	T	T	T	T
(2) Criteria : authority, bias, currency, validity					I	T	T	T	T	T

c. Newbery Medals/ other medals					I	T	T	T	T	T
4. Biography		I	I	T	M	M	T	M	M	M
5. Periodicals : Magazines, Newspapers (Entertainment, News, Special Interests)		I	I	T	M	M	T	M	M	M

## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### V. REFERENCE COLLECTION

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Identify, locate, select, and utilize print reference materials										
1. Dictionaries		I	I	T	M	M	M	M	M	M
2. Almanacs					I	T	T	T	M	M
3. Atlases					I	T	M	M	M	M
4. Encyclopedias				I	I	T	M	M	M	M
5. Collective Biographies								T	M	M
B. Identify, locate, select, and utilize non-print reference materials 8.1.(4).2; (4)B.3										
1. Online databases, for example: Encyclopedias, periodicals, Literary Criticism, General Reference, News Digests					I	T	T	T	T	T

a. Access skills										
b. Search strategies					I	T	T	T	T	T
c. Evaluation of information					I	T	T	T	T	T
(1) Understand, analyze, evaluate, synthesize, and apply appropriate information effectively										
(2) Bias, authority, currency, validity					I	T	T	T	T	T
2. The Internet					I	T	M	M	M	M
a. Netiquette										
b. Access Skills					I	M	M	M	M	M

## Scope & Sequence Template (Course Outline/Student Objectives)

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Key: I = Introduce/Expose                      T = Teach                      M = Maintain

### V. REFERENCE COLLECTION (continued)

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
c. Search strategies					I	M	M	M	M	M
d. Evaluation of information (1) Understand, analyze, evaluate, synthesize, and apply appropriate information effectively					I	M	M	M	M	M
(2) Bias, authority, currency, validity					I	M	M	M	M	M

## Scope & Sequence Template (Course Outline/Student Objectives)

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Key:    I = Introduce/Expose                      T = Teach                      M = Maintain

### VI. BIBLIOGRAPHIC CITATION

Standard/Indicator:

- Apply subject area NJ Core Curriculum content Standards according to context in which skills are taught
- Apply NJCCCS Technological Literacy Standards according to context in which skills are taught

**Students in grades K-8 will be able to:**

Course Outline- Scope/Sequence	PreK	K	1	2	3	4	5	6	7	8
A. Apply district guideline for bibliographic citations; e.g., Modern Language Associations (MLA), American Psychological Association (APA), and others					I	I	M	M	M	M

## **APPENDICES**

**APPENDIX A:** Suggested Student Activities and Library Media Specialist's Role

**APPENDIX B:** Standards:

1. AASL/AECT – Information Literacy Standards
2. Technological Literacy Core Curriculum Content Standards

**APPENDIX C:** NJASL Print and Online Resources

**APPENDIX D:** Additional Resources 15

**SUGGESTED STUDENT ACTIVITIES AND LIBRARY MEDIA SPECIALIST'S ROLE**  
**(Related to Scope and Sequence)**

<b>Student Activities</b>	<b>School Library Media Specialist's Role(s)</b>
~ Choose books to read, report on, respond to, and speak about	~ Develops a literature collection which responds to the curriculum ~ Gives book talks ~ Introduces specific literature ~ Teaches classification/use of catalog ~ Gathers materials ~ Directs students to books ~ Creates resource lists ~ Assists students in selecting appropriate books
~ Listen to a story or other literary work and respond appropriately ~ Develop questions about a literary work	~ Develops a literature collection which responds to the curriculum ~ Reads stories to classes ~ Provides classroom teacher with appropriate materials
~ Select a book/story to dramatize or read aloud ~ Produce a multimedia presentation	~ Helps students locate and evaluate material individually or as part of a group ~ Models and provides students with instructions on the skills for effective reading aloud ~ Assists in producing multimedia presentations ~ Helps students to evaluate their productions
~ Conduct research for assigned projects, and personal interests	~ Develops a research collection ~ Directs students to print and non-print sources ~ Teaches research skills ~ Helps students develop research strategies ~ Teaches students how to evaluate sources ~ Creates resource lists
~ Use periodicals to analyze social and political bias ~ Use advertisements to analyze motivational techniques	~ Develops periodical collection that responds to the curriculum ~ Helps students select periodicals ~ Teaches the use of periodical indexes/databases ~ Assists students in evaluating periodicals ~ Assists students in evaluating advertisements

**SUGGESTED STUDENT ACTIVITIES AND LIBRARY MEDIA SPECIALIST'S ROLE**  
**(continued)**  
**(Related to Scope and Sequence)**

<b>Student Activities</b>	<b>School Library Media Specialist's Role(s)</b>
~ Access the Internet and other electronic media for research and assigned projects	<ul style="list-style-type: none"> <li>~ Describes and compares electronic information</li> <li>~ Teaches students how to access electronic information</li> <li>~ Teaches students how to develop search strategies</li> <li>~ Teaches students to evaluate electronic resources</li> </ul>
~ View films, commercials, newsreels, and televised debates to make comparisons and critical judgments	<ul style="list-style-type: none"> <li>~ Develops and provides an audio-visual collection which responds to the curriculum</li> <li>~ Guides students and teachers to sources of criticism</li> <li>~ Helps students develop criteria for evaluating what they view</li> </ul>
~ Conduct career research	<ul style="list-style-type: none"> <li>~ Develops and provides career resources</li> <li>~ Teaches students how to access materials about careers</li> <li>~ Guides students to local job advertisements in print and electronic sources</li> <li>~ Leads students to materials on successful interviewing techniques</li> </ul>

**APPENDIX B-1**  
**AASL/AECT Information Literacy Standards**

**The Nine Information Literacy Standards for Student Learning**

**Standard 1:** The student who is information literate accesses information efficiently and effectively.

**Standard 2:** The student who is information literate evaluates information critically and competently.

**Standard 3:** The student who is information literate uses information accurately and creatively.

**Independent Learning**

**Standard 4:** The student who is an independent learner is information literate and pursues information related to personal interests.

**Standard 5:** The student who is an independent learner is information literate and appreciates literature and other creative expressions of information.

**Standard 6:** The student who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation.

**Social Responsibility**

**Standard 7:** The student who contributes positively to the learning community and to society is information literate and recognizes the importance of information to a democratic society.

**Standard 8:** The student who contributes positively to the learning community and to society is information literate and practices ethical behavior in regard to information and information technology.

**Standard 9:** The student who contributes positively to the learning community and to society is information literate and participates effectively in groups to pursue and generate information.

Excerpted from Chapter 2, "Information Literacy Standards for Student Learning," of *Information Power: Building Partnerships for Learning*. Copyright © 1998 American Library Association and Association for Educational Communications and Technology.

## APPENDIX B-2

### New Jersey Core Curriculum Content Standards for Technological Literacy

#### INTRODUCTION

##### The Vision

Technology, any modification of the natural world designed by human beings to solve human problems, enhance human life, or extend human capability, was identified by the United States Department of Labor as an essential workplace competency in a 1992 report called the Secretary's Commission on Achieving Necessary Skills (SCANS). SCANS stated that students should be able to select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment. The Department of Education recognized its importance by including technology in the original cross-content workplace readiness standards. In keeping with today's technological society, technological literacy has been further emphasized by its inclusion as a separate standards area which focuses on both computer and information literacy and technology education.

Technology is evolving at an amazing rate, with both frequent advancements of existing technology and the creation of new technologies. All students must understand and be comfortable with the concepts and application of technology, not only in order to function in today's complex society, but also to become informed and productive adults of tomorrow.

##### Computer and Information Literacy

Computer and information literacy, which supports skills in information-gathering, information-organizing, and problem solving, has become critical for every student whether college- or workplace-bound. Colleges and employers are now demanding that students and employees possess a broad range of computer and information literacy proficiencies. More and more retail purchasing is being done on-line every year, and all but the most menial of positions now require a significant understanding of computer and information literacy. To ensure that students are computer literate, a separate standard that defines rigorous, in-depth learning has been included. The computer and information literacy standard is designed to be integrated and applied in all of the content areas of the Core Curriculum Content Standards.

##### Technology Education

The technology education standard was developed to ensure the literacy needed by all students to succeed in a highly technological world. Business and industry has clearly stated the need for technological skills in the workplace of the 21st Century.

This standard is based on the *Standards for Technological Literacy (STL): Content for the Study of Technology (ITEA, 2000)*, developed as part of the National Science Foundation (NSF)/National Aeronautics and Space Administration (NASA) funded by the *Technology for All Americans (TfAA)* project.

A study by DeKlerk has found that students form negative attitudes about the technological world if there are no formal technological experiences during the early school years. This finding is a great concern to New Jersey business and industry. Other cognitive research suggests that "design-based learning" is important. Early studies with design and technology curriculum indicate that students who learn important technological concepts develop positive attitudes about technology, math, science and learning in general. For these reasons, an introduction to technology education, including engineering and technological design, is an essential component of a thorough and efficient K-12 education.

## **Standards and Strands**

There are two technological literacy standards, each of which has a number of lettered strands. The standards and strands include:

### **8.1 Computer and Information Literacy**

#### A. Basic Computer Tools and Skills

- Keyboarding
- Word processing
- Internet usage
- Spreadsheets
- Database concepts and usage
- Publications and presentations

#### B. Application of Productivity Tools

- Social Aspects
- Information Access and Research
- Problem Solving

### **8.2 Technology Education**

#### A. Nature and Impact of Technology

#### B. Design Process and Impact Assessment

#### C. Systems in the Designed World

## **References**

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Online:[http://www.ala.org/aaslTemplate.cfm?Section=Information\\_Power&Template=/ContentManagement/ContentDisplay.cfm&ContentID=19937](http://www.ala.org/aaslTemplate.cfm?Section=Information_Power&Template=/ContentManagement/ContentDisplay.cfm&ContentID=19937) .

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National Business Education Association. (2001). National standards for business education. Online: <http://www.nbea.org/curriculum/bes.html> .

<p><b>STANDARD 8.1 (COMPUTER AND INFORMATION LITERACY )</b> <b>ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND TO SOLVE PROBLEMS.</b></p>
--

Descriptive Statement: Using computer applications and technology tools students will conduct research, solve problems, improve learning, achieve goals, and produce products and presentations in conjunction with standards in all content areas, including career education and consumer family, and life skills. They will also develop, locate, summarize, organize, synthesize, and evaluate information for lifelong learning.

### **Strands and Cumulative Progress Indicators**

**By the end of Grade 4, students will:**

#### **A. Basic Computer Skills and Tools**

1. Use basic technology vocabulary.
2. Use basic features of an operating system (e.g., accessing programs, identifying and selecting a printer, finding help).
3. Input and access text and data, using appropriate keyboarding techniques or other input devices.
4. Produce a simple finished document using word processing software.
5. Produce and interpret a simple graph or chart by entering and editing data on a prepared spreadsheet template.
6. Create and present a multimedia presentation using appropriate software.
7. Create and maintain files and folders.
- . Use a graphic organizer.
9. Use basic computer icons.

#### **B. Application of Productivity Tools**

##### **Social Aspects**

1. Discuss the common uses of computer applications and identify their advantages and disadvantages.
2. Recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use including:
  - Internet access
  - Copyrighted materials
  - On-line library resources
  - Personal security and safety issues
3. Practice appropriate Internet etiquette.
4. Recognize the ethical and legal implications of plagiarism of copyrighted materials.

### Information Access and Research

5. Recognize the need for accessing and using information.
6. Identify and use web browsers, search engines, and directories to obtain information to solve real world problems.
7. Locate specific information by searching a database.
8. Recognize accuracy and/or bias of information.

### Problem Solving and Decision Making

9. Solve problems individually and/or collaboratively using computer applications.
10. Identify basic hardware problems and solve simple problems.

**Building upon knowledge and skills gained in preceding grades, by the end of Grade 8, students will:**

#### **A. Basic Computer Skills and Tools**

1. Use appropriate technology vocabulary.
2. Use common features of an operating system (e.g., creating and organizing files and folders).
3. Demonstrate effective input of text and data, using touch keyboarding with proper technique.
4. Input and access data and text efficiently and accurately through proficient use of other input devices, such as the mouse.
5. Create documents with advanced text-formatting and graphics using word processing.
6. Create a file containing customized information by merging documents.
7. Construct a simple spreadsheet, enter data, and interpret the information.
8. Design and produce a basic multimedia project.
9. Plan and create a simple database, define fields, input data, and produce a report using sort and query.
10. Use network resources for storing and retrieving data.
11. Choose appropriate electronic graphic organizers to create, construct, or design a document.
12. Create, organize and manipulate shortcuts.

#### **B. Application of Productivity Tools**

### Social Aspects

1. Demonstrate an understanding of how changes in technology impact the workplace and society.
2. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.
3. Explain the purpose of an Acceptable Use Policy and the consequences of inappropriate use of technology.
4. Describe and practice safe Internet usage.
5. Describe and practice .etiquette. when using the Internet and electronic mail.

### Information Access and Research

6. Choose appropriate tools and information resources to support research and solve real world problems, including but not limited to:
  - On-line resources and databases
  - Search engines and subject directories
7. Evaluate the accuracy, relevance, and appropriateness of print and non-print electronic information sources.

### Problem Solving and Decision Making

8. Use computer applications to modify information independently and/or collaboratively to solve problems.
9. Identify basic hardware problems and demonstrate the ability to solve common problems.
10. Determine when technology tools are appropriate to solve a problem and make a decision.

**STANDARD 8.2 (TECHNOLOGY EDUCATION)****ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE NATURE AND IMPACT OF TECHNOLOGY, ENGINEERING, TECHNOLOGICAL DESIGN, AND THE DESIGNED WORLD AS THEY RELATE TO THE INDIVIDUAL, SOCIETY, AND THE ENVIRONMENT.**

Descriptive Statement: The following indicators are based on the Standards for Technological Literacy (STL, 2000) and support the National Academy of Engineering's (2002) call for students to gain technological literacy. Students will be expected to understand the various facets of technology and the design process. They will analyze and evaluate design options and then apply the design process to solve problems. A systems perspective is employed to emphasize the interconnectedness of all knowledge and the impact of technology and technological change. Students will be expected to use technology as it applies to physical systems, biological systems, and information and communication systems. The intent at the elementary and middle school levels is that all students develop technological literacy and are prepared for the option of further study in the field of technology education. At the elementary level, the foundation for technology education is found in the science standards, particularly standards 5.2 and 5.4.

**Strands and Cumulative Progress Indicators****By the end of Grade 4, students will:****A. Nature and Impact of Technology**

Refer to Science Standards 5.2 and 5.4.

**B. Design Process and Impact Assessment**

Refer to Science Standards 5.2 and 5.4.

**C. Systems in the Designed World**

Refer to Science Standards 5.2 and 5.4.

**Building upon knowledge and skills gained in the preceding grades, by the end of Grade 8, students will:****A. Nature and Impact of Technology**

1. Describe the nature of technology and the consequences of technological activity.
2. Describe how components of a technological product, system, or environment interact.
3. Describe how one technological innovation can be applied to solve another human problem that enhances human life or extends human capability.
4. Describe how technological activity has an affect on economic development, political actions, and cultural change.
5. Explain the cultural and societal effects resulting from the dramatic increases of knowledge and information available today.

## **B. Design Process and Impact Assessment**

1. Demonstrate and explain how the design process is not linear.
2. Use hands on activities to analyze products and systems to determine how the design process was applied to create the solution.
3. Identify a technological problem and use the design process to create an appropriate solution.
4. Describe how variations in resources can affect solutions to a technological problem.
5. Select and safely use appropriate tools and materials in analyzing, designing, modeling or making a technological product, system or environment.

## **C. Systems in the Designed World**

1. Explain technological advances in medical, agricultural, energy and power, information and communication, transportation, manufacturing, and construction technologies.
2. Explain reasons why human-designed systems, products, and environments need to be monitored, maintained, and improved to ensure safety, quality, cost efficiency, and sustainability.
3. Explain the functions and interdependence of subsystems such as waste disposal, water purification, electrical, structural, safety, climatic control, and communication.

## APPENDIX C RECOMMENDED PRINT AND ONLINE RESOURCES

### Developing a School Library Media Program

*Note: websites listed below were active as of 4-2-2005.*

#### **Assessment**

Kuhlthau, Carol Collier. Assessment and the School Library Media Center. Englewood, CO: Libraries Unlimited, 1994.

Murray, Janet. "Big6 Skills and State Standards."  
<<http://www.big6.com/showenewsarticle.php?id=339>>.

National Education Association > Hot topics > Accountability and Testing. <http://www.nea.org/>>.

New Jersey Department of Education.  
<http://www.nj.gov/education/index.html>.  
<http://www.state.nj.us/education/index.html>.

New Jersey Core Curriculum Content Standards.  
<http://www.njpep.org/standards/index.html>  
<http://www.nj.gov/njded/cccs/>

New Jersey Curriculum Frameworks.  
<http://www.state.nj.us/njded/frameworks/index.html>.

NJ Department of Education, Standards and Assessment.  
<http://www.nj.gov/njded/stass/>.

NJ Department of Education, NJ Professional Education Port: Virtual Academy.  
<http://www.njpep.org/>.

#### **Educational Technology**

Association for Educational Communications and Technology [AECT].  
<http://www.aect.org>.

International Society for Technology in Education [ISTE].  
<http://www.iste.org/>.

National Educational Technology Standards [NETS]  
<http://cnets.iste.org/index.shtml>.

Johnson, Doug. "Doug Johnson: Writing, Speaking and Consulting on School Technology and Library Issues".

<http://www.doug-johnson.com/>

<http://www.doug-johnson.com/articles.html>

“Listing of White Papers From the 1999 Secretary's Conference on Educational Technology That Focused on Technology and Its Efficacy.” United States Department of Education.

<http://www.ed.gov/rschstat/eval/tech/techconf99/whitepapers/index.html?exp=0>.

McKenzie, Jamie. “From Now On: The Educational Technology Journal”.

<http://www.fno.org/>.

### **Essential Questions**

A Questioning Toolkit.” From Now On: The Educational Technology Journal.

<http://www.fno.org/nov97/toolkit.html>.

“The Research Cycle Begins with an ‘Essential Question’.” Bellingham Public Schools.

<http://www.gen.bham.wednet.edu/probsolv.htm>.

### **Facilities**

New Jersey Department of Education Facilities Efficiency Standards.

<http://www.state.nj.us/njded/facilities/over/faq.shtml>

<http://www.state.nj.us/njded/facilities/>.

### **General**

Articles for Educators.

<http://www.articlesforeducators.com/search.asp>.

Association for Educational Communications and Technology [AECT].

<http://www.aect.org>.

Classroom Leadership, Association for Supervision and Curriculum Development.

<http://www.ascd.org/>.

Inquiry Education Research links, Exploratorium Institute for Inquiry.

<http://www.exploratorium.edu/IFI/resources/research.html>.

McKenzie, Jamie. “From Now On: The Educational Technology Journal”.

<http://www.fno.org/>.

McKenzie, Jamie. “The Ties that Bind - Providing Support for Coherence throughout the Research Process.”

<http://optin.iserver.net/fromnow/sum00/links.html>

<http://optin.iserver.net/fromnow/sum00/links2.html>.

McKenzie, Jamie. "Winning with Information Literacy."  
<http://optin.iserver.net/fromnow/sum00/winning.html>.

MCREL, Mid-continent Research for Education and Learning.  
<http://www.mcrel.org/>.

### **Information Literacy**

"The Big6™ - Information Literacy for the Information Age."  
<http://www.big6.com/>.

Breivik, Patricia Senn. Information Literacy: Educating Children for the 21st Century (2nd edition). National Education Association, 1998.

Information Literacy. "Improving Literacy through School Libraries FY 2004 Grantees in Order by State." ERIC Digest.  
<http://www.ed.gov/programs/isl/abstracts2004.doc>

"Information Literacy." Infosearcher.  
[http://www.infosearcher.com/info\\_literacy.htm](http://www.infosearcher.com/info_literacy.htm).

The Literacy Web at University of Connecticut.  
<http://www.literacy.uconn.edu/>.

New Jersey Department of Education, Standards and Assessment.  
<http://www.nj.gov/njded/stass/>.

"An Overview of Prominent Information Literacy Strategies: Definition and Models." Wired Learning.  
<http://www.kn.pacbell.com/wired/21stcent/infooverview.html>.

"What Do We Mean by 'Information Literacy'?"  
<http://stauffer.queensu.ca/inforef/tutorials/rbl/infolit.htm>.

### **Reading**

American Library Association . Great Web Sites for Kids.  
<http://www.ala.org/greatsites>  
<http://www.ala.org/ala/alsc/greatwebsites/greatwebsiteskids.htm>.

Craver, Kathleen W. School Library Media Centers in the 21st Century: Changes and Challenges. Westport, CT: Greenwood Press, 1994.

Freeman, Judy. Books Kids Will Sit Still For : A Guide To Using Children's Literature For Librarians, Teachers, and Parents. Hagerstown, MD: Alleyside Press, 1984.

Freeman, Judy. More Books Kids Will Sit Still For: A Read Aloud Guide . New Providence, NJ: R.R. Bowker, 1995.

International Reading Association.  
<http://www.ira.org>

New Jersey Center of the Book  
<http://njcenterforthebook.org/>

New Jersey Reading Association.  
<http://www.njreading.org/>

Krashen, Stephen. The Power of Reading. Englewood, CO: Libraries Unlimited, 1993.

## **Research**

American Association of School Librarians [AASL].  
<http://www.ala.org/aasl>

Association for Educational Communications and Technology [AECT].  
<http://www.aect.org/>

Center for International Scholarship in School Libraries, Rutgers, The State University of New Jersey (CISSL). <http://www.cissl.scils.rutgers.edu/directors/Todd.htm>

Center for Media Studies, Rutgers, The State University of New Jersey.  
<http://www.mediastudies.rutgers.edu/cmsyme.html>

ERIC - Educational Resources Information Center  
<http://www.eric.ed.gov>  
<http://reading.indiana.edu/>

Haycock, Ken. What Works: Research About Teaching and Learning Through the School's Library Resource Center. Seattle, WA: Rockland Press, 1992.

Internet Resources for Library Media Specialists and Children's Librarians. ERIC Digest.  
<http://homepage.mac.com/donsmith/webresources.htm>.

Kuhlthau, Carol C. "Implementing a Process Approach to Information Skills: A Study Identifying Indicators of Success in Library Media Programs." School Library Media Quarterly. Fall 1993.

Lance, Keith Curry. "The Impact of School Library Media Centers on Academic Achievement." <http://www.ala.org/ala/aasl/aaslpubsandjournals/slmrb/editorschoiceb/infopower/selectlancehtml.htm>

Lance, Keith Curry. The Impact of School Library Media Centers on Academic Achievement. Castle Rock, CO: Hi Willow Research and Publishing, 1993.

Lance, Keith Curry. Library Research Service.  
<http://www.lrs.org/>

"National School Library Statistics."

[http://www.lrs.org/asp\\_school/national.asp](http://www.lrs.org/asp_school/national.asp)

“School Library Impact Studies.”

<http://www.lrs.org/impact.asp>

“School Libraries Work!” Scholastic Research Foundation Paper. 2004. Scholastic Library Publishing.

[http://www.scholastic.com/librarians/printables/slp\\_rfp\\_804.pdf](http://www.scholastic.com/librarians/printables/slp_rfp_804.pdf)

or [http://www.scholasticlibrary.com/download/slw\\_04.pdf](http://www.scholasticlibrary.com/download/slw_04.pdf)

Whelan, Debra Lau. “13,000 Kids Can’t Be Wrong: A New Ohio Study Shows How School Libraries Help Students Learn.” School Library Journal, February 2004. 46-50.

<http://www.schoollibraryjournal.com/>

The White House Conference on School Libraries. The Laura Bush Foundation. June 4, 2002.

[http://www.laurabushfoundation.org/release\\_060402.html](http://www.laurabushfoundation.org/release_060402.html).

### **School Library Media Program**

American Association of School Librarians [AASL].

<http://www.ala.org/aasl>.

Association for Educational Communications and Technology [AECT].

<http://www.aect.org/Divisions/mt.asp>.

Craver, Kathleen W. School Library Media Centers in the 21st Century: Changes and Challenges. Westport, CT: Greenwood Press, 1994.

Educational Media Association of New Jersey [EMAnj], Professional Development Committee. “What Do You Say When... Talking Points: Suggested Responses for Frequently Asked Questions.” 2002.

<http://www.njasl.org/publications.htm>.

Educational Media Association of New Jersey [EMAnj], New Jersey Library Association [NJLA] and State Library. “School/Public Library Joint Use Facility Standards.” 2003.

<http://www.njasl.org/publications.htm>.

Eisenberg, Michael B. and Robert E. Berkowitz. Curriculum Initiative: An Agenda & Strategy for Library Media Programs. Norwood, NJ: Ablex, 1988.

Eisenberg, Michael B. and Robert E. Berkowitz. “Big6 Skills Overview”.

<http://www.big6.com/showarticle.php?id=16>.

Eisenberg, Michael B. and Robert E. Berkowitz. “Lessons: Ideas on How to Implement the Big6 in Your Classroom”.

<http://www.big6.com/showcategory.php?cid=19>

Eisenberg, Michael B. and Robert E. Berkowitz. Applying the Big6™ and Information Literacy Standards to Internet Research.

<http://www.big6.com/showcategory.php?cid=20>

Foundations for Effective School Library Media Programs. Ed., Ken Haycock. Englewood, CO: Libraries Unlimited, 1999.

Information Power: Building Partnerships for Learning. Chicago: American Library Association, 1998. Excerpts [http://www.ala.org/aasl/ip\\_toc.html](http://www.ala.org/aasl/ip_toc.html)

Johnson, Doug. "Common Sense Economy." Library Media Connection. January 2005. 98-96. <http://www.doug-johnson.com/>

Kuhlthau, Carol. Seeking Meaning: A Process Approach to Library and Information Services. 2<sup>nd</sup> Ed. Westport, CT: Libraries Unlimited, 2003.

Loertscher, David V. Reinvent Your School's Library in the Age of Technology: A Guide for Principals and Superintendents. San Jose, CA: Willow Publishing, 1998.

Loertscher, David V. Taxonomies of the School Library Program. Englewood, CO: Libraries Unlimited, 1988.

New Jersey Department of Education, New Jersey State Library. Guidelines for School Library Media Programs in New Jersey: A Planning Tool. Trenton, NJ: New Jersey Department of Education, New Jersey State Library, 1992.

A Planning Guide for Information Power: Building Partnerships for Learning. Chicago: AASL, 1999.  
Valenza, Joyce Kasman. Power Tools: 100+ Essential Forms and Presentations for Your School Library Information Program. Chicago: American Library Association, 1998.

Valenza, Joyce K. Power Tools Recharged: 125+ Essential Forms and Presentations for Your School Library Information Program. Chicago: American Library Association, 2004.

The Virtual School Library: Gateways to the Information Superhighway. Englewood, CO: Libraries Unlimited, 1996.

Weisburg, Hilda K. and Ruth Toor. At Your Fingertips: 78 Ways to Improve Your Library Media Program. Berkeley Heights, NJ: Library Learning Resources, Inc., 1992.

### **Student Achievement**

Gardner, Howard. Intelligence Reframed: Multiple Intelligences for the 21<sup>st</sup> Century. NY: Basic Books, 1999.

Hamilton-Pennell, Christine, et al. "Dick and Jane Go to the Head of the Class." School Library Journal. April, 2000. 44-47. <http://www.schoollibraryjournal.com/>

Lance, Keith Curry. "The Impact of School Library Media Centers on Academic Achievement."

<http://www.ala.org/ala/aasl/aaslpubsandjournals/slmrb/editorschoiceb/infopower/selectlancehtm.htm>

Lance, Keith Curry. The Impact of School Library Media Centers on Academic Achievement. Castle Rock, CO: Hi Willow Research and Publishing, 1993.

Lance, Keith Curry. Library Research Service. <http://www.lrs.org/>

“National School Library Statistics.” [http://www.lrs.org/asp\\_school/national.asp](http://www.lrs.org/asp_school/national.asp)

“School Library Impact Studies.” <http://www.lrs.org/impact.asp>

Loertscher, David V. School Library Media Programs and Academic Achievement: A Bibliography and Availability List. <http://www.davidvl.org/research.html>

Scott, Leslie and Jeffrey Owings. (2002) School Library Media Centers: Selected Results From the Education Longitudinal Study of 2002 (ELS:2002). (NCES 2005302). U.S. Dept. of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office. <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005302>

Stripling, Barbara. “School Libraries: Catalysts for Authentic Learning.” School Library Media Quarterly 25(2) 1997. 89-90

## **Teaching/Rubrics**

Berkowitz, Bob. “Activate a Big6™ Tool to Improve Learning.” <http://www.big6.com/showarticle.php?id=238>

“Comparison of Information Skills Process Models.” <http://big6.com/showarticle.php?id=87>

Bloom’s Taxonomy. <http://www.officeport.com/edu/bloomq.htm>

Educational Technology Department at San Diego State University. “WebQuests.” <http://webquest.sdsu.edu/>

High Plains Regional Technology in Education Consortium. <http://www.4teachers.org/>

“Project Based Learning.” <http://pblchecklist.4teachers.org/>

High School Hub (with link to Middle School Hub). <http://highschoolhub.org/hub/hub.cfm>

Internet School Library Media Center's Index to Internet Sites. <http://falcon.jmu.edu/~ramseyil/index.html>

Kids Click! Kids Research - Web Search for Kids by Librarians.

<http://www.kidsclick.org>

Lesson Plan Formats

[http://edweb.sdsu.edu/Courses/EDTEC470/sections/F02-10/lesson\\_planning.htm](http://edweb.sdsu.edu/Courses/EDTEC470/sections/F02-10/lesson_planning.htm)

Lesson Plan Template. NJPEP: Virtual Academy, NJ Department of Education.

[http://www.njpep.org/standards/revised\\_standards/ClassroomActivityTemplate\\_Oct\\_02.doc](http://www.njpep.org/standards/revised_standards/ClassroomActivityTemplate_Oct_02.doc).

Lesson Planning Resources.

<http://www.huntington.edu/education/lessonplanning/>

MCREL, Mid-continent Research for Education and Learning

<http://www.mcrel.org/>

NJAC 6A:9-3.3 Professional Standards for Teachers. New Jersey Department of Education.

[www.nj.gov/njded/profdev/profstand/standards.pdf](http://www.nj.gov/njded/profdev/profstand/standards.pdf)

November, Alan C. "The Web—Teaching Zack to Think." Principal Magazine. June, 1998.

<http://www.anovember.com/>

<http://www.anovember.com/articles/zack.html>

PBS TeacherSource.

<http://www.pbs.org/teachersource/>

Pritzel, Amy. "What Do They Really Need to Know: Adventures in Curriculum Writing." Book Report. March/April, 2000. 30-33

Schrock, Kathy. "Kathy Schrock's Guide for Educators."

<http://school.discovery.com/schrockguide/index.html>

"Assessment and Rubrics."

<http://school.discovery.com/schrockguide/assess.html>

Stripling, Barbara K. and Judy M. Pitts. Brainstorms and Blueprints: Teaching Library Research as a Thinking Process. Englewood, CO: Libraries Unlimited, 1988.

Stripling, Barbara K. and Sandra Hughes-Hassell, Ed. Curriculum Connections through the Library. Westport, CT: Libraries Unlimited, 2003.

Toor, Ruth and Hilda K. Weisburg. Reasons, Roles and Realities: A Hands-on Seminar in Resource Based Instruction. Berkeley Heights, NJ: Library Learning Resources, Inc., 1986.

Valenza, Joyce Kasman. "The Neverending Search."

<http://joycevalenza.com/>

"Web Explorer." The New York Times.

<http://www.nytimes.com/learning/students/explorer/index.html>

Weisburg, Hilda K. and Ruth Toor. Learning, Linking, & Critical Thinking. Berkeley Heights, NJ: Library Learning Resources, Inc., 1994.

Yucht, Alice. Flip It! An Information Skills Strategy for Student Researchers. Worthington, OH: Linworth Pub., 1997.

<http://www.aliceinfo.org/>

## **Writing**

OWL - Online Writing Lab.

<http://owl.english.purdue.edu/>

Paradigm - Online Writing Assistant.

<http://www.powa.org/>

\* *School Library Media Program: Catalyst for Efficient Implementation of Cores Curriculum Content Standards K – 12*. Created by New Jersey Association of School Librarians, 2004.

<http://www.njasl.org/P:ublications.htm>

**APPENDIX D**  
**RESOURCES SEPARATE FROM THE GUIDE**

**Please See:**

**NJCCC Standards Matrix**  
**Language Arts Curriculum Guide**  
**Technology Education Curriculum Guide**  
**NJCCCS – Language Arts**