

**M.S.A.D. #44**

**Kindergarten  
Curriculum**

**English/Language Arts**

**Mathematics**

**Social Studies**

**Science**

**Health**

**Physical Education**


**Visual and Performing Arts**

**Career and Education Development**

Developed by  
Lee C. Graham,  
Director of Curriculum  
and K-5 Teachers  
2007

# M.S.A.D. #44

## English/Language Arts Curriculum



Revised Spring 2007

Lee C. Graham, Director of Curriculum

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# English Language Arts Mission:

Students completing the K-12 English Language Arts curriculum in MSAD#44 will develop literacy skills and strategies that allow them to construct meaning through reading, listening, viewing, and to present ideas through writing, speaking, and media so that they may be achieve the **Guiding Principles of the Maine *Learning Results***.

Each Maine student must leave school as:

1. ***A CLEAR AND EFFECTIVE COMMUNICATOR***
  1. uses oral, written, visual, artistic, and technological modes of expression;
  2. reads, listens to and interprets messages from multiple sources; and
  3. uses English and at least one other language.
2. ***A SELF-DIRECTED AND LIFE-LONG LEARNER***
  1. creates career and education plans that reflect personal goals, interests and skills, and available resources;
  2. demonstrates the capacity to undertake independent study; and
  3. finds and uses information from libraries, electronic data bases, and other resources.
3. ***A CREATIVE AND PRACTICAL PROBLEM SOLVER***
  1. observes situations objectively to clearly and accurately define problems;
  2. frames questions and designs data collection and analysis strategies from all disciplines to answer those questions;
  3. identifies patterns, trends, and relationships that apply to solutions to problems; and
  4. generates a variety of solutions, builds a case for the best response, and critically evaluates its effectiveness of this response.
4. ***A RESPONSIBLE AND INVOLVED CITIZEN***
  1. recognizes the power of personal participation to affect the community and demonstrates participation skills;
  2. understands the importance of accepting responsibility for personal decisions and actions;
  3. knows the means of achieving personal and community health and well-being; and
  4. recognizes and understands the diverse nature of society.
5. ***A COLLABORATIVE AND QUALITY WORKER***
  1. knows the structure and functions of the labor market;
  2. assesses individual interests, aptitudes, skills, and values in relation to demands of the workplace; and
  3. demonstrates reliability, flexibility, and concern for quality.
6. ***AN INTEGRATIVE AND INFORMED THINKER***
  1. applies knowledge and skills in and across English language arts, visual and performing arts, foreign languages, health and physical education, mathematics, science, social studies, and career preparation; and
  2. comprehends relationships among different modes of thought and methods associated with the traditional disciplines.

**From the 1997 Maine *Learning Results*:**

## English Language Arts

The fundamental need for an exchange of meaning and the sharing of human experience is a special province of the English language arts. All students share this need. They learn best when it is frequently addressed in their schooling and when they are invited to explore it effectively through literature.

The English language arts form the foundation for effective communication which depends upon a person's ability to construct meaning through reading, listening, and viewing and to present ideas through writing, speaking, and visual media. These skills, essential to the health of our democracy and the quality of our culture, have become ever more important since the modern explosion of communications media. Devices that allow us to communicate more quickly over distances can be used effectively only to the extent that we are skilled in basic language arts.

The study of language helps students to control their lives and become more effective thinkers--through communication, reflection, and understanding. To develop good thinking strategies, students must become engaged as active learners. To help them improve, students need to practice English language skills and receive frequent feedback across all areas of study. Parents, teachers, and other adults must encourage the interest in language that students bring with them when they first enter school. Students need to make the experience and enjoyment of English language arts a central part of their lives.

Collectively, the English language arts - writing, reading, speaking, and listening - constitute both a discipline in its own right, like mathematics or science, and a means of communicating about all other disciplines. Without a command of these arts it is impossible to think about, understand, or explain other disciplines.

### A. PROCESS OF READING

**Students will use the skills and strategies of the reading process to comprehend, interpret, evaluate, and appreciate what they have read.** *Readers apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on prior experience, interactions with others, knowledge of word meaning and knowledge of other texts, word identification strategies, and understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).*

### B. LITERATURE AND CULTURE

**Students will use reading, listening, and viewing strategies to experience, understand, and appreciate literature and culture.** *Literary texts that are rich in quality, add to the understanding of history and various cultures and build an appreciation of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.*

### C. LANGUAGE AND IMAGES

**Students will demonstrate an understanding of how words and images communicate.** *Language and images enable people to get things done, to take charge of their lives, to express opinions and feelings, to experience emotions, and to function as productive citizens. Students will consider such things as the relationship between thought and language, the ways people use language and other symbol systems to communicate, the history and structure of English, and the similarities and differences in the ways various social, occupational, and cultural groups use language.*

### D. INFORMATIONAL TEXTS

**Students will apply reading, listening, and viewing strategies to informational texts across all areas of curriculum.** *When reading, listening, and viewing critically, students will ask pertinent questions,*

*recognize assumptions and implications, and evaluate information and ideas. In a world that surrounds them with information, they have to be able to connect with this information and make sense of it.*

#### **E. PROCESSES OF WRITING AND SPEAKING**

**Students will demonstrate the ability to use the skills and strategies of the writing process.** *Effective communication can improve the work of writers and speakers. Students will use a wide range of strategies to address different audiences for a variety of purposes. Students will write or speak for reflective, creative and informational purposes.*

#### **F. STANDARD ENGLISH CONVENTIONS**

**Students will write and speak correctly, using conventions of standard written and spoken English.** *Knowledge of language structure and conventions (e.g., spelling, punctuation, level of formality) is used to create, critique, discuss, and present print and nonprint texts.*

#### **G. STYLISTIC AND RHETORICAL ASPECTS OF WRITING AND SPEAKING**

**Students will use stylistic and rhetorical aspects of writing and speaking to explore ideas, to present lines of thought, to represent and reflect on human experience, and to communicate feelings, knowledge, and opinions.** *Spoken, written, and non-verbal visual language (e.g., facial expressions, styles of clothing) accomplish many purposes (e.g., enjoyment, learning, persuasion, and the exchange of information). Writing and speaking for various purposes and for different audiences requires rhetorical skill and stylistic competence.*

#### **H. RESEARCH-RELATED WRITING AND SPEAKING**

**Students will work, write, and speak effectively in connection with research in all content areas.** *Research involves generating ideas and posing questions. It includes gathering, evaluating, and synthesizing data from a variety of sources (e.g., print, non-print, and electronic texts, examination of artifacts, interviews with people). Researching and reporting use a variety of informational and technological resources to gather and synthesize information and to create and communicate knowledge.*

In 2003, the Department clustered the ELA standards into:

1. Reading and Viewing
  - A. Process of Reading
  - B. Literature and Culture
  - D. Informational Texts
2. Writing and Speaking
  - E. Process of Writing and Speaking
  - F. Standard English Conventions
  - G. Stylist and Rhetorical Aspects
3. Integrated Literacy
  - C. Language and Images
  - H. Research

## The MLR Standards were revised in 2006-2007 into the following content standards:

### ***English Language Arts Standards***

**A. Reading** - Students read to comprehend, interpret, analyze, evaluate, and appreciate literary and expository texts by using a variety of strategies. They connect essential ideas, evaluate arguments, and analyze the various perspectives and ideas presented in a variety of literary and expository texts.

**B. Writing** - Students utilize the writing process to express their ideas and experiences; to communicate information to others; to present or analyze an argument; and to participate effectively in academic, civic and economic communities.

**C. Research** - Students participate in inquiry by identifying research questions, refining them as necessary; accessing a variety of PRIMARY AND SECONDARY SOURCES; summarizing, synthesizing and evaluating the quality of sources; and communicating the answer/s to research questions, applying the conventions of documentation. Students use technology when appropriate to present findings orally, in writing, or using mixed media.

**D. Language** - Students understand and use the conventions of Standard English when writing and speaking. They apply knowledge of grammar and usage when reading to aid comprehension. They know and apply rules of mechanics and spelling.

**E. Listening and Speaking** - Students listen to comprehend spoken information and speak to communicate information effectively.

**F. Media** - Students recognize and can explain the effects that both print and non-print media have on listeners, viewers and readers. They develop an awareness of the effect that the media has on civic discourse and decision-making.

You may read the proposed revised standards below, or [download a PDF version](#) (57 KB).

**Note:** the PDF version of the proposed revised standards is formatted to print on 8.5 x 14 inch paper.

For definitions of terms in ALL CAPS below, consult the [ELA glossary](#).

Detailed performance indicators of the revised ELA standards may be reviewed at:

[http://www.maine.gov/education/lres/review/revised\\_mlr\\_ela.htm](http://www.maine.gov/education/lres/review/revised_mlr_ela.htm)

The following curriculum document represents a reworking of the 1998 work to align the MSAD#44 literacy program to national and Maine standards. The basic instructional content is fundamentally unchanged, especially at the K-5 level. The 1998 benchmarks are included at each grade K-5 and the entire document is appended here. The current English/language Arts curriculum represents an attempt to present all district curricula in a consistent format, to write student outcomes in terms of the Maine *Learning Results*, to include the mandated local assessments, and to include the most up-to-date knowledge of literacy instruction.

## Grade Level Interdisciplinary Themes

Kindergarten: A Child's Place

Grade 1: Family

Grade 2: Family and Tradition

Grade 3: Learning About Community and Self

Grade 4: My Place in Maine, the United States, and the World

Grade 5: My Country and My Self

Grade 6: Where in the World Are We?

How does the World See Us?

Grade 7: How has Maine become ME?

What Gifts or Legacies have we received from Europe?

Grade 8: What does it mean to be an American?

How did we get here?

Where are we going?

Grade 9: Universal Themes in Literature

Grade 10: Genre Studies

Grade 11: What Makes American Literature Unique?

Grade 12: World Literature (Connections between Literature and Culture)

## **Grade: K**

**Theme:** A Child's Place

**Purpose Statement:**

Students will practice and develop the processes of language arts: reading, writing, listening, speaking, and viewing as interrelated and integrated throughout the curriculum and life.

**Units:** Connected to social studies, health, and science units

**Students will:**

### **Cluster 1: Reading and Viewing**

#### **A. PROCESS OF READING**

1. Seek out and enjoy experiences with books and other print materials.
2. Demonstrate an understanding that reading is a way to gain information about the world.
3. Make and confirm predictions about what will be found in a text.
4. Recognize and use rereading as an aid to developing fluency and to understanding appropriate material.
5. Figure out unknown words using a variety of strategies including rereading, context clues, and knowledge of word structures and letter-sound relationships.
6. Recognize and use clues within the text (sentence structure, word meanings), rereading, and other strategies as aids in developing fluency and comprehension.
7. Ask questions and give other responses after listening to presentations by the teacher or classmates.

#### **B. LITERATURE AND CULTURE**

1. Understand the basic plot of simple stories.
2. Draw logical conclusions about what will happen next or how things might have turned out differently in a story.
3. Identify differences and similarities in story elements (e.g., plot, setting, characters, conflict resolution) in works from various cultures.
4. Distinguish between fiction and nonfiction.

#### **D. INFORMATIONAL TEXTS**

1. Understand the main idea of simple expository information.

### **Cluster 2: Writing and Speaking**

#### **E. PROCESSES OF WRITING AND SPEAKING**

1. Tell about experiences and discoveries, both orally and in writing.
2. Respond to stories orally and in writing.
3. Respond to remarks or statements orally and in writing.

#### **F. STANDARD ENGLISH CONVENTIONS**

1. Edit their own written work for standard English spelling and usage, as evidenced by pieces that show and contain:  
complete sentences.  
initial understanding of the use of pronouns and adjectives.

evidence of correct spelling of frequently used words.  
few significant errors in the capitalization of proper nouns and of the words that begin sentences.

few significant errors in the use of end stop punctuation (e.g., periods, question marks).

2. Use oral language appropriate to the level of formality required.

#### **G. STYLISTIC AND RHETORICAL ASPECTS OF WRITING AND SPEAKING**

1. Dictate or write stories or essays which convey basic ideas, have sequences that make sense, and show evidence of a beginning, middle, and ending.

#### **Cluster 3: Integrated Literacy**

#### **C. LANGUAGE AND IMAGES**

1. Distinguish between and make observations about formal and informal uses of English.

2. Recognize characteristic sounds and rhythms of language, including the relationship between sounds and letters.

3. Make valid observations about the use of words and visual symbols.

#### **H. RESEARCH-RELATED WRITING AND SPEAKING**

1. Develop a search strategy which uses appropriate and available resources.

2. Formulate questions to ask when gathering information.

3. Record and share information gathered.

Assessed by DRA and Writing Prompts

## **Kindergarten Benchmarks (1998 Literacy Framework)**

### **Strand I. Reading**

#### **Language Study and Word Recognition Strategies**

- B1. Identifies sounds and sound patterns in speech
- B2. Matches letters and sounds
- B3. Recognizes and identifies upper and lower case letters
- B4. Identifies initial and final consonant sounds
- B5. Recognizes environmental print (McDonald's, restroom, Shop 'N Save, etc.)
- B6. Recognizes and identifies first and last name in print
- B7. Associates speech with print by tracking auditory words in print (voice-print match)
- B8. Identifies core list of sight words for grade level, which includes colors, shapes, and categories from the picture word list (See Appendix)
- B9. Identifies phonogram words from the Ekwall pre-primer list
- B10. Uses picture clues and picture captions to gain information
- B11. Sorts words into categories, recognizing concepts, relationships

### **Strand I. Reading**

#### **Process of Reading, Reading Comprehension**

- B1. Selects books for range purposes, such as silent reading, reading aloud, independent reading, reading for enjoyment and reading to gather information about topics
- B2. Knows how a book works, such as how to turn pages from front to back and how to hold the book the right way up. (Concepts About Print)
- B3. Locates words, lines, spaces, own name, and familiar letters in print, identifying print knowledge

- B4. Indicates start and end of book, and beginning and end of a page
- B5. Selects books to read, reading simple, repetitive patterns and using “book talk” such as “the end” or “once upon a time”
- B6. Selects illustrations to support meaning from texts
- B7. Predicts from a picture and retells a story in simple sequence
- B8. Responds and participates in stories, chants, poems, songs, displaying voice to print match
- B9. Reads own writing and shows awareness that print has meaning
- B10. Uses knowledge of words in the environment for reading and writing
- B11. Distinguishes between upper and lower case letters
- B12. Shows preferences for particular books and chooses reading as an independent activity

**Strand I. Reading**  
**Literature Analysis**

- B1. Identifies the parts of stories (the beginning, middle, and the end) which are shared through reading aloud
- B2. Identifies the characters and simple plot of a story, retelling with prompts
- B3. Begins to distinguish between “real” and “make believe-pretend” in stories
- B4. Identifies story language, such as story beginnings and endings
- B5. Responds to literature through choral reading, songs, chants, etc.
- B6. Predicts outcomes from stories heard and read together
- B7. Recognizes similar themes in various texts
- B8. Identifies some characteristics of simple genres such as fairy tales, folk tales, plays, and poems
- B9. Makes comments and expresses feelings about characters in texts

- B10. Explains a piece of literature, identifying author's style such as artwork (i.e. Eric Carle), use of repetition (such as Bill Martin's texts), use of nursery rhymes, colors, and characters (*Corduroy, Curious George, Spot, Clifford, etc.*)
- B11. Selects favorite authors for reading aloud
- B12. Participates in discussions about famous people, celebrations, and traditions that appear in literature which support one's own and other people's cultural heritage

**Strand II. Writing**

**Process of Writing, Strategies, and Response**

- B1. Labels and adds sight words to pictures
- B2. Copies and writes full name and familiar words from the environment
- B3. Uses a mixture of drawing and writing to convey ideas, using captions
- B4. "Reads" and explains own writing
- B5. Dictates stories based on experience
- B6. Writes using repetitive language patterns
- B7. Organizes writing using left to right directionality, and top to bottom concepts (Concepts about Print)
- B8. Writes using pictures, and linking letters and sounds
- B9. Writes, attempting to put ideas into words and sentence format
- B10. Writes, contributing to class stories, songs, poems, plays
- B11. Writes, participating in a timed response to the prompt "Write all the words you know," displaying vocabulary and print knowledge (Clay's Writing Inventory)

**Strand II. Writing**

**Grammar, Usage, Mechanics, and Punctuation**

- B1. Identifies and understands the difference between picture and print
- B2. Comments on marks on a page, identifying letters, words, capital letter, a period, question mark, and exclamation point
- B3. Dictates a simple sentence

- B4. Recognizes that speech can be written down and that words make up sentences
- B5. Begins to identify the way words can be written down, seeing voice and print match
- B6. Attempts to write words using sound-symbol linkages
- B7. Uses the vocabulary of print, such as book talk for story beginnings and endings
- B8. Writes and draws messages that adults can try to read
- B9. Checks written work by reading aloud print and pictures

**Strand II. Writing**  
**Spelling**

- B1. Relies on sound most obvious which may be initial and final sounds such as “DN” for down and “KT” for kitten
- B2. Represents a whole word with one, two, or three letters, mainly consonants (for example: KGR = kangaroo)
- B3. Spells first and last names correctly
- B4. Spells, using some common letter and rhyming word patterns
- B5. Recognizes some sound-symbol relationships in context
- B6. Generates new words using familiar word chunks
- B7. Identifies differences in upper and lower case letters
- B8. Reads and spells core list of grade level sight words (First 50)
- B9. Spells words, monitoring and self-correcting using available print and personal dictionary
- B10. Experiments with unknown, willing to “have-a-go” at writing
- B11. Begins to spell words with phonogram patterns from the Pre-primer Ekwall list

**Strand II. Writing**  
**Handwriting (Zaner-Bloser)**

- B1. Hold pencil, crayons, paint brushes with satisfactory grip
- B2. Uses preferred hand consistently for writing and drawing
- B3. Copies and writes full name correctly
- B4. Experiments with a variety of media, such as crayons, paint, markers, chalk, clay, to convey meaning
- B5. Writes upper and lower case letters of the alphabet
- B6. Writes full name on class work correctly
- B7. Uses letters in groups to form words
- B8. Comments on signs and other symbols in the environment, attempting to draw them

**Strand II. Writing**

**Study Skills, Informational Literacy, Research  
(electronic & traditional) Across the Curriculum**

- B1. Illustrates information gathered from print and non-print resources
- B2. Locates the library and reference area in the classroom and school
- B3. Demonstrates understanding of library and classroom borrowing policies
- B4. Selects non-fiction and fiction books to gather information
- B5. Uses picture dictionary or a picture/word wall to locate a word
- B6. Makes a personal dictionary or word list when writing
- B7. Gathers sounds and information from audio and video
- B8. Gathers information from viewing software on the computer

**Strand III. Listening**

- B1. Listens to and respond appropriately to directions
- B2. Listens and discriminates sounds in the environment

- B3. Listens and identifies patterns in language
- B4. Listen for information, maintaining a focus
- B5. Listens and attends to speakers with courtesy and respect
- B6. Listens and begins to recall details
- B7. Listens, hearing sounds and doing actions simultaneously in songs and games
- B8. Listens and begins to predict sequence
- B9. Listens, beginning to show active listening skills

#### **Strand IV. Speaking**

- B1. Speaks, expressing wants, needs, and experiences appropriately
- B2. Recites nursery rhymes, poems, chants, and songs
- B3. Speaks in large and small groups, making short announcements clearly and in complete sentences
- B4. Dramatizes and retells simple stories
- B5. Describes objects and pictures in telling stories
- B6. Dictates sentences and stories
- B7. Offers personal opinions and ideas in groups
- B8. Communicates non-verbally using gestures, posture, facial expressions, etc.
- B9. Speaks with appropriate volume, rate, and tone of voice
- B10. Introduces people and responds to introductions
- B11. Speaks, using appropriate telephone skills
- B12. Recites name, address, phone number and understands how to dial 911 for emergencies
- B13. Speaks, taking turns in conversations

- B14. Speaks connecting ideas with conjunctions such as “and,” “but,” and using “and then.”

**Strand V. Viewing**

**Language and Images**

**(Media literacy – Ability to interpret information presented orally, visually, and electronically)**

- B1. Distinguishes picture from print
- B2. Identifies details from a picture or illustration from grade level sources
- B3. Recognizes environmental print in context and isolation (stop sign, hospital, McDonalds, etc.)
- B4. Recalls events from visual text with familiar content, such as in Eric Carle’s books
- B5. Tells own story from familiar picture book
- B6. Recognizes color, shape, and size in illustrations
- B7. Begins to pay attention to details in illustrations and pictures
- B8. Begins to read a rebus text
- B9. Begins to predict from pictures and print
- B10. Begins to talk about characters in illustrations, such as Spot, Curious George, etc

## Kindergarten ELA


	<b>All literacy skills are on-going and integrated into all aspects of learning</b>		
<b>Units:</b>	<b>Connect to science, health, and /or social studies</b>		
<b>Strands</b>	<b>Reading and Viewing:</b> <b>Process of Reading: A</b> Literature and Culture: B; Informational Texts: D	<b>Writing and Speaking:</b> <b>Process of Writing and Speaking: E</b> Standard English Conventions F Stylistic and Rhetorical Aspects: G	<b>Integrated Literacy</b> Language and Images C Research Related Writing and Speaking: H
	<b><a href="http://www.state.me.us/education/lres/ela.htm">http://www.state.me.us/education/lres/ela.htm</a></b>		
<b>Activities</b>	Find, make letters and match letters and sounds Find words in the environment Select books; read aloud Read stories, nursery rhymes Use large charts: difference between word and letter	Identify sound patterns in speech Label pictures Dictate story; Communicate with non-verbal clues Write simple stories using words and pictures Read and explain own writing Spell “core list” Write and spell own name Practice writing letters with correct spacing with a variety of media Listen to stories and speakers and recall what it read(said) Listen and predict Listen for information Recite name, address, phone number, birthday	Visit library and use classroom reference books “Borrow” library books Use a picture dictionary Make a personal dictionary Distinguish pictures from print

<b>Assessments</b>	<b>DRA Level 3</b> Letter ID	<b>K Writing prompts:</b> Friends Family in winter Ocean Animal Learned in school	
<b>Vocabulary</b>	Beginning, middle, and end of a story Parts of a book Cover, title page, page number, dedication, table of contents Real and pretend Fiction and non-fiction Fairy tale Play Poem Illustration Character detail	Period, apostrophe, comma, question mark, exclamation point Capital letter Lower case letter Sentence Punctuation Noun and verb Quotation marks Speech bubble Singular and plural Edit One-to-one match Invented and conventional spelling	Fiction Non fiction Dictionary Reference Audio Research
<b>Resources</b>	<a href="http://www.readwritethink.org/">http://www.readwritethink.org/</a> This site allows you to search by grade spans or by standards. <a href="http://edsitement.neh.gov/">http://edsitement.neh.gov/</a> This site is not only for language arts but brings in the foreign languages as well. Aligns to the standards <a href="http://www.ceismc.gatech.edu/busyt/eng.shtml">http://www.ceismc.gatech.edu/busyt/eng.shtml</a> This site has lots of links to other sites of which some seem to be aligned to the standards and others are by grade span.		

# M.S.A.D. #44

## Mathematics

### Curriculum



2006

Lee C. Graham, Director of Curriculum

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Kate Slattery/Lori Davis (6)  
Judi Brown (Sp Ed)

\*Hold or have held leadership roles

## Maine *Learning Results*, 1997

Education must equip all students with mathematical skills that provide them with the flexibility, adaptability, and creativity to function as productive citizens in the changing technological society of the twenty-first century. Mathematical skills must extend beyond the ability to calculate into the use of mathematics to investigate, analyze, and interpret.

Thinking mathematically is critical to every life skill from balancing a checkbook to understanding the newspaper. People use math skills daily to identify problems, look for information that will help solve the problems, consider a variety of solutions, and communicate the best solution to others.

A math classroom should provide practical experience in mathematical skills that are a bridge to the real world, as well as explorations which develop an appreciation of the beauty and value of mathematics. Using a variety of tools, such as calculators, computers, and hands-on materials, under the guidance of a skillful teacher creates a rich mathematical learning environment. Such an environment will help to prepare students for a world where using calculators and computers to carry out mathematical procedures is commonplace, a world where mathematics is rapidly growing and extensively being applied in diverse fields.

Maine should expect its students to enjoy, appreciate, and use mathematics, just as it expects them to enjoy, appreciate, and use music, art, and literature. Students who are challenged to reach these goals will be better prepared for a future in which mathematics will be increasingly important in all areas of endeavor.

### A. NUMBERS AND NUMBER SENSE

**Students will understand and demonstrate a sense of what numbers mean and how they are used.**

*Numbers are used to describe and interpret phenomena. Building a sense of number relationships is essential for developing the ability to deal with any set of numbers. Number sense involves understanding the meaning of numbers, relationships among numbers, relative number magnitudes, and the effects of operations on numbers. Skilled estimation is also an important component of number sense.*

### B. COMPUTATION

**Students will understand and demonstrate computation skills.** *Understanding the fundamental operations of addition, subtraction, multiplication, and division is central to knowing mathematics. Proficiency in computational skills is essential to problem-solving and other mathematical activities. Estimating, evaluating reasonableness of answers, and obtaining accuracy in calculations are included in this proficiency. Understanding relationships in operations allows students greater facility with mental computation. Computational skill promotes efficient and confident learners.*

### C. DATA ANALYSIS AND STATISTICS

**Students will understand and apply concepts of data analysis.** *We are faced with massive quantities of information which must be selected, sorted, and analyzed to reach conclusions. Sound decision making requires the ability to collect data effectively, organize data, discover patterns, summarize trends, make inferences, draw conclusions, and make predictions. The ethical use of statistics is a paramount concern in the Information Age.*

## **D. PROBABILITY**

**Students will understand and apply concepts of probability.** *Probability is the study of uncertainty. Informed consumers of information understand the basic principles of probability. People need to understand the uncertainties and limitations involved when drawing conclusions from data.*

## **E. GEOMETRY**

**Students will understand and apply concepts from geometry.** *Geometry is the study of the spatial world and its symmetries. The ideas of geometry are used to describe, interpret, represent, and change the spatial world in which we live. The understanding and development of spatial and visual skills strengthens problem-solving abilities.*

## **F. MEASUREMENT**

**Students will understand and demonstrate measurement skills.** *Measurement is valuable as an integrating skill throughout the curriculum and in everyday life. The use of estimation is vital in determining the reasonableness of measurement. Measurement attributes (e.g., length, volume, minutes), units, and tools enhance the ability to describe and understand the world.*

## **G. PATTERNS, RELATIONS, FUNCTIONS**

**Students will understand that mathematics is the science of patterns, relationships, and functions.** *Relationships are central to mathematical understanding. A study of patterns often reveals regularity, indicating the presence of a mathematical relationship. Studying relationships allows students to make generalizations and predictions about phenomena and occurrences.*

## **H. ALGEBRA CONCEPTS**

**Students will understand and apply algebraic concepts.** *Algebra and analytic thinking are fundamental tools for working in and thinking about mathematics. These tools provide ways to generalize and predict problem solutions when not all information is known. Taught within the context of mathematical and practical applications, the concept of functions is a unifying theme for algebraic concepts.*

## **I. DISCRETE MATHEMATICS**

**Students will understand and apply concepts in discrete mathematics.** *Discrete mathematics studies discrete processes (e.g., all possible bus routes in a school district). This study includes the exploration of diagrams, networks, and flowcharts that students construct to model situations or use for planning, scheduling, and decision making. Three main concerns of discrete mathematics are: existence (Is there a solution?), counting (How many solutions are there?), and efficiency (What is the best solution?).*

## **J. MATHEMATICAL REASONING**

**Students will understand and apply concepts of mathematical reasoning.** *Reasoning is fundamental to the knowing and doing of mathematics. To give more students access to mathematics as a powerful way of making sense of the world, it is essential that an emphasis on reasoning pervade all mathematics. Students need a great deal of time and many experiences to develop their ability to construct valid arguments in problem settings and to evaluate the arguments of others.*

## **K. MATHEMATICAL COMMUNICATION**

**Students will reflect upon and clarify their understanding of mathematical ideas and relationships.**  
*Communication plays a key role in helping make important connections among physical, pictorial, graphic, symbolic, verbal, and mental representations of mathematical ideas. Providing individual and collaborative opportunities for discussions about issues, people, and the cultural implications of mathematics reinforce student understanding of the connection between mathematics and our society.*

In 2003, the Department of Education clustered the math standards as a structure for assessments as follows;

**Cluster #1: Numbers and Operations**

**A. Numbers and Number Sense**

**B. Computation**

**I. Discrete Mathematics**

**Cluster #2: Shape and Size**

**E. Geometry**

**F. Measurement**

**Cluster #3: Mathematical Decision Making**

**C. Data Analysis and Statistics**

**D. Probability**

**J. Mathematical Reasoning**

**Cluster #4: Patterns**

**G. Patterns, Relations, and Functions**

**H. Algebra Concepts**

**K. Mathematical Communication**

The 10 year revision of the *Learning Results*, currently in draft, reduces the number of standards from eleven to four (**Number; Data; Geometry; and Algebra**) and creates a more cohesive spiraling framework. The revised standards can be viewed at [http://www.maine.gov/education/lres/review/revised\\_mlr\\_math.htm](http://www.maine.gov/education/lres/review/revised_mlr_math.htm)

The proposed new standards are used at the middle and high school levels in this curriculum revision. They are:

**A. NUMBER:** Students use numbers in everyday and mathematical contexts to quantify or describe phenomena, develop concepts of operations with different types of numbers, use the structure and properties of numbers with operations to *solve* problems, and perform mathematical computations.

Students develop number sense related to magnitude, estimation, and the effects of mathematical operations on different types of numbers. It is expected that students use numbers flexibly, using forms of numbers that best match a situation. Students compute efficiently and accurately.

**B. DATA:** Students make measurements and collect, display, evaluate, analyze and compute with data to describe or *model* phenomena and to make decisions based on data. Students compute statistics to summarize data sets and use concepts of probability to make predictions and describe the uncertainty inherent in data collection and measurement. It is expected that when working with measurements students:

- *Understand* that most measurements are approximations and that taking repeated measurements reveals this variability.
- *Understand* that a number without a *unit* is not a measurement. Thus an appropriate *unit* must always be attached to a number to provide a measurement.
- *Understand* that the *precision* and *accuracy* of a measurement depends on selecting the appropriate tools and *units*.
- Use *estimation* comparing measures to *benchmarks* appropriate to the type of measure and *units*.

**C. GEOMETRY:** Students use measurement and observations to describe objects based on their sizes and shapes, model or construct two- and three-dimensional objects, solve problems involving geometric properties, compute areas and volumes based on object properties and dimensions, and perform transformations on geometric figures. When making or calculating measures, students use estimation to check the reasonableness of their work.

**D. ALGEBRA:** Students use symbols to represent and model quantities, patterns and relationships and use symbolic manipulation to evaluate expressions and solve equations. Students solve problems using symbols, tables, graphs and verbal rules choosing the most effective representation and converting among representations.

## MSAD# 44 Mathematics Mission

The mathematics curriculum of MSAD #44, designed to align with the Maine Learning Results, seeks to

- provide all students with knowledge and numeracy skills
- promote enthusiasm and appreciation for mathematics
- allow students to gather, interpret, and analyze data to solve problems
- prepare students for upper level mathematics
- graduate students with competency in both mathematical computation and mathematical reasoning

## Grade Level Themes

Kindergarten: Understanding Numbers and Shapes

Grade 1: Counting; Calculations; Calendars; and Coins

Grade 2: Using Math Facts: Adding; Subtracting; and Measuring to Solve Real Problems

Grade 3: Fractions; Geometry; and Mathematical Thinking

Grade 4: Multiplication and Division; Graphing; Geometry and Measurement

Grade 5: Fractions and Decimals; Computation; and Algebraic Thinking

Grade 6: Arithmetic Skill Review; Problem Solving; Unknowns

Grade 7: Data Analysis; Geometry; and Pre-Algebra

Grade 8: Variables and Algebra

Algebra: Solving Linear Equations

Geometry: Understanding and Using the Properties of Triangles, Circles, and Other Shapes

Algebra 2: Using linear and quadratic equations to solve problems

Advanced Algebra: Preparing for College Mathematics

Pre-Calculus: Understanding Exponents, Logarithms, and Trigonometry

Calculus: Using Non-linear Equations and Derivatives

## K-2 Narratives and National Standards

Young children strive to make sense of their world. Children's early experiences with mathematical reasoning and their early attempts to make sense of mathematics are crucial to their later mathematical development. Children need to be nurtured and encouraged so that they do not give up on the innate belief that the world including mathematics is supposed to make sense.

A major goal of mathematics instruction at K - 2 is to help children develop habits of thinking clearly and checking new ideas against what they already know. Although young children very much want to make sense of the world, they have yet to develop all of the tools that adults use to make mathematical sense. Maturity and experiences together help determine the development of reasoning.

Two elements central to the ability to reason are pattern recognition and classification skills. Young children naturally generalize from examples and it is important to help children judge whether generalizations they make are correct. The notion that examples can be used to test conjecture is an important one, and by the end of second grade students should be using this method. The goal is K-2 is to help children develop useful ways of making sense of mathematics and using these ways flexibly in new situations.

### Understanding and Using Numbers

#### *NCTM Standards*

In grades K-2, all students should:

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems.
- Count fluently with understanding and recognize "how many" in small sets of objects.
- Understand the cardinal and ordinal meaning of numbers in quantifying, measuring, and identifying the order of objects.
- Connect number words, the quantities they represent, numerals, and written words and represent numerical situations with each of these.
- Develop an understanding of the relative magnitude relationships among whole numbers by comparing, ordering, estimation, composing, decomposing, and grouping number, including beginning understanding of place value.
- Understand and represent familiar fractions, such as  $\frac{1}{2}$  and  $\frac{3}{4}$ .
- Understand the meaning of operations and how they relate to each other.
- Understand different meanings of addition and subtraction of whole numbers and the relation between the two operations.
- Understand situations that lead to multiplication and division, such as equal groupings of objects and sharing equally.
- Develop understanding about the effects of the operations on whole numbers.
- Use computational tools and strategies fluently and estimate appropriately.

- Develop and use strategies and algorithms to solve number problems.
- Develop fluency with addition and subtraction facts by the end of second grade.
- Compute using a variety of methods, including mental computation, paper and pencil, and calculators and choose an appropriate method for the situation.
- Recognize whether numerical solutions are reasonable.

## **Data Analysis**

### *NCTM Standards*

In grades K-2, all students should:

1. Understand various types of patterns and functional relationships.
  - Sort and classify objects by different properties.
  - Order objects by size or other numerical property (seriation).
  - Identify, analyze, and extend patterns and recognize the same pattern in different manifestations.
  - Describe how both repeating and growing patterns are generated.
2. Use symbolic forms to represent and analyze mathematical situations and structures.
  - Illustrate general principles (e.g., commutativity) using specific numbers.
  - Understand reversal of operation.
  - Use concrete, pictorial, and verbal representation numerical situations, including invented notation.
  - Use appropriate symbolic representation of mathematical situations.
3. Use mathematical models and analyze change in both real and abstract contexts.
  - Make comparisons and describe change qualitatively (e.g., taller than).
  - Make comparisons and describe change quantitatively (e.g., 3 inches taller).
  - Model concrete situations using addition and subtraction of whole numbers.

## **Geometry**

### **Spatial Reasoning**

#### *NCTM Standards*

In grades K-2, all students should:

1. Analyze characteristics and properties of two- and three-dimensional geometric objects.
  - Recognize, name, build, draw, describe, compare, and sort two- and three-dimensional shapes.
    - Recognize and locate geometric shapes and structures in the world.
  - Describe attributes and parts of two- and three-dimensional shapes.
  - Investigate and predict the results of putting together and taking apart shapes.
  - Recognize congruent and similar shapes.
  - Relate geometric ideas to number and measuring ideas.

2. Select and use different representational systems, including coordinate geometry and graph theory.
  - Describe, name, interpret, and apply ideas of relative position in space.
  - Describe, name, interpret, and apply ideas of direction and distance in navigating space.
  - Find and name locations with simple relations (e.g., near to) and coordinate systems (maps).
3. Recognize the usefulness of transformations and symmetry in analyzing mathematical situations.
  - Recognize and apply slides, flips, turns; predict the effects of transformation on shape.
  - Recognize and create reflectional and rotational symmetry of two- and three-dimensional objects.

## **Patterns, Functions and Algebra**

### *NCTM Standards*

In grades K-2, all students should:

1. Understand various types of patterns and functional relationships
  - Sort and classify objects by different properties.
  - Order objects by size or other numerical property (seriation). Identify, analyze, and extend patterns and recognize the same pattern in different manifestations.
  - Describe how both repeating and growing patterns are generated.
2. Use symbolic forms to represent and analyze mathematical situations and structures.
  - Illustrate general principles (e.g., commutativity) using specific numbers.
  - Understand reversal of operation.
  - Use concrete, pictorial, and verbal representation numerical situations, including invented notation.
  - Use appropriate symbolic representation of mathematical situations.
3. Use mathematical models and analyze change in both real and abstract contexts.
  - Make comparisons and describe change qualitatively (e.g., taller than).
  - Make comparisons and describe change quantitatively (e.g., 3 inches taller).
  - Model concrete situations using addition and subtraction of whole numbers.

## Grade: Kindergarten

Coding: Mastery Level [K](#), [1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#) [Grade Level Expectations for MEA](#)  
[Local Assessments](#)

**Theme:** Understanding Numbers and Shapes

**Purpose Statement:** Students completing grade K will be able to count to 20; identify the numbers 1-12; count 1-12 objects; understand more and less than, and tell time to the hour.

**Units:** Shapes and Patterns; Time and Data; Numeration Skills; and Addition and Subtraction

**Students will:**

### Cluster #1: Numbers and Operations

#### A. Numbers and Number Sense

1. Demonstrate an understanding of what numbers mean (e.g., that the number 7 stands for a group of objects).
  - Compare sets (difference in number of objects in set to 10).
  - Construct equal sets (using objects).
  - Become familiar with 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> (sequence of pictures).
  - Equal sets (by matching).
  - One to one matching without counting.
  - Concept of one more (by matching one to one).
  - Numeration Sequence orally to 20
  - Identify 0-12 (numerical recognition out of order).
  - Count objects (0-12).
2. Understand the many uses of numbers (e.g., prices, recipes, measurement, directions in play).
  - Concept of one more (by matching one to one).
3. Order, compare, read, group, and apply place value concepts to numbers up to 1,000.
  - Compare sets (difference in number of objects in set to 10).
  - Construct equal sets (using objects).
  - Become familiar with 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> (sequence of pictures).
  - Count backwards (10-0)
  - Count by rote (0-20)
  - Equal sets (by matching).
  - One to one matching without counting.
  - Concept of one more (by matching one to one).

- Numeration Sequence, orally to 20
- Identify 0-12 (numerical recognition out of order).
- Count objects ( 0-12).

## B. Computation:

1. Use and apply estimation with quantities, measurement, computations, and problem solving.

Whole Numbers

Addition/Subtraction Sequence

- Show that some sets contain one more than a given numeral.
- Recognize through one to one matching, the set with the more
- or fewer objects (concretely and pictorially).

2. Use multiple strategies in solving problems involving addition and subtraction of whole numbers.

Whole Numbers

- Addition/Subtraction concretely or pictorially (0-10).
- Recognize through one to one matching, the set with the more or fewer objects (concretely and pictorially).

Common Fraction

- **Recognize** concrete objects that represent whole and half.
- Sphere (object - orange); Flat (object - cookie); Others (paper folding)

3. Show an understanding of addition and subtraction by using a variety of materials, strategies and symbols.

Whole Numbers

Addition/Subtraction concretely or pictorially (0-10)

- Show that some sets contain one more than a given numeral.
- Recognize through one to one matching, the set with the more or fewer objects (concretely and pictorially).

Common Fraction

- **Recognize** concrete objects that represent whole and half.
- Sphere (object - orange); Flat (object - cookie); Others (paper folding)

## I. Discrete Mathematics

1. Classify sets of objects into two or more groups using their attributes.

## Cluster #2: Shape and Size

### E. Geometry:

1. Describe, model, and classify 2D shapes and selected 3D figures.

#### Shape Sequence

- Build (draw) shapes: circle, square, triangle, rectangle, oval, diamond.
- Recognize objects as being a circle, square, triangle, or rectangle shape.
- Identify same shapes.
- Recognize shapes in the environment.

### F. Measurement:

1. Estimate and measure length, time, temperature, weight and capacity

- Tell time to half-hour.
- Know the months of the year.
- Distinguish between heavier and lighter objects.
- Identify the larger and smaller of two concrete objects.
- Identify the taller and shorter of two concrete objects.
- Compare length using terms such as longer than, shorter than, or same as.
- Name the days of the week.
- Name the seasons (time span by observing physical change).
- Tell time to the hour.
- Describe the location of two concrete objects as near or far.
- Distinguish between temperatures (using standard and non-standard measurement, i.e. thermometer and sense of touch)

2. Identify and give the value of different coins

- Know the value of penny, nickel, dime, and quarter
- Use the symbol for cents.
- Know the use of money.
- Recognize coins and use the correct vocabulary for penny, nickel, dime and quarter.

3. Select standard and non-standard tools for determining length, time, temperature, weight, and capacity and use them to solve everyday problems

- Tell time to half-hour.
- Know the months of the year.
- Measure and describe object length using non-standard measure.
- Compare length using terms such as longer than, shorter than, or same as.
- Name the days of the week.
- Name the seasons (time span by observing physical change).
- Differentiate A.M, Noon, P.M. (as related to events).
- Tell time to the hour.
- Understand that the size of a concrete object does not change regardless of its location or position.

## Cluster #3: Mathematical Decision Making

### C. Data Analysis and Statistics:

1. Formulate and solve problems by collecting, arranging, and interpreting data.
2. Make tallies and graphs of information gathered from immediate surroundings given the graph template.
  - Begin to learn tally process and group graphing of information gathered from immediate surroundings.
  - Learn to conduct a survey to gather information and work as a group to interpret the data.

### D. Probability:

1. Use concepts of chance and record outcomes of simple events.  
Example: Investigate the possible and likely outcomes when rolling a number cube.
  - Introduce concepts of probability using impossible, more likely, and less likely.

### J. Mathematical Reasoning:

1. Describe a simple argument's strengths and weaknesses.
2. Distinguish between "important" and "unimportant" mathematical information.

## Cluster #4: Patterns

### G. Patterns, Relations, and Functions:

1. Recognize, orally describe, extend, copy, and create a wide variety of patterns with manipulatives.

Pre-number Sequence

- Recognize numbers in patterns (skip counting by 10's and number chart)
2. Explore the use of variables and open sentences to describe relationships
  - Positions: above, below, up, down, inside, outside, and introduce left and right.
  - Patterns: geometric sequencing, sequence by color (eight colors).
  - Quantity: more, fewer, less (by sight, not counting) comparing sets (difference in number of objects in set) one to one matching without counting, equal sets (by matching) concept of one more (by matching one to one)
  - Comparisons: larger, smaller, largest, and smallest

### H. Algebra Concepts:

2. Use language and symbols to express numerical and other relationships.
  - Recognize numbers in patterns (skip counting by 10's and number chart).

### K. Mathematical Communication:

1. Use numerals and symbols (>,<,+,-) to report numerical data and relationships

## Kindergarten Mathematics

*Length of units will vary*

<b>Unit (order may vary) On-going concept development</b>	<b>Shapes and Patterns</b>	<b>Time and Data</b>	<b>Numeration Skills</b>	<b>Addition and Subtraction</b>
<b>Strands</b>	Geometry(E) Pattern, Relations, and Functions (G)	Measurement (F) Data analysis (C)	Numbers and Number Sense (A)	Numbers and Number Sense (A) Computation (B)
<a href="http://www.state.me.us/education/lres/math.htm">http://www.state.me.us/education/lres/math.htm</a>				
<b>Activities</b>	Build shapes Sort by shape Identify shapes Recognize shapes in the environment Identify, create, and extend patterns: ABAB, AABB, AAB, ABC	Clock activities Play store activities Measure units with various devises Graph results Create class graphs Estimate results	Count forward and backward Construct sets using objects	Add and subtract using manipulatives, Number symbols, number lines
<b>Assessments</b>	#1 Patterns (Local) G1 #2 Shapes	#3 Clock assessment F3 Graphing Assessment	Counting Blocks (Local) A1	Teacher-made

<b>Vocabulary</b>	Larger, -est Smaller, -est More/less Equal to Above, below Inside/outside Circle, square, triangle, rectangle, oval, diamond, rhombus, hexagon, trapezoid Whole, half Flat, sphere	Larger, -est Smaller, -est More/less Greater than/ less than Longer/shorter Equal to How many altogether? Sum/ difference Inch, foot (feet), centimeter Penny, nickel, dime, quarter, Time to the hour Half hour O'clock A.M., P.M., noon Analog/ digital Hour hand, minute hand Data	Number words: both ordinal and cardinal Even and odd numbers More/less Symbols for \$, ¢, . (decimal) numeration	Equal to How many altogether? Sum/ difference Vertical/ horizontal Addition Subtraction Plus, minus
<b>Resources</b>	<p><a href="http://illuminations.nctm.org/index.aspx">http://illuminations.nctm.org/index.aspx</a> This site enables you to search by grade or standard.</p> <p><a href="http://illuminations.nctm.org/swr/index.asp">http://illuminations.nctm.org/swr/index.asp</a> This site is filled with web resources by grade level and standard</p> <p><a href="http://nlvm.usu.edu/en/nav/vlibrary.html">http://nlvm.usu.edu/en/nav/vlibrary.html</a> Interactive math tools that allow you to pick the grade span and the standard.</p> <p><a href="http://www.lessonplanspage.com/Math.htm">http://www.lessonplanspage.com/Math.htm</a> This site has lesson plans for math by grade span.</p> <p><a href="http://www.aaamath.com/">http://www.aaamath.com/</a> This site is by grade levels and math topics.</p> <p><a href="http://www.mathmanipulatives.com/">http://www.mathmanipulatives.com/</a> United Steaming Manipulatives <i>Houghton Mifflin Math 2007</i></p>			

Coding: Mastery Level **K, 1, 2, 3, 4, 5, 6, 7, 8** **Grade Level Expectations for MEA**  
**Local Assessments**

# M.S.A.D. #44

## Social Studies Curriculum



Revised 2006

Adopted January 22, 2007

Lee C. Graham, Director of Curriculum

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## **MSAD#44 Social Studies Mission**

*Students completing the K-12 social studies curriculum in MSAD#44 will demonstrate skills to gather, analyze, and synthesize information from a variety of sources including technology to identify social issues affecting their lives so that they may interact as tolerant citizens, respectful of diversity, in a democratic society.*

“The study of the human past with all its triumphs and tragedies is necessary to the understanding of contemporary society and the issues facing humankind.”

Risinger, 1992

The MSAD#44 social studies committee has worked with committees in mathematics, English Language Arts, science and technology, visual and performing arts, career preparation, health and physical education, and modern and classical languages to encourage interdisciplinary units wherever feasible and appropriate.

# Maine Learning Results

## Social Studies\*

### **\*From the Maine Learning Results, 1997**

*The great architects of American public education, such as Thomas Jefferson, Horace Mann, and John Dewey, considered a strong literacy essential to the preservation of democracy. Each believed that every student must be well versed in the nation's history, the principles which undergird citizenship, and the institutions which define our government. Understandings of commerce and geography were critical to their thinking as well.*

*In essence, Jefferson, Mann, and Dewey viewed the study of social studies as critical to the mission of public schools. Indeed, they would applaud the inclusion of a "responsible and involved citizen" in the Guiding Principles, as well as social studies as one of eight content areas in the Learning Results.*

*A strong social studies education depends upon a clear understanding of its interrelated disciplines.*

*Without a knowledge of the geography and economics of earlier times, history offers only lists of people, events, and dates. Without a knowledge of history, the institutions of American government and the dynamics of today's global economy are difficult to understand.*

*Important contemporary issues such as health care, education, crime, the environment, and foreign policy are all multidisciplinary in nature. Understanding these issues and developing responses to them requires an integrated social studies education. In such a social studies program, students are actively engaged in inquiry, research, debate, and in-depth learning. Students can further enhance their knowledge of the world around them by using local communities as extended classrooms; they can learn to build on that knowledge and on their knowledge of history to construct insights into the future. A broad understanding of the perspectives central to social studies enables students to develop, practice, and apply the knowledge and experiences required to be contributing participants in a democratic society.*

*Although social studies curricula vary in their breadth and depth, the Learning Results have adopted a focused definition of this content area whereby government, history, geography, and economics stand as the pillars of the content with other disciplines within the social sciences deemed important, but not essential.*

### **CIVICS AND GOVERNMENT**

*Students will learn the constitutional principles and the democratic foundations of national, state, and local systems and institutions. Further, students will learn how to exercise the rights and responsibilities of participation in civic life and to analyze and evaluate public policies. This understanding entails insight into political power, how it is distributed and expressed, the types and purposes of governments, and their relationships with the governed. Political relationships among the United States and other nations are also included in this content area.*

#### **A. RIGHTS, RESPONSIBILITIES, AND PARTICIPATION**

*Students will understand the rights and responsibilities of civic life and employ the skills of effective civic participation.*

#### **B. PURPOSE AND TYPES OF GOVERNMENT**

*Students will understand the types and purposes of governments, their evolution, and their relationships with the governed.*

#### **C. FUNDAMENTAL PRINCIPLES OF GOVERNMENT AND CONSTITUTIONS**

*Students will understand the constitutional principles and the democratic foundations of the political institutions of the United States.*

#### **D. INTERNATIONAL RELATIONS**

*Students will understand the political relationships among the United States and other nations.*

### **HISTORY**

*Students will learn to analyze the human experience through time, to recognize the relationships of events and people, and to identify patterns, themes, and turning points of change using the chronology of history and major eras. In interpreting current and historical events, students will evaluate the credibility and perspectives of multiple sources of information gathered from technology, documents, artifacts, maps, the arts, and literature.*

#### **A. CHRONOLOGY**

*Students will use the chronology of history and major eras to demonstrate the relationships of events and people.*

**B. HISTORICAL KNOWLEDGE, CONCEPTS, AND PATTERNS**

*Students will develop historical knowledge of major events, people, and enduring themes in the United States, in Maine, and throughout world history.*

**C. HISTORICAL INQUIRY, ANALYSIS, AND INTERPRETATION**

*Students will learn to evaluate resource material such as documents, artifacts, maps, artworks, and literature, and to make judgments about the perspectives of the authors and their credibility when interpreting current historical events.*

**GEOGRAPHY**

*In order to understand and analyze the relationships among people and environments, students will learn how to construct and interpret maps and how to use globes and other geographic tools to locate and derive information about people, places, regions, and environments. In an integrated way, students will study people and the physical characteristics and processes of the earth's surface to understand causes and effects, ecosystems, human behavior, patterns of population, interdependence, resources, cooperation and conflict, and how these are shaped by economic, political, and cultural systems.*

**A. SKILLS AND TOOLS**

*Students will know how to construct and interpret maps and use globes and other geographic tools to locate and derive information about people, places, regions, and environments.*

**B. HUMAN INTERACTION WITH ENVIRONMENTS**

*Students will understand and analyze the relationships among people and their physical environments.*

**ECONOMICS**

*Students will learn and apply basic economic concepts of production, distribution, and consumption to make decisions as effective participants in an international economy. Students will understand the development, principles, institutions, relationships to culture, and change over time of economic systems in the United States and elsewhere. Students will also understand how these concepts apply to individuals, households, businesses, governments, and societies which make decisions based on the availability of resources, as well as on costs and benefits of choices. These concepts also help to explain the patterns and results of trade, interdependence, and distribution of wealth in local, regional, national, and world economies.*

**A. PERSONAL AND CONSUMER ECONOMICS**

*Students will understand that economic decisions are based on the availability of resources and the costs and benefits of choices.*

**B. ECONOMIC SYSTEMS OF THE UNITED STATES**

*Students will understand the economic system of the United States, including its principles, development, and institutions.*

**C. COMPARATIVE SYSTEMS**

*Students will analyze how different economic systems function and change over time.*

**D. INTERNATIONAL TRADE AND GLOBAL INTERDEPENDENCE**

*Students will understand the patterns and results of international trade.*

Outcomes on the following pages reflect the numbering of the content standards and performance indicators of the Maine *Learning Results*.

*i.e.* In Kindergarten, students will

**Cluster 1: Civics and Government (Cluster)**

**A. Rights, Responsibilities and Participation (Standard)**

1. Identify and practice classroom rights and responsibilities. (Performance Indicator)

The Maine *Learning Results* are currently in revision. Detailed changes are available at the Department of Education website. An outline of the new social studies standards appears below.

[http://www.maine.gov/education/lres/review/revised\\_mlr\\_standards.htm](http://www.maine.gov/education/lres/review/revised_mlr_standards.htm)

***DRAFT DOCUMENT -- PROPOSED REVISED MAINE  
LEARNING RESULTS STANDARDS 9/26/2006***

**SOCIAL STUDIES**

**OUTLINE OF SOCIAL STUDIES STANDARDS AND  
PERFORMANCE INDICATORS**

**A. Applications of Social Studies Processes, Knowledge, and Skills**

1. Researching and Developing Positions on Current Social Studies Issues
2. Making Decisions Using Social Studies Knowledge and Skills
3. Taking Action Using Social Studies Knowledge and Skills

**B. Civics and Government**

1. Knowledge, Concepts, Themes and Patterns of Civics/Government
2. Rights, Duties, Responsibilities, and Citizen Participation in Government
3. Individual, Cultural, International, and Global Connections in Civics and Government

**C. Economics**

1. Economic Knowledge, Concepts, Themes, and Patterns
2. Individual, Cultural, International, and Global Connections in Economics

**D. Geography**

1. Geographic Knowledge, Concepts, Themes, and Patterns
2. Individual, Cultural, International, and Global Connections in Geography

**E. History**

1. Historical Knowledge, Concepts, Themes, and Patterns
2. Individual, Cultural, International, and Global Connections in History

## Grade Level Interdisciplinary Themes

Kindergarten: A Child's Place in Time and Space

Grade 1: Families Now and Long Ago

Grade 2: Traditions, Monuments, and Celebrations

Grade 3: Communities

Grade 4: US Regions, World Regions, and Maine

Grade 5: Early United States History

Grade 6: Where in the World Are We?

How does the World See Us?

Grade 7: How has Maine become ME?

What Gifts or Legacies have we received from Europe?

Grade 8: What does it mean to be an American?

How did we get here?

Where are we going?

Grade 9: Global Perspectives

Grade 10: The World

Grade 11: History of the United States

Grade 12: United States Contemporary History and Issues

## Grade: K

**Theme:** A Child's Place in Time and Space

**Purpose Statement:** Students will relate rules, governments, history, geography, and economics to school, family, and self.

**Students will:**

**Unit 1: USA**

### Cluster 1: Civics and Government

**A. Rights, Responsibilities and Participation**

1. Identify and practice classroom rights and responsibilities.

**B. Purpose and Types of Government**

1. Describe why we need governments.

### Cluster 2: History

**A. Chronology**

1. Place individual and family experiences in historical time and place.

**C. Historical Inquiry, Analysis, and Interpretation**

1. Use artifacts and documents to gather information about the past.

### Cluster 3: Geography

**A. Skills and Tools**

1. Use and construct maps and other visuals to describe geographic location, direction, size, and shape.

### Cluster 4: Economics

**A. Personal and Consumer Economics**

1. Identify goods and services, giving examples.

**B. Economic Systems of the United States**

1. Explain the terms consumer and product

## **Unit 2: Multicultural (Alternate Australia and China)**

### **Cluster 1: Civics and Government:**

#### **B. Purpose and Types of Government**

1. Describe why we need governments.

#### **D. International Relations**

1. Recognize there are other nations with different traditions and practice.

### **Cluster 2: History:**

#### **B. Historical Knowledge, Concepts, and Patterns**

2. Demonstrate an understanding of the cultural origins of the customs and beliefs in several places around the world.

#### **C. Historical Inquiry, Analysis, and Interpretation**

1. Use artifacts and documents to gather information about the past.

### **Cluster 3: Geography:**

#### **A. Skills and Tools**

1. Use and construct maps and other visuals to describe geographic location, direction, size, and shape.

### **Cluster 4: Economics:**

#### **D. International Trade and Global Interdependence**

1. Explain where products come from and how we use them.

### **Considerations:**

- Every group of people has a set of rules
- Family is child's frame of reference.
- Each individual has both rights and responsibilities.
- Artifacts help connect belief and practice

**See attached pages for activities, vocabulary, assessments, and resources.**

**Kindergarten Social Studies**  
*A Child's Place in Time and Space*

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
<b>Unit (order may vary)</b>	USA		Multicultural Alternate: Australia and China	
<b>Strands</b>	Civics and Government History Geography Economics <a href="http://www.state.me.us/education/lres/ss.htm">http://www.state.me.us/education/lres/ss.htm</a>		Civics and Government History Geography Economics	
<b>Activities</b>	Establish classroom constitution Holidays activities Native American unit Picture time line of own life Make fire safety map Look at Maine, community, and school maps		Read stories from other culture Videos Guest speakers Multi-cultural fair Connect to ELA activities(reading, writing, speaking, integrated literacy)	
<b>Assessments</b>	Observation Writing prompt: picture of your home(ELA)			
<b>Vocabulary</b>	Constitution Consequences Timeline Holidays Calendar terms Map terms: directions, continents, oceans Mountains, rivers coastline Economics terms: goods, services, wants and needs, consumer, product		Tradition Government Holidays Map terms: directions, continents, oceans Mountains, rivers coastline Economics terms: goods, services, wants and needs, consumer, product	
<b>Resources</b>	<i>Weekly Reader</i> Maine map <i>Time for Kids</i> <i>Scholastic News</i>			

	<p><a href="http://www.econedlink.org/">http://www.econedlink.org/</a> This site allows you to select grade spans and then it gives you a standard and a lesson. It's basically about economics.</p> <p><a href="http://www.nationalgeographic.com/xpeditions/">http://www.nationalgeographic.com/xpeditions/</a> This site is aligned with the standards and it allows you to search by grade span.</p> <p><a href="http://edsitement.neh.gov/">http://edsitement.neh.gov/</a> This site has history and social studies. Aligns with standards.</p> <p><a href="http://www.lessonplanspage.com/SS.htm">http://www.lessonplanspage.com/SS.htm</a> lots of lesson plans organized by subjects/topics and also by grade span.</p> <p><a href="http://www.pbs.org/teachersource/soc_stud.htm">http://www.pbs.org/teachersource/soc_stud.htm</a> This site allows you to search by grade span or topic.</p>
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M.S.A.D. #44  
Science Curriculum



April 2002

Adopted 7/22/02

Revised January 2007

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## **MSAD#44 Science and Technology Mission**

*"The terms and circumstance of human existence can be expected to change radically during the next human life span. Science, mathematics and technology will be at the center for that change -- causing it, shaping it, responding to it. Therefore, they will be essential to the education of today's children for tomorrow's world." Science for All Americans*

**Science and Technology Mission:** Science education in MSAD#44 should provide an opportunity for students to develop curiosity and create excitement for the sciences and technology. Students, as active learners, should be able to gain the essential knowledge and necessary skills to increase their ability to be critical thinkers and problem solvers able to:

- Apply what they have learned to the real world around them.
- Work in a safe environment -- one that encourages students to take risks.
- Communicate what they have learned both orally as well as in writing.
- Collaborate with others to use their knowledge to solve new problems.
- Use technology to illustrate, enhance and create knowledge.

### **Reflective Questions for the Teacher**

#### *MEASURING UP\**

- Does the planned activity address all types of learning styles?
- Is the planned activity accessible to all students?
- Are students actively learning and solving problems?
- Does the environment encourage risk-taking?
- Can every student expect to be listened to in this classroom?
- Do students collaborate effectively?
- Do students have opportunities to practice communicating their new knowledge?
- Do assessment practices match curriculum and instructional methods?
- Are appropriate tools and technology for learning being used?
- What additional resources could enhance the learning environment?

*\*Curriculum Framework*

## **From the Maine *Learning Results*, 1997**

The explosive growth of scientific knowledge and continuing developments in technology are transforming society. These rapid changes require that students learn to access, understand, and evaluate current information by utilizing the skills and knowledge of science and technology. Science includes processes and a body of knowledge. Processes are the ways scientists investigate and communicate about the natural world. The body of knowledge includes concepts, principles, facts, laws, and theories. Technology utilizes tools, techniques, and an applied understanding of science to design products and solve problems.

Science and technology are connected. Technological problems create a demand for scientific knowledge and modern technologies make it possible to discover new scientific knowledge. In a world shaped by science and technology, it is important for students to learn how science and technology connect with all content areas.

Helping students develop curiosity and excitement for science and technology while they gain essential knowledge and skills is best achieved by actively engaging learners in multiple experiences that increase their ability to be critical thinkers and problem solvers. Standards A through I describe content standards that encompass the subject matter conventionally referred to as life, physical, earth, and space science. Standards J through M describe essential skills that should always be embedded throughout the curriculum, rather than taught separately.

### **A. CLASSIFYING LIFE FORMS**

**Students will understand that there are similarities within the diversity of all living things.** *Modern classification systems are based on comparisons of the structure, function, life-cycles, and behavior of organisms.*

### **B. ECOLOGY**

**Students will understand how living things depend on one another and on non-living aspects of the environment.** *Balance in ecosystems is based on an intricate web of relationships among populations of living organisms and on non-living factors such as water and temperature. Changes in specific populations or conditions affect other parts of the ecosystem. Individual systems continually change in response to human and other factors.*

### **C. CELLS**

**Students will understand that cells are the basic units of life.** *The functions performed by organelles (specialized structures found in cells) within individual cells are also carried out by the organ system in multi-cellular organisms. This standard requires that students be conversant with magnifying devices, cell structure and function, body systems, and disease causes and the body's defense against them.*

### **D. CONTINUITY AND CHANGE**

**Students will understand the basis for all life and that all living things change over time.** *Fossils show past life, extinct species, and environmental changes over time. Organisms change and new species may arise due to genetically coded adaptations.*

### **E. STRUCTURE OF MATTER**

**Students will understand the structure of matter and the changes it can undergo.** *Matter is made of atoms, each with characteristic properties, which can combine to form all substances in the universe. The state and properties of matter may differ when it experiences chemical, physical, and nuclear changes.*

## **F. THE EARTH**

**Students will gain knowledge about the earth and the processes that change it.** *The earth's surface undergoes steady or sudden changes due to forces of wind, water, ice, volcanism, and shifting of tectonic plates.*

## **G. THE UNIVERSE**

**Students will gain knowledge about the universe and how humans have learned about it, and about the principles upon which it operates.** *This includes understanding the result of the relative positions and movement of the earth, moon, sun, stars, planets, and galaxies. It also entails an understanding of how scientists gather data and formulate explanations for phenomena in space.*

## **H. ENERGY**

**Students will understand concepts of energy.** *Energy takes many forms which can exert forces and do work. The conversion of energy from one form to another offers useful applications and sometimes presents problems.*

## **I. MOTION**

**Students will understand the motion of objects and how forces can change that motion.** *All objects are in motion, at least at an atomic/subatomic level. By understanding how forces (e.g., gravity, friction, and magnetism) act on objects, they can predict their effects on the motion of the object.*

## **J. INQUIRY AND PROBLEM SOLVING**

**Students will apply inquiry and problem-solving approaches in science and technology.** *Scientific inquiry, problem solving, and the technological method provide insight into and comprehension of the world around us. A variety of tools, including emerging technologies assist, the inquiry processes. Models are used to understand the world.*

## **K. SCIENTIFIC REASONING**

**Students will learn to formulate and justify ideas and to make informed decisions.** *This involves framing and supporting arguments, recognizing patterns and relationships, identifying bias and stereotypes, brainstorming alternative explanations and solutions, judging accuracy, analyzing situations, and revising studies to improve their validity.*

## **L. COMMUNICATION**

**Students will communicate effectively in the applications of science and technology.** *Clear and accurate communication employs appropriate symbols and terminology, models, and a variety of media and presentation styles. Communication includes constructing knowledge through reflection, evaluation, refocusing, and critically analyzing information from a variety of sources. Individuals and collaborative groups must communicate effectively.*

## **M. IMPLICATIONS OF SCIENCE AND TECHNOLOGY**

**Students will understand the historical, social, economic, environmental, and ethical implications of science and technology.** *Scientific and technological breakthroughs are influenced by prevailing beliefs and conditions which in turn are impacted by new ideas and inventions. By assessing the impacts of technological activity on the environment, students will develop their own sense of global stewardship.*

The Maine *Learning Results* are currently in revision. Outline draft appears below. Complete changes are available at the Department of Education website. [http://www.maine.gov/education/lres/review/revised\\_mlr\\_standards.htm](http://www.maine.gov/education/lres/review/revised_mlr_standards.htm)

***DRAFT DOCUMENT -- PROPOSED REVISED MAINE LEARNING RESULTS  
STANDARDS FOR SCIENCE AND TECHNOLOGY***  
**OUTLINE OF SCIENCE AND TECHNOLOGY STANDARDS AND  
PERFORMANCE INDICATORS**

**A. Unifying Themes**

1. Systems
2. Models
3. Constancy and Change
4. Scale

**B. The Skills and Traits of Scientific Inquiry and Technological Design**

1. Skills and Traits of Scientific Inquiry
2. Skills and Traits of Technological Design

**C. The Scientific and Technological Enterprise**

1. Understandings of Inquiry
2. Understandings about Science and Technology
3. Science, Technology, and Society
4. History and Nature of Science

**D. The Physical Setting**

1. Universe and Solar System
2. Earth
3. Matter and Energy
4. Force and Motion

**E. The Living Environment**

1. Biodiversity
2. Ecosystems
3. Cells
4. Heredity and Reproduction
5. Evolution

This document is organized by the 1997 standards grouped by cluster: Cluster 1: Life Sciences (Standards A,B, and C); Cluster 2: Physical Sciences(Standards E,H, and I); Cluster 3: Earth and Space Sciences (Standards D,F, and G); and Cluster 4: Nature and Implications of Sciences(Standards J,K,L, and M)(in grade span narratives).

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## Narratives K-2

### **J. Inquiry and Problem Solving**

- The students in grades K-2 will be given the opportunity to observe, compare, and share scientific information within their developmental capabilities. By being actively involved in exploring, they begin to develop the ability of "doing" science through the study of familiar objects from school and home. This includes collecting, counting, measuring, observing and discussing.
- The students will use their own observations and investigations from reliable sources to gather and record relevant information, enabling them to answer their scientific questions.
- The students should have a variety of educational experiences that help them analyze their work and communicate their findings.
- The students will progress through the following stages; identify the objective, formulate a strategy, reach an understanding, and communicate the findings.
- Students may have misconceptions when different conclusions are drawn from the same data. Children may have difficulty understanding how the process of experimentation relates to the theory.

### **K. Scientific Reasoning**

- Students need to remain open to new ideas while they engage in active learning. They should be given time to talk about what they observe and check what they think against what they see.
- Students' explanations should become more sophisticated as their scientific knowledge base increases.
- In science reasoning, students need to accept the fact that there may be a variety of explanations for the same set of observations.
- Students understand new ideas more easily through the use of analogies.

### **L. Communication**

- Students will record, summarize and communicate results of experiments by drawing pictures and graphing to represent scientific ideas.
- Students will understand that the use of up-to-date equipment helps scientists make accurate measurements and observations.

**Theme:** *Making Sense of the World Around Us*

**Purpose Statement:** The students in grades K-2 will be given the opportunity to observe, compare and share scientific information within their developmental capabilities. By being actively involved in exploring, they begin to develop the ability of "doing" science through the study of familiar objects from school and home. This includes collecting, counting, measuring, observing and discussing.

**Students will:**

## **Unit 1: Living Things/Basic Needs**

### **Cluster 1: Life Sciences**

#### **A. Classifying Life Forms**

##### **1: Identify the differences between living and non-living things.**

1. Living organisms eat, breath, and reproduce.
2. Non-living things do not show the characteristics of living things. Examples are air, water, light and rocks

##### **2: Describe characteristics of different living things.**

1. Organisms have basic needs: animals need air, water and food; plants need air, water, nutrients and light.
2. Plants and animals have different features that help them survive in different environments.
3. All organisms are dependent on the environment where they live.
4. All organisms have senses that help them detect internal clues (hunger) and external clues (danger).
5. Stories sometimes give plants and animals attributes they really do not have.

#### **C. Cells**

##### **2: Demonstrate an understanding that plants and animals need food, water and gases to survive.**

1. All organisms have basic needs.
2. Animals need air, water and food.
3. Plants need air, water, nutrients and light.
4. Animals take their food in from the environment; plants make their own food.
5. Living things also need a particular range of temperatures to survive.

### **Cluster 2: Physical Science**

#### **H. Energy**

##### **2: Explain why living things need energy.**

1. Sunlight provides the energy for plants to live and grow.
2. Animals all need energy from food to live.

## Cluster 3: Earth and Space Sciences

### D. Continuity and Change

**4: Describe ways in which individuals of the same species are alike and different.**

1. Some features of individuals of the same kind of organism can vary.
2. Some of the features of offspring resemble their parents while some differ.

**Considerations** (*The science committee has included possible considerations and student misconceptions which the teacher should take into account when developing lessons based on the curriculum.*)

- Children think movement defines living (example: clouds, sun, fire).
  - Non-living things need air, water, food.
- Children often categorize by observable features, such as breathing, eating, reproducing and growing.
  - It is not obvious to children that plants are living because they don't move.
- Children don't always recognize that trees, vegetables and grass are all plants.
- Children have difficulty distinguishing between fiction and non-fiction in regards to storybook characters.
- Children may not comprehend that plants make their own food.
- Children may not understand that animals and plants need their own environment to survive.
- Children may think that people supply animals and plants with food and shelter.
- Children may not understand that plants are producers (make their own food) as opposed to animals who are consumers.
- Young children may have difficulty understanding the continuity of life K-1, life cycles, i.e., seed to seedling/larva to pupa to adult. Many children may believe genes are inherited from only one parent.
- Children may believe energy is only associated with movement and can be used up.
- Children may have difficulty understanding that energy is measurable and quantifiable.

## Unit 2: Watching Weather

### Cluster #3: Earth and Space Sciences

#### F. The Earth:

**1: Describe the way weather changes.**

1. Weather is comprised of temperature, rain, snow, wind, clouds, etc. and changes from day to day.
2. Weather can be described by measurable quantities such as temperature, wind speed, rainfall, etc.

### **Possible Misconceptions**

- Children may not distinguish between heat and temperature.
- Children may have difficulty understanding that weather can be described by measurable quantities; temperature, wind direction, speed and precipitation.

## **Unit 3: Classification of Objects**

### **Cluster #1: Life Sciences**

#### **C. Cells:**

#### **3: Explore magnifying devices and how they allow one to see in more detail.**

1. Magnifiers make things appear larger.
2. Magnifiers help us to see things we cannot see with our eyes alone.

### **Cluster #2: Physical Sciences**

#### **E. Structure of Matter:**

#### **1: Show that large things are made up of smaller pieces.**

1. Most things are made up of parts.

#### **3: Group objects based on observable characteristics (e.g. color, size, texture)**

1. Objects and materials can be sorted or grouped by a characteristic of their physical properties.

### **Cluster #3: Earth and Space Sciences**

#### **F. The Earth:**

#### **1: Describe the way weather changes.**

### **Considerations**

- Children may have trouble understanding that the properties of an object differ from the properties of the materials they are made of.
- Children may have difficulty understanding that the arrangements of materials may change the final product.
- Students may think that everything that exists is matter, including heat, light, and electricity. They may think matter does not include liquids and gases.

### **Implications/Notes**

- Children learn through hands on activities to obtain information that cannot be obtained by only using the senses.
- Children should be stimulated and encouraged to make further inquiry.
- Students should get experience in constructing things with small parts, ex: tinker toys, Legos.
- Children should have the opportunity to take the constructed objects apart and rearrange the material.
- Children should identify parts of objects and the way in which one part connects to and affects another.

## **Unit 4: Light/Heat**

### **Cluster #2: Physical Sciences**

#### **H. Energy:**

##### **1: Demonstrate an understanding that the sun gives off light and heat energy.**

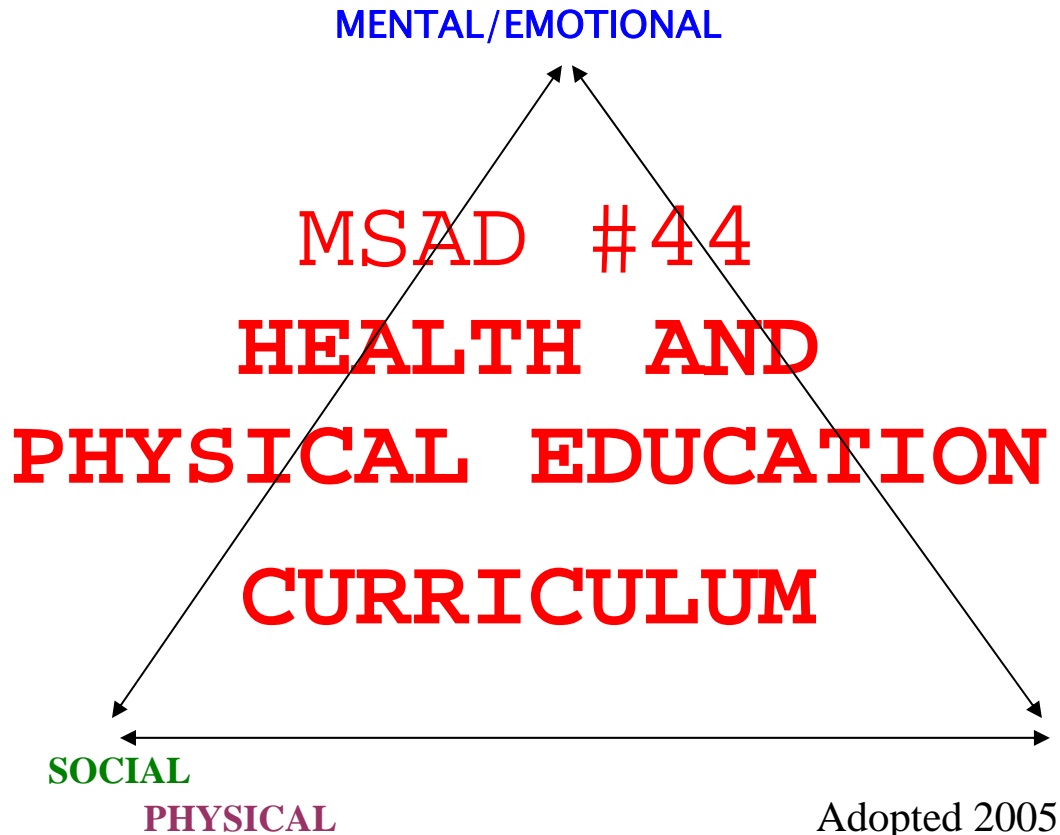
1. The sun provides light for us to see.
2. Sunlight warms the land, air and water.

**See attached page for activities, assessments, vocabulary and resources for all units.**

## Kindergarten Science

	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
<b>Unit (order will vary)</b>	<b>Living Things/ Basic Needs</b>	<b>Watching Weather</b>	<b>Classification of Objects</b>	<b>Light/Heat</b>
<b>Strands</b>	Classifying Life Forms (A) Cells (C) Continuity and Change (D) Energy(H)	The Earth (F)	Cells (C) Structure of Matter (E)	Energy (H)
	<a href="http://www.state.me.us/education/lres/st.htm">http://www.state.me.us/education/lres/st.htm</a>			
<b>Activities</b>	Give examples and categorize living and non-living things Choose an organism and explain what it needs to survive Help children distinguish between plants and animals Discuss environmental needs to live	Make a list of various types of weather Draw a picture of weather in each season. Graph temperature daily Graph other weather events Keep weather journal	Use magnifying glasses Group objects by attributes Use objects like Legos, Tinker toys to group and classify by size, shape, texture and construct larger objects	Discuss how the sun affects the earth Draw a picture of the location of the sun and the earth during the day and at night
<b>Assessments</b>	Observation C2 to be developed	ELA Writing Prompt “What do You Like to do with Your Family in Winter?”	Observation	
<b>Vocabulary</b>	Living Non-living Organism Energy Attributes Nutrients	Temperature Measure Weather terms: Wind speed, rainfall	Magnify Characteristic Property Texture	Energy Light Heat
<b>Resources</b>	Foss Kit: Trees	Media reports	Magnifying glasses, building toys	

	<p><a href="http://www.sciencenetlinks.com/">http://www.sciencenetlinks.com/</a> This site is aligned by the benchmarks as well as the grade span. It also has a list of great resource sites to go to.</p> <p><a href="http://www.nasalearn.org/">http://www.nasalearn.org/</a> At present this site is under construction but it is to be aligned with the Maine <i>Learning Results</i>.</p> <p><a href="http://www.cloudnet.com/~edrbsass/edsci.htm">http://www.cloudnet.com/~edrbsass/edsci.htm</a> This site has lots of links to other science sites and resources.</p>
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# Health and Physical Education

## Maine *Learning Results*, 1997

Every day, students make decisions affecting their health and well-being: What foods to eat. What company to keep. What risks to take. What to do for exercise. These decisions often lead to habits that stay with them throughout life. The standards for health education and physical education can help students make better decisions about their health. They learn that their decisions can affect their health and set a pattern for their lives. Students learn to protect their health by acquiring good information, by seeking good advice and friendships, and by taking responsibility for their own health.

Health education gives students the knowledge and skills to thrive physically, mentally, emotionally, and socially. This knowledge helps students meet the challenges of growing up. It helps students to recognize the causes of ill health and to understand the benefits of prevention, good hygiene, and appropriate medical care. Through health education, students become aware of the dimensions of good health: physical soundness and vigor; mental alertness and ability to concentrate; expressing emotions in a healthy way; resiliency; and positive relations with family and peers. Health education also includes a set of skills to help students be better consumers of information, to manage stress and conflict, and to make better decisions in the face of conflicting messages, thus assisting them to live healthier lives.

Physical education gives students the knowledge and skills to make the most of their physical and mental abilities. It gives them building blocks for good health: physical fitness and skills, coordination, and good sportsmanship. Students learn to assess their own physical fitness and maintain healthy levels of physical activity. They learn new skills and improve performance, while gaining the self discipline to take part in individual and group activities. Students who participate in physical education activities on a regular basis, learn the benefits of that participation and value its contribution to a healthy lifestyle.

### **HEALTH EDUCATION**

#### **A. HEALTH CONCEPTS**

**Students will understand health promotion and disease prevention concepts.** *Knowledge of how disease and injury affect the body and learning about the health benefits of preventive care, timely treatment, and appropriate personal behaviors are at the heart of health education. Students who protect their health have a better chance of remaining healthy and productive throughout their lives.*

#### **B. HEALTH INFORMATION, SERVICES, AND PRODUCTS**

**Students will know how to acquire valid information about health issues, services, and products.** *People need good information about prevention, early detection, and treatment of health problems. An important step in learning to protect health is developing the skills to find and analyze information about health issues.*

#### **C. HEALTH PROMOTION AND RISK REDUCTION**

**Students will understand how to reduce their health risks through the practice of healthy behaviors.** *In taking responsibility for personal health, students lay a foundation for a healthy, productive life. Many diseases and injuries can be prevented by avoiding harmful behaviors and taking fewer risks. More importantly, students can take steps to improve their health such as eating better foods, exercising regularly, and paying attention to preventive care.*

#### **D. INFLUENCES ON HEALTH**

**Students will understand how media techniques, cultural perspectives, technology, peers, and family influence behaviors that affect health.** *Students receive an almost constant stream of information about their health and behavior. As a first step to making decisions that protect health, students need to recognize how different messages influence their actions.*

#### **E. COMMUNICATION SKILLS**

**Students will understand that skillful communication can contribute to better health for them, their families, and the community.** *Students need effective communication skills to develop and maintain healthy personal relationships. The ability to organize and convey information, beliefs, opinions, and feelings is a skill that can reduce and avoid conflict. Communication skills enable individuals to be advocates for a healthy school, home, workplace, and community.*

#### **F. DECISION-MAKING AND GOAL SETTING**

**Students will learn how to set personal goals and make decisions that lead to better health.** *Knowledge of good health practices will not help students unless they have the foresight and discipline to act on that knowledge. The practical application of knowledge requires students to develop skills such as goal setting and decision making. Students who have the right combination of knowledge and skills can begin to contribute to their own good health, to healthy families, and to safer communities.*

### **PHYSICAL EDUCATION**

#### **A. PHYSICAL FITNESS**

**Students will acquire the knowledge needed to be physically fit and take part in healthful physical activity on a regular basis.** *Students who develop healthful patterns of physical activity and enjoyment are more likely to stay physically fit and active in their adult lives.*

#### **B. MOTOR SKILLS**

**Students will develop motor skills and apply these to enhance their movement and physical performance.** *Successful development of motor skills provides an opportunity to enjoy participation in physical activities, and reach advanced levels of performance, which in turn, increases the likelihood of continued participation.*

#### **C. PERSONAL AND SOCIAL INTERACTIONS**

**Students will demonstrate responsible personal and social behaviors in physical activity settings.** *Whether working alone, with another individual, or with a group, students engaged in physical activities are expected to demonstrate self respect and consideration of others as they seek to meet a challenge or solve a problem.*

*In 2003, the Health and Physical Education standards were clustered into three areas: Cluster 1: Health Knowledge (standards A, B, and D); Cluster 2: Health Skills (standards C, E, and F); and Cluster 3: Physical Education (PE standards A, B, and C). The MSAD#44 Curriculum is organized by Clusters.*

*The Maine Learning Results are currently in revision. Outline draft appears below. Complete changes are available at the Department of Education website. [http://www.maine.gov/education/lres/review/revised\\_mlr\\_standards.htm](http://www.maine.gov/education/lres/review/revised_mlr_standards.htm)*

## **OUTLINE OF HEALTH EDUCATION AND PHYSICAL EDUCATION STANDARDS AND PERFORMANCE INDICATORS**

### **A. Health Concepts**

- 1. Healthy Behaviors and Personal Health**
- 2. Dimensions of Health**
- 3. Diseases/Other Health Problems**
- 4. Environment and Personal Health**
- 5. Growth and Development**
- 6. Basic Health Concepts**

### **B. Health Information, Services and Products**

- 1. Validity of Resources**
- 2. Locating Health Resources**

### **C. Health Promotion and Risk Reduction**

- 1. Healthy Practices and Behaviors**
- 2. Avoiding/Reducing Health Risks**
- 3. Self-Management**

### **D. Influences on Health**

- 1. Influences On Health Practices/Behaviors**
- 2. Technology and Health**
- 3. Compound Effect Of Risky Behavior**

### **E. Communication and Advocacy Skills**

- 1. Interpersonal Communication Skills**
- 2. Advocacy Skills**

### **F. Decision Making and Goal Setting Skills**

- 1. Decision Making**
- 2. Goal Setting**
- 3. Long Term Health Plan**

### **G. Movement/Motor Skills and Knowledge**

- 1. Stability and Force**
- 2. Movement Skills**
- 3. Skill-Related Fitness**
- 4. Practice for Skill Improvement**

### **H. Physical Fitness Activities and Knowledge**

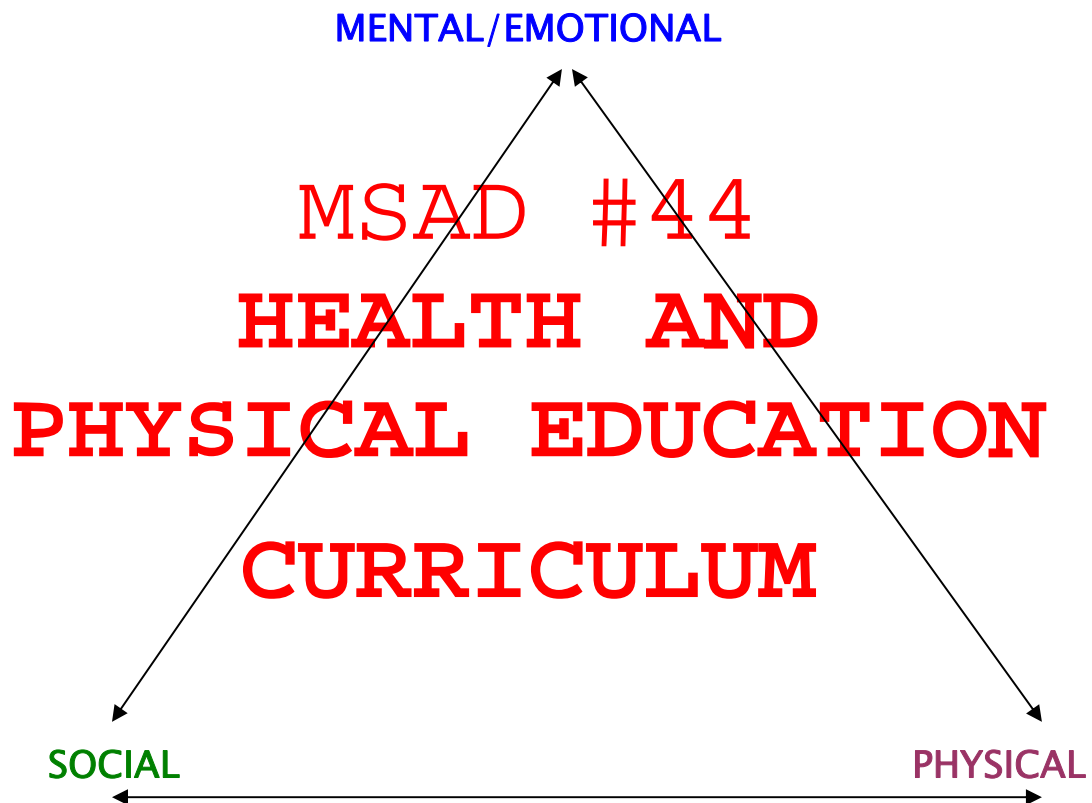
- 1. Fitness Assessment**

- 2. Fitness Plan**
- 3. Fitness Activity**
- 4. Physical Activity Benefits**
- I. Personal and Social Skills and Knowledge**
  - 1. Cooperative Skills**
  - 2. Responsible Behavior**
  - 3. Safety and Playing Rules**

## Health and Physical Education Mission Statement

All students completing the health and physical education curriculum in MSAD#44

- Recognize and utilize community resources that promote health and well-being
- Understand the importance of participation in lifelong physical and recreational activities.
- Make informed healthy decisions and choices.
- Function positively in personal and social relationships.



## **Grade Level Themes for Health**

Kindergarten. Personal Health

- 1: Safety and Accident Prevention
- 2: Emotional Well-Being and Interpersonal Relationships
- 3: Physical Well-being
- 4: Role in Family and Peer Group
- 5: Growth and Development: Physically and Emotionally
- 6: Health Promotion and Risk Reduction
- 7: Fundamental Health Concepts
- 8: Health Lifestyles/ Personal Health
- 9 -10: Informed Choices/ Risk Reduction
- 11-12: Promotion of Life Skills

## Grade: K Health

**Theme:** Personal Health and Hygiene

### **Maine Learning Results: Cluster 1: Health Knowledge**

**A. Health Concepts:** *Students will understand health promotion and disease prevention concepts.*

*The student will:*

2. Describe the transmission and prevention of communicable diseases.
3. Demonstrate an understanding of basic health terms.

### **Maine Learning Results: Cluster 2: Health Skills**

**C. Health Promotion and Risk Reduction:** *Students will understand how to reduce their health risks through the practice of healthy behaviors.*

*The student will:*

2. Demonstrate personal hygiene skills.
3. Choose healthful foods.

**F. Decision-making and Goal Setting:** *Students will learn how to set personal goals and make decisions that lead to better health.*

*The student will:*

2. Set a short-term personal goal.

Part of Local Assessment

## Grade: Kindergarten Tasks

### Theme: Personal Health and Hygiene

#### Cluster 1: Health Knowledge

#### A. Health Concepts

##### 2. Describe the transmission and prevention of communicable diseases.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will describe safety precautions concerning bodily fluids.	-demonstration -modeling -discussion -guided practice	-sketch a picture -demonstrate a process -participate in a simulation -develop a classroom "Big Book" of safety precautions	MAP: Structured Response: <b>Germ Buster</b> (Replacement Assessment: LAD: Structured Response: <b>I Have a Cold</b> )

##### 3. Demonstrate an understanding of basic health terms.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will demonstrate an awareness of the body and its parts.  -Students will describe the five senses	-guided discussion -use of media (books, videos, tapes) -demonstration -brainstorming	-sketch a picture -create a song or story -Eduquest Computer activities (Stories and More)	Curriculum Committee: Structured response: <b>My Body and My Senses</b>

## Cluster 2: Health Skills

### C. Health Promotion and Risk Reduction

#### 2. Demonstrate personal hygiene skills.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will practice healthy personal habits: (washing hands, eating healthy snacks, brushing teeth, exercising, and personal grooming).	-discussion -use of media -hygiene (science) -modeling -brainstorming -guided practice	-at-home checklist -interaction with a resource person, such as local hygienist -daily classroom practice -movement to song	MAP: Structured Response: <b>Germ Buster</b>  (Replacement Assessment: LAD: Structured Response: <b>I Have A Cold</b> )

#### 3. Choose healthful foods.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will compare healthy and unhealthy snacks from various food groups  -Students will develop awareness that different foods can be good or bad for you.	-Discussions -Dental health unit -Healthy Snack Day -Veggie people Demonstration/discussion -Nutrition	-graphing/ categorize daily snacks - healthy snack party -collage of healthy snacks /non-healthy snacks	LAD: Structured Response: <b>What's for Lunch?</b>  Modified MAP task: Structured Response: <b>Creating a Healthy Lunch</b>

**F. Decision-making and Goal Setting**

2. Set a short-term personal goal.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Students will understand and set a short-term personal goal	<ul style="list-style-type: none"> <li>-guided discussion</li> <li>-brainstorming</li> <li>-demonstration</li> <li>-fire safety unit</li> </ul>	<ul style="list-style-type: none"> <li>- Create dental health chart</li> <li>-Bring in personal home escape plan</li> </ul>	<p>Curriculum Committee: Structured response:</p> <p><b>A Healthy Goal</b></p> <p>Replacement ideas:  <ul style="list-style-type: none"> <li>-Teacher observation</li> <li>-finished dental health chart</li> <li>-participation in various school activities: ie: Walk to School Day / Scheduled Walkathon</li> </ul> </p>

# Physical Education Curriculum

## **Grade Level Themes for Physical Education**

Kindergarten: Cooperative Skills

1: Gross Motor Skills

2: Fundamentals of Fitness

3: Team Concept

4: Individual Activities and Fitness

5: Individual Activities and Fitness

6: Structured Team Activities

7: Transition to Individualized Team and Cooperative Activities

8: Individualized Team and Cooperative Activities

9-12: Exposure to a Variety Of Physical Lifetime And Recreational Sports And Lifetime Activities That Promote Healthy, Active Life Styles.

## Grade: K Physical Education

### Theme: Cooperative Skills

### Cluster 3 Physical Education Knowledge and Skills

**A: Physical Fitness:** *Students will acquire the knowledge needed to be physically fit and take part in healthy physical activity on a regular basis.*

*The student will:*

2. Engage in moderate to vigorous physical activity.
4. Move with an awareness of others.
5. State reasons for safe and controlled movements.

**B: Motor Skills:** *The student will develop motor skills and apply these to enhance their movement and physical performance.*

*The student will:*

1. Demonstrate progress in mastering locomotor skills.
7. Apply movement concepts

**C: Personal and Social Interactions:** *The student will demonstrate responsible personal and social behaviors in physical activity settings.*

The student will:

1. Identify the rules of a given activity
2. Demonstrate cooperative skills while participating in a physical event.
3. Use equipment appropriately and responsibly

Part of Local Assessment

## Grade: K Tasks

### Theme: Cooperative Skills

#### Cluster 3: Physical Education Knowledge and Skills

##### A: Physical Fitness:

###### 2. Engage in moderate to vigorous physical activity

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Engage in moderate to vigorous physical activity.	Directed Activity	Chase & Fleeing Games	Visual

###### 4. Move with and awareness of others.

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Move with and awareness of others.	Directed Activity	Chase & Fleeing Games	Visual

###### 5. . State reasons for safe and controlled movements.

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
State reasons for safe and controlled movements.	Guided Discussion	Structured response	Visual

##### B. Motor Skills

###### 1. Demonstrate progress in mastering locomotor skills

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Demonstrate progress in mastering locomotor skills.	Directed Activity	Line Demonstration	Visual

###### 7. Apply movement concepts

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Apply movement concepts.	Directed Activity	Demonstrate through participation	Visual

**C: Personal and Social Interactions:**

1. Identify the rules of a given activity

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Identify the rules of a given activity.	Guided Discussion	Structured response	Visual

2. Demonstrate cooperative skills while participating in physical activities.

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Demonstrate cooperative skills while participating in physical activities	Guided Discussion	Demonstrate thru participation – Team Games	<b>LAD: Being Responsible</b> adapted PE Skills Performance

3. Use equipment appropriately and responsibly.

Task to Accomplish	Teaching Methods	Student Activities	Means of Assessment
Use equipment appropriately and responsibly.	Guided Discussion	Demonstrate thru participation – see curriculum map	visual



May 2006

Lee C. Graham, Director of Curriculum

Visual and Performing Arts Curriculum Committee

Teresa Ingraham, Elementary Art

Linda Stowell, Elementary Music

Kathleen DeVore, Elementary Instrumental Music

Melissa Prescott, Telstar Middle School Art

C. Thomas Coolidge, Telstar Middle School Music

Jennifer Bennett, Telstar High School Music

Timothy Kavanagh, Telstar High School Arts

Timothy O'Connor, Telstar High School, Industrial Arts and  
Technology

## Curriculum Development Process

The MSAD #44 Visual and Performing Arts (VPA) Committee began meeting in the fall of 2004 to develop a Maine *Learning Results* K-12 curriculum. The committee used a research-based process which began with mapping what was currently being taught in each Visual and Performing Arts “Cluster” at each grade level.

When the map was complete, the committee took time to brainstorm and develop a vision/mission statement, focusing on what they expected the graduating MSAD#44 student to know and be able to do in the content areas. The Vision/Mission is reflected throughout the curriculum document. Mindful of the vision and the map of currently enacted curriculum, the committee generated grade level themes applicable to both music and art.

Next the committee went back to the map to cross reference it with the Maine *Learning Results* looking for unplanned redundancies and for gaps. They began to make decisions about which performance indicators belonged at which grade.

Using the State’s Balance of Representation, the group had met earlier to determine which performance indicators would be assessed at each grade span to meet the requirements of Chapter 127 and the Comprehensive Local Assessment System. With selected themes, performance indicators, and assessment targets at each grade, the committee began to construct “task pages” to help teachers with the teaching activities, student activities, and ways of assessing each indicator. When an indicator was to be commonly assessed, the committee created valid (aligned) and reliable tasks. The committee learned to write aligned 4-point rubrics and to critique the assessment tasks to make them inclusive for all student learning styles and abilities.

The VPA committee also acts as a planning group for the districts “Partners in the Arts” program and uses those funds to expand opportunities for MSAD#44 students in experiencing the arts.

No curriculum is ever “done.” As teachers pilot the curriculum and the assessments, the committee will look at student work and the resulting assessment data to refine the curriculum, assessment, and instruction to improve student learning outcomes and ensure that MSAD#44 students meet the Maine *Learning Results*.

## Mission Statement

Students completing the K-12 Visual and Performing Arts curriculum in MSAD#44 will have an understanding and ability to:

- Communicate creatively
- Examine and respect artistic/cultural contributions
- Appreciate the importance of and advocate for the arts
- Realize and develop their own artistic strengths

## Grade Level Themes

**K:** Explore Creative Expression

1: Experience Basic Concepts and Processes

2: Develop Basic Concepts and Processes

3: Understand and Apply Basic Concepts and Processes

4: Deepen Understanding and Refine Skills

5. Develop and Use Appropriate Vocabulary

6. Expand Knowledge of Concepts and Skills

7: Focus On Cultural Connections

8: Focus On Quality and Criticism

9-12:

Refine Individual Skills

Understand That Art Arises From Experience

Understand the Role of the Arts in Work, Life, and Society

Explore the Connections between Technology and the Arts

## From the Maine *Learning Results*, 1997

The arts include dance, music, theater and visual art. In an increasingly technological world, the arts help all students to develop multiple capabilities for creating, understanding, deciphering, and appreciating an image- and symbol-laden world. The arts are concerned with intellectual, emotional, and physical faculties and, in combination, can be used to present issues and ideas, teach or persuade, entertain, plan, beautify, and design both functional and expressive works. Experiencing and creating art brings lifelong enjoyment to students and an array of expressive, analytical, and developmental tools to use in their daily lives.

The arts play a valued role in creating cultures and developing and documenting civilizations. Students of the arts gain powerful tools for:

- communicating through creative expression;
- understanding human experiences, past and present;
- adapting to and respecting the ways others think, work, and express themselves;
- using artistic modes of problem solving, which, in turn, bring an array of expressive, analytical, and development tools to every human situation;
- understanding the power of the arts to create and reflect cultures;
- understanding the impact of design on virtually all we use in daily life;
- understanding the interdependence of work in the arts and the worlds of ideas and events;
- making decisions in situations where there are no standard answers;
- analyzing nonverbal communication and making informed judgments about cultural products and issues; and for
- communicating thoughts and feelings in a variety of modes, thereby providing a more powerful repertoire of self-expression.

Because each arts discipline appeals to different senses and expresses itself through different media, each adds a special richness to the learning environment. Arts education helps students learn to identify, appreciate, and participate in the traditional and non-traditional art forms of their own communities and the communities of others. As students imagine, create, and reflect, they are developing the verbal and non-verbal abilities necessary for life-long learning. The intellectual demands of the arts help students develop problem-solving abilities and such powerful thinking skills as analyzing, synthesizing, and evaluating. Numerous studies point toward a consistent and positive correlation between substantive education in the arts and student achievement in other subjects. A comprehensive, well-designed arts education program also engages students in a process that helps them develop the self-esteem, self-discipline, cooperation, and self-motivation necessary for success in life. Most importantly, the arts should be experienced and studied for their own intrinsic value.

**A. CREATIVE EXPRESSION. Students will create and/or perform to express ideas and feelings.**  
*Students communicate through their works, revise and problem-solve, use a variety of processes, and integrate their works with other disciplines.*

- *Each art form has specific vocabulary, elements, principles, and structures that allow for communication of ideas, feelings, and moods.*
- *Problem-solving skills, reflection, self-evaluation, revising, and refinement are part of the process used in the creation and development of art works.*
- *The development and creation of work in the arts use a variety of approaches, styles, media, and performance modes, including electronic technology.*
- *Students will understand that the roles, skills, relationships, and differences among the arts are transferable from one arts discipline to another as well as to other disciplines.*

**B. CULTURAL HERITAGE.** Students will understand the cultural contributions (social, ethical, political, religious dimensions) of the arts, how the arts shape and are shaped by prevailing cultural and social beliefs and values, and recognize exemplary works from a variety of cultures and historical periods. *The arts are the record of our diverse world cultures and provide understanding of who we are, where we've been, and possible directions for our future.*

**C. CRITICISM AND AESTHETICS.** Students will reflect upon and assess the characteristics and merits of art works. *An understanding of how the senses are used to make artistic choices in daily life, together with an understanding of how these choices affect feelings, moods, and emotions, helps us to make judgments about the merits and meaning of work in the arts. The elements, principles, and structures of art forms can be composed in ways which enrich, persuade, and influence society, either directly, through performances, original works and exhibits or indirectly, through electronic and printed media..*

*The Maine Learning Results are currently in revision. Outline draft appears below.  
Complete changes are available at the Department of Education  
website. [http://www.maine.gov/education/lres/review/revised\\_mlr\\_standards.htm](http://www.maine.gov/education/lres/review/revised_mlr_standards.htm)*

## DRAFT OUTLINE OF VISUAL AND PERFORMING ARTS STANDARDS AND PERFORMANCE INDICATORS

### A. Disciplinary Literacy

**Dance:** Terminology, Space, Time, Energy, Locomotor and Non-Locomotor Movement, Compositional Forms

**Music:** Music Difficulty, Notation and Terminology, Observe, Listen and Describe

**Theater:** Terminology, Production

**Visual Arts:** Artist's Purpose, Elements of Art and Principles of Design, Media, Tools, Techniques and Processes

### B. Creation, Performance, and Expression

**Dance:** Communication, Sequencing, Solving Challenges, Technical Aspects

**Music:** Style/Genre, Composition

**Theater:** Movement, Character, Improvisation

**Visual Arts:** Media Skills, Composition Skills, Making Meaning, Exhibition

### C. Creative Problem Solving

1. Application of Creative Process

### D. Aesthetics and Criticism

1. Aesthetics and Criticism

**E. Relationships Among the Arts, History and World Culture;** and Make Connections Among the Arts and Other Disciplines, Daily Life, Goal Setting, and Interpersonal Interaction

1. The Arts and History and World Cultures

2. The Arts and Other Disciplines

3. Goal Setting

4. Impact of the Arts on Lifestyle and Career

5. Interpersonal Skills

**Grade: K**

**Theme: Explore Creative Expression**

**A. Creative Expression**

*Students will create and/or perform to express ideas and feelings.*

*Students will be able to:*

2. Experiment with art forms

7. Differentiate simple expressive forms within each arts discipline.

14. Use materials in a safe and responsible manner.

**B. Cultural Heritage**

*Student will understand the cultural contributions (social, ethical, political, religious dimensions), how the arts shape and are shaped by prevailing cultural and social beliefs and values, and recognize exemplary works from a variety of cultures and historical periods.*

*Students will be able to:*

4. Experiment with works exhibiting variety in style/technique, trends, and culture.

5. Create original works that integrate one or more of the characteristics and purposes of artworks from different cultures.

**C. Criticism and Aesthetics**

*Students will reflect upon and assess the characteristics and merits of art works.*

*Students will be able to:*

1. Explain likes and dislikes of a work of art, music, dance, and drama.

**Include in LAS**

## Grade K Tasks

### A. Creative Expression

2. Experiment with art forms.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will use a variety of materials to create art forms.	-demonstration -guided practice -use of media -direct activities	-create -brainstorm	Teacher observation

7. Differentiate simple expressive forms within each arts discipline.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will be able to recognize soft/loud, and fast/slow. -Students will be able to recognize different styles of expressive line.	-Demonstration -Brainstorming -Guided practice -“Line is a dot that went for a walk.” - <i>Harold and the Purple Crayon</i>	-Inspect(visual examples) -Guided discussion -Listen and move(variety of music) -create(variety of line drawings, purple crayon drawings)	Rubric: A-7 A-7 Art A-7 Music (below)

**Task:** Student can distinguish various styles of expressive line from visual examples. A-7

A-7 Rubric for Art	<b>1</b> Attempted Demonstration (Does Not Meet Standards)	<b>2</b> Partial Demonstration (Partially Meets Standards)	<b>3</b> Proficient Demonstration (Meets Standards)	<b>4</b> Sophisticated Demonstration (Exceeds Standards)
A7. Differentiate simple expressive forms within each arts discipline.	Student cannot identify any expressive line.	With guidance student can distinguish various styles of expressive line.	Student can distinguish various styles of expressive line.	Student can distinguish and create various styles of expressive line.

**Task:** Student will perform movements that demonstrate an ability to distinguish between loud/soft and fast/slow. A-7

A-7 Rubric for Music	<b>1</b> Attempted Demonstration (Does Not Meet Standards)	<b>2</b> Partial Demonstration (Partially Meets Standards)	<b>3</b> Proficient Demonstration (Meets Standards)	<b>4</b> Sophisticated Demonstration (Exceeds Standards)
A7. Differentiate simple expressive forms within each arts discipline.	Student cannot perform any appropriate movement.	With guidance student can perform at least one appropriate movement.	Student performed appropriate movements for loud/soft and fast/ slow.	Student can use appropriate vocabulary as well as movement to describe loud/soft and fast/slow.

14. Use materials in a safe and responsible manner.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will demonstrate appropriate use of materials.	-Demonstration -Guided practice	-Demonstrate ability to safely use scissors and glue. -Demonstrate ability to play and handle percussion instruments.	Teacher observation

**B. Cultural Heritage**

4. Experiment with works exhibiting variety in style/technique, trends, and culture.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will explore the style/technique in a given culture.	-Guided discussion -Demonstration -Guided practice	-brainstorming -experimenting (Aboriginal style of dot painting)	Teacher observation

**5. Create original works that integrate one or more of the characteristics and purposes of artworks from different cultures.**

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will create artwork that reflects style of the given culture.	-Demonstration -Guided practice	-create(original works using Aboriginal art as inspiration)	Teacher observation

### C. Criticism and Aesthetics

1. Explain likes and dislikes of a work of art, music, dance and drama.

Tasks to Accomplish	Teaching Methods	Student Activities	Means of Assessment
-Students will verbally explain likes and dislikes of a visual or performing art.	-Guided discussion	-Group discussion (What do you like about this particular work?)	Teacher observation

## Grade K

Strands	Creative Expression (A-7)	Cultural Heritage	Criticism and Aesthetics
<a href="http://www.maine.gov/education/lres/vpa.htm">http://www.maine.gov/education/lres/vpa.htm</a>			
<b>Activities</b>	Guided practice Use of media Direct activities Demonstration Brainstorming “Line is a dot that went for a walk.” <i>-Harold and the Purple Crayon</i> Create(variety of line drawings, purple crayon drawings) Inspect(visual examples) Listen and move(variety of music) Demonstrate ability to safely use scissors and glue. Demonstrate ability to play and handle percussion instruments.	Brainstorming Experimenting (Aboriginal style of dot painting) Create(original works using Aboriginal art as inspiration)	Group discussion (What do you like about this particular work?)
<b>Assessments</b>	A-7 Rubric		
<b>Vocabulary</b>			
<b>Resources</b>	<i>-Harold and the Purple Crayon</i> Simple instruments Recorded music	Aboriginal art	

# M.S.A.D. #44

## Career Preparation

(Career and Education Development)

## Curriculum



## April 2006

Lee C. Graham, Director of Curriculum

Career Preparation Curriculum Committee

Beth LaVallee, Elementary Guidance

Amy Saunders, Telstar Middle School Guidance

Peter Howard, Telstar High School Guidance

Kevin O'Reilly, Telstar High School Guidance

## Mission Statement

Students completing the K-12 Career Preparation curriculum in MSAD#44 will be able to explain the connection between current experiences (academic, civic, and social) and their goals and aspirations (educational, personal, family, and work). Specifically, students will:

- Identify their unique skills, abilities, and interests
- Acquire a broad understanding of career opportunities
- Connect personal skills, abilities, and interests to career choices
- Participate in a variety of activities so that they can envision themselves in the world of work
- Analyze the impact of present decisions on future options
- Organize life roles and balance responsibilities.

## **Grade Level Themes**

K: Awareness of the World of Work

1: Awareness of Personal Strengths/ Interests

2: Social skills: Getting Along

3: Value of Work

4: Personal Decision Making

5: Conflict Resolution

6: Awareness of Self

7: Personal and Social Responsibility

8: Goal Setting

9: Connecting Present to Future

10: Identifying Personal Strengths and Abilities

11: Exploring Options

12: Implementing Plans

## **From the Maine Learning Results, 1997**

A successful career in the twenty-first century will differ significantly from the model of career success that has prevailed in this century. New ways of working and new technology already dictate the importance of bringing new skills to the workplace, but other changes are even more fundamental. Lifelong employment for the same employer has virtually vanished. Initial career decisions are no longer seen as lifetime determinations, but rather as first steps in a career that is likely to include work for several employers in a variety of positions.

Career preparation helps students develop the ability to handle changes. In a world of work where being a "good worker" is no longer an assurance of continued employment, career preparation serves students in several ways. It helps them acquire the basic skills and attitudes for successful entry to the world of work, it teaches them to be effective career managers and to be knowledgeable about their talents, to acknowledge their strengths, and to address their weaknesses. Career preparation enables students to recognize that challenges present opportunities and that they must be prepared to acquire new skills and new knowledge to take advantage of those opportunities.

As part of career preparation, students learn to see education, not as something to be completed in 13 or 17 years, but as a continuing process, available throughout their lives, to assist in coping with a fast-changing world. As one community college president put it, "education is a train and students must be able to get on and off as their needs change."

### **A. PREPARING FOR THE FUTURE**

**Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.** *To interact successfully with people and organizations students need to adapt to the changing nature of the workplace. Strong interpersonal, teamwork, leadership, and negotiation skills are essential for this success.*

### **B. EDUCATION/CAREER PLANNING AND MANAGEMENT**

**Guided by self assessment and personal career interests, students will integrate school- and work-based experiences to develop their career goals.** *Once career goals have been determined, students will evaluate continuously their progress and make necessary modifications. Students' success in the competitive world will depend on their ability to manage their own careers using job seeking, retention, and advancement skills.*

### **C. INTEGRATED AND APPLIED LEARNING**

**Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.** *Students will select and apply appropriate technological resources and problem-solving strategies to real life situations using problem solving strategies in purposeful ways.*

### **D. BALANCING RESPONSIBILITIES**

**Students will acquire and apply skills/concepts required to balance personal, family, community, and work responsibilities.** *The skills to manage work, family, and community responsibilities for the well being of themselves and others are critical for personal success.*

The Maine *Learning Results* are currently in revision. Detailed changes are available at the Department of Education website. An outline of the new social studies standards appears below.

[http://www.maine.gov/education/lres/review/revised\\_mlr\\_standards.htm](http://www.maine.gov/education/lres/review/revised_mlr_standards.htm)

Please note content area name change to:

## **CAREER AND EDUCATION DEVELOPMENT**

Career and Education Development helps all students gain the knowledge and skills to interact with others, set goals and make decisions related to work, career and education. Success in work, career and education in the twenty-first century differs significantly from the twentieth century model. Lifelong employment with a single employer has virtually vanished. Success today is increasingly dependent on a sophisticated knowledge base, the ability to collaborate, to self-direct, and to adapt to change. Career, work and education goals and decisions for individuals will need to change over their lifetimes in relation to school and workplace requirements and personal responsibilities. As part of career and education development, students should see education as a continuing lifelong process that will prepare them for and make them adaptable in a fast-changing world.

**Embed Career and Education Development Instruction** - The knowledge and skills outlined in Career and Education Development Standards are essential for all students. It is important that the knowledge and skills of Career and Education Development be learned in the context of schools, career and education. Stand alone courses in career and education development are artificial and less effective. School administrative units should determine the most appropriate content areas and school settings in which to embed these standards.

### **OUTLINE OF CAREER AND EDUCATION DEVELOPMENT STANDARDS AND PERFORMANCE INDICATORS**

#### **A. Learning About Self-Knowledge and Interpersonal Relationships**

1. Self-Knowledge and Self-Concept
2. Beliefs and Behaviors that Lead to Success
3. Interpersonal Skills
4. Career and Life Roles

#### **B. Learning About and Exploring Education, Career, and Life Roles**

1. Relationships among Learning, Work, the Community, and the Global Economy
2. Skills for Individual/Personal Success in the 21<sup>st</sup> Century
3. Education and Career Information

#### **C. Learning to Make Decisions, Plan and Create Opportunities, and Make Meaningful Life Contributions**

1. The Career and Life Planning Process
2. Decision Making
3. Influences on Decision Making
4. Societal Needs and Changes that Influence Workplace Success

**Grade: K**

**Theme:** *Awareness of the World of Work*

**Performance Indicators:**

**Cluster 1: Career and Life PLANNING**

**A. Planning for the Future**

The student will

3. Identify local career opportunities.

**B. Education/Career Planning and Management**

The student will

1. Explore reasons why people work.

**Cluster 2: Career and Life MANAGEMENT**

**C. Integrated and Applied Learning**

The student will

1. Identify examples of technology being applied at home, school, and work.

**Grade K Career Preparation**  
**“Awareness of the World of Work”**

	Work in the Community
<b>Strands</b>	A. Preparing for the Future-3 B. Educational/Career Planning and Management-1 C. Integrated and Applied Learning-1 <a href="http://www.state.me.us/education/lres/cp.htm">http://www.state.me.us/education/lres/cp.htm</a>
<b>Activities</b>	Visits to fire station and various community businesses Speakers from the community Identify parents’ occupations Observe how various occupations use technology
<b>Assessments</b>	
<b>Vocabulary</b>	Occupation Work place safety
<b>Resources</b>	Parents Fire Department Community Businesses