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# Massachusetts Recommended Standards for PreK – 12 Information Literacy Skills



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Massachusetts School Library Association  
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## Executive Summary

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In the complex technological world of today, education is no longer simply the acquisition of a body of knowledge. It is rather the ability to continually access and use a vast array of information sources. The learner must be able to effectively evaluate these sources, combine them in meaningful patterns and react creatively to the results. For a successfully educated individual, this mode of learning becomes a lifelong habit, since knowledge acquired today may be inadequate tomorrow, while the process of searching out answers, once learned, will be a lifetime skill.

---*Rationale for Today's School Library Media Center, MSLA*

In 2007 the American Association of School Librarians (AASL) published the *Standards for the 21<sup>st</sup> Century Learner*. According to this document, the definition of information literacy has become more complex as resources and technologies have changed. Information literacy has progressed beyond the simple definition of using reference resources to find information. Multiple literacies, including digital, visual, textual, and technological, have now joined information literacy as crucial skills for this century. The continuing expansion of information demands that all individuals acquire the thinking skills that will enable them to learn on their own. The AASL Standards present a broad perspective, going beyond the teaching of information literacy skills to focus on the learning process as a whole by including indicators for the dispositions, responsibilities, and self-assessment strategies that are essential for all learners in the 21<sup>st</sup> century.

Moving these ideals forward, *the Massachusetts Recommended Standards for PreK-12 Information Literacy Skills* are designed to support and augment the Guiding Principles, General Standards, and Strands of the *Massachusetts Curriculum Frameworks*. Library teachers from PreK through grade 12 schools developed the document. The overarching goal of these standards is to outline what information literate students should be able to do in order to use information efficiently, effectively, and ethically to guide learning. School districts can use these recommended standards to ensure that their students are aware of and proficient in using information in all formats.

*The Massachusetts Curriculum Frameworks* explicitly make the connection between successful mastery of framework content and use of the school library. School library programs can be primary supporters of this educational process, poised as they are on the cutting edge. A qualified school library teacher working in partnership with classroom teachers, school administrators, parents, and other community members is one of the chief agents of support for students learning 21<sup>st</sup> century skills. Classroom teachers and library teachers, working together, enhance the delivery of curriculum in our schools today.

The newly-revised *Massachusetts English Language Arts Curriculum Frameworks* integrates a research strand which requires students to gather information from a variety of sources, analyze and evaluate the quality of the information they obtain, and use it to answer their own questions. Incorporation of the *Massachusetts Recommended Standards for PreK-12 Information Literacy Skills* ensures that students have command of the tools they need to become effective and ethical users of the vast amount of data and resources available. These skills are a necessary part of contemporary life in the 21<sup>st</sup> century's global economy.

The *Massachusetts Recommended Standards for PreK-12 Information Literacy Skills* complement the *Massachusetts Instructional Technology Standard and Expectations*. School library teachers, as part of their regular practice, teach students web evaluation, use of electronic databases and ethical use of online resources.

In 2007, Massachusetts joined with the Partnership for 21<sup>st</sup> Century Skills acknowledging that “every child in America needs 21<sup>st</sup> century knowledge and skills to succeed as effective citizens, workers and leaders in the 21<sup>st</sup> century.” *The Massachusetts Recommended Standards for PreK-12 Information Literacy Skills* support the Partnership’s recommendations for information and media literacy skills, problem identification, formulation and solution; critical thinking, creativity and intellectual curiosity along with social responsibility.

Today, school library programs are broadening their scope to provide information access beyond the four walls of the library twenty-four hours a day, seven days a week. Digital worlds will widen access points for students of the future, and school libraries must be ready to meet those needs. Students are undergoing a rapid transformation from being consumers of information to becoming evaluators and producers of information using collaborative online tools. The need for easy, constant and reliable access to information will change the way school libraries operate throughout the 21<sup>st</sup> century.

The standards and indicators outlined on the following pages reflect the AASL *Standards for the 21<sup>st</sup> Century Learner*, which state that learners must be able to:

- Inquire, think critically, and gain knowledge
- Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge
- Share knowledge and participate ethically and productively as members of our democratic society
- Pursue personal and aesthetic growth

and support these underlying common beliefs:

- Reading is a window to the world.
- Inquiry provides a framework for learning.
- Ethical behavior in the use of information must be taught.
- Technology skills are crucial for future employment needs.
- Equitable access is a key component for education.
- The definition of information literacy has become more complex as resources and technologies have changed.
- The continuing expansion of information demands that all individuals acquire the thinking skills that will enable them to learn on their own.
- Learning has a social context.
- School libraries are essential to the development of learning skills.

# Acknowledgements

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The committee that created this document would like to acknowledge their colleagues throughout the state of Massachusetts. Without the help of fellow library teachers, this document would not be possible. In particular, the committee would like to thank the following communities for sharing their information literacy documents: Dartmouth, Westford, Cambridge, Norwood, and Chelmsford.

We would also like to acknowledge that the development of these standards was informed by:

- *Standards for the 21<sup>st</sup> Century Learner*, AASL
- *The Road to 21<sup>st</sup> Century Learning: Policymaker's Guide to 21<sup>st</sup> Century Skills*, Partnership for 21<sup>st</sup> Century Skills
- *Information Power: Building Partnerships for Learning*, AASL and AECT
- *Massachusetts Technology Literacy Standards and Expectations*, Massachusetts DOESE
- *Big6 Information Literacy Model*, Michael B. Eisenberg and Robert E. Berkowitz

The underlying assumption of these standards is that the only way for learners to develop the skills and dispositions of learning is for them to be given opportunities to construct their own understanding and develop the skills through guided practice. Library media specialists will want to offer direct instruction on the targeted skill, but then scaffold the learning experience so that students are challenged to perform the skill with guidance and then on their own. Any information processing/research/inquiry model can be used as the structure for the learning process because all of the models have essentially the same phases, as outlined in the standards and indicators themselves.

---Standards for the 21st Century Learner, AASL

The Curriculum Standards Committee of the Massachusetts School Library Media Association:

Valerie Diggs, Chelmsford Public Schools, MSLA Professional Standards Chair  
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Sandra Kelly, Carlisle School, MSLA President, 2007-2009  
Geraldine Fegan, Andover Public Schools, MSLA President-Elect, 2008-09  
Katherine Lowe, MSLA Executive Director

# Overview of Grade Spans

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The information literacy skills are divided into four age spans:

- PreK to Grade 2
- Grades 3 and 4
- Grades 5 through 8
- Grades 9 through 12

There are several educational philosophies incorporated in the presentation and organization of these information literacy skills. First, regardless of the grade, it is important to remember that students learn information literacy skills best when introduced at the point of need, not in isolation. Jamie McKenzie affirms that we should teach students “just in time” not “just in case” (McKenzie). Constructivist educational theory confirms this; we know that students are much more likely to retain a skill if they learn it when they need to use it, rather than if they learn it just because it is the next thing in the curriculum. When students are actively engaged in their own learning and are applying new skills to authentic tasks, they are able to connect prior knowledge with new knowledge. In order for this type of learning to take place efficiently and effectively, the school library teacher and the core classroom teachers need to be able to communicate on a regular and frequent basis as they prepare lessons and projects together. Therefore, a school library with reliable print and electronic resources, which supports curriculum initiatives, must be accessible to all users during regular school hours.

Also, the skills outlined in this document are cumulative. Students must develop a familiarity and literacy with information at an early age so that as they get older and are capable of more abstract thinking, the basic skills are second nature. For example, if high school students do not know how to search an online library catalog, a skill that should be practiced and developed at a younger age, they are unlikely to be able to search online databases effectively. If fourth grade students do not learn to use a teacher selected essential question to develop a topic focus, they will find it very difficult to develop their own thesis statement in eighth grade. If students do not have the opportunity to learn the basic skills when they are young, they will be at a disadvantage when they are older.

Therefore, this presentation of information literacy skills is predicated on the assumption that they will be introduced at every grade level in authentic lessons and projects, and that they are integrated directly within the core classroom content as they become relevant to the students’ learning.

## **PreK to Grade 2**

Beginning information literacy skills for this age group is crucial. While many students in this grade span are not readers at all, others are only at the beginning stages of “learning to read”. The groundwork for later skills must be laid, even at this young age. It is developmentally appropriate for students in the lower elementary grades to be able to do the following: ask relevant questions; recognize when information is needed; describe what kinds of information can be used to solve a problem; recognize the differences between fiction and non-fiction; begin to be able to find resources independently in a library; sort information in meaningful ways; communicate new information that they have learned; evaluate their own information processes as well as their final products; and be able to verbalize basic elements of stories.

### **Grades 3-4**

The students at these grade levels are making a critical transition from “learning to read” to “reading to learn.” Information literacy skills at this point correspond to their newly acquired reading skills and their greater capacity for critical thinking. They should practice making connections, within literature, as well as with words. For example, they should be able to plan a search strategy for information by using keywords to help find the information using various sources such as a book index, a library catalog or an online site. Students should be able to synthesize information to organize and produce new meaning.

### **Grades 5-8**

By fifth grade students are now reading information to learn. They are developing abstract thinking skills and information literacy skills that build on this ability. By the end of eighth grade they should be familiar with various internet search strategies and how to use them, and they begin to evaluate information that they find. In addition, they can evaluate their own research process and product, and explain the ethical use of information. If provided regularly with authentic learning in a resource-based environment, eighth-graders become fluent in information literacy skills.

### **Grades 9-12**

The information literacy skills delineated for this age group further develop the skills from earlier stages, but are more in depth and focus more on student independence. As they prepare to go to college, the world of work and beyond, students should be critical thinkers and independent information users. They must be able to ask relevant questions to answer a broader question and be familiar with the range of information sources available to them. In addition, they need to be able to recognize authority, bias, opinion, and relevance, regardless of the type of information source. They must know how to develop a search strategy and be able to change the strategy if it isn't working. They understand both the possibilities and the limitations of various internet-based resources. They should know how to use information ethically, and should be able to work both individually and collaboratively.

### **Conclusion**

The ultimate goal of a school library program is to help students find, evaluate, synthesize, present and produce information efficiently, effectively and ethically. The objective of *The Massachusetts Recommended Standards for PreK-12 Information Literacy Skills* is to assist school districts in focusing on age-appropriate skills that will lead to students becoming life-long readers and learners who contribute positively to a global society.

# PreK – Grade 12 Information Literacy Skills Standards

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The Recommended PreK – 12 Information Literacy Skills Standards fall under eight broad categories:

**Standard 1. Define an Information Task**

*Students will be able to define problems competently and identify information needs.*

**Standard 2. Develop Information Seeking Strategies**

*Students will be able to develop strategies to find information relevant to their question or personal need.*

**Standard 3. Locate and Access Information**

*Students will be able to access and gather information efficiently and effectively.*

**Standard 4. Use Information**

*Students will be able to evaluate resources for their appropriateness, select the best and extract the most relevant information.*

**Standard 5. Synthesize Information**

*Students will organize new information from multiple sources to construct a product that communicates the results of their research*

**Standard 6. Participate in Collaborative Activities**

*Students will participate effectively in groups to pursue and generate information.*

**Standard 7. Evaluate the Process and the Product**

*Students will evaluate both the research process and the final product. This may include both self and peer evaluation.*

**Standard 8. Appreciate Literature**

*Students will gain an increased enjoyment of literature and grow in their abilities to locate and select appropriate reading materials independently.*

# Information Literacy Skills Performance Indicators

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**Standard 1. Define an Information Task.**

Students will be able to define problems competently and identify the needed information.

Grade Level	Performance Indicator
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <p>1.1 Ask a question that requires information seeking.            1.2 Rephrase the classroom assignment: What am I supposed to do?            1.3 Identify existing knowledge and, with assistance, areas where more information is needed. Example: complete a topic chart, "What I Know," "What I Think I Know," "What I Need to Find Out."            1.4 Brainstorm additional questions to answer in solving an information problem.</p>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>1.5 With assistance, list the criteria for a research assignment.            1.6 Demonstrate overall understanding of the final product, e.g. "I need to create a... presentation, poster, essay, etc."            1.7 Use the teacher selected essential question to develop a topic focus, e.g. "Why do leaves turn different colors in the fall?"            1.8 Gather background information by reading, viewing or listening to a variety of pre-selected and self-selected resources.            1.9 As a class, develop a student driven essential question.            1.10 Identify existing knowledge as well as additional information necessary to solve the problem.</p>
5-8	<p><i>By the end of the eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>1.11 Understand the criteria for the research assignment.            1.12 Explain what the final product will look like.            1.13 Select a topic from a range of possibilities.            1.14 Use the teacher provided essential question to develop a topic focus, or develop a self-selected essential question.            1.15 With assistance, develop a thesis statement.            1.16 Identify pre-existing knowledge, as well as additional information necessary to solve the problem.            1.17 Read, listen, and watch from all relevant and appropriate sources to gain an overview of the topic.</p>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>1.18 Independently select a topic.            1.19 Develop an essential question to answer.            1.20 Skim/read all sources to provide background information and generate subsidiary questions.            1.21 Develop a thesis statement, demonstrating a particular point of view.</p>

## **Standard 2. Develop Information Seeking Strategies.**

Students will be able to develop strategies to find information relevant to their question or personal need.

<b>Grade Level</b>	<b>Performance Indicator</b>
PreK-2	<p><i>By the end of second grade, students should be able to:</i></p> <ul style="list-style-type: none"><li>2.1 Exhibit proper respect for and care of library materials, facilities, and equipment.</li><li>2.2 Understand the layout and organization of the library.</li><li>2.3 Understand and follow library rules and procedures.</li><li>2.4 Identify the parts of a book, e.g. spine, spine label, cover, title, page, verso page, barcode, if library is automated.</li><li>2.5 Explain the difference between fiction and non-fiction.</li><li>2.6 Recognize which resources are the best to use and why.</li><li>2.7 Web or map a topic based on prior knowledge and preliminary background information.</li><li>2.8 Develop a strategy to solve an information problem, e.g. Plan-Do-Review (Big6™).</li></ul>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>2.9 Identify and use parts of a book to gather information: copyright, publisher, table of contents, index, glossary, etc.</li><li>2.10 Explain that there are different types of resources that can be used for different purposes: books, databases, periodicals, pre-selected class websites, reference materials such as dictionaries, encyclopedias, thesauruses, almanacs, etc.</li><li>2.11 Identify key words to find information on a topic.</li><li>2.12 With assistance, use the online catalog to find information sources in the school library.</li><li>2.13 Web, map, or diagram a main topic with sub-topics.</li><li>2.14 Develop a strategy for finding relevant information, including a variety of types of resources.</li></ul>
5-8	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>2.15 Understand the library's organization of resources.</li><li>2.16 With assistance, select and modify keywords and phrases for information seeking purposes.</li><li>2.17 Understand the difference between, and the uses of, primary and secondary sources</li></ul>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>2.18 Use a strategy for finding relevant information from a variety of resources, shifting the strategy as necessary, based on availability and relevance.</li><li>2.19 Assess the value of various types of electronic resources for data gathering, including databases, internet sites, ebooks, community and government resources.</li><li>2.20 Independently develop keywords and phrases to search for information.</li><li>2.21 Use information sources of all types to explore a topic.</li><li>2.22 Narrow or expand a topic based on preliminary searching.</li><li>2.23 Select primary and secondary sources as appropriate.</li></ul>

### **Standard 3. Locate and Access Information.**

Students will be able to access and gather information efficiently and effectively.

<b>Grade Level</b>	<b>Performance Indicator</b>
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <ul style="list-style-type: none"><li>3.1 Independently locate library staff and navigate the library's physical space.</li><li>3.2 Independently approach the library teacher for assistance.</li><li>3.3 Understand that there is a relationship to spine label and book content and independently locate fiction and non-fiction sections in the school library.</li></ul>
<b>3-4</b>	<p><i>By the end of fourth grade, students will continue to work on the previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>3.4 Understand the roles of the library teacher and library staff.</li><li>3.5 Understand the organization of the library media center.</li><li>3.6 Use the library catalog to locate information sources.</li><li>3.7 With assistance, choose appropriate information source.</li><li>3.8 With assistance, find information from maps and charts.</li><li>3.9 Explore and develop understanding of how to gather information, including the use of table of contents, index, and glossary.</li></ul>
<b>5-8</b>	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>3.10 Independently choose appropriate information from print and electronic sources.</li><li>3.11 Use cross-references to locate additional information.</li><li>3.12 Recognize inadequacies or gaps in information.</li></ul>
<b>9-12</b>	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>3.13 Independently develop and implement an information search strategy.</li><li>3.14 Select the best sources for the information need.</li></ul>

## **Standard 4. Use Information**

Students will be able to:

- 4a. evaluate resources for their appropriateness
- 4b. select the best and most relevant information
- 4c. practice ethical behavior and respect for intellectual property rights

### **4a. Evaluation for Appropriateness**

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<i>By the end of second grade, students will be able to:</i> 4.1 Distinguish fiction from non-fiction.
3-4	<i>By the end of fourth grade, students will continue to work on previous standard as necessary and will also be able to:</i> 4.2 With assistance, develop criteria for relevant information, including authority, accuracy, objectivity, relevancy, and currency of source. 4.3 Compare and contrast information from different sources.
5-8	<i>By the end of eighth grade, students will continue to work on previous standard as necessary and will also be able to:</i> 4.4 Independently develop criteria for relevant information, including authority, accuracy, objectivity, relevancy, and currency of source. 4.5 Independently discriminate between primary and secondary sources.
9-12	<i>By the end of twelfth grade, students will continue to work on previous standard as necessary and will also be able to:</i> 4.6 Practice independent critical thinking when reviewing a potential information source by: <ul style="list-style-type: none"><li>• distinguishing between verifiable facts and opinion</li><li>• detecting bias</li><li>• identifying the purpose</li><li>• distinguishing between relevant and irrelevant information recognizing inconsistencies or false claims</li></ul>

### **4b. Extraction of Most Relevant Information**

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<i>By the end of second grade, with assistance, students will be able to:</i> 4.7 Sort, classify and sequence pieces of information; e.g., place events along a timeline, sort families of animals, etc.
3-4	<i>By the end of fourth grade, students will continue to work on previous standard as necessary and will also be able to:</i> 4.8 Take notes using guided research forms to extract relevant information. 4.9 Use provided graphic organizers and outlines to organize information logically. 4.10 With assistance, choose appropriate order for information; e.g., chronological, alphabetical, topical, etc. 4.11 With assistance, summarize and paraphrase information in own words.

<b>5-8</b>	<p><i>By the end of eighth grade, students will continue to work on previous standard as necessary and will also be able to:</i></p> <p>4.12 Independently take notes.  4.13 Independently summarize and paraphrase information.  4.14 Choose appropriate order for information; e.g.. chronological, alphabetical, hierarchical in terms of importance, persuasive position.  4.15 Make inferences from data.  4.16 Collaborate with others, including using technology to share information.</p>
<b>9-12</b>	<p><i>By the end of twelfth grade, students will continue to work on previous standard as necessary and will also be able to:</i></p> <p>4.17 Gather information to support a point of view in persuasive writing.</p>

#### **4c. Ethical Behavior in Information Use**

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <p>4.18 Indicate the source of information.</p>
<b>3-4</b>	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>4.19 Define plagiarism.  4.20 Using a provided format, create correct citations for text and images.  4.21 Adhere to the provisions of the school's Acceptable Use Policy.</p>
<b>5-8</b>	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>4.22 Independently create correct citations for text and images used.  4.23 With assistance begin to demonstrate understanding of copyright law. e.g. fair use and intellectual property rights.</p>
<b>9-12</b>	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>4.24 Demonstrate legal and ethical behaviors among peers, family and community regarding the use of technology and information.  4.25 Demonstrate understanding of copyright law.</p>

## **Standard 5. Synthesize Information**

Students will organize new information from multiple sources to construct a product that communicates the results of their research.

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <ul style="list-style-type: none"><li>5.1 Create and share developmentally appropriate text and images with others.</li><li>5.2 Use new information in the final product.</li><li>5.3 With assistance present a final product using an appropriate format: report, poster, electronic program, or other medium.</li></ul>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>5.4 With assistance, consider the purpose and audience for the product and/or presentation.</li><li>5.5 Organize the information in a way which is appropriate for the assignment, project, or question.</li><li>5.6 Present a final product using an appropriate format: report, poster, electronic program, web page or other medium of communication.</li></ul>
5-8	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>5.7 Use appropriate medium to produce an original product to communicate research results.</li><li>5.8 Collaborate with peers in sharing information.</li><li>5.9 Understand that communicating information is a life long skill.</li></ul>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>5.10 Consider the purpose and audience for the product and/or presentation.</li><li>5.11 Select an appropriate media format to communicate new understandings and new knowledge..</li><li>5.12 Create a storyboard, script, layout or rough draft of research notes.</li><li>5.13 Use appropriate editing, dictionary and thesaurus tools to produce a polished, original product that clearly communicates research results.</li></ul>

## **Standard 6. Participate in Collaborative Activities**

Students participate effectively in groups to pursue and generate information.

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <ul style="list-style-type: none"><li>6.1 Demonstrate appropriate group conduct (take turns speaking, respect opinions, use library voice).</li><li>6.2 Listen to the information and ideas of others.</li><li>6.3 Cooperate with others and share resource.</li><li>6.4 Work with other students to create and evaluate simple information products.</li><li>6.5 Assist other students with book selection.</li></ul>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>6.6 Exhibit an understanding of the rights of other library users.</li><li>6.7 Work cooperatively with others and share resources and materials.</li><li>6.8 Discuss information and ideas with others, listen well and reformulate ideas when appropriate.</li><li>6.9 Use information sources, select information and ideas that will contribute directly to the success of group projects.</li><li>6.10 Respect others' ideas and backgrounds and acknowledge their contributions.</li><li>6.11 Encourage consideration of ideas and information from all group members.</li><li>6.12 Participate actively in group discussions to analyze information products and solutions.</li><li>6.13 Collaborate with others to design, develop and evaluate information products and suggest solutions.</li></ul>
5-8	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>6.14 Use provided guidelines and the group's work to improve content and delivery.</li></ul>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>6.15 Integrate their own knowledge and information with that of others in the group.</li><li>6.16 Actively listen to and respectfully respond to the point of view of others.</li><li>6.17 Collaborate with others to lead, facilitate, negotiate and otherwise participate in defining the information needs of a group.</li><li>6.18 Participate actively in group discussions to devise solutions to information problems that integrate group members' information and ideas.</li><li>6.19 Work to move the group to consensus after substantive conversations and sharing of information and ideas among all the members of the group.</li><li>6.20 Help organize and integrate the contributions of all the members of the group into information products.</li><li>6.21 Work with others to create and evaluate complex information products that integrate information in a variety of formats.</li><li>6.22 Participate effectively as a member of a group in evaluating the content and delivery of its work and the effectiveness of the group's work habits.</li></ul>

### **Standard 7. Evaluate the Process and the Product**

Students will evaluate both the research process and the final product. This may include both self and peer evaluation.

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<p><i>By the end of second grade, students will be able to:</i></p> <p>7.1 Using provided checklist or rubric to determine that project is complete and accurate.</p> <p>7.2 Judge the process by asking questions: e.g. What did I like? What was easy? What was difficult? How can I do it better next time?</p> <p>7.3 Judge the product by asking questions: e.g. Did I complete all the steps required by my teacher? What have I learned? How can I improve my final product? If I had to do it over again, what would I do differently?</p>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>7.4 Conference with peers, teachers, and library teacher during the creation of the product and in final product evaluation.</p>
5-8	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>7.5 Analyze the evaluation results to improve their communications through developing evaluation criteria and doing self and peer evaluations.</p> <p>7.6 With assistance, describe the ethical use of information.</p> <p>7.7 Use critical and creative thinking skills to analyze, synthesize and evaluate relevance, reliability, and authority of sources.</p> <p>7.8 Using predetermined criteria, evaluate the effectiveness of the communication of research results.</p> <p>7.9 Review and evaluate the process of transforming information into knowledge.</p> <p>7.10 Summarize new knowledge gained through peer presentations.</p>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <p>7.11 Voluntarily apply legal principles and ethical conduct related to information technology such as: copyright, plagiarism, privacy, online etiquette, acceptable use of resources.</p>

## **Standard 8. Appreciate Literature**

Students will gain an increased enjoyment of literature and grow in their abilities to locate and select appropriate reading materials independently.

<b>Grade Level</b>	<b>Performance Indicators</b>
PreK-2	<p><i>By the end of the second grade, students will be able to:</i></p> <ul style="list-style-type: none"><li>8.1 Understand the importance of the library as an information source.</li><li>8.2 Demonstrate active listening skills.</li><li>8.3 Listen to literature for pleasure and information.</li><li>8.4 Use illustrations to acquire a greater understanding of the story.</li><li>8.5 Use library collection for pleasure reading.</li><li>8.6 Understand the difference between an author and an illustrator.</li><li>8.7 Demonstrate comprehension of a story heard, read or viewed through verbal discussion and/or written responses or artwork.</li><li>8.8 Share books by favorite authors and illustrators.</li><li>8.9 Identify book award winners e.g. Caldecott, Newbury, Coretta Scott King Awards.</li></ul>
3-4	<p><i>By the end of fourth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>8.10 Recognize various genres of literature.</li><li>8.11 Demonstrate awareness of literature from various cultures and genres. e.g. fairy tales, folklore, myths and legends, poetry.</li><li>8.12 Make connections among materials read, heard or viewed.</li><li>8.13 Make predictions in literature.</li><li>8.14 Recognize basic story elements: character, setting and conflict.</li></ul>
5-8	<p><i>By the end of eighth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>8.15 Incorporate critical and creative thinking skills to evaluate literary elements and conventions.</li><li>8.16 Display knowledge of various types of print material, of genres, and of selection aids.</li><li>8.17 Identify and read from a variety of genres. e.g. historical, realistic, fantasy, fiction, folklore, poetry, biography, nonfiction.</li><li>8.18 Recognize reading as a lifelong pursuit.</li><li>8.19 Recognize characteristic styles of various authors and illustrators.</li></ul>
9-12	<p><i>By the end of twelfth grade, students will continue to work on previous standards as necessary and will also be able to:</i></p> <ul style="list-style-type: none"><li>8.20 Identify award-winning books, their selection criteria, and attributes.</li><li>8.21 Perform preliminary research to enhance appreciation of literature.</li><li>8.22 Demonstrate an understanding of the characteristics of the different literary genres, including: fantasy, folklore, poetry, drama, biography, short stories, science fiction, historical fiction, realistic fiction, humor, etc.</li></ul>

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