## MAINE STATE LEGISLATURE

The following document is provided by the

LAW AND LEGISLATIVE DIGITAL LIBRARY

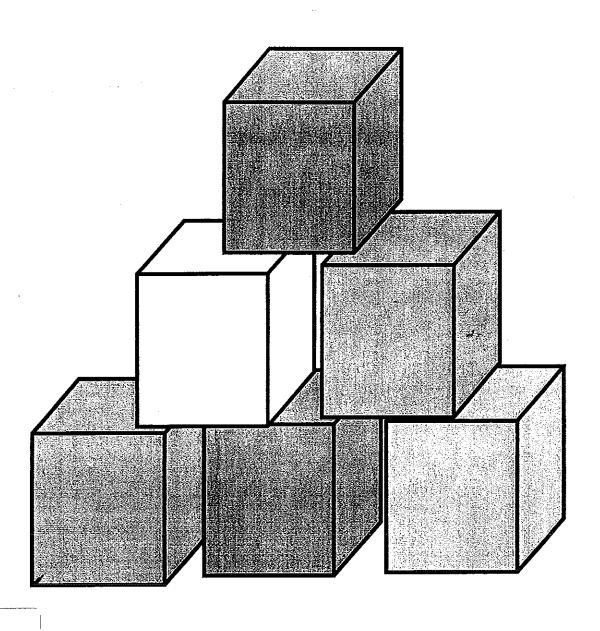
at the Maine State Law and Legislative Reference Library

http://legislature.maine.gov/lawlib



Reproduced from scanned originals with text recognition applied (searchable text may contain some errors and/or omissions)

## Task Force on Learning Results Final Report



LC 90 .M2 M33 1996 c.1

January 1996



## STATE INFLITTING AUGUSTA, MAINE

## Contents

Summary	1
Foundations of the Task Force's Work	3
Building a Results-based System	4
Recommended Legislation	б
The Development Process	8
Opportunities and Challenges	9
Appendix A	2
Appendix B	3
Appendix C	1

,		i
		!
		1
		·
		· ·
		* '
		***************************************
		;
		•
		:
	:	

# Task Force on Learning Results Final Report January 1996

## **Summary**

## The Task Force's Charge

P.L. Chapter 290, Sec. 20A, "An Act to Enhance the State Board of Education", enacted in the first regular session of the 116th Maine legislature, made the State Board of Education responsible for setting goals for education in Maine. To assist the Board in the planning process, the Act establishes the Task Force on Learning Results. The Task Force, led by the chair of the State Board of Education, is composed of 20 members representing the largest education organizations and education stakeholder groups.

The Act gave the Task Force two responsibilities. First, the group developed a five-year plan for education in Maine for approval of the State Board of Education. Second, the Task Force used Maine's Common Core of Learning, and involved more than 5000 educators and citizens in the development of student Learning Results. The Learning Results identify the specific knowledge and skills all Maine students will be required to achieve before leaving school. The timeline for completing the Learning Results is March 1996.

The Task Force on Learning Results has completed its legislated work ahead of its March 1996 deadline. Appendix A contains the completed Plan for Education in Maine, the Task Force's vision after Learning Results implementation, and the legislation which authorized its work. The plan was accepted by the State Board of Education on November 30, 1994, and submitted to the Joint Standing Committee on Education on December 1, 1994. The required interim progress report was submitted to the State Board of Education on December 1, 1994 and to the Joint Standing Committee on Education on December 15, 1994.

The Task Force expects to remain involved in the implementation of the Learning Results in its role as the state's Goals 2000 panel. Federal Goals 2000 regulations require participating states to name a state-level stakeholder panel to oversee the development of student standards, create a five-year plan for education reform, and provide close monitoring and evaluation of state and local progress in following the plan. The Task Force on Learning Results was named the state Goals 2000 panel in 1994, assuming a dual role. As its work as the Goals 2000 panel continues, the Task Force will use its original five-year plan as the foundation for a more comprehensive state plan, which can be closely evaluated over the next five years (see Appendix C for a detailed description of the Task Force/Goals 2000 connections).

#### **Products**

The Task Force's work yielded three products: the initial five-year plan to implement the Learning Results (see Appendix A); the Learning Results themselves (see Appendix B); and recommended legislation based on both the plan and the results.

The Learning Results are in three parts. The **Guiding Principles** are the broad categories of knowledge and skills which are the goals of education. The **Content Standards** are knowledge and skills in subject areas which lead directly to the achievement of the Guiding Principles. The **Performance Indicators** are the specific knowledge and skills in each subject area at key points in student learning. The Performance Indicators will be used to develop state and local assessments, and will guide local school districts in developing curriculum and instruction.

## Recommended Legislation

The Task Force believes that the Learning Results are a first step in ensuring that all Maine students have an equal opportunity to learn to high standards. Implementing the Learning Results requires Maine's education system to transform from a system of many loosely connected components and organizations to a new system in which common results and a common purpose drive decisions and relationships.

The Task Force's intention is the implementation of the Learning Results for all Maine students. In doing so, Maine is laying the foundation for the creation of a results-driven public education system by 2002. Based on the components of its plan, the Task Force recommends the following:

- 1. The Learning Results will replace the current Carnegie Unit high school graduation requirements in Maine law.
- 2. In order to receive a high school diploma, all students must demonstrate achievement of the Learning Results. Local school units may establish additional diploma requirements.
- 3. The diploma requirement will take effect in 2002, effecting those students now in the sixth grade.
- 4. Students will demonstrate achievement of the Learning Results through a combination of state and local assessments -- one of which will be a state-level secondary level assessment. This state component will be administered twice yearly, and will be open to any student, regardless of age.
- 5. The Maine Comprehensive Assessment System will replace the current Maine Education Assessment (MEA) tests, and will assess all of the content areas included in the Learning Results. The new assessment system will include state and local assessments. Statelevel student achievement information will be collected for all students in grades 4 and 8.
- 6. Intensive educator development activities to implement the Learning Results will be supported by a \$2 million General Fund appropriation in addition to General Purpose Aid to school units.

As the state Goals 2000 panel, the Task Force expects to propose additional education legislation as it analyzes information about the effects of the changes outlined above.

## The Task Force on Learning Results

## Final Report

This final report of the Task Force's work includes a detailed description of recommended legislation based on the Learning Results and the Plan for Education, an outline of the processes used to involve education stakeholders in the development of the Learning Results and the five-year plan, the implications of the Task Force's work on the State Board of Education's charge to identify essential programs and services, and an evaluation of the opportunities and challenges represented by the Learning Results in the coming months.

## Connecting the Task Force on Learning Results and Goals 2000

The Task Force on Learning Results expects to remain involved in the Learning Results implementation process in its role as the Goals 2000 State Panel. As the state Goals 2000 panel, the Task Force is charged with the development of a detailed five-year plan which includes benchmarks, a system to monitor and evaluate state-wide progress toward increased student achievement, and provisions for providing support to local school districts.

The Goals 2000 plan must be developed as the result of broad-based public input and ensure local flexibility to meet student needs. Goals 2000 plan development will enable the Task Force to involve many more educators, students and citizens in shaping the future of education in Maine than it could do during the development of its first year plan. It is expected that this process will lead to additional recommendations for legislative action.

The Goals 2000 state plan will be completed by June 30, 1996 and will add a detailed monitoring and evaluation system to the Task Force's existing Plan for Education. This system will provide Maine with a built-in schedule of data collection and analysis about local implementation of the Learning Results, and furnish needed data about local needs and the state-level support designed to help meet them. In addition, Maine's Goals 2000 plan will describe how all federally-funded education programs will be connected under the umbrella of the Learning Results, including school-to-work transition programs and the cluster of federal programs included in the Improving America's Schools Act (Eisenhower, Title I, Drug-free Schools and others).

#### The Foundations of the Task Force's Work

The Task Force's work is based on the beliefs embedded in its authorizing legislation, and on the structure of a results-driven public education system to which these beliefs naturally lead. These beliefs are:

It is the responsibility of the state to provide an education that will help all children develop the knowledge and skills they need to become productive and fulfilled members of society.

Maine's Common Core of Learning is the guide for developing the learning results for all students and is the foundation for planning the future of public education.

All Maine schools will work toward the same set of learning results.

Our children will face a world that is increasingly complex and competitive in the areas of family, community, government, and employment.

An education system based on learning results will provide greater and more equal opportunities for Maine children to prepare themselves for the challenges they will face as adults.

Educators, parents, students, taxpayers and policy makers need one, integrated long-term plan for public education which guides state and local decision making.

## Building a Results-based System

These beliefs and values led the Task Force to the description of a new kind of public education system -- one driven by the results it achieves. A results-based system has the following characteristics:

- -- Agreement on a common purpose;
- -- Articulated results based on the common purpose;
- -- Effective methods to measure the achievement of results over time;
- -- Accurate systems to collect, analyze and use data to identify and solve problems, and to make decisions about human and financial resources;
- -- Processes to change the results and indicators to show when the results need to be changed;
- -- Continuous improvement strategies, based on timely information about progress and needs, which create new structures, tools, and processes to support the achievement of the results;
- -- Maximum flexibility in using innovative strategies to reach the results;
- -- Resources targeted toward the results and the common purpose;
- -- A system-wide culture of open communication, partnership and equal access to information;
- -- Accountability and responsibility for results among all education stakeholders.

There are many differences between a results-based education system and the current system. The following chart identifies some of these differences.

Results-based System	Current System
results based on a common purpose	no identified results for all students     high school diploma represents different learning for each student in each district     statutes specify time in school, and years of each subject area
measure achievement over time	<ul> <li>what is assessed at both the state and local levels may change from year to year</li> <li>no coordination of state and local assessment</li> <li>MEA provides long-term program information and identifies trends and patterns</li> </ul>
ways to collect, analyze and use data to identify problems and make decisions	<ul> <li>information collected by the DOE from local districts is not routinely used by planners or policy makers;</li> <li>local districts have varied expertise and capacity to use information in decision making;</li> <li>there is little incentive at either the state or local levels to make decisions based on concrete data</li> </ul>
maximum flexibility in using innovative strategies to reach the results	current statutes specify many of the structures and processes to be used; time, space, personnel, district configurations and other state and federal regulations make local flexibility difficult
all resources targeted toward the common purpose	<ul> <li>public funds and staff time are spent on a myriad of separate programs and approaches;</li> <li>state and federal regulations lead to compartmentalization of scarce resources;</li> <li>public education institution and organizations compete for shrinking resources to address pieces of complex problems;</li> <li>coordination of state and local services for children and families is difficult</li> </ul>

## Recommended Legislation

In recommending legislation, the Task Force has three considerations. First, legislation must correspond to the characteristics and components of the results-driven public education system it envisions, providing maximum flexibility at the local level. Second, the time it will take local districts to fully implement the Learning Results is in direct proportion to the amount of financial and human support available to help them do so. Third, the recommended statutory changes are intended to build a foundation for a new education system -- they are not all that may be necessary, but they are the most the essential first steps.

The Task Force's Plan for Education (see Appendix A) is organized around six themes which correspond to its vision for Maine education. Some action steps require no legislative action. Others will require additional statutory changes as districts begin implementation of the Learning Results. The following Task Force recommendations correspond to each of the six goals in the five-year plan:

## 1. High standards and expectations for all students

Recommended Legislation:

The first two parts of the Learning Results, the Guiding Principles with their descriptors and the Content Standards with their descriptors, will replace the current statutory graduation requirements. School districts may establish additional high school diploma requirements. The current school approval process will no longer be required. School districts will incorporate plans to implement the Learning Results for all students into the action plans they are required to prepare for the Improving America's Schools Act (IASA) cluster of federal programs.

2. All activities to support the local implementation of the Learning Results must be designed around what students need in order to learn.

Recommended Legislation:

No legislation is recommended at this time.

3. Continuous state and local level student assessment which provides multiple ways for students to demonstrate what they know and can do is necessary to build accountability into the system.

Recommended Legislation:

Assessment

The third level of the Learning Results, the Performance Indicators which span Kindergarten through Grade 12, will be widely distributed to educators and citizens, and will be the basis for developing both state and local assessments at all grade spans to determine student achievement of the Learning Results. The Maine Education Assessment (MEA) will be replaced with the new Maine Comprehensive Assessment System, which will collect statewide information on the achievement of all students in grades 4 and 8. The Comprehensive Assessment System will assess student achievement in all of the content areas included in the Learning Results.

A secondary-level state assessment will be given twice yearly and will open to any students of any age who wish to demonstrate this part of their achievement of the Learning Results. Overall achievement of the Learning Results will be determined through a combination of state and local assessments, only one of which will be the secondary-level state assessment.

School districts will identify and develop a local array of assessments required to complete the demonstration of achievement of the Learning Results for all students at each of the grade spans outlined in the Performance Indicators of the Learning Results. These assessments may include student portfolios, performances, demonstrations, and other records of achievement. The district's assessment plan will be verified by the Department of Education, which will periodically sample local assessments to ensure validity, reliability, and equity for all students.

#### Accountability

Students now in the Sixth Grade will be the first Maine high school graduates required to demonstrate achievement of the Learning Results to earn a diploma. After this point, school districts and communities will be held accountable for student achievement of the Learning Results. The Task Force recommends that, by January 1998, the State Board of Education develop the criteria to identify districts having difficulty in helping all students achieve the Learning Results. Districts will first receive intensive assistance in helping all students achieve. The State Board will also identify the sanctions which will apply after all other measures have failed.

### 4. Equitable, adequate, and predictable school district resources

Recommended:

For all children in all communities of Maine, adequate and predictable resources will be invested to permit each child equal access to essential programs and services, and equal opportunity to achieve the Learning Results.

#### 5. Emphasis on educator development

Recommended Legislation:

An annual general fund appropriation of \$2 million, in addition to General Purpose Aid to school districts, will be appropriated to support the increased educator development costs associated with Learning Results implementation. The Task Force expects the State Board of Education to recommend new standards for initial teacher certification based on the Learning Results in 1996.

#### 6. Community involvement

Recommended Legislation: No legislation is recommended at this time.

## The Plan and Learning Results Development Process

The Task Force used a wide variety of strategies to involve education stakeholders in its work. The short timeline for developing the five-year plan made involvement more difficult, but stakeholder participation in the development of the Learning Results has been substantial.

#### Stakeholder Involvement in the Plan

The Task Force's first step was to identify the beliefs and values inherent in its authorizing legislation. (See above.) It used these beliefs and those common within the group to develop a vision for public education in Maine. That vision was verified by a conference sponsored by the Department of Education and the Coalition for Excellence in Education in November 1993. The 320 people attending representing 22 education stakeholder groups.

The Task Force used its vision, which is really a concrete picture of the future after implementation of the Learning Results, to identify goals and action steps for the five-year plan. A draft of the plan was discussed by 120 educators attending a Department of Education Innovative Education Grant networking meeting, and revisions were made as a result.

Following adoption of the plan by the State Board of Education in February 1994, the plan was widely distributed and discussed with education groups and school districts. In August 1994 the executive boards of the state's education organizations voted to support the Task Force on Learning Results' plan and do whatever they could to support the development of the Learning Results.

## Stakeholder Involvement in the Learning Results

The Task Force on Learning Results began its work to develop Learning Results in August 1994. The Task Force used Maine's Common Core of Learning to create a more specific framework to use in identifying essential knowledge and skills. The group decided to develop Learning Results at three levels of increasing specificity, and to stop short of creating a state curriculum. Appendix B contains the completed Learning Results developed by the Task Force.

From August 1994 through June 1994, the Task Force on Learning Results received input on what Maine students should know and be able to do from more than 5000 stakeholders, including high school students, superintendents, business representatives, principals, and thousands of parents and citizens. Six regional leadership teams were formed, each composed of representatives of 12 major stakeholder groups, who identified ways to collect information from as many citizens as possible in each region. Working with the staff support of a sixmember team from the Department of Education and a larger department staff group of 26, the Task Force also convened groups of educators and business leaders.

The Task Force used the public input to identify the broad goals for education called the Guiding Principles. Each school district in the state was asked to nominate at least one teacher to be directly involved in the development of the Learning Results. Eighty percent of Maine's school districts elected to participate, and 350 classroom teachers met for three days in April 1995 to use the stakeholder input and the Guiding Principles to develop content standards in the eight areas included in the Learning Results.

Drafts of the content standards developed by the teachers were then distributed to educators throughout the state, and the feedback received was used to refine them. Public hearings were then held in five regions of the state to collect additional reactions to the Learning Results. The testimony and completed questionnaires collected at the hearings were then used by the Task Force to edit the standards again.

In September 1995 the original 350 Maine teachers reconvened for two days to begin the development of grade span performance indicators based on the refined content standards. Each of the teachers also received a packet of materials and overheads to use in making presentations to their colleagues about the development of the Learning Results.

Teacher participation continued when representative teacher groups in each content area met again during the week of October 19. This work was followed with two additional days of intensive review by Task Force members working with teachers and Department of Education staff members. A final check for continuity across all content areas was undertaken by the department's staff, to ensure that performance indicators were at the right level of specificity for a state-level set of standards, and that the indicators could be assessed at either the state or local levels.

The result of the final checks of continuity and specificity revealed that some of the previous work on the content standards needed to be revised once again. These revision were approved by the Task Force at its December 14 and January 4 meetings.

Despite a great deal of press coverage over the development period, and a relatively significant effort at stakeholder involvement, the Task Force and the department's 26-member Standards Group continue to hear of educators who are not aware that the Learning results are even being developed. To heighten public and educator awareness, 18 afternoon and evening forums were held during the period from November 28 through December 20, 1995.

## Learning Results Distribution

The Learning Results will be distributed to educators and citizens. During the last week of January 1996, a weekend newspaper supplement will be printed, which will include the Learning Results and information about their implementation. This will be followed by a mailing of the three levels of the Learning Results to 8000 educators and approximately 3500 citizens. Each mailing will include a poster of the Guiding Principles and Content Standards which can be used in central locations in schools and community buildings.

## Opportunities and Challenges

The Learning Results provide Maine with the best opportunity in recent memory to change the public education system so that all children have an equal opportunity to learn to high standards. Parents, teachers, students, and businesses have all told the Task Force how important this is to them and to the future of our state. All of the education organizations in the state have agreed to support this process, providing another opportunity to marshal resources, share the work, and build new partnerships. The Learning Results represent our best thinking about what is essential for all students to know and be able to do before they leave school, giving the Maine education system a common purpose for the first time in its history.

The opportunities are unprecedented. The challenges, however, are not. Maine school districts have always worked to provide the best possible education for all students, and they have always gotten mixed results. Too many of the variables in the student achievement equation are outside the school walls. Requiring common student learning standards won't change the equation. Only a creative, concerted effort to hold students, parents, communities, and policy makers, as well as educators, accountable for student learning will. This kind of accountability can't be legislated. It is a social/cultural change which will take decades to complete.

Another continuing challenge is the difficulty Maine school districts have in finding adequate resources for research and development. Time, funds and access to expertise vary considerably throughout the state. There is no current information about how time and money are allocated locally in support of educator training and development. However, most businesses allocate between five and 15% of their personnel budgets to the training and development of their employees. The Task Force estimates that the average training and development investment of Maine school districts is less than 1% of the personnel budget. Yet, districts will be asked to undertake changes at least as complex as those which businesses have invested heavily in.

The immediate challenges facing the state are to build the support systems school districts tell us are crucial in successful implementation of the Learning Results. Supporting materials, training and discussion designs, processes, and networks need to be established as soon as possible.

#### TASK FORCE ON LEARNING RESULTS

1

1/10/96

J. Duke Albanese Messalonskee School District 20 Heath Street Oakland, ME 04963 207-465-7384 Superintendent of Schools

Weston Bonney
11 Wildwood Circle
Portland, ME 04103
207-774-6920
Coalition for Excellence

Alan Dickey
Hancock County Technical Center
RR 5, Box 508-K
Ellsworth, ME 04605
207-667-9729
Vocational Education

Abigail Garthwalt 389 College Avenue Orono, ME 04473 207-866-2151 Librarian

Raymond Glass 22 Stewart Avenue Farmington, ME 04938 207-778-6785 University Professor

Leon J. Levesque 13 Kensington Terrace Lewiston, ME 04240 207-622-6351 Ex Officio (Maine ASCD)

Leo Martin
Leo G. Martin Associates
P.O. Box 8
Kennebunkport, ME 04046
207-967-5947
Ex Officio (Education Consultant)

Orene C. Nesin P.O. Box 476 Belfast, ME 04915 207-338-1141 School Boards Association Sandra B. Bernstein MSAD #27 14 West Main Street Fort Kent, ME 04743 207-834-3189 Superintendent of Schools

James Carignan
Dean of the College
Bates College
Lewiston, ME 04240
207-786-6202
Private Higher Education

Pamela Fisher Noble High School Cranberry Meadow Road Berwick, ME 03901 207-698-1320 Principal, High School

Peter E. Geiger Geiger Bros. P.O. Box 1609 Lewiston, ME 04240 207-783-2001 x246 State Board of Education

Thomas A. Hood Montelio School 399 East Avenue Lewiston, ME 04240 207-795-4150 Principal, Elementary School

Linda Lord Maine State Library 64 State House Station Augusta, ME 04333 207-287-5620 Ex Officio (Library Media)

Marjorie Medd P.O. Box 126 Norway, ME 04268 207-743-2706 Chair

Ariene Nicholson 349 Kennebec Road Hampden, ME 04444 207-827-3900 Local School Board Roy Bishop P.O. Box 298 Stockton Springs, ME 04981 207-548-6643 Ex Officio

Timothy Crowley
Maine Technical College
33 Edgemont Drive
Presque Isle, ME 04769
207-768-2700 x2811
Vice President, Technical College

Denison Gallaudet Millbrook Advisors 337 Range Road Cumberland, ME 04021 207-829-4023 Business

Sally H. Gibson 20 Oxford Street Fryeburg, ME 04037 207-935-3676 Parent

Timothy F. Humphrey
Maine Education Association
35 Community Drive
Augusta, ME 04330
207-622-5866 x 320
Maine Education Association

Mary Majorowicz Maine Education Service 526 Western Avenue Augusta, ME 04332 207-791-3600 Public

Wayne Mowatt
Commissioner, Maine Dept. Education
23 State House Station
Augusta, ME 04333
207-287-5114
Commissioner, Dept. of Education

Barbara A. Wicks P.O. Box 219 Orono, ME 04473-0219 207-848-3365 Teacher

## Acknowledgments

The work of the Task Force on Learning Results would have been impossible without the support of the following:

- The employers and families of the Task Force's members.
- 350 Maine teachers.
- The State Board of Education.
- The Goals 2000/Task Force staff members in the Department of Education, including Pam Rolfe, Donna Gervais, Sarah Simmonds, Heidi McGinley, Cathy Dumont, Ellen Duff, and Doris Ray.
- The members of the Department of Education Standards Group, including Susan Parks, Chris Lyons, Sandra Long, Edward Maroon, Susan Wishkowski, Robert Kautz, Nancy Andrews, David Cadigan, Thomas Keller, Connie Manter, Brud Maxcy, Jackie Mitchell, Bill Primmerman, Don Reutershan, Kathy Wilbur, Karen Rumery, Mona Baker, Valerie Seaberg, Ruth Johnson, Becky Boober, Linda Edwards; Maine Math and Science Alliance staff members Francis Eberly, Rita Kingsbury, Eleanor Dickens, and honorary Standards Group members Don Cannan and Yvonne Damborg.
- ♥ Department of Education staff Susan Seavey, Jerry Barrows, Stephanie Quintal, Nancy Panek, and Charlene Daniels.
- The educator, student, and community members of the six regional leadership teams who collected information about what Maine students should know and be able to do.
- The members of the Maine Leadership Consortium.
- Participants in the Maine Education Summit.
- The Maine Coalition for Excellence in Education.
- Bates College.
- The Departments of Education in Pennsylvania, Connecticut, Kentucky, and Oregon.
- First-year Task Force members Cynthia Philbrick, Ann Anctil, Tom Birmingham, Leslee Welch, Norman Higgins, Pam Rolfe, Don Waddell, Darrel Staat and Bob Kautz.

## Appendix A

# The Task Force on Learning Results' Plan for Education in Maine

ļ   
***************************************
12.0
-
***************************************
ļ
Company Company
1
***** ********************************
**
Tables Table
100
!

## The Task Force on Learning Results

## Plan for Education in Maine

Convened by the Maine State Board of Education Authorized by PL 1993, Chapter 290, Sec. 20A An Act to Enhance the State Board of Education

Submitted to the State Board of Education on February 9, 1994 Submitted to the Joint Standing Committee on Education February 15, 1994 The Department of Education insures equal employment education opportunities, and affirmative action regardless of race, sex, color, national origin, religion, marital status, age, or handicap.

Affirmative Action Coordinator
Department of Education
23 State House Station
Augusta, ME 04333

## The Task Force on Learning Results

## Plan for Education in Maine

## **Summary**

## The Task Force's Charge:

P.L. Chapter 290, See. 20A, "An Act to Enhance the State Board of Education", enacted in the first regular session of the 116th Maine Legislature, made the State Board of Education responsible for setting goals for education in Maine. To assist the Board in the planning process, the Act establishes the Task Force on Learning Results. The Task Force, led by the chair of the State Board of Education, can include no more than 20 members. The Act gives the Task Force two responsibilities.

First, the group is required to develop a plan for education in Maine for approval by the State Board of Education. The State Board is in turn required to submit the plan to the Joint Standing Committee on Education by February 15, 1994. Second, the Act requires the Task Force to use Maine's Common t- ore of Learning to specifically identify what all Maine students will be required to know and be able to do by the time they leave school. The Task Force must complete the development of these "learning results" and present them to the State Board of Education by March 1996. In the interim, the State Board must deliver a progress report on the development of the learning results to the Joint Standing Committee in December 1994. In FY '95 and FY '96 \$260,000 in general funds were appropriated to support the Task Force/State Board's work as required by the Act.

#### The Foundations of the Task Force's Plan

The Task Force's plan for education in Maine is based first on its analysis of the act itself. The implications of the Act are far-reaching. The assumptions, beliefs and values which prompted its passage and which are embedded in the Act's charge to the State Board and to the Task Force on Learning Results dictated many of the elements of the plan. These include:

- All Maine children can learn the knowledge and skills necessary to be effective parents, citizens, workers and adults.
- Maine's Common Core of Learning is the guide for developing learning results for all students and is the foundation for planning the future of public education.
- All Maine schools will work toward the same set of learning results.
- By developing learning results which apply to all Maine students and providing support for schools and communities to redesign schools so all children can achieve these results, all Maine students will have an equal opportunity to learn.
- Educators, parents, students, taxpayers and policy makers need one integrated, long-term plan for public education which guides decision making at both the state and local levels.

## The Task Force's Vision for Education in Maine

In Alice in Wonderland the Cheshire Cat says, "If you don't know where you're going, any road will take you there." The Task Force wanted its work to impact the learning of Maine's children and its plan to be the road map for making that impact. Building on the underlying beliefs embedded in the Act and its own strongly held beliefs about education, the group developed a picture of education in Maine which illustrates how public education will function after its plan is implemented. The vision the Task Force developed was verified by 350 representatives from 20 education stakeholder groups who met in November 1993 at the Education Summit. The Task Force's vision for education in Maine:

"Every Maine child can claim a promising future, because each enjoys an equal opportunity to develop the knowledge, skills and attitudes necessary to participate in shaping Maine's future.

This equal opportunity to learn is ensured by a common set of learning results which embody high expectations for all students. The learning results, and the standards of achievement based upon them are the work of teachers, parents and citizens across the state.

Each community determines the strategies it will use to help its children reach the learning results. Learning teams, which include students, parents, and teachers develop and periodically review multi-year personalized education plans for all students. Student progress is assessed regularly, using a variety of methods which help students demonstrate what they know and can do. Students advance through school based on their progress in achieving the learning results. Each student, by actively participating in the development of a personal learning plan, understands the expected learning results and takes pride in progress made toward attaining those results. Each student accepts personal responsibility by choosing activities which lead to rigorous intellectual growth.

Educators are mentors who guide this learning process. They use a variety of engaging strategies to support students' personal learning plans. They benefit from teacher preparation programs and professional development opportunities emphasizing new technologies and approaches effective in helping students reach the learning results. Educators utilize these approaches as a springboard to help them design creative ways to personalize education for each student.

Every Maine citizen is a lifelong learner. Schools therefore are the educational service center for all residents in each community. Learning activities continue all day, every day, and learning groups are multi-aged and inter-generational. As education centers, schools use telecommunications, technology-intensive library and media centers and other technological tools to advance learning. The community itself is used as a classroom, where students further their studies of academic and human relations, explore global and multi-cultural concerns, and address environmental issues. Businesses provide additional avenues for students to use in learning, and post-secondary education contributes its learning resources to support both adult and students. Through all of these activities and the involvement of all segments of the community, the community itself takes responsibility for helping its students reach the common learning results.

Accountability for ensuring that all students continue to progress toward the learning results is shared by all the stakeholders of Maine's public schools ~ students, parents, teachers, community members and policy makers. Every community can depend upon receiving equitable, predictable and adequate funding as well as the technical resources necessary to provide a rich learning environment. When schools and communities have difficulty helping students progress toward the learning results, more intensive assistance is provided. Assistance may include support services, additional funding, or sanctions if necessary. This view of accountability redefines the responsibilities of each member of the educational system, and requires shared decision making and decentralization at all levels of the system. At both the state and local levels, policy makers act on the belief that our top priority is to create and maintain an environment in which all students can and do achieve the learning results."

## Making the Vision a Reality for Maine

The Task Force's plan has two major components -- developing the learning results and supporting local implementation of the results. In developing goals for education in Maine, the Task Force recognized the necessity of action in six major areas (the complete action plan follows).

1. The learning results must reflect high expectations and high standards for all students. (High Standards and Expectations)

Actions: The learning results will be established through a four-step process which involves Maine schools who are already involved in developing local learning results, and educators, parents and community members across the state. Using the Common Core of Learning, the Task Force, the State Board, and the Department of Education will use a broad-based collaborative process to develop specific learning results. This process will build on the department's work during the last two years in helping 60 schools develop learning results at the local level. The process will also involve community members all over the state in discussions about what Maine students should know and be able to do. Once the learning results are developed, schools will work with their communities to develop a local implementation plan.

2. All activities to support the local implementation of the learning results must be designed around what students need in order to learn. (Learner-centered education)

Actions: Planning teams, composed of teachers, parents and students, will create a learning plan for each student so that all children have an equal opportunity to work toward the learning results. Once initial mastery of the results have been reached, the same planning teams will develop transition plans for each student. Transition plans may include in-depth academic study, apprenticeship or internship, concentrated pursuit of a personal talent, or any combination of these activities. Students will select the point in their school career in which they want to demonstrate initial mastery and the transition plan will help each student determine when exit from high school takes place. A state-level collection of student assessment tools (including the Maine Educational Assessment Test) will be developed to help schools and students determine initial mastery.

3. Continuous state and local level student assessment which provides multiple ways for students to demonstrate what they know and can do is necessary to build accountability into the system. (Assessment and Accountability)

Actions: Local school districts will receive assistance in developing local assessment tools to provide information about student progress in reaching the learning results. Schools will also receive assistance from teams of educators from other schools, which will also help schools and their communities evaluate their plans for implementation of the learning results. Regional support centers will be established to assist schools in the following areas:

- ⇒ planning to help students achieve the learning results;
- ⇒ the development of new instructional strategies;
- ⇒ the development of local authentic and performance assessment tools;
- ⇒ involving parents and community in shared decision making;
- ⇒ recruiting, placing, and supervising volunteers in schools;
- ⇒ forming partnerships with businesses and community organizations;
- ⇒ the implementation of older students' transition plans;

#### The centers will also:

- ⇒ identify and broker public and private funding;
- create regional coordination systems for social services which impact children and families, and connect schools and teachers with these services;
- prepare visiting teams to provide assistance and feedback, and coordinate the formation of these teams;
- ⇒ create school-to-school networks;
- serve as clearinghouses for ideas, strategies, community-as-a-classroom project, and educational research and information.

In order to ensure that all schools are striving to help students reach the learning results, a system of rewards and sanctions will be developed during the next two years.

4. Schools and communities must have equitable, adequate and predictable resources and technical support if they are to be held accountable for student progress toward the learning results. (Equitable Resources)

Actions: As recommended by the School Funding Task Force, "essential programs and services will be defined for school funding purposes. Local school districts will identify what portion of the total school budget will be allocated to social services in order to determine equitable pupil funding for all other essential school programs. The legislature will establish predictable funding levels by March 1st for the subsequent biennium.

5. Investment in high quality, meaningful educator development is required at all levels of the education system. (Educator Development)

Actions: Resources equivalent to a minimum of 5% of each school district's personnel budget will be allocated to educator development. The focus of all educator development activities will be on helping students reach the learning results and on continuous learning

about teaching as a profession. Educator development will include <u>adequate time</u> for teachers and administrators to: develop materials; explore new strategies and approaches; locate needed resources; use appropriate technology; arrange student learning experiences; develop student assessment tools; meet with students, parents and other educators. <u>Certification of Maine's newest educators will be performance based.</u> Prospective teachers enrolled in the state's <u>pre-service education programs will learn curriculum</u>, <u>assessment and instruction practices which lead to student achievement of the learning results.</u>

## 6. All stakeholder groups must learn to work together to help students reach the learning results. (Community Involvement)

Actions: Each school will adopt a <u>site-based decision making</u> approach to planning, assessment and evaluation which involves all community stakeholders. Employers and other community stakeholders will reinforce student achievement of the learning results by: providing learning opportunities in the community and the workplace; supporting school-to-work transition plans for students; developing and expanding school volunteer programs to include all community stakeholders, especially senior citizens; and creating employee volunteer programs which allow employees to volunteer.

## Implementing the Plan

During the next 18 months, the Task Force will work with the Department of Education and the State Board of Education to oversee the development of learning results. The process will involve thousands of educators, parents, students and Maine citizens and will be based on Maine's Common Core of Learning. Once the learning results have been developed, the Task Force's plan for education in Maine will be the vehicle for helping local schools redesign education so that all students have an equal opportunity to achieve the results. During the same period, the support system outlined in the Task Force's plan will be developed. The Task Force will continue as a standing body during this two-year development process, providing oversight and ensuring continuity among the components of the plan. It will report regularly to the State Board of Education, which has ultimate responsibility for monitoring the entire process.

Following the design of the learning results and implementation of the support structures necessary to help schools integrate them locally, a continuous evaluation process will be instituted among all organizations responsible for helping children reach the learning results. As assessment information at both the state and local levels is collected, all aspects of the education system will be continuously examined. It is expected that both the learning results themselves and elements of the support systems will change as a result of continuous evaluation.

## The Task Force on Learning Results

## Membership

Marjorie Medd, Chair	Orene Nesin, President
State Board of Education	Maine School Boards Association
Leo Martin, Commissioner	Leslee Welch, Maine PTA
Maine Department of Education	Calais
J. Duke Albanese, Superintendent	Norman Higgins, Principal
MSAD #47	Piscataquis High School, Guilford
Cynthia Philbrick, School Board	Pamela Rolfe, Teacher
Hampden	Limestone JrSr. High School
Tom Hood, Principal	James Carignan, Dean
Montello School, Lewiston	Bates College, Lewiston
Linda Lord, Librarian	Roy Bishop, Special Education
MSAD #3, ITV Consultant	School Union #48
Ann Anctil, President	Don Waddell
Maine Education Association	Fort Kent
Weston Bonney, Chair	Peter Geiger
Coalition for Excellence	State Board of Education
Raymond Glass, Professor	Darrel Staat, President
University of Maine at Farmington	Eastern Maine Technical College
Denison Gallaudet, President	Robert Kautz, Superintendent
Casco Northern Bank	Wells-Ogunquit CSD
Thomas Birmingham, Director	1 - 1
Mid-Coast School of Technology, Rockland	

## Acknowledgments

The work of the Task Force on Learning Results would have been impossible without the support of the following:

Bates College

Casco Northern Bank, including

Dennison Gallaudet, Cathe Pruess, Karen Zand, and Jeanne Wright

Colby College

Maine Coalition for Excellence in Education

Maine Education Association

Participants in the Maine Education Summit

State Departments of Education in

Pennsylvania, Connecticut, Kentucky, Oregon, and Maine (especially Heidi

McGinley and Mary Majorowicz)

University of Maine

## **Action Plan**

## Theme #1: High Expectations & High Standards Based on Common Core of Learning

Goal I. Implement a broad-based collaborative process to develop learning results and performance standards, with a goal of achieving shared agreement concerning high expectations for public school students.

Action Steps:

Actions	1	- 44	
l		Responsible	Time to
#	Description	Stakeholders	Complete
1	With assistance from DOE and pilot project school	Task Force	6/94
	districts, the Task Force will adopt a format and frame-		
	work which describes learning results and standards by		
	disciplines and across disciplines.		
2	The Task Force will develop a list of essential learning	Task Force,	12/94
	results. To do so, the TF will build upon the work of the	DOE	
	DOE, the Common Core and Maine schools, and it will		
	enlist the participation of a broadly diverse representation		
	of educational constituents.		
3	The DOE will be charged to convene and guide broadly	DOE	6/95
	representative groups to designate academic content		
	standards for each discipline.		
4	Following that initial work (steps 2 & 3), the DOE will	DOE	12/95
	convene and guide a group of Maine educators and		
	citizens to identify the major integrated learning resulted		
	and standards, and to ascertain the adequacy of the MEAs		
	and other assessment means to evaluate these integrated		
	learning results and standards.		
5	The DOE will establish field-based teams charged with	DOE	
	annual comprehensive review of the learning results,		
	standards and MEAs. DOE consultants will provide		
	guidance. The purpose of annual review is to insure that		
	high expectations and rigor are maintained.		
		<del></del>	

## Goal II. Develop local implementation of standards, including strategies and responsibility for implementation of standards.

#	Description	Responsible Stakeholders	Time to Complete
1	Each LEA will develop a local plan to implement instructional practices, curriculum design, and a comprehensive system of assessment with the goal of insuring that learning results and standards will be achieved.	DOE &	Complete
2	The DOE will provide technical assistance to school units to assist them in achieving step 1.	DOE	

### Theme #2: Learner-Centered Education

Goal I. Our schools and communities will demonstrate the belief that all children can learn and achieve results which reflect high expectations and high standards.

Action Steps:

		Responsible	Time to
#	Description	Stakeholders	Complete
1	Each community will have a dialogue about the learning results to discuss ways by which all of its students can succeed.	LEA's	1995-1997
2	Each school board will establish graduation requirements that include mastery of the learning results.	School Boards	9-1-97
3	Each community will provide training and coordinate all existing resources in order to assure readiness of all children to begin school.	Community ag Schools, Busin & State depar	nesses

Goal II. Learning will be personalized so that each student will demonstrate to a high standard mastery of Maine's established learning results before graduation.

Action Steps:

#	Description	Responsible Stakeholders	Time to Complete
1	Planning teams composed of parents, teachers, and students will develop and monitor a personal learning results plan for each student from school entrance through initial mastery of learning results. The plan must include periodic assessment means to provide ongoing evaluation of the student's progress and achievements.	Parents, Teachers, & Students	1995-1998
2	The DOE will establish a consortia of regional schools to develop a pilot process for assessment of student achievement of initial mastery of learning results.	DOE	1995-1998

## Goal III. Each school will have a system in place to provide each student with a personalized learning plan for the transition period between initial mastery of Maine's learning results and exit from high school.

#	Description	Responsible Stakeholders	Time to Complete
1	A formalized assessment procedure to evaluate each student's initial mastery of learning results will be developed and implemented for Maine's schools. [See Theme #3, Assessment & Accountability]	Task Force, State Board Legislature, DOE, LEAs, Higher Educ et al.	9-1-98
2	Planning teams (per Goal II, step 1) will further provide a personalized transition plan for student learning from completion of initial mastery until exit from HS at graduation.	Parents, Teachers, & Students	9-1-98

## Theme #3: Assessment & Accountability

Goal I. Students must have access to a rich variety of assessment methods (e.g. portfolio, MEA, exit exhibitions) by which they can demonstrate progress toward achievement of the learning results. These methods must be developed.

Action Steps:

		Responsible	Time to
#	Description	Stakeholders	Complete
1	The DOE will oversee the integration of content	DOE	1989
	standards within its ongoing revision & development of		
	the MEAs and other assessment methods in order to		
	assess students' achievement of learning results.		
2	DOE will provide technical assistance to LEAs in order to	DOE	1996
	create and/or improve local assessment methods.		
3	DOE will create Regional Resource Centers throughout	DOE	1998
	the state to provide local assess to technical assistance.		

Goal II. School units' progress toward achievement of the learning results will be assessed periodically by the MEA, by visiting teams and through periodic self-evaluation by each school unit with community participation.

Action Steps:

#	Description	Responsible Stakeholders	Time to Complete
1	Technical assistance, summer institutes, etc. will be made available to schools. LEAs in each region will be encouraged to form networks to share their progress.	DOE, university system & professional org.	Ongoing
2	Visiting teams of 3-5 educators will be formed to provide a resource for the implementation of each school unit's comprehensive plan (Theme 1, goal II). Team members will be selected from a pool of trained educators.		1998

Goal III. Stakeholders will have increased responsibility to help students and schools to achieve the learning results; they will receive training to enhance their readiness for assuming this responsibility.

#	Description	Responsible Stakeholders	Time to Complete
1	The DOE will take action to publicize widely current collaboration models.	DOE	1995
2	State resources for child services will be coordinated to eliminate barriers which prevent delivery of unified, comprehensive services at the community level.		1998

Goal IV. Each school unit's progress toward achievement of the learning results will be facilitated by a system of recognition, supplemental technical assistance and, if necessary, sanctions.

Action Steps:

#	Description	Responsible Stakeholders	Time to Complete
1	Schools units will publicize their progress toward achievement of the learning results.	LEAs	1996
2	School units which make outstanding progress toward meeting the learning results will be publicly recognized and rewarded.	State Board	1996
3	School units that do not demonstrate adequate progress toward achieving the learning results will be provided with supplemental resources and technical assistance.	DOE	1996
4	The State Board of Education will develop the means to establish appropriate rewards and sanctions for school vis-à-vis achievement of the learning results.	State Board	1997
5	The DOE will re-evaluate the relevance of the existing school approval plan process vis-à-vis this goals.	DOE	1998

## Theme #4: Equitable, Adequate, Predictable Resources

Goal I. For all children in all communities of Maine, adequate and predictable resources will be invested to permit each child equal access to essential programs and services, and equal opportunity to achieve the learning results.

#	Description	Responsible Stakeholders	Time to Complete
1	"Essential programs and services" will be defined for school funding purposes in order to determine each LEA's appropriate level of resources as recommended by the School Funding Task Force.	State Board	Complete
2	The State Legislature must provide sufficient funds to assure an appropriate education for all children.	State Legislature	
3	The State Legislature must establish predictable funding levels by March 1st for the subsequent biennium in order to permit local communities and LEAs to complete long-term planning.	State Legislature	
4	The DOE must identify what portion of the total school budget will be allocated to social services in each LEA in order to determine equitable pupil funding for all other essential school programs.	DOE	

### Theme #5: Educator Development

Goal I. Resources equivalent to a minimum of 5% of each school district's personnel budget (salaries & benefits) will be allocated to professional development, including adequate training days for each educator.

Action Steps:

#	Description	Responsible Stakeholders	Time to Complete
1	Each LEA will establish a planning committee (for relevant professional development for personnel in schools) to determine the necessary resources to implement and evaluate in-service educator development which is intended to promote students' mastery of the learning results.	LEAs and Higher Education	1995-1998
2	Each LEA Planning Committee will develop budgets for educator development activities. Budgets will include local, federal, grant/foundation and in-kind support for annual and long-term staff development.	LEAs, Higher Education & Business	1995-1998
3	Staff development opportunities will be arranged such that students' programs are not interrupted.	LEAs	1995-1998
4	Staff development will focus on helping students meet the goals of their personalized learning plans and will uphold teaching as a reflective practice.	LEAs	1995-1998

Goal II. Staff development must include training for the use of new technologies, and must incorporate information resources & skills into the curriculum.

#	Description	Responsible Stakeholders	Time to Complete
1	Each LEA will identify training facilities available to be used for staff development, particularly facilities for technology and information resources and skills.	LEA and community orgs. i.e., Chamber of Commerce, churches, synagogs, and businesses	1995
2	A coalition of business people and educators must be developed to identify and plan for the application of technology tools for schools.	DOE, Cable operators, Ed Network of ME, LEAs & Higher Ed.	

3	Every school district will have access to technological	DOE,	1995
	consultative expertise for acquisitions and maintenance	Higher Ed,	
	and to achieve effective and efficient use of technologies.	Partnerships	
		i.e.,	
		Southern	
		ME, ME	
		Center,	
		other pro-	
		fessional org	
4	The State of Maine will communicate to LEAs through	State	1998
	the use of technologies.	Agencies,	
		LEAs	
5	Each educator will have access to computers, computer	LEAs, State	1998
	networks and other computer-based information.	of ME	

# Goal III. Maine's newest educators will demonstrate a high level of scholarship in their areas of study upon completion of their educator preparation programs, and will develop and demonstrate expertise as educators by means of a field-based professional development system within the State's public schools.

#	Description	Responsible Stakeholders	Time to Complete
1	Each new teacher must demonstrate teaching ability or must have a minimum of one year field-based experience in primary or secondary school.	State Board, DOE, Teacher prep. programs	
2	Certification for Maine's newest educators will be performance-based.	as above	
3	Maine's educator pre-service program supports a system based on personalized learning and the achievement by all students of the learning results.	as above	
4	Pre-service training must include familiarity with information skills and resources so that these can enrich students' learning.	as above	

## Theme #6: Community Involvement

Goal I. Each school unit will adopt a site-based decision making approach that includes all community stakeholders.

Action Steps:

,,		Responsible	Time to
#	Description	Stakeholders	Complete
1	Each LEA will establish a forum for <u>all</u> community stake- holders to explore continuous improvement toward student achievement of the learning results. Progress on this activity will be included in the periodic assessment (Theme #3, Goal II).	LEA	1995
2	The State Board will create a statewide stakeholder forum as a model to local school units.	State Board	By 12/94
3	Each LEA will regularly evaluate and present evidence of the efficacy of its site-based decision making approach.	LEA	1998

## Goal II. Employers, professional people and other community stakeholders will be expected to reinforce in students their need to achieve the learning results.

#	Description	Responsible Stakeholders	Time to Complete
1	Employers will cooperate with schools to provide learning opportunities in the workplace.		Ongoing
2	Employers will develop communication means to make students and guidance counselors aware of the importance of achievement of the learning results.		Ongoing
3	TV stations will develop and contribute public service spots about the value of education and the relevance of the learning results to success in the workplace.		Ongoing
4	Employers and community stakeholders will support and expand school-to-work transition programs such as Youth Apprenticeship.		Ongoing

Goal III. Volunteerism must be encouraged at state and school unit levels and must promote the participation of senior citizens.

		Responsible	Time to
#	Description	Stakeholders	Complete
1	School units will develop active participatory roles for senior citizens. Progress in this effort will be addressed in periodic assessment (Theme 3, Goal II).		
2	School unit volunteer programs will include and reach out to all stakeholders.		
3	Employers will be encouraged to permit employees at least two hours per month of paid leave to volunteer for school support activities.		
4	Regional volunteer coordinators positions will be included at the Regional Resource Centers.	·	

## Glossary

- Common Core of Learning -- Developed by a 36 member Commission in 1989-90, the Common Core is a statement of what Maine students should know and be able to do by the time they leave school. Over 40,000 copies have been distributed in Maine, to eight countries and to 160 school districts in 38 states.
- Learning Results -- A comprehensive list of what students should know to be able to do by the time they leave school. Learning results, as defined by the Task Force, will provide a more detailed picture of knowledge and skills than does the Common Core of Learning. However, the learning results will use the Common Core of Learning as the foundation for development.
- Results-based Learning -- Result-based learning is built on the belief that all students should be expected to work toward high levels of achievement. The basic concept is that it is possible to identify common ends for all students, but uncommon means are necessary in order for students to reach them. Traditional practices assume that all students learn at the same rate and in the same ways and that the number of hours and the number of courses students take are meaningful indicators of learning.
- Assessment Assessment refers to the tools used to measure student achievement. Standardized tests are one form of assessment which can provide information about the level of knowledge students have acquired. In order to measure students' ability to use and connect knowledge, other types of assessment are developed at both the state and local levels. These assessment tools may include collections of a student's best work over time in one academic area or across many areas (portfolios), or performances and demonstrations which allow students to fully display their skills in several areas.
- Education Stakeholders -- The beneficiaries of public education. Stakeholder groups include students, teachers, administrators, parents, senior citizens, businesses, non-profit organizations involving and serving youth, professional education associations, unions, taxpayers without children in school, local public officials, religious institutions, and state-level elected officials and policy makers.

#### STATE OF MAINE

## IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND NINETY-THREE

#### S.P. 209 - L.D. 680

#### An Act to Enhance the Role of the State Board of Education

Emergency preamble. Whereas, Acts of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, the Legislature believes that it is the responsibility of the State to provide an education that will help all children in the State develop the knowledge and skills they need to become productive and fulfilled members of society; and

Whereas, our children will face a world that is increasingly complex and competitive in the areas of family, community, government, stewardship and employment; and

Whereas, the Legislature finds that tomorrow's challenges demand that we make significant changes for our children today, including the development of an education system structured to keep up with the rapidly changing world; and

Whereas, the Legislature believes that an education system based on learning results to be accomplished will provide greater and more equal opportunities for children in this State to prepare themselves for the challenges they will face as adults; and

Whereas, this legislation establishes a task force to develop goals and a plan for an education system based on student achievement; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore,

Be it enacted by the People of the State of Maine as follows:

- Sec. 1. 20-A MRSA §405, sub-§3, ¶O, as amended by PL 1989, c. 698, §11 and affected by §76, is further amended to read:
  - O. Recommend funds to the Bureau of the Budget for equalization of educational opportunity; and
- Sec. 2. 20-A MRSA §405, sub-§3, ¶Q, as amended by PL 1985, c. 797, §10, is further amended to read:
  - Q. Serve as state agency for administering federal funds for construction of school facilities and for vocational education: ; and
  - Sec. 3. 20-A MRSA §405, sub-§3, ¶S is enacted to read:
  - S. Develor long-range education goals and standards for school performance and student performance to improve learning results and recommend to the commissioner and to the Legislature a plan for achieving those goals and standards.
- Sec. 4. 20-A MRSA §405, sub-§6, as enacted by PL 1981, c. 593, §§5 and 8, is amended to read:
- 6. Recommendations to Legislature. The state board shall recommend to the Legislature any new legislation or amendments to existing legislation for the efficient conduct of the public schools and for achieving the education and performance goals and standards and the plan for the public schools developed in accordance with subsection 3, paragraph S.
- Sec. 5. Task force established. The Task Force on Learning Results, referred to in this legislation as the "task force," is established to assist the State Board of Education in performing the duties set forth in the Maine Revised Statutes, Title 20-A, section 405, subsection 3, paragraph 5.
- Sec. 6. Task force membership. The task force consists of 15 to 20 members, broadly representative of the regions and citizens of the State, appointed by the State Board of Education in consultation with the Joint Standing Committee on Education. The chair of the state board shall serve as chair of the task force.
  - Sec. 7. Duties. The task force shall:
- 1. Develop goals and a 5-year plan for an education system based on learning achievements; and

2. Develop criteria for student learning derived from the standards established by the State's common core of learning upon which students and schools will be evaluated.

The task force shall establish 2 subcommittees to carry out the duties described in this section.

Sec. 8. Report. The task force shall present its report on the goals and the 5-year plan to the State Board of Education by February 1, 1994. The state board shall present the report, together with any recommended legislation, to the Joint Standing Committee on Education by February 15, 1994.

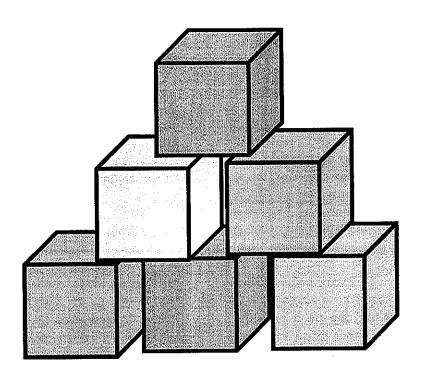
The task force shall also present a preliminary progress report on the development of standards for student achievement to the state board, which shall present the report and any other findings to the joint standing committee of the Legislature having jurisdiction over education matters by December 1, 1994. The task force shall present its findings on standards for student achievement to the State Board of Education, which shall present the report, together with any recommended legislation, to the joint standing committee of the Legislature having jurisdiction over education matters by March 1, 1996.

- Sec. 9. Staff assistance. The task force may receive staff and professional assistance from the Department of Education, the Maine Technical College System, the University of Maine System, the Maine Coalition for Excellence in Education, the Maine Teachers Association, the Maine School Management Association, the Maine Chamber of Commerce and Industry, the Legislative Council and other sources.
- Sec. 10. Funding; compensation. Interested persons and organizations may provide outside sources of funding to finance the activities of the task force. The Legislative Council shall administer outside funds acquired for the conduct of the task force. Expenditures may not be incurred that have an impact on the General Fund. Expenditures may not be incurred relative to the task force until the funding from outside sources has been received by the Legislative Council. Members of the task force are entitled to expenses from that funding upon application to the Executive Director of the Legislative Council.

Emergency clause. In view of the emergency cited in the preamble, this Act takes effect when approved.

			or on entering
			***
			. —
			*manutes in item. *
			Type of the second
			*Commence of
			Table Same
			- continue to the continue to
			man
			Yanna
			to common the common terms of the common terms
			V Annicomes on

## State of Maine



# LEARNING RESULTS

## <u>State of Maine</u> LEARNING RESULTS

#### WHAT ARE THE LEARNING RESULTS?

The Learning Results are the knowledge and skills which are essential for all Maine students so that they will be prepared for work, higher education and citizenship. These knowledge and skills build on the traditional basic skills which everyone remembers from his or her own school days. Maine's Learning Results go beyond these basic skills and apply to all students, regardless of their future plans.

The Learning Results are essential for all Maine students because the demands of contemporary life and work require us to know and be able to do a great deal. These demands ask us to be: clear and effective communicators; self-directed and life-long learners; creative and practical problem solvers; responsible and involved citizens; collaborative and quality workers; and integrative and informed thinkers. These six areas of knowledge and skills are called the GUIDING PRINCIPLES. The Learning Results do not represent everything it is possible for students to know and be able to do by the time they leave school -- only those things which are essential for all students.

Learning Results have also been developed in each of these subject areas: Career Preparation; English Language Arts; Foreign Languages; Health and Physical Education; Mathematics; Science; Social Studies; and Visual and Performing Arts. The knowledge and skills in each of these areas lead directly to the achievement of the Guiding Principles. The results in each area are called CONTENT STANDARDS.

In order to achieve the Learning Results, students will need to work toward them from their first year in school. Teachers, parents, schools, school districts, and communities will need to find common sense ways to make sure that students don't get left behind during these early years and that they know how each student is doing as the years pass.

## HOW WERE THE LEARNING RESULTS DEVELOPED?

The State Board of Education was given the responsibility to develop the Learning Results in a law enacted by the Maine legislature in 1993. The

law required the board to create a group of twenty citizens, including educators and business representatives, to identify what Maine students should know and be able to do by the time they leave school. This group, called the Task Force on Learning Results, used a variety of strategies to involve educators, students, and citizens in the process.

The Learning Results benefited first from the input of thousands of Maine citizens who completed surveys and attended meetings to identify what they felt Maine students should know and be able to do. The Task Force on Learning Results used this information to identify the Guiding Principles listed above. Student meetings were also held to gather their important input into this process. Then, teachers from 80% of Maine's school districts used citizen input to identify essential knowledge and skills in each subject area.

Public hearings were held in June 1994 and the comments received were integrated into the Learning Results. The same teachers then identified what students would need to know and be able to do at the elementary, middle and high school levels if they were to achieve the Learning Results by the time they leave school. These very specific standards are called PERFORMANCE INDICATORS.

#### WHY ARE THEY IMPORTANT?

The State Board of Education and the Task Force on Learning Results will propose legislation to require the Guiding Principles and the Content Standards as one component of a Maine high school diploma. Local districts may establish additional requirements. So, the Learning Results will give the high school diploma a common meaning throughout the state. Employers will also know that a Maine graduate brings valuable skills from the first day on the job. College-bound students will have practical problem solving, teamwork, and communication skills to enhance their own employability.

### **GUIDING PRINCIPLES**

#### Each Maine student will leave school as:

#### A CLEAR AND EFFECTIVE COMMUNICATOR

- a) uses oral, written, visual, artistic and technological modes of expression;
- b) reads, listens to and interprets messages from multiple sources;
- c) uses English and at least one other language.

### A SELF-DIRECTED AND LIFE-LONG LEARNER

- a) creates career and education plans that reflect personal goals, interests and skills, and available resources;
- b) demonstrates capacity to undertake independent study; and
- c) finds and uses information from libraries, electronic data bases and other resources.

#### A CREATIVE AND PRACTICAL PROBLEM SOLVER

- a) observes situations objectively to clearly and accurately define problems;
- b) frames questions, and designs data collection and analysis strategies from all disciplines to help answer them;
- c) identifies patterns, trends and relationships which apply to problem solutions; and
- d) generates a variety of solutions, builds a case for the best response and critically evaluates its effectiveness.

#### A RESPONSIBLE AND INVOLVED CITIZEN

- a) recognizes the power of personal participation to affect the community and demonstrates participation skills;
- b) understands the importance of accepting responsibility for personal decisions and actions;
- c) knows the means of achieving personal and community health and well-being; and
- d) appreciates the value of diversity in society.

### A COLLABORATIVE AND QUALITY WORKER

- a) knows the structure and functions of the labor market;
- b) assesses individual interests, aptitudes, skills, and values in relation to demands of the workplace;
- c) demonstrates reliability, flexibility and concern for quality.

#### AN INTEGRATIVE AND INFORMED THINKER

- a) 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
- b) comprehends relationships among different modes of thought and methods associated with the traditional disciplines.

		CAREER PREPARATION An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
1.	func	ionstrates understanding of how the workplace tions and of the interactions within it among people, and materials, and			х		X	Х
	a)	Uses academic knowledge and age appropriate tools in practical applications that are linked to the workplace and are technologically intensive;		X				
	b)	Understands the economics of the workplace;				X	X	
	c)	Develops career and education plans based on assessment of self in relation to workplace demands; and		X	X			х
	d)	Acquires and applies job seeking and advancement skills.		X	X		X	
2.	-	uires and adopts skills that assure success in family, k and community settings, and						
	a)	Understands and applies teamwork, leadership and negotiation skills needed to interact successfully with others in an increasingly diverse world;		X	X	X	X	
	b)	Demonstrates awareness of family roles and relationships and how they interrelate with community life; and		Х		X		
	c)	Applies an understanding of economic concepts to personal and financial choices.		Х		X	X	Х

.

	CAREER PREPARATION			
	ons and of the interactions within it among people, tools and mactical applications that are linked to the workplace and are technological applications, of a technology on the community, the nation and the world.  Researches a technological development and predicts its spin-offs.			
	l ons and of the interactions within it among people, tools and n	l naterials, and		
PK-2  Describes workplaces in the community after consulting with parents and others and indicates such features as education needed and the roles men and women play.  Compiles a list of products made locally and compares the work environments that produced them and requirements to do this work.	MIDDLE  5-8      Creates an occupational and economic history of the community giving a rationale for the changes that have occurred and develops a forecast of the occupational and economic outlook.	Demonstrates an understanding of basic business economic concepts such as profit and loss, market share and customer service.		
Demonstrates understanding of how the workplace funct     Develops career and education plans based on assessment	ons and of the interactions within it among people, tools and n of self in relation to workplace demands.	naterials, and		
PK-2  Illustrates positive self characteristics and personal interests.  Lists positive self-characteristics and links to personal and career interests.	MIDDLE  5-8      Completes an initial attitude and employability assessment.      Using interviews with adults and other research methods, develops a model for career development showing it as a continuous process of making choices, meeting the expectation of others, etc.      Identifies the pathways between programs of study and different occupations and careers.	SECONDARY     Continues to build a personal portfolio of skills and accomplishments as the basis for a career and education plan     Creates a self portrait which identifies personal strengths, skills and talents incorporating positive recognition from others, and justifies the proposition that a positive self-concept influences behavior and accomplishment.		

	CAREER PREPARATION	
	CAREER PREPARATION	
	ons and of the interactions within it among people, tools and a	materials, and
<ul> <li>d) Acquires and applies job-seeking and advancement skills.</li> </ul>		
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>3-4</li> <li>Creates a time management plan for school and afterschool activities.</li> </ul>	Constructs timelines for successful completion of multiple tasks and modifies as events change.	<ul> <li>Justifies the need for such workplace behaviors as punctuality and time-on-task and evaluates against own behaviors</li> <li>Identifies a variety of stressors, designs a plan to manage them constructively and evaluates how stressors can impact performance.</li> <li>Writes a brief resume and conducts simulated interviews for occupations of interest.</li> </ul>
2. Acquires and adopts skills that assure success in family, v	vork and community settings, and	
	ation skills needed to interact successfully with others in an increa	asingly diverse world.
PK-2  Differentiates between positive and negative attitudes and feelings and relates both to behaviors classified as acceptable and unacceptable at school, at home and within the community.  Classifies unacceptable behaviors and attitudes based on rules and expectations in various circumstances and determines possible consequences.  Identifies communications skills that result in successful interactions with others such as conveying constructive feedback.	Determines attitudes which lead to success in the workplace such as acceptance of others' viewpoints and contrasts those with behaviors that do not.      Applies communication and problem-solving skills in different situations such as making a decision by consensus, delivering constructive criticism and expressing a complaint to an authority figure.	SECONDARY  Engages in a team project requiring skills such as time management, communication and presentation and critical analysis.
2. Acquires and adopts skills that assure success in family, v		
b) Demonstrates awareness of family roles and relationships  ELEMENTARY	MIDDLE	CECOND ARV
	5-8	SECONDARY
<ul> <li>PK-2</li> <li>Creates a plan for and identifies the benefits of conserving resources such as food.</li> <li>3-4</li> <li>Compares different cultures and shows how each supports and impacts family life.</li> <li>Creates a presentation on family nutrition that conserves family resources and maintains good family health.</li> </ul>	<ul> <li>Designs housing space that meets individual and family needs.</li> <li>Evaluates child-support environments such as day care centers using various aspects of child development and human behavior.</li> </ul>	<ul> <li>Designs an environment that supports child development and compares with home and community programs.</li> <li>Prepares an individual community service plan.</li> </ul>
2. Acquires and adopts skills that assure success in family, w		
c) Applies an understanding of economic concepts to person		GEGOVE ANY
ELEMENTARY	MIDDLE 5.8	SECONDARY  Develops personal financial plans and justifies the pend
<i>PK-2</i> 3-4	Demonstrates an understanding of personal budgeting	Develops personal financial plans and justifies the need for such plans and their relationship to career choice,
<ul> <li>Justifies the concept of saving in relation to the economic stability of the family.</li> </ul>	Demonstrates an understanding of personal budgeting and available financial services.	desired lifestyle and broad economic forces such as inflation and unemployment.

	ENGLISH LANGUAGE ARTS An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
1.	Knows how language and literature contribute understanding the human experience and						
	<ul> <li>Reads popular and classical literature from diversity of genres;</li> </ul>		X				Х
	<ul> <li>b) Articulates the impact of reading, listening viewing on personal thinking, beliefs and values; a:</li> </ul>						Х
	<ul> <li>Demonstrates an understanding of enduring theme- literature.</li> </ul>		X				Х
2.	Uses a wide variety of strategies to present informat and ideas in a format appropriate to purpose a audience and						
	<ul> <li>Uses standard oral and written language conventions (such as grammar, syntax and spelling);</li> </ul>	ons X			X		Х
	<ul> <li>Practices writing as a process that includes plann drafting, giving and receiving feedback, editing presenting;</li> </ul>	<u> </u>	X	X	X	×	×
	<ul> <li>Uses a wide variety of technology and media research or highlight creative and exposi expression; and</li> </ul>			X		X	x
	<ul> <li>d) Collects, analyzes and organizes material to info describe, entertain and persuade.</li> </ul>	orm, X			Х		Х
3.	Reads, listens and views with comprehension and						
	<ul> <li>Reads creative, technical, and expository mate from both primary and secondary sources for a var of purposes;</li> </ul>		X	X		X	X
	<ul> <li>Recognizes the intention of a speaker or writer knows when language is being used to persuade influence; and</li> </ul>	e or	X		Х	X	X
	<ul> <li>Poses questions and practices predict interpretation and response in build comprehension.</li> </ul>		Х	X	Х		X

	ENGLISH LANGUAGE ARTS	
Knows how language and literature contribute to underst     a) Reads popular and classical literature from diverse culture.	anding the human experience and	
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Identifies and shares perceived differences and similarities in story elements in works from a variety of cultures.</li> <li>3-4</li> <li>Expresses, orally and in writing, personal discoveries and</li> </ul>	Reads literature in a variety of genres which illustrate distinct cultures in a variety of genres, and formulates and defends assumptions based on the literary elements.	Reads literature representing diverse times and cultures in a variety of genres and examines how the texts explore the human experience.
connections with cultures portrayed in quality literature.		
<ol> <li>Knows how language and literature contribute to underst</li> <li>b) Articulates the impact of reading, listening and viewing o</li> </ol>		
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Uses illustration, media, or oral presentations to articulate a personal connection to the story read.</li> <li>3-4</li> <li>Articulates and justifies a personal point of view regarding an issue raised from reading, viewing or listening.</li> </ul>	Reads, listens to or views a variety of texts in order to identify, represent, and support or oppose various viewpoints on a debatable issue.	<ul> <li>Develops a position on an enduring theme, self-selects materials that support/oppose the position, distinguishes among the views being offered, re-evaluates their own position, and presents that position to an audience so that decision-making processes are effectively represented.</li> <li>Develops a personal interpretation of an enduring theme and its impacts.</li> </ul>
1. Knows how language and literature contribute to unders		
c) Demonstrates an understanding of enduring themes of lite		
PK-2  • Uses a variety of visual and oral strategies to connect the main ideas in stories.  3-4  • Differentiates between main ideas and themes after study of story elements (plot, setting, characters, conflict, resolution).	<ul> <li>5-8</li> <li>Evaluates the connections between, and identifies the universality of themes among, various forms of literature.</li> </ul>	Examines, evaluates and elaborates on the connections between, and universality of themes among, various forms of literature.

	ENGLISH LANGUAGE ARTS	
Uses a wide variety of strategies to present information as	nd ideas in a format appropriate to purpose and audience and	
a) Uses standard oral and written language conventions (such		
ELEMENTARY	MIDDLE	SECONDARY
PK-2	5-8	Produces a well-developed piece of writing on demand,
<ul> <li>Produces a coherent piece of writing on a self-chosen topic which uses appropriate language, has voice and demonstrates control of mechanics in simple constructions.</li> <li>Self and peer edits/corrects written and spoken language, addressing mechanics, spelling, and other language conventions appropriately.</li> </ul>	<ul> <li>Produces a well-developed piece of writing on demand, in response to an assigned prompt, that is organized, uses language effectively, has voice and demonstrates control of mechanics in a manner appropriate to the demands and the complexity of the assigned task.</li> <li>Independently and accurately uses standard oral and written language conventions in formal and informal situations.</li> </ul>	in response to an assigned prompt, that is organized, user language effectively, has voice and demonstrates control of mechanics in a manner appropriate to the demands and the complexity of the assigned task.  • Uses written and spoken language with competent command of the grammatical, stylistic and mechanical conventions of composition and speech.
<ul> <li>Produces a well-developed piece of writing on demand, in response to an assigned prompt, that is organized, uses language effectively, has voice and demonstrates control of mechanics in a variety of structures.</li> <li>Demonstrates increasingly complex use of language</li> </ul>		
conventions in writing and speaking for defined purposes.  2. Uses a wide variety of strategies to present information a	nd ideas in a format appropriate to purpose and audience and	
b) Practices writing as a process that includes planning, draf	ting, giving and receiving feedback, editing and presenting.	
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Demonstrates use of a prewriting strategy to write about a self-selected topic, conferences with others by giving and receiving feedback to improve development of ideas and use of conventions.</li> </ul>	Generates an initial text on a self-selected topic, using prewriting strategies; then uses strategies for revision to improve correctness. clarity of purpose and expression in a finished piece for a specific audience.	Generates an initial text on a self-selected topic, using prewriting strategies; then uses strategies for revision to improve correctness, structure, clarity of purpose and language expression in a finished piece for a specific audience.
3-4	i · ·	
<ul> <li>Uses prewriting and drafting strategies, including conferencing with others in order to develop ideas, revise, and edit, before presenting a final written piece for a specific audience.</li> </ul>		
	nd ideas in a format appropriate to purpose and audience and	
c) Uses a wide variety of technology and media to research		
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Formulates questions, listens to, reads, and views various media to organize and share information gathered from the exploration.</li> <li>3-4</li> </ul>	Uses a variety of media and technological resources to investigate multiple topics for creative and expository written and oral presentations.	<ul> <li>Explores and uses various technological resources to plan and deliver creative and informational multi-media presentations.</li> <li>Designs a presentation which uses various media and technological resources to achieve particular rhetorical</li> </ul>
Uses a variety of media and technological resources to generate reports for a selected audience.		purposes (persuade, explain, defend, question, justify,

etc.).

generate reports for a selected audience.

	ENGLISH LANGUAGE ARTS	
	nd ideas in a format appropriate to purpose and audience and	
<ul> <li>d) Collects, analyzes and organizes material to inform, descr</li> </ul>		
PK-2  Collects, listens to, and shares information about a self-selected topic.  J-4  Locates, collects, organizes, and shares information to inform, describe or entertain.  Reads, listens and views with comprehension and	Uses research skills to locate, collect, organize, and share materials from a variety of resources to inform, describe, entertain, and/or persuade depending on audience and purpose.	Designs and presents an original research project, incorporating primary and secondary sources of information.
Reads creative, technical, and expository material from be     ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Selects, reads, listens, and views with comprehension appropriate materials for a specific purpose.</li> <li>3-4</li> <li>Selects, reads, listens and views with comprehension from a variety of print and non-print sources for a variety of purposes.</li> </ul>	5-8     Adjusts reading, listening and viewing strategies in order to comprehend a variety of materials for a variety of purposes.	Selects, reads, and shapes information from pertinent and from appropriately complex primary and secondary sources in a report that demonstrates substantive research and knowledge.
3. Reads, listens and views with comprehension and		
b) Recognizes the intention of a speaker or writer and know		
PK-2  Distinguishes between reality and fantasy in literature and in real life.  Identifies and uses formal and informal language variations pertinent to a variety of familiar situations.  Analyzes a variety of materials to distinguish fact from opinion and describes how each is used to influence others.  Investigates the language of other cultures and compares/contrasts to the native language.	MIDDLE  5-8      Identifies bias in oral, written, and visual materials.     Identifies how and when the power of language creates impressions and generates bias.     Evaluates the reliability of information from the mass media.	SECONDARY      Identifies how bias influences people's perceptions of events and formulates a hypothesis about an author's viewpoint.      Recognizes and explains how dialect and dialogue usage impacts the way people are viewed in society.      Evaluates language used in diverse situations.
3. Reads, listens and views with comprehension and	nd reamone in building comprehension	
c) Poses questions and practices prediction, interpretation ar  ELEMENTARY	MIDDLE	SECONDARY
PK-2  Recognizes and uses reading strategies associated with the development of fluency and comprehension, demonstrating competence in response to material read.  3-4  Applies strategies for reading comprehension when reading self-selected as well as assigned texts.	In reading, discussing or writing about written materials independently, poses questions, predicts, interprets and responds to build comprehension.	Identifies strategies used to extend understanding of increasingly sophisticated, complex and challenging texts.

	FOREIGN LANGUAGES An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
1.	Communicates clearly and effectively through listening, speaking, reading and writing, as appropriate, in a language other than the native language and	Х	X	Х	X		X
	<ul> <li>a) Engages in conversations and discussions about everyday topics and current events using authentic information;</li> </ul>	Х	X	X	Х		Х
	b) Presents information, concepts and ideas on a variety of topics orally and in writing to an audience of listeners or readers both within and beyond the school setting; and	X	X	X	X		X
	<ul> <li>Provides, obtains, interprets and uses information from a variety of sources, including technologies and worldwide resources.</li> </ul>	X	X	X	X	X	Х
2.	Gains knowledge and understanding of other cultures and develops insights into one's own culture and	X	Х		X	X	Х
	a) Understands that culture is multi-faceted and includes language, behavioral practices, ideas and perspectives, and products (e.g., music, foods, literature) and	X	X		X	X	X
	<ul> <li>Makes linguistic, economic, political, geographical, cultural and historical connections between and among countries and peoples.</li> </ul>	X	Х	Х	Х	X	X

## **FOREIGN LANGUAGES**

1. Communicates clearly and effectively through listening, speaking, reading and writing, as appropriate, in a language other than the native language and a) Engages in conversations and discussions about everyday topics and current events using authentic information.

#### ELEMENTARY

#### PK-2

- Uses learned phrases and recalled vocabulary to ask and answer simple questions about self and family.
- Orally expresses needs, likes and dislikes relating to the immediate environment.
- Orally greets others and responds to greetings in appropriate social situations.

#### 3-4

- Orally reproduces learned patterns in short sentences to express personal information.
- Uses short phrases to orally describe people and things.
- Orally expresses feelings about familiar situations.
- Orally makes and responds to simple requests.
- Orally asks and responds to questions in social situations.

#### MIDDI

# Uses strings of short sentences to exchange information about personal events and familiar situations.

- Asks for and gives spoken directions and simple instructions.
- Compares and contrasts people, objects, and events using short spoken sentences.
- Interviews a peer on a specified topic.

#### SECONDARY

- Uses strings of related sentences to orally compare and contrast people, things and events.
- Orally clarifies and asks for clarification in a conversational setting.
- Discusses his/her past, present and future using simple discourse.
- Orally exchanges information about current, past and future events regarding issues of personal interest.

## 1. Communicates clearly and effectively through listening, speaking, reading and writing, as appropriate, in a language other than the native language and b) Presents information, concepts and ideas on a variety of topics or ally and in writing to an audience of listeners or readers both within and beyond the school setting.

5-8

#### ELEMENTARY

#### PK-2

 Engages in pre-writing activities (illustrations, letters of the alphabet).

#### 3-4

- Uses single words or phrases to produce simple, illustrated written stories about everyday activities or events.
- Writes to others to describe daily life and likes and dislikes.
- Uses short spoken sentences to present information on a specific topic.
- Recites the letters of the alphabet when presented with corresponding symbols.

#### MIDDLE

- Uses a series of connected sentences to write notes or letters on topics of personal interest.
- Prepares stories or brief written reports on daily life or a topic studied in another subject area.
- Writes summaries of the main ideas, events, people, places, and things in instructionally appropriate texts.
- Narrates in writing and explains feelings about a special personal event.
- Uses strings of short spoken sentences to present information about topics of interest and current events.

- Summarizes, in short written paragraphs, the content of simple articles or documents from other disciplines (geography, art, etc.).
- Writes letters at various levels of formality.
- Explains and supports, in writing, an opinion on a topic of personal importance to them.
- Narrates, in writing, past, present and future events in areas of public interest.
- Orally gives directions for carrying out a multi-step task.
- Plans and delivers an oral report on a self-selected topic.
- Orally summarizes information obtained through verbal interaction with peers.
- Demonstrates understanding of selected examples of authentic spoken language by paraphrasing in the native language, predicting outcomes, and verifying content.
- Orally summarizes oral and written text using strings of related sentences.

## **FOREIGN LANGUAGES**

MIDDLE

1. Communicates clearly and effectively through listening, speaking, reading and writing, as appropriate, in a language other than the native language and c) Provides, obtains, interprets and uses information from a variety of sources, including technologies and worldwide resources.

#### ELEMENTARY

#### PK-2

- Follows simple classroom commands and directions.
- · Responds to simple one word written directions.
- Uses multiple strategies (picture clues, letter-sound associations and simple sentences) to read simple text in the target language and to state or paraphrase in native language.
- Understands simple oral narratives and short conversations on familiar topics.
- Uses clues and illustrations to identify people and objects in learner's environment.
- Comprehends the main ideas of a video or TV program on a familiar topic.

#### 3-4

- Demonstrates understanding of brief spoken messages, commands and directions.
- Demonstrates interpretation of gestures, intonation, and other visual and auditory cues.
- Uses the native language to state or paraphrase brief written passages and personal notes on familiar topics.
- Selects main ideas and identifies principal characters of illustrated stories.
- Reads and responds to one and two-step directions.
- Comprehends the main ideas in simple sentences of developmentally appropriate oral narratives and conversations.
- Reacts appropriately to gestures, intonation and other visual and auditory cues.
- Demonstrates comprehension of orally-presented vocabulary in the target language from topics related to other school subjects.
- Recognizes oral phrase grouping and voice inflection.

5~8

- Answers questions on the content of announcements and messages on familiar topics.
- Follows a set of directions to develop a product.
- Reads and evaluates written work in simple sentence form by editing, revising and creating a final draft.
- Identifies the primary messages in short written informational texts on familiar topics.
- Reads and interprets multiple-step written directions and simple printed information (advertisements, posters).
- Understands main ideas and supporting details of short narratives on familiar topics.
- Comprehends short spoken messages in the target language on topics being studied in other classes.
- Recognizes common oral phrase groupings and structures.
- Collects data, identifies main ideas, themes and details from authentic TV, radio or live presentations from the target culture.

- Comprehends selected short samples of authentic spoken language.
- Understands the main ideas of developmentally appropriate, orally-presented non-fiction articles (newscasts, documentaries).
- Comprehends short written texts which contain some unfamiliar content.
- Identifies main idea and supporting details of an informational text (letter, poem, story).
- Understands main ideas in newspaper and magazine articles.
- Understands the main ideas and supporting details of brief (both live and recorded) discussions and presentations about familiar topics.
- Demonstrates comprehension of dialogues and/or oral presentations in the target language about a topic being studied in other school subjects.
- Combines information gathered from dialogues and/or oral presentations from other school subjects with oral information in the target language.

## **FOREIGN LANGUAGES**

MIDDLE

- 2. Gains knowledge and understanding of other cultures and develops insights into one's own culture and
  - a) Understands that culture is multi-faceted and includes language, behavioral practices, ideas and perspectives, and products (e.g., music, foods, literature).

#### ELEMENTARY

#### PK-2

- Associates a language with the dress, holidays and music of a country or region where it is spoken.
- Identifies products of the target culture, to include currency, crafts, toys, songs and food.

#### 3-4

 Identifies ideas or perspectives about the target culture based on examination of tangible products of the culture, to include toys, dress, housing. food, songs, currency and artwork.

5-8

- Infers themes, ideas or perspectives about the target culture by examining tangible products of the culture, to include popular music and dance, literature, architecture and education.
- Explains how idiomatic expressions impact communication and reflect culture.
- Demonstrates more than one way to express an idea across languages.

#### SECONDARY

- Demonstrates appropriate gestures and oral expressions when interacting in the target language or culture.
- Demonstrates awareness of cultural nuances in spoken language by comparing or contrasting different ways to express the same thought.
- Comprehends the main ideas and relevant details of live and recorded presentations of songs, folktales, comedy and various anecdotes that are of cultural significance.

- 2. Gains knowledge and understanding of other cultures and develops insights into one's own culture and
  - b) Makes linguistic, economic, political, geographical, cultural and historical connections between and among countries and peoples.

5-8

#### ELEMENTARY

#### PK-2

- Discriminates between examples of the sound and writing systems of the target language and these same elements in the native language.
- Identifies similarities and differences between the dress, holidays and music of the target and native cultures.

#### 3-4

- Understands the process of word borrowing from one language to another.
- Distinguishes between the sound and writing systems of the target language and these same elements in the native language.
- Explains social practices based on age, gender and heritage that are characteristic of the target culture and identifies similar and different practices in their native culture.

#### MIDDLE

- Observes, identifies and discusses patterns of behavior typical of their peer group in the native and target cultures.
- Compares appropriate communicative gestures across languages.
- Identifies cultural beliefs and perspectives of people in both the native and target cultures relating to family, school, work and play.

- Applies understanding of the products of the target culture as they are reflected in the native culture.
- Explains social practices based on religion, political and social status, and education that are characteristic of the target culture and compares these practices to own culture.

	HEALTH AND PHYSICAL EDUCATION	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
	An educated person	<u></u>					
	mprehends concepts and practices which enhance alth and reduce health risks and						
a)	Understands the short- and long-term impact of personal behaviors on health;		Х	X	X	Х	Х
b)	Understands the interrelationship of mental, emotional, social and physical health;		X		Х		X
c)	Knows when, where, and how to gain access to good health information and care;	X	X	X	X		X
d)	Understands basic concepts of personal, family and community health;	X	X	Х	X		X
e)	Uses strategies to manage stress; and		X	X	X	X	X
f)	Uses communication and problem-solving skills to improve and maintain health and practices skills needed to cope successfully with pressures.	X	X	X	X		X
2. Is	physically active and						
a)	Achieves and maintains a health-enhancing level of physical fitness which is directly related to academic performance;		X	Х	X	X	X
b)	Understands the role of regular physical activity in contributing to personal health and productivity;		X	Х	X	X	X
c)	Demonstrates a variety of motor skills; and	X	X		X		X
d)	Demonstrates responsible personal and social behavior in physical activity settings.	X	X	Х	X		Х

## HEALTH AND PHYSICAL EDUCATION

1. Comprehends concepts and practices which enhance health and reduce health risks and

5-8

5-8

a) Understands the short- and long-term impact of personal behaviors on health.

#### ELEMENTARY

#### PK-2

- Describes how a healthful school and community environment influences personal health.
- Illustrates how lice, colds and flu are transmitted and prevented.
- Differentiates between harmful and unharmful substances found at home and school.
- Demonstrates personal hygiene skills and the selection of healthy food choices.
- Demonstrates the skills needed to practice pedestrian, bus, fire, seat belt, and bicycle safety.
- Identifies goals to be achieved by choosing healthy habits.

#### 3-4

- Identifies the relationship between eating well and personal health.
- Determines the basic function and care of the human respiratory and digestive systems.
- Differentiates between safe and unsafe practices when coming in contact with bodily fluids, prescription and non-prescription drugs.
- Develops injury prevention and safety strategies.
- Sets a personal health goal with appropriate assistance and charts progress towards its achievement.

#### MIDDLE

- Analyzes the relationship between healthy behavior and the causes and prevention of chronic and communicable diseases.
- Classifies the phases of chemical dependency and evaluates the effects of substance use and abuse and nicotine addiction on oneself and friends and family members.
- Examines the importance of assuming responsibility for personal health behaviors.
- Analyzes a personal health assessment to determine health strengths and risks and develops strategies to improve or maintain personal and family health.
- Distinguishes between safe and risky or harmful behaviors in relationships and demonstrates ways to avoid and reduce situations that threaten personal safety, such as physical, emotional and sexual abuse.
- Develops injury prevention and management strategies for personal safety, including recreational safety and, given a specific situation, recommends first aid care.
- Analyzes how health-related decisions and personal health goals are influenced by individuals, family, and community values and predicts the consequences for self and others.
- Applies strategies and skills needed to attain personal health goals.
- Demonstrates a decision-making process to resolve health issues and problems individually and collaboratively.

#### SECONDARY

- Compares and contrasts the relationship between personal health behaviors and individual well-being.
- Analyzes the impact of personal health behaviors on the functioning of body systems.
- Analyzes the role of individual responsibility for enhancing health in the workplace.
- Evaluates a personal health assessment to determine strategies for health enhancement and risk reduction.
- Analyzes the short- and long-term effects of safe and risky or harmful behaviors regarding the use of tobacco, alcohol, and other drugs.
- Analyzes how cultural diversity enriches and challenges health behaviors.
- Demonstrates the ability to utilize various strategies when making decisions related to tobacco, alcohol and other drugs, nutrition, sexual activity and behaviors resulting in intentional and unintentional injury
- Predicts immediate and long-term impact of health decisions on the individual, family and community.
- Implements a plan and evaluates progress toward attaining a long term personal health goal.
- Formulates an effective plan for lifelong health.

## 1. Comprehends concepts and practices which enhance health and reduce health risks and

b) Understands the interrelationship of mental, emotional, social and physical health.

#### ELEMENTARY

#### PK-2 3-4

 Recognizes some of the indicators of mental, emotional, social, and physical health during childhood.

#### MIDDLE

Critiques the interrelationship of mental, emotional, social, and physical health during adolescence.

#### SECONDARY

 Investigates the interrelationship of mental, emotional, social, and physical growth patterns throughout the stages of life.

HEA	ALTH AND PHYSICAL EDUCAT	ION
1. Comprehends concepts and practices which enhance healt		
c) Knows when, where, and how to gain access to good healt		
ELEMENTARY  PK-2  Decides which school and community health helpers are needed for given situations.	MIDDLE  5-8  • Analyzes influences on reproductive health care decisions.	SECONDARY      Analyzes how public health policies and government regulations influence health promotion and disease prevention.
<ul> <li>Classifies characteristics of valid health information and health promoting products and services.</li> <li>Identifies community agencies that advocate for healthy individuals, families and communities.</li> </ul>	<ul> <li>Analyzes health information, products, and services and determines the situations requiring their use.</li> <li>Locates resources from home, school and community that provide valid health information and services.</li> <li>Investigates the influence of cultural beliefs on health behaviors and the use of health services.</li> </ul>	<ul> <li>Analyzes situations requiring health care services and demonstrates the ability to access the health care system.</li> <li>Supports with evidence the validity of health information, products and services and evaluates factors that influence personal selection of health products and services.</li> </ul>
Comprehends concepts and practices which enhance healt     d) Understands basic concepts of personal, family and comm		
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Compares and contrasts differences in family structures.</li> <li>Sequences the four stages of life (birth, childhood, adult and old age) and differentiates among them.</li> <li>Determines the basic functions and care of the human, skeletal, muscular, circulatory, and sensory systems.</li> <li>Categorizes the influences of culture and media on health.</li> <li>3-4</li> <li>Demonstrates a basic understanding of developmental changes during puberty.</li> <li>Identifies common health problems of children that should be detected and treated early.</li> <li>Evaluates the influences of culture, media and technology on health.</li> </ul>	<ul> <li>5-8</li> <li>Analyzes how family, peers, and the environment are interrelated with personal health.</li> <li>Describes common health issues experienced throughout the life stages and determines how these issues impact family and community health.</li> <li>Critiques outside influences that affect roles and responsibilities within the family structure.</li> <li>Evaluates how health is influenced by the interaction of body systems.</li> <li>Analyzes how messages from the media, technology, and information from peers influence personal and family health.</li> </ul>	<ul> <li>Analyzes how the environment influences the health of the community.</li> <li>Predicts how lifestyle, pathogens, family history, nutrition and other factors are related to the causes or prevention of disease, and health problems of adolescents and young adults.</li> <li>Evaluates the effect of media, technology, and other factors on personal, family and community health.</li> </ul>
1. Comprehends concepts and practices which enhance heal	th and reduce health risks and	
e) Uses strategies to manage stress.  ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Investigates the difference between positive and negative stressors and applies strategies to cope with feeling excited, anxious, or out of control.</li> </ul>	Designs, implements and evaluates a proactive plan of stress management.	Evaluates strategies to manage stress, distinguishing between healthy and unhealthy stress management techniques.
<ul> <li>Demonstrates ways to deal with and avoid threatening and stressful situations that can and cannot be controlled or avoided.</li> </ul>		

## HEALTH AND PHYSICAL EDUCATION

MIDDLE

- 1. Comprehends concepts and practices which enhance health and reduce health risks and
  - f) Uses communication and problem-solving skills to improve and maintain health and practices skills needed to cope successfully with pressures.

#### ELEMENTARY

#### PK-2

- Demonstrates interpersonal skills to enhance health.
- Advocates for healthy behaviors through written and verbal expression.

#### 3-4

- Differentiates between negative and positive behaviors and demonstrates non-violent strategies in conflict situations.
- Uses appropriate verbal and non-verbal communication skills and attentive listening skills in building and maintaining healthy relationships.
- Demonstrates healthy ways to express needs, wants, and feelings.
- Demonstrates ways to communicate acceptance and consideration of gender related similarities and differences.
- Expresses opinions and accurate information about health issues using a variety of methods and supports others in making positive health choices.

# 5-8 Analyzes issues that create significant conflict which could lead to violence and develops conflict resolution strategies.

- Relates how styles of interpersonal communication impact peer and family relationships.
- Demonstrates effective verbal and non-verbal communication skills to build and maintain healthy relationships.
- Models ways to communicate care and consideration of self and others regardless of physical and mental abilities.
- Demonstrates refusal and negotiation skills to enhance health.
- Analyzes various communication methods to accurately express information, ideas and opinions about health issues.
- Demonstrates skills needed to influence and support others when advocating for positive health choices.

#### SECONDARY

- Demonstrates ways, including harassment and violence prevention strategies, to avoid and reduce threatening situations.
- Demonstrates healthy ways to effectively communicate with family, peers, and others.
- Demonstrates refusal, negotiation, and collaboration skills to avoid potentially unsafe and harmful situations.
- Analyzes the possible causes of conflict in schools, families and communities and demonstrates strategies used to prevent or solve interpersonal conflicts without harming self or others.
- Analyzes health concerns that require collaborative decision making,
- Evaluates the effectiveness of communication methods for accurately expressing health information and ideas.
- Utilizes strategies to adapt health messages and communication techniques to the characteristics of a particular audience and to overcome barriers when communicating information, ideas, feelings, and opinions about health issues.
- Demonstrates the ability to work cooperatively when advocating for healthy individuals, families, schools and communities.

#### 2. Is physically active and

a) Achieves and maintains a health-enhancing level of physical fitness which is directly related to academic performance.

5-8

#### ELEMENTARY

#### PK-2

Identifies the physiological indicators of exercise when engaged in moderate to vigorous activity, and the components of cardio-respiratory endurance, muscular strength, muscular endurance, and flexibility.

#### 3-4

 Differentiates between activities that increase cardiorespiratory endurance, muscular strength/endurance and flexibility.

#### MIDDLE

- Defines the components of health-related fitness and skill-related fitness and determines activities which contribute to the development of each.
- Participates in and distinguishes among a variety of health related fitness activities.
- Applies basic training principles to design a personal fitness plan based on fitness standards.
- Assesses health-related fitness levels.

#### SECONDARY

 Designs a personal fitness program based on an accurately assessed fitness profile using the principles of training to modify levels of physical fitness.

HEA	ALTH AND PHYSICAL EDUCAT	ION
2. Is physically active and		dia
b) Understands the role of regular physical activity in contrib	uting to personal health and productivity.	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Demonstrates cooperative skills (following rules, turn taking, sharing of equipment, space, roles) while participating in various physical activities.</li> <li>Uses equipment appropriately and responsibly.</li> <li>Describes rules and behaviors that contribute to productive participation in physical activity.</li> <li>3-4</li> <li>Demonstrates listening and communication skills in a variety of games, movement activities and sports requiring verbal and non-verbal communication and shows how these skills can enhance group/team cooperation and effort.</li> <li>Assesses activity-specific safe practices, rules, procedures, and etiquette.</li> <li>Judges performance of a physical skill to determine strengths and challenges.</li> </ul>	<ul> <li>Describes ways in which respect for oneself and for the diversity among people is demonstrated in physical activity settings.</li> <li>Works safely and cooperatively with others to achieve group goals in competitive settings which enhance fair play.</li> <li>Analyzes the consequences of behavior choices (decision making, personal and group safety, conflict resolution skills, self direction) participating in physical activities.</li> </ul>	Describes personal and group conduct necessary to participate cooperatively and ethically in competitive and noncompetitive physical activities.      Evaluates risks and safety factors that may effect physical activity preferences.      Accommodates the physical and performance levels of self and others by adapting activities to encourage success.
2. Is physically active and		
c) Demonstrates a variety of motor skills.  ELEMENTARY  PK-2  Moves through space safely, responding appropriately to prompts of various pathways, levels, speed, and force while maintaining balance.  Demonstrates locomotor, non-locomotor, and manipulative skills using teacher cues.  3-4  Creates movement patterns in combinations and/or sequences using the concepts of speed, force, directionality, pathways, levels, and balance in relation to objects, space and people.  Distinguishes between locomotor and non-locomotor skills in physical activities.	<ul> <li>Selects movement patterns to plan and perform a movement sequence which demonstrates success and safety.</li> <li>Selects and performs appropriate motor skills and applies these skills in physical activities.</li> </ul>	SECONDARY     Demonstrates competency in basic skills, strategies and rules in complex versions of different types of movemen forms.     Uses biomechanical concepts and principles in the acquisition of sport-specific skills and analyzes and evaluates motor skills performance.
2. Is physically active and	physical activity settings	
d) Demonstrates responsible personal and social behavior in  ELEMENTARY  PK-2  Identifies the rules of a given activity.  3-4  Follows rules when combining movement concepts and motor skills in physical activity.	MIDDLE  5-8      Demonstrates etiquette, strategies and competence in modified versions of a variety of physical activities.	SECONDARY     Demonstrates etiquette, strategies and competence in many physical activities with proficiency in a few.

MATHEMATICS An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
Attains and applies knowledge and skills of mathematics     and	X	X	X	X	X	X
a) Understands the meanings and relationships of numbers and the effects of operations on numbers;	X	X	X		X	X
b) Computes accurately with appropriate tools and evaluates the reasonableness of answers;		Х	Х		X	
c) Formulates and solves problems which involve collecting, organizing, analyzing, presenting and drawing conclusions from data;	Х	X	X	X	X	Х
d) Uses the ideas of probability and recognizes the uncertainty and limitations involved in drawing conclusions from a set of data;	X	X	X	X	X	Х
e) Uses the geometric concepts of size, shape, location, dimension, and perspective to describe characteristics of the world;	X	X	X	x	X	X
f) Uses measurement units and tools to describe and justify solutions to real world problems;	Х	X	X		X	X
g) Uses patterns, relationships, and functions to generalize and predict solutions to problems;	Х	Х	X	X	X	Х
h) Constructs visual and symbolic models to represent a problem or an idea; and	Х	X	X	X	Х	X
<ul> <li>i) Uses the main ideas of discrete mathematics to determine if a problem has a solution, how many solutions exist, and which solution is best for the given situation.</li> </ul>		X	X	X	X	X
2. Recognizes the historical and societal importance of mathematics and	X	X	X	X	X	X
a) Uses mathematical reasoning to justify ideas and make informed decisions; and	X	X	X	X	X	X
b) Uses mathematics to make sense of the world.		X	X	X	X	X

	MATHEMATICS				
<ol> <li>Attains and applies knowledge and skills of mathematics a         a) Understands the meanings and relationships of numbers an         ELEMENTARY         PK-2</li></ol>	<ul> <li>d the effects of operations on numbers.</li> <li>MIDDLE</li> <li>5-8</li> <li>Uses numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential and scientific notation) in practical and theoretical problem-solving.</li> <li>Understands the relationship between basic arithmetic operations.</li> <li>Applies ratio, proportions, percents, number theory concepts (e.g. primes, factors and multiples) in practical and other mathematical situations.</li> <li>Represents numerical relationships in one and two dimensional graphs.</li> </ul>	SECONDARY  Describes the structure of the real number system and identifies its appropriate applications and limitations. Constructs number meanings for real and complex numbers through hands on experience, the use of physical materials, and connections to other mathematics.			
1. Attains and applies knowledge and skills of mathematics a b) Computes accurately with appropriate tools and evaluates  ELEMENTARY  PK-2  Uses and applies estimation with quantities.  measurement, computation and problem-solving and determines the reasonableness of results.  Selects and uses multiple strategies in solving problems involving estimation, addition and subtraction of whole numbers checking for accuracy using manipulatives, technologies and techniques (such as inverse operations).  Models and explains addition and subtraction using a variety of materials, strategies and symbols.  3-4  Estimates and solves multi-step, real-life problems including the four operations involving whole numbers and money, addition and subtraction of simple fractions with like denominators.  Demonstrates, illustrates and explains the problem-solving process, integrates appropriate technology and defends the reasonableness of results.  Models, explains and develops proficiency with the facts and algorithms of the four operations using mental math, a variety of materials, strategies and technologies.		SECONDARY  Models and explains all four operations with real numbers using a variety of techniques.  Uses various techniques to approximate solutions, determine the reasonableness of answers, and justify the results.  Models and explains operations with alternative number systems using a variety of techniques.			

	MATHEMATICS	
1. Attains and applies knowledge and skills of mathematics :	ind	
	organizing, analyzing, presenting and drawing conclusions from	data.
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Formulates and solves problems by collecting, arranging and interpreting data.</li> <li>Makes tallies and graphs of information gathered from immediate surroundings.</li> <li>3-4</li> <li>Makes generalizations, draws conclusions, and</li> </ul>	<ul> <li>MIDDLE</li> <li>5-8</li> <li>Analyzes and reports on data using mean, median, mode, and range to formulate and solve problems.</li> <li>Makes inferences and constructs convincing arguments based on data.</li> </ul>	SECONDARY     Determines and evaluates the effect of variables on the results of data collection.     Constructs, models, and predicts from charts, tables, and graphs that summarize data from practical situations.     Explores concepts of standard deviation and correlation and how they relate to data analysis.     Understands ideas of random sampling and recognizes
formulates and solves problems, using various types of graphs, charts and tables.  Reads and interprets displays of data.  Attains and applies knowledge and skills of mathematics:	ınd	their role in statistical claims.
	y and limitations involved in drawing conclusions from a set of d	
<ul> <li>EXPLORES Concepts of chance to predict outcomes of simple events.</li> <li>Explores the concept of chance and estimates probability from a sample of observed outcomes and simulations.</li> <li>Explores the idea that probability can be represented as a fraction between and including zero and one.</li> </ul>	<ul> <li>5-8</li> <li>Finds the probability of simple events and makes predictions by applying the theories of probability.</li> <li>Uses simulations to estimate probabilities.</li> </ul>	<ul> <li>SECONDARY</li> <li>Finds the probability of compound events and makes predictions by applying theoretical probability.</li> <li>Creates and interprets probability distributions.</li> <li>Extends the exploration of probability to include permutations, combinations and other counting methods.</li> </ul>
Attains and applies knowledge and skills of mathematics:     Uses the geometric concepts of size, shape, location, dime	and nsion, and perspective to describe characteristics of the world.	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Describes, models, draws or builds, and classifies plane 2D shapes and selected 3D figures.</li> <li>Investigates and predicts the results of combining, dividing and changing 2D shapes.</li> <li>Uses positional words to describe the relationship of two or more objects.</li> <li>3-4</li> <li>Describes, models, and classifies shapes and figures using applicable properties.</li> <li>Experiments with shapes and figures and makes generalizations regarding congruency, symmetry, and similarity using transformations such as slides, flips and rotations.</li> <li>Uses the properties of shapes and figures to describe the physical world.</li> </ul>	<ul> <li>MIDDLE</li> <li>5-8</li> <li>Identifies, describes, compares, classifies, discriminates, and draws 2D shapes and 3D figures using similarity, congruence, symmetry, and properties of change.</li> <li>Applies geometric properties to represent and solve reallife problems involving regular and irregular shapes and figures using a variety of appropriately selected tools to justify and illustrate solutions.</li> <li>Uses a coordinate system to define and locate position.</li> </ul>	<ul> <li>SECONDARY</li> <li>Constructs, draws and interprets 2D and 3D shapes and figures in multiple orientations, using geometric tools, manipulatives and computers for problem-solving and simulations.</li> <li>Draws coordinate representations of geometric figures and their transformations (changes in position and size) and applies the ideas of transformation to similarity and congruence of figures.</li> <li>Through inductive and deductive reasoning, explores and determines the properties of and relationships among geometric figures.</li> <li>Applies trigonometry to problem situations involving triangles and periodic phenomena.</li> <li>Uses different geometric systems to model different aspects of reality.</li> </ul>

	MATHEMATICS	
1. Attains and applies knowledge and skills of mathematics :		
<ul> <li>f) Uses measurement units and tools to describe and justify s</li> </ul>		
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Estimates and measures length, time, money, temperature, weight and capacity.</li> <li>Selects standard and non-standard tools of length, time, temperature, weight, and capacity to solve every day problems.</li> <li>3-4</li> <li>Selects the most appropriate tool or unit (metric or U.S. customary), estimates, solves, and justifies solutions to real-life problems involving measurement with time, money, length, area, perimeter, weight, temperature, mass, capacity and volume.</li> </ul>	<ul> <li>5-8</li> <li>Demonstrates the structure and use of systems of measurement.</li> <li>Develops and uses concepts that can be measured directly or indirectly, such as the concept of rate.</li> </ul>	Uses dimensional analysis to help solve problems.     Compares relationships among related attributes in systems (e.g. volume).
1. Attains and applies knowledge and skills of mathematics		
g) Uses patterns, relationships, and functions to generalize a	and predict solutions to problems.	
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Recognizes, describes, extends and creates a wide variety of patterns.</li> <li>Explores the use of variables and open sentences to describe relationships.</li> <li>Represents and describes both geometric and numeric relationships.</li> <li>3-4</li> <li>Recognizes, describes, extends and creates patterns using numbers, geometry, and a variety of graphs in the context of a problem.</li> <li>Uses variables and open sentences to express relationships.</li> </ul>	<ul> <li>5-8</li> <li>By applying the concepts of variables, expressions and equations defends the solutions to linear and non-linear problems using models, formulas, graphs, tables and other data organizers.</li> <li>Detects, manipulates, represents, and extends patterns through the use of concrete models and algebraic functions.</li> </ul>	<ul> <li>Creates a coordinate representation to model a real-life situation and draws inferences from it.</li> <li>Translates and solves a real-life problem using symbolic language.</li> <li>Models phenomena using a variety of functions (linear quadratic, exponential, trigonometric, etc.).</li> <li>Translates among tabular, symbolic, and graphical representations of functions.</li> <li>Identifies a variety of situations modeled by the same type of function.</li> </ul>

	MATHEMATICS	
Attains and applies knowledge and skills of mathematics     h) Constructs visual and symbolic models to represent a pro		
PK-2  Illustrates problem situations and mathematical expressions in which there is an unknown using manipulatives and actions.  3-4  Develops and evaluates simple formulas in problemsolving contexts.  Finds replacements for variables that make simple number sentences true.	<ul> <li>5-8</li> <li>Uses the concepts of variables and expressions.</li> <li>Solves linear equations using concrete, informal and formal methods applying order of operation and equation.</li> <li>Analyzes tables and graphs to identify properties and relationships in a practical context.</li> <li>Uses graphs to represent equations in two variables.</li> <li>Investigates inequalities and non-linear equations.</li> </ul>	SECONDARY  Uses tables, graphs, and spreadsheets to interpret expressions. equations and inequalities.  Determines the appropriate use of algebraic symbols and terminology.  Investigates concepts of variation through the use of equations, graphs and data collection.  Operates on expressions and matrices and solves equations and inequalities in practical contexts.  Uses computer and calculator technology to model situations effectively.  Investigates, analyzes and models situations using multiple solutions, discussing the usefulness of each solution.
<ol> <li>Attains and applies knowledge and skills of mathematics</li> <li>Uses the main ideas of discrete mathematics to determine</li> </ol>	and if a problem has a solution, how many solutions exist, and which:	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Classifies sets of objects into two or more groups using attributes.</li> <li>Uses an organized list to determine possible outcomes or solve problems.</li> <li>3-4</li> <li>Uses organized lists, tree diagrams, Venn diagrams, and networks to generate possible outcomes and to solve problems.</li> <li>Gives examples of infinite and finite solutions.</li> </ul>	MIDDLE  5-8      Uses directed graphs to model practical situations or solve problems.      Identifies recursive sequences (patterns) in the world, expresses the recursions as rules and gives examples of sequences that approach neighborhoods and those that do not.	<ul> <li>Uses linear programming to find optimal solutions to a system within constraints.</li> <li>Uses networks to find solutions or prove the problem is unsolveable.</li> <li>Applies strategies from game theory to social problem solving situations.</li> <li>Uses matrices as tools to interpret and solve problems.</li> <li>Gives examples of bounded and unbounded infinite series.</li> </ul>

	MATHEMATICS	
2. Recognizes the historical and societal importance of math a) Uses mathematical reasoning to justify ideas and make inf		
PK-2  Describes a simple argument's strengths and weaknesses. Distinguishes between "important" and "unimportant" information in simple arguments.  3-4  Generates alternative explanations to explain phenomena. Uses intuitive thinking and brainstorming. Understands that support for a claim should include a variety of types of evidence including logical, quantitative and others.	MIDDLE  5-8      Understands that there are a variety of ways people can form generalizations and knows the implications of each.     Supports reasoning using models, known facts, properties and relationships.     Recognizes stereotypes in common inferences about persons, places, things, and events.	SECONDARY  Judges the accuracy of alternative explanations by identifying the types of evidence necessary to support each alternative.  Demonstrates the differences between the formal and informal uses of logical connectors (ifthen. not, and, or) in everyday situations.  Analyzes situations where more than one logical conclusion can be drawn from data presented.  Revises studies to improve their validity in terms of better sampling, better controls or better data analysis techniques.  Understands that agreement among people does not necessarily make an argument valid.
2. Recognizes the historical and societal importance of math b) Uses mathematics to make sense of the world.	ematics and	
ELEMENTARY  PK-2  Explores numeral systems from different societies.  3-4  Investigates numeral and measurement systems of diverse cultures.	MIDDLE  5-8      Traces the history and impact of a mathematical discovery.      Understands the role of mathematics in decision making including cost-benefit analysis, predictions of future events from current trends or samples, and budgetary projections.	SECONDARY     Investigates connections between mathematics and technologies.     Researches the life of a mathematician and explores the cultural influences of his or her work.     Shows how a development in mathematics has altered and been affected by prevailing cultural beliefs.     Understands that there are certain questions and concerns that mathematics cannot answer or even address.

	An edu	IENCE cated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
1.	Uses the knowledge a scientific inquiries and	and skills of science to conduct	Х	Х	X	Х	Х	Х
	a) Comprehends ti	ne similarities, diversity and fliving and non-living things in the		Х	X	X		Х
	b) Recognizes that c	ells are the basic units of life than mselves;		X	Х			Х
	c) Understands the b change over time;	asis of life and that all living things		X		Х		X
	d) Understands the standargo;	ructure of matter and the changes it			X			X
	e) Knows the process	ses which work to change the earth;			X			X
	-,	humans have learned about the rinciples upon which it operates;	X					X
	g) Comprehends and	applies the concept of energy;			X			X
		notion of objects and the forces that			X			X
		science skills of acquisition, d presentation of data in problem- s using existing and emerging	X	X	X	X	X	X
	<li>j) Understands and of</li>	lemonstrates measurement skills.	X		X		X	
2.		rical and societal importance of s actions based on this knowledge	X	X	X	X	х	X
	Uses scientific re informed decision	asoning to justify ideas and make s; and	Х	X	Х	X	X	Х
	b) Uses science to m	ake sense of the world.		X	X	X	X	X

	SCIENCE	
<ol> <li>Uses the knowledge and skills of science to conduct scient         <ul> <li>a) Comprehends the similarities, diversity and interdependent ELEMENTARY</li> </ul> </li> <li>PK-2         <ul> <li>Categorizes things as living or non-living.</li> <li>Designs and articulates a classification system for objects.</li> <li>Demonstrates, with examples, that almost all animals' food can be traced back to plants.</li> <li>Recognizes and gives examples of the many different ecological systems on Earth</li> </ul> </li> <li>Compares and contrasts the life cycles, behavior and structure of different organisms.</li> <li>Describes a food web and the relationships within a given ecosystem.</li> <li>Compares and contrasts physical and living components of different biomes.</li> <li>Explains that certain substances (water) go through a cyclic process of change in the environment.</li> </ol>		SECONDARY  Analyzes similarities and differences among organisms within each taxonomic level.  Illustrates the cycles of matter in the environment.  Examines and explains the complex chemical reactions or photosynthesis: the organs, organelles and molecules involved in these reactions, and the factors that affect them.  Verifies, through a model, that changes in population size depend on reproductive rates and survival rates.
An educated person  1. Uses the knowledge and skills of science to conduct scient b) Recognizes that cells are the basic units of life that can re	eproduce themselves.	GEGOVINANV.
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Determines that plants and animals need food, water and gases to survive.</li> <li>Demonstrates the use of magnifying devices and how they enable individuals to see in more detail.</li> <li>Verifies that there are many reasons for diseases and give examples.</li> </ul>		<ul> <li>SECONDARY</li> <li>Analyzes the parts of cells and describe the functions of those parts.</li> <li>Summarizes the function of the important "molecules of life" - proteins, carbohydrates, lipids and nucleic acids.</li> <li>Assesses the basic principles of genetic engineering: how it is done, its uses and some ethical implications.</li> </ul>

organ systems in the human body.

Determines that all living things are made up of one or

individuals to see cells in plants and animals.

Describes the function of some of the major human organ

• Demonstrates how the use of a microscope enables

more cells.

systems.

## SCIENCE

#### An educated person

- 1. Uses the knowledge and skills of science to conduct scientific inquiries, and
  - c) Understands the basis of life and that all living things change over time.

5-8

5-8

#### ELEMENTARY

#### PK-2

- Describes how fossils show past life and extinct species.
- Illustrates the ways that an organism can change over its lifetime, sometimes in predictable ways.
- Compares and contrasts the ways in which individuals in a species are alike and different.

#### 3\_4

- Provides examples of organisms that are present now that have not always existed and of some forms of life that have become extinct.
- Creates a model illustrating how adaptations enable different species to survive.
- Describes ways in which organisms may be similar to and different from their parents and enumerate the possible reasons for this.

#### MIDDLE

- Describes how fossils can be used by scientists to trace the evolution of a species.
- Provides an example of the concept of natural selection and its role in evolutionary change.
- Explains how sexual reproduction can lead to offspring that have traits different from the traits of their parents.
- Describes how new varieties of plants and animals have been produced by humans through selective breeding for certain traits.

#### SECONDARY

- Explains how mutations can be caused by gene mutation or chromosomal alteration and describe the possible results of such mutations.
- Describes fertilization, zygote formation and embryo development in humans and other species.
- Explains how scientific evidence from organic molecules, especially DNA, cells, fossils, comparative anatomy and comparative embryology supports the idea that all forms of modern life have arisen from common ancestors.
- Explains the evidence used to develop the geologic time scale and why an awareness of geologic time is important to understand the process of change in the universe as well as on Earth.

#### An educated person

- 1. Uses the knowledge and skills of science to conduct scientific inquiries, and
  - d) Understands the structure of matter and the changes it can undergo.

#### ELEMENTARY

#### PK-2

- Recognizes that large things are made up of smaller pieces (a tower of blocks may be made up of many of the same kind of block).
- Describes some physical properties of objects, including color, size, and texture.
- Groups objects based on observable characteristics.

#### 3-4

- Describes physical properties of objects and how these sometimes change when the object combines with another.
- Analyzes and describes chemical and physical changes in matter.

#### MIDDLE

- Analyzes the Periodic Table and explain the way it groups elements.
- Describes how the motion of matter's particles determines its solid, liquid, gas, or plasma state and vice versa.
- Provides an example illustrating the law of conservation of matter.
- Describes the characteristics and behavior of acids and bases.

- Analyzes the effect that changes in temperature, pressure and volume have on matter.
- Demonstrates an understanding of the Law of Conservation of Matter by writing and balancing chemical equations for chemical reactions.
- Compares the physical and chemical characteristics of elements.
- Describes nuclear reactions, their occurrences in nature and how they can be used by humans.

	SCIENCE	
An educated person  1. Uses the knowledge and skills of science to conduct scient e) Knows the processes which work to change the earth.	ific inquiries, and	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Describes weather changes that occur.</li> <li>Analyze the relationship between observable weather patterns and the cycling of the seasons.</li> <li>Observes changes that are caused by water, snow and ice.</li> <li>Explains how the Earth's rotation causes day and night.</li> <li>3-4</li> <li>Describes the change in the position of the continents over time.</li> <li>Identifies some things about the Earth (such as climate) that occur in cycles that vary in length and frequency.</li> </ul>	MIDDLE  5-8      Demonstrates how the Earth's tilt on its axis results in the seasons.      Describes forces that can cause short-term and long-term changes in the Earth's surface      Classifies and identifies rocks and minerals based on their physical and chemical properties, their composition and crystal structure, and the processes which formed them.	SECONDARY  Analyzes the ways in which global climate can be affected by large scale circulation of the oceans and the atmosphere.  Describes the impact of plate movement and erosion on the rock cycle.  Provides examples of the ways in which rocks and minerals are used to determine geologic history.
An educated person  1. Uses the knowledge and skills of science to conduct scient f) Articulates what is known about the universe and the print		
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Describes the cycles of day/night and of seasons.</li> <li>Analyzes the ways in which shadows of objects change based on where light is coming from.</li> <li>Describes the sun as one of many stars in the universe and it's position relative to Earth.</li> <li>3-4</li> <li>Illustrates the relative positions of the sun, moon and planets.</li> <li>Traces the sources of Earth's heat and light energy to the sun.</li> <li>Describes Earth's rotation on its axis and its revolution around the sun.</li> </ul>	<ul> <li>MIDDLE</li> <li>Describes the concept of galaxies, including size and number of stars.</li> <li>Compares and contrasts distances, and the time required to travel those distances on Earth, in the solar system, in the galaxy and between galaxies.</li> <li>Describe how scientists find out what is in space and some of the objects they have found there including comets, asteroids, pulsars.</li> </ul>	Describes how scientists gather data about the universe.     Describes current explanations for phenomena such as black holes and quasars.

	SCIENCE	
An educated person  1. Uses the knowledge and skills of science to conduct scient g) Comprehends and applies the concept of energy.	ific inquiries, and	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Generates examples that show that the sun gives off light and heat energy.</li> <li>Describes ways in which living things need energy.</li> <li>3-4</li> <li>Identifies and describes different forms of energy (light, sound, heat).</li> <li>Provides examples of the many forms in which energy can exist and of the different ways that these forms may be produced.</li> </ul>	MIDDLE  5-8      Demonstrates that energy cannot be created or destroyed but only changed from one form to another.     Compares and contrasts sound and light energy.     Describes the characteristics of static and current clectricity.     Describes how heat can travel by conduction, convection and radiation.	SECONDARY     Explains the evidence that leads scientists to conclude that light behaves somewhat like a wave and somewhat like a particle.     Analyzes qualitatively and quantitatively the relationship between kinetic and potential energy of a falling object.     Describes the relationship between matter and energy and how matter can be used to obtain energy through the processes of nuclear fission and fusion.     Uses mathematics to describe and predict electrical and magnetic activity.
An educated person  1. Uses the knowledge and skills of science to conduct scient h) Understands the motion of objects and the forces that can		
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Describes the motion of objects in a variety of ways.</li> <li>Creates a model demonstrating that the motion of an object can be changed.</li> <li>3-4</li> <li>Draws conclusions about how the amount of force affects the motion of more massive and less massive objects.</li> <li>Generates examples that illustrate that when something is pushed, it exerts a reaction force.</li> </ul>	MIDDLE  5-8      Uses mathematics to describe the motion of objects including speed, distance, time, and acceleration.     Analyzes and describes the characteristics and properties of electricity.	SECONDARY  Explains some current theories of gravitational force.  Describes and quantifies how machines can provide mechanical advantages in producing motion.  Describes how forces within and between atoms affect their behavior and the properties of matter.  Provides an example of a situation in which Newton's Laws do not accurately describe motion, and analyze the reasons for the phenomenon.

	SCIENCE	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Asks clarifying questions about his/her work as well as the work of others.</li> <li>Uses calculators, computers and other tools appropriately in science learning.</li> <li>Demonstrates scientific inquiry skills such as observing, formulating hypotheses, modeling, predicting, experimenting, analyzing and interpreting data and creating and communicating explanations.</li> <li>3-4</li> <li>Generates a variety of possible solutions for a given problem, select and defend one of the proposed ideas.</li> <li>Demonstrates proper use of age-appropriate tools (from seissors to computers) while making a tangible, student-designed solution for a pre-determined problem.</li> </ul>		SECONDARY  Identifies a current dilemma, research public information on the topic, identify points of bias, inconsistent logic, etc. and share conclusions.  Considers ergonomic and human factors in the design and construction of a product, service or process.  Discusses in written and oral forms scientific concepts and ideas, make conjectures, hypotheses and convincing arguments.
<ul> <li>Demonstrates the ability to make and use tables and graphs by organizing and recording the results of an experiment.</li> </ul>		
An educated person		
<ol> <li>Uses the knowledge and skills of science to conduct scient</li> <li>j) Understands and demonstrates measurement skills.</li> </ol>	ific inquiries, and	
PK-2  Orders familiar measurements of length, weight, and time and attaches meaning to the units.  Judges whether measurements and computations are reasonable.  Applies rules for precision and rounding off.	**Source    *	Uses both metric and English units of weights and measures.

# **SCIENCE**

# An educated person

# 2. Recognizes the historical and societal importance of science and

a) Uses scientific reasoning to justify ideas and make informed decisions.

## ELEMENTARY

#### PK-2

- Analyzes a simple argument's strengths and weaknesses.
- Distinguishes between "important" and "unimportant" information in simple arguments.

#### 3-4

- Generates alternative reasons to explain phenomena.
- Demonstrates the use of intuitive thinking and brainstorming.
- Provides support for a claim including a variety of types of evidence including logical, quantitative and others.

# MIDDLE

5-8

5-8

- Provides examples of the variety of ways people can form generalizations and know the implications of each.
- Supports reasoning using models, known facts, properties and relationships.
- Identifies stereotypes in common inferences about persons, places, things, and events.

# SECONDARY

- Judges the accuracy of alternative explanations by identifying the types of evidence necessary to support each alternative.
- Demonstrates the differences between the formal and informal uses of logical connectors (if...then, not, and, or) in everyday situations.
- Analyzes situations where more than one logical conclusion can be drawn from data presented.
- Revises studies to improve their validity in terms of better sampling, better controls or better data analysis techniques.
- Provides an example to show that agreement among people does not necessarily make an argument valid.

# An educated person

# 2. Recognizes the historical and societal importance of science and

b) Uses science to make sense of the world.

#### ELEMENTARY

# PK-2

- Provides an example showing that things are made up of parts and when the parts are put together, the whole can do things the parts can't do by themselves.
- Describes relationships and patterns observed in nature.
- Identifies many groups to which one belongs and describe why each group is different and has its own goals and needs.
- Provides examples of the resources they use regularly, and traces the sources for these resources and where waste products go.

# 3-4

- Creates a model of a food web and food pyramid.
- Creates a model demonstrating some of the impacts that human beings, as a group and as individuals have on their environment.

# MIDDLE

- Describes how matter and energy are transferred in a food web.
- Describes an example of the influence of abiotic and biotic factors on biotic communities.
- Provides an example illustrating that actions which may be appropriate in one set of circumstances may not be appropriate in a different set of circumstances.
- Analyzes the fundamental concept of sustainable living.
- Uses mathematics to calculate the cumulative effect of individual actions in a population.
- Uses measurement tools to quantify environmental conditions.

- Models mathematically the effects of human actions or other variables on natural systems.
- Determines that even in some very simple systems it may not always be possible to predict accurately the result of changing some part of the system.
- Creates a model illustrating the concept and value of biodiversity.
- Creates a model that illustrates the different human, biotic and abiotic pressures on different populations in an ecosystem.
- Designs a sustainable community.
- Uses risk assessment to evaluate plans designed to address environmental problems.

	SOCIAL STUDIES An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
1.	Understands and applies the roles and principles of responsibility, power and participation in society, and	X	X		X	X	X
	Understands how to exercise the rights and     responsibilities of participation in civic life, including     analyzing and evaluating public policies;	Χ	х		X		X
	b) Understands power and how it is distributed and expressed;		X		X		Х
	c) Understands the types and purposes of governments, their evolution and their relationships with the governed;				X		х
	d) Understands and applies constitutional principles and the democratic foundations of national, state and local political, economic and social systems and institutions of the United States; and	X			X		Х
	e) Understands the past and present political relationships between the United States and other nations.		X	X	X		X
2.	Analyzes the human experience through time to identify enduring philosophies and themes and turning points of change.			Х	X		x
	Uses the chronology of history and major eras to demonstrate the relationships of events and people;		Х	Х	Х	X	Х
	b) Uses technology and evaluates the credibility and perspectives of multiple sources of information, including documents, artifacts, maps, the arts and literature, in interpreting current and historical events; and	X	Х	X	X		х
	c) Identifies and predicts historical and current patterns and turning points.		Х	X	X		X

		SOCIAL STUDIES An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
3.		erstands and analyzes the relationships among ole and environments and		X	X	X	X	Х
	a)	Knows how to construct and interpret maps and uses globes and other geographic tools to locate and derive information about people, places, regions and environments;	X	X			Х	Х
	b)	Applies the physical and human characteristics of places and regions to analyze their patterns of change;		X	Х			Х
	c)	Understands how the physical characteristics and processes of the Earth's surface shape ecosystems and patterns of human behavior; and		×	X	X		X
	d)	Integrates studies of people and environments to understand patterns of populations, interdependence, resources, cooperation and conflict and how they are shaped by economic, political and cultural systems.	Х	х	Х	X	X	Х
4.		erstands and analyzes elements which compose vidual and cultural identities and	Х	Х		Х		X
	a)	Understands common characteristics of and unique expressions of cultures including language, beliefs, the arts, societal institutions and technologies; and	Х	Х	-	X	х	X
	b)	Understands and analyzes the benefits and challenges of cultural interactions and how they lead to cooperation, conflict and interdependence among individuals, groups and societies.	Х	Х	X	X	Х	X
5.	pro	lerstands and applies basic economic concepts of duction, distribution and consumption to make isions as effective participants in a global economy		X	Х	X	х	Х
	a)	Understands that individuals, households, businesses, governments and societies make decisions based on resource availability and the costs and benefits of choices;		Х	X	X	X	X
	b)	Understands the economic systems of the United States, including its principles, development and institutions;		Х		X		X
	c)	Analyzes how different economic systems function, relate to the cultures in which they operate, and change over time; and		X				X
	d)	Understands the patterns and results of trade, interdependence and distribution of wealth in local, regional, national and global economies.		Х	X	X	X	X

# SOCIAL STUDIES

- 1. Understands and applies the roles and principles of responsibility, power and participation in society, and
  - a) Understands how to exercise the rights and responsibilities of participation in civic life, including analyzing and evaluating public policies.

# ELEMENTARY

# PK-2

 Identifies and practices classroom rights and responsibilities and generalizes them to the larger community.

## 3-4

- Describes the major steps a law goes through to become adopted and how it was influenced by governmental and non-governmental factors.
- Identifies the legitimate functions of government at school, local, state and national levels.

# 5-8

Identifies the characteristics of a democratic government.

MIDDLE

- Describes how government policies can change
- Compares reasons for revolutions in different times and places.
- Investigates, evaluates, and debates current community issues involving government.
- Demonstrates an understanding of the American political system by tracing the process by which a proposed local law could become adopted, including governmental and non-governmental influences.
- Develops and practices skills necessary for participatory citizenship, including participation in decision making, persuasion, compromise, debate and problem solving.
- Explains relationships between rights and responsibilities in a democratic society.

# SECONDARY

- Explains how governments in other times and places were organized and how they functioned.
- Researches and assesses current issues within our democracy, selects issues of personal relevance and proposes and defends the best approaches to solving those issues.
- Compares and contrasts the legitimacy of various governments in different time periods and places throughout history.
- Describes and analyzes the conflicts of sovereignty between and among nations.
- Accounts for the role of government agencies in shaping public policy.
- Demonstrates skills necessary for participatory citizenship in real life settings in the community.
- Analyzes the importance of social movements in a democratic society.
- Makes predictions about current world issues based on influences from past revolutions.
- Identifies groups and institutions that strive to promote social goals and examines the processes used by these groups to affect change in individual thinking and community and government policies.
- 1. Understands and applies the roles and principles of responsibility, power and participation in society, and

5-8

b) Understands power and how it is distributed and expressed.

# ELEMENTARY

# PK-2

- Describes the responsibilities of people who have authority.
- Compares the ways individuals and groups make decisions and rules.
- Identifies the positive qualities of past and present leaders.

#### 3-4

- Identifies and analyzes the sources of authority.
- Describes positive and negative uses of authority.
- Examines well-known U.S., state and local leaders of recent times.

# MIDDLE

- Explains the connections between political power and economic, social, military, gender and religious groups.
- Describes, analyzes and compares responses to the abuse of power.
- Identifies power groups within nations and how government authorities reconcile the needs of these groups.
- Evaluates the benefits and liabilities of centralized power.

- Develops definitions of legitimate and illegitimate power.
- Analyzes events and movements in various times and places which modified power structures in governments.
- Compares and contrasts how people respond to abuses of power in different historical settings.
- Compares the roles and responsibilities and methods of selection for leaders from the U.S. and other nations.
- Analyzes the effects of the checks and balances system on the use of power in the United States.

# **SOCIAL STUDIES**

- 1. Understands and applies the roles and principles of responsibility, power and participation in society, and
  - c). Understands the types and purposes of governments, their evolution and their relationships with the governed.

5-8

5-8

5-8

#### ELEMENTARY

# PK-2

Compares and evaluates characteristics of different forms of government.

#### 3-4

- Explains the meaning of and gives examples of "due
- Compares and contrasts local, state and national government structures.

- Compares leadership and civic rights in our democracy to that of an authoritarian type government.
- Investigates, evaluates, and debates current civic related issues and their relationship to the three branches of government.
- Examines the roles and impact of political parties and leaders on the American political system.
- Describes the government of another nation drawing distinctions between this government and our own.

# SECONDARY

- Compares and contrasts the purpose and structure of the U.S. government with other governments (parliamentary, dictatorship and monarchy) with respect to ideologies, cultures, values and histories.
- Examines the roles and impact of political parties and leaders in contemporary America and other nations.
- Explains how governments in other times and places were organized and how they functioned.
- Compares and contrasts the legitimacy of various governments in different time periods and places throughout history.
- Explains the establishment, functions and principles of our state and federal government.
- 1. Understands and applies the roles and principles of responsibility, power and participation in society, and
  - d) Understands and applies constitutional principles and the democratic foundations of national, state and local political, economic and social systems and institutions of the United States.

# ELEMENTARY

# PK-2

Identifies basic democratic ideals as written in key U.S. documents.

# 3-4

- Identifies ways that individuals may act to improve life in the community.
- Uses items from current events to become more informed and active citizens.

# MIDDLE

- Examines and analyzes current events to become active participants in the community.
- Examines civic rights, liberties and responsibilities established in the U.S. Constitution and Bill of Rights,
- Examines differing philosophies in selected influential presidential administrations.

# SECONDARY

- Explains the establishment and functions of our government, including the principles embedded in the Declaration of Independence, the Articles of Confederation, the Constitution of the United States and the Constitution of Maine.
- Demonstrates civic responsibilities by participating in school and community issues and activities.
- Analyzes the court systems of the U.S.
- Examines civic rights issues related to well-known Supreme Court decisions.
- 1. Understands and applies the roles and principles of responsibility, power and participation in society, and
  - e) Understands the past and present political relationships between the United States and other nations.

# ELEMENTARY

# PK-2 3-4

- Compares a foreign culture, including how decisions are made, to one's own.
- Uses current event items to discuss issues related to local. state, national and global issues, events, and leaders.
- Analyzes and evaluates children's rights, liberties and responsibilities in a variety of cultures.

#### MIDDLE

- Identifies the sequence of major eras and historical turning points in the roles and relationships of the United States with other nations.
- Uses current events to analyze the relationships of the United States and its citizens with other nations.
- Explains reasons for alliances with some nations against others.
- Identifies the sequence of historical turning points in the roles and relationships of the United States with other nations.
- Uses current events to analyze the relationships of the United States and its citizens with other nations.

- Traces the development of a major world event and predicts the possible outcomes.
- Uses all existing media, technology and current data to examine, analyze, and predict global interactions and trends.
- Analyzes the processes used to develop national and foreign policies.
- Analyzes the reasons why nations have joined in alliances throughout history.
- Evaluates the benefits and costs of interdependence and international cooperation.

a) Uses the chronology of history and major eras to demonstr		
ELEMENTARY PK-2	MIDDLE 5-8	• Analyzes parallels between people who shaped history
<ul> <li>Places individual and family experiences in historical time and place.</li> <li>Identifies cause and effect relationships in a simple sequence of events.</li> <li>Distinguishes similarities and differences among historical events.</li> <li>Identifies similarities and differences in the characteristics of individuals who have made significant contributions to society.</li> <li>Places significant events, groups and people in the history of Maine in chronological order.</li> <li>Identifies multiple causes and outcomes of a specific event, using historical and current information.</li> <li>Explains predictions using knowledge of the past and present.</li> </ul>	<ul> <li>Describes the effects of historic changes on daily life.</li> <li>Describes the sequence of major events and people in the history of Maine, the United States and selected world civilizations.</li> <li>Traces simultaneous events in various parts of the world.</li> <li>Predicts outcomes by using knowledge of past and current events.</li> <li>Evaluates the validity of cause and effect arguments.</li> </ul>	and significant contributors in modern society.
	enduring philosophies and themes and turning points of chang tives of multiple sources of information, including documents, art	
historical events.		
PK-2  • Illustrates current changes in daily life when compared to	<i>MIDDLE</i> 5-8  • Uses information from a variety of sources to identify	SECONDARY     Evaluates and uses historical materials to examine the present and makes predictions about the future.
a specific historic era. 3-4	and support a point of view on a controversial historical topic.	Analyzes and evaluates a variety of sources to articular different interpretations of history.
<ul> <li>Judges the accuracy of historical fiction by comparing the characters and events described within multiple primary</li> </ul>	Identifies ethnic and cultural perspectives missing from an historical account and describes these points of view.	

sources.

	SOCIAL STUDIES	
2. Analyzes the human experience through time to identify e c) Identifies and predicts historical and current patterns and t	enduring philosophies and themes and turning points of chang	е.
PK-2  Identifies major events in one's personal life.  Hakes connections between and among events in one's personal life and those occurring in the community, nation and world.	<ul> <li>MIDDLE</li> <li>Defines the characteristics of historical turning points.</li> <li>Compares and contrasts technological revolutions         <ul> <li>(Agricultural, Industrial) and political revolutions (i.e.</li> <li>American, English, French, Russian. Cuban) to identify political, economic, and social causes and effects.</li> <li>Evaluates the impact of changes on past and present cultures.</li> </ul> </li> </ul>	SECONDARY     Compares significant historical periods and patterns of change within and across cultures.     Describes how and why change has occurred, considering many factors such as geography, religion, technology, cultural interactions and wars.     Analyzes the effectiveness of social and intellectual movements in bringing about change.     Explains origins and development of major historical ideologies.     Uses all media, technology and current data to trace the development of major world events and predicts possible outcomes.
<ol> <li>Understands and analyzes the relationships among people</li> <li>a) Knows how to construct and interpret maps and uses glob</li> </ol>	e and environments and es and other geographic tools to locate and derive information abo	out people, places, regions and environments.
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Constructs maps and other visuals that describe location, direction, size and shape.</li> <li>3-4</li> <li>Compares maps of Maine, the U.S. and regions of the world to interpret geographic features.</li> </ul>	Visualizes and constructs maps of the world and its subregions to identify patterns of human settlement, major physical features and political divisions.     Develops maps, globes, graphs, charts, models, and databases to analyze geographic patterns on the earth.	SECONDARY      Uses maps to propose solutions to complex geographic and environmental problems.      Analyzes the geographic consequences of human/environmental interaction using appropriate geographic tools and technologies.      Appraises the ways in which maps reflect environmental, economic, social and political policy decision-making.
<ul><li>3. Understands and analyzes the relationships among people</li><li>b) Applies the physical and human characteristics of places a</li></ul>		
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Describes the human and physical characteristics of the immediate environment.</li> <li>Uses cultural characteristics to compare how children live in different regions.</li> <li>3-4</li> <li>Describes how human and physical processes shape and change places and regions.</li> <li>Determines ways in which communities reflect the background of their inhabitants and explains the significance of these cultural patterns.</li> <li>Uses a variety of materials and geographic tools to explain the cultural characteristics of a region.</li> </ul>	<ul> <li>MIDDLE</li> <li>5-8</li> <li>Analyzes how technology shapes the physical and human characteristics of places and regions.</li> <li>Explains how regions are connected and how people, goods and ideas move among them.</li> </ul>	<ul> <li>SECONDARY</li> <li>Explains factors which shape places and regions over time.</li> <li>Analyzes the cultural characteristics that make specific regions of the world distinctive.</li> <li>Analyzes how technologies contribute to cultural sharing and separation, and identifies examples of the spread of cultural traits.</li> </ul>

	COCIAT CITIDATE	
Understands and analyzes the relationships among people     Understands how the physical characteristics and processes.	SOCIAL STUDIES e and environments and es of the Earth's surface shape ecosystems and patterns of human	hehavior
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Identifies the characteristics of Earth's physical systems, ecosystems, and human systems.</li> <li>Documents the impact one person can make on the environment.</li> <li>3-4</li> <li>Identifies and describes the interdependence of physical and human systems.</li> <li>Explains ways in which human-induced changes in the physical environment in one place can cause changes in other places.</li> <li>Describes the impact of technology on food production.</li> <li>Shows examples of how human's attitudes and values have affected environmental issues.</li> </ul>	<ul> <li>Examines the characteristics of major global environmental changes and assesses whether the changes are a result of human action, natural causes, or a combination of both.</li> <li>Describes how technology has expanded human abilities to modify physical environments.</li> <li>Explains how people have adapted to and/or modified their environments in specific times and places.</li> <li>Uses differing points of view to examine a local environmental problem.</li> </ul>	SECONDARY  Evaluates the connections among political, economic and environmental change.  Calculates how a personal decision, projected over time, will impact the environment.  Compares the environmental effects of different cultures in various times and places.  Debates practices and policies to lessen the impact of population growth on Earth's resources.
Understands and analyzes the relationships among peopl     d) Integrates studies of people and environments to understate economic, political and cultural systems.	e and environments and and patterns of populations, interdependence, resources, cooperations.	on and conflict and how they are shaped by
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Explains some of the factors which determine how population is distributed across and within regions</li> <li>3-4</li> <li>Analyzes how climate, geography and history have influenced the location of communities and cities.</li> <li>Identifies the causes and patterns of human migration and how they relate to the economy.</li> <li>Locates major cities of the world and explains why they emerged in a particular location and what has caused them to grow.</li> </ul>	MIDDLE  5-8      Identifies and explains factors involved in settling and developing cities in various times and places.      Explains how migration influences the character of places.      Uses multiple points of view to analyze and evaluate a contemporary geographic issue.	SECONDARY  Analyzes factors that contribute to the movement of people, products and ideas.  Analyzes the role that culture plays in incidents of cooperation and conflict in the present-day world.  Predicts the impacts of population growth or decline on an urban area.

	SOCIAL STUDIES	·
4. Understands and analyzes elements which compose indivia) Understands common characteristics of and unique expre	dual and cultural identities and ssions of cultures including language, beliefs, the arts, societal ins	titutions and technologies.
PK-2  Identifies and explores characteristics of one's own and other cultures.  3-4  Recognizes the contributions of other world cultures and civilizations in Maine and the U.S.  Recognizes the cultural influences of major religions.	<ul> <li>MIDDLE</li> <li>5-8</li> <li>Defines culture in terms of one's own experiences.</li> <li>Compares and contrasts the cultural characteristics of one ancient culture or civilization from Africa, Asia or the Americas with that of modern Maine and the U.S.</li> <li>Describes the major characteristics associated with the world religions of Christianity, Judaism, Islam,</li> </ul>	SECONDARY     Identifies the cultural, technological and religious contributions that impact Maine and the U.S. today.     Compares the historic and current influences of the world religions of Christianity, Judaism. Islam, Buddhism, and Hinduism on the cultures in which they are prominent.
<ul> <li>Describes the impact of several cultural, technological or religious contributions made by cultures and civilizations today.</li> <li>Identifies several major world religions and the regions of the world associated with them.</li> <li>Understands and analyzes elements which compose indiv</li> </ul>	Buddhism and Hinduism.     Describes how a culture grew and changed during "a golden age".     Identifies and describes unique contributions of different cultures to society.	
b) Understands and analyzes the benefits and challenges of and societies.	cultural interactions and how they lead to cooperation, conflict ar	id interdependence among individuals, groups
ELEMENTARY	MIDDLE	SECONDARY
<ul> <li>PK-2</li> <li>Describes one's strengths, accomplishments and areas needing improvement.</li> <li>Describes one's relationships to family, school and community.</li> <li>3-4</li> <li>Describes how local and regional cultures adapt to different and sometimes opposing points of view.</li> <li>Describes similarities and differences among people, their needs, feelings and identities.</li> </ul>	<ul> <li>5-8</li> <li>Evaluates one's dominant learning style.</li> <li>Recognizes the characteristics and stages of human growth and development.</li> <li>Evaluates the influences of nationality, ethnicity, religion and socioeconomic status on personal identity.</li> <li>Analyzes how the media characterize cultural and social groups.</li> <li>Explains how cultural differences may cause people to react differently to situations.</li> <li>Analyzes benefits and problems when cultures have interacted.</li> </ul>	<ul> <li>Describes the personal and cultural effects of discrimination.</li> <li>Explains the benefits and conflicts of encounters between cultures.</li> <li>Analyzes the role that culture plays in incidents of cooperation and conflict in the present-day world.</li> </ul>
	luction, distribution and consumption to make decisions as effi- vernments and societics make decisions based on resource availab	
<ul> <li>ELEMENTARY</li> <li>PK-2</li> <li>Shows how scarcity effects decisions in satisfying wants and needs.</li> <li>Describes how individuals, families and communities use money and other resources to satisfy basic wants and needs.</li> <li>Identifies institutions which use money in a community.</li> <li>3-4</li> <li>Describes barter, money and credit and how each is used to facilitate the exchange of resources, goods and</li> </ul>	MIDDLE  5-8      Analyzes how scarcity affects governments' and individuals' decisions about production and consumption of goods and services.      Identifies and analyzes the factors that contribute to personal spending and saving decisions.	SECONDARY      Evaluates current and historical solutions to imbalanced distribution of resources, goods and services and proposes alternative solutions.

_	SOCIAL STUDIES	
<ol> <li>Understands and applies basic economic concepts of prod</li> <li>Understands the economic systems of the United States, i</li> </ol>	uction, distribution and consumption to make decisions as effe ncluding its principles, development and institutions.	ective participants in a global economy.
PK-2  Demonstrates understanding of the basic economic concepts of production, distribution, consumption, and needs.  3-4  Demonstrates knowledge of economic concepts of supply, demand, price, the role of money, and profit and loss.  Explains how the economy of Maine affects families and communities.  Describes the contributions of entrepreneurs	<ul> <li>Summarizes the role of money and banking in the economy and analyzes the ways in which government taxing and spending affect the functioning of market economies.</li> <li>Analyzes how changes in technology, costs and demand determine the price of goods and services.</li> <li>Describes the interaction of the family conomy with the larger U.S. economy.</li> <li>Explains how the U.S. economic system has changed over time.</li> <li>Demonstrates principles of entrepreneurship.</li> </ul>	SECONDARY     Describes how supply and demand, prices, governmental policies and profit effect distribution of a product.     Identifies and analyzes the role of government in the U.S. economic system.     Identifies and analyzes the roles and contributions of entrepreneurs in a global economy.
<ul> <li>Understands and applies basic economic concepts of prod</li> <li>Analyzes how different economic systems function, related</li> </ul>	uction, distribution and consumption to make decisions as effe	ective participants in a global economy.
PK-2  Explains how people organize production and distribution to meet human needs.  Explains where products come from and how we use them.  3-4  Analyzes how environmental concerns and laws affect economic activity.  Demonstrates how the use of particular resource has changed over time.	MIDDLE  5-8      Describes the impact that changes in economic systems have on social organization and behaviors.      Compares how different economics meet basic wants and needs over time.	SECONDARY     Explains the relationship between cultural values and conomic decisions.     Describes and analyzes emerging trends in the world economy.     Investigates ways in which economic concepts and processes are integrated within the community, state, nation, and world to maintain the welfare of citizens.
d) Understands the patterns and results of trade, interdepen	uction, distribution and consumption to make decisions as effe dence and distribution of wealth in local, regional, national and gl	lobal economics.
PK-2 3-4  Illustrates how the exchange of goods and services helps to create economic interdependence between people in different places and countries.  Describes how changes in transportation and communication technologies have affected trade over time.	MIDDLE  5-8      Examines the patterns and results of international trade.     Evaluates how world trade issues can affect a nation's economy and how trade can influence and transform societies.     Explains the impact that major events and technological advancements have had on economic cycles and predict future economic trends and career opportunities.	SECONDARY     Explains the connections between trade, technology, geopolitics and power.     Predicts and defends potential economic changes in the nation and the world.

V	ISUAL AND PERFORMING ARTS An educated person	A clear and effective communicator	A self-directed and life-long learner	A creative and practical problem solver	A responsible and involved citizen	A collaborative and quality worker	An integrative and informed thinker
3.	Creates or performs in visual and performing arts to express ideas and feelings, and	X	X	Х		X	Х
	Uses the vocabulary, elements, principles and structures of art forms to communicate ideas, feelings and moods and to interpret meaning in others' work;	Х	X	Х			X
	<ul> <li>Uses problem-solving skills, the creative process, reflection and self-evaluation in creating, revising and refining work in progress;</li> </ul>	X	x	Х		×	X
	c) Uses a variety of approaches, styles, media, and performance modes, including technology, to develop and create works of visual and performing arts; and	Х	X	х		X	X
	d) Understands the roles, relationships and differences between and among the visual and performing arts and uses knowledge and skills in the arts in other disciplines.	X	X	X		X	Х
4.	Understands the cultural, social, ethical, and political dimensions and contributions of the visual and performing arts, and		Х	X	X		X
	Understands how the arts shape and are shaped by prevailing cultural and social beliefs and values and recognizes exemplary works from a variety of cultures and historical periods; and		X	X	X		X
	<li>Uses knowledge of artistic elements and principles to determine how and when the arts are being used to manipulate, persuade and influence.</li>		Х		X		X

MIDDLE

# 1. Creates or performs in visual and performing arts to express ideas and feelings, and

a) Uses the vocabulary, elements, principles and structures of art forms to communicate ideas, feelings and moods and to interpret meaning in others' work.

# ELEMENTARY

# PK-2

- Demonstrates a basic knowledge of rhythm and mood through purposeful movement.
- Explores the visual, tactile and aural qualities in works of art.
- Uses dramatic movement and sounds to imitate and differentiate among a variety of people, animals and objects.
- Uses space, costumes, and props to create suitable environments in dramatic activities.
- Differentiates simple music forms.
- Recognizes and maintains a steady beat and echoes short rhythmic patterns.
- Incorporates knowledge of the elements and principles of each art form into own work.
- Uses appropriate vocabulary to explain visual and performing arts ideas.

#### 3-4

- Applies previously learned principles to create a simple performance.
- Performs simple rhythmic and melodic accompaniments in classroom performances.
- Designs and arranges simple scenery, props, lighting, sound, costumes, and makeup to communicate visual and aural aspects of theater.
- Improvises dialogue and describes characters and their relationships in telling stories.
- Uses appropriate terminology when explaining music and musical performance.
- Uses the elements and principles of each art form to support opinions of the meaning of art work.
- Explains a particular genre of dance, music, dramatic literature and/or visual arts using appropriate terminology.
- Listens to and/or views a dramatic, musical, dance, or visual art work and provides feedback to the artist.
- Demonstrates appropriate audience behavior.

# 5-8

- Discusses and evaluates written reviews of visual and performing art works.
- Justifies in written or oral form perceptions of meaning in works of the arts and the effectiveness of selected media, techniques and processes in communicating ideas.
- Differentiates between an educated opinion and informed judgment about the meaning of works of visual and performing art.
- Provides examples of daily decisions involving aesthetic choices of a personal, community and global level.
- Evaluates diverse aural examples in music.
- Creates movement appropriate to various genres of music.
- Incorporates the expressive qualities of the elements and principles of each art form into own work.

- Evaluates diverse examples of visual and performing arts.
- Articulates and justifies personal aesthetic criteria for critiquing works of visual and performing art, texts and events, that compares perceived artistic intent with the final artistic achievement.
- Analyzes, interprets and evaluates elements in visual or performing arts.
- Analyzes and critiques informal and formal dramatic and electronic media productions in performing and visual art works.
- Defends personal reactions to works of visual and performing arts and explains the basis for them.
- Analyzes, compares, and evaluates differing critiques of the same visual and performing art works.
- Analyzes the physical, emotional and social dimensions of visual and performing art works.
- Uses the work of critics, historians, aestheticians, and artists to analyze and interpret visual and performing art works.
- Formulates his/her own aesthetic criteria based on a knowledge of arts elements and principles and historical and cultural context.
- Communicates ideas, feelings and moods through the use of selected media and process in visual or performing arts.

# 1. Creates or performs in visual and performing arts to express ideas and feelings, and

b) Uses problem-solving skills, the creative process, reflection and self-evaluation in creating, revising and refining work in progress.

5~8

#### ELEMENTARY

# PK-2

- Recognizes the functions of, and the expressive quality of the elements and principles of the visual and performing arts and incorporates them into works.
- Differentiates between an original idea and one that is copied or integrated into their own work.
- Improvises sound backgrounds and original songs to accompany stories.

# 3-4

- Incorporates the expressive quality and principles of design into visual art work.
- Uses improvisation to solve visual and performing arts problems.
- Applies previously learned principles to create, revise and refine art work.
- Improvises dialogue to tell stories and formalize improvisations by writing or recording the dialogue.
- Ouestions how we make choices using our senses and examines the effect of those choices on others and the environment.

- Critiques the use of art, music, dance, theater elements and principles in their own work and in the work of others.
- Uses performance elements and principles to enhance the dramatic elements of a story.
- Provides examples of daily decisions involving aesthetic choices of a personal, community and global level.

#### SECONDARY

- Creates a visual or performance piece in a distinct style, using imagination and technical skill.
- Uses the visual elements and principles of design to demonstrate multiple solutions to specific visual or performing arts problems.
- Defends personal evaluations of two or more approaches to the use of visual and performing arts elements and principles.
- Creates and justifies works of art that demonstrate an understanding of how the communication of their ideas and feelings relate to the media, techniques and processes
- Judges the effectiveness of visual or performing art work to convey subtle feelings and complex meaning and defends the conclusions.
- Creates a visual or performance piece to communicate an idea or feeling or mood using problem-solving skills, the creative process, reflection and self-evaluation.

# I. Creates or performs in visual and performing arts to express ideas and feelings, and

c) Uses a variety of approaches, styles, media, and performance modes, including technology, to develop and create works of visual and performing arts.

# ELEMENTARY

#### PK-2

- Experiments with art forms and knows the differences among materials, techniques and processes.
- Experiences and/or observes various styles/techniques of visual and performing arts.

## 3-4

- Creates original work in visual and performing art using different media, techniques and processes to communicate ideas, feelings and emotions.
- Differentiates among several materials, techniques and processes used to produce selected works.

# MIDDLE

- 5-8 Uses a variety of resources, materials and techniques to design and execute work in the visual and performing arts and to enhance the elements of the particular art form.
- Analyzes the effectiveness of selected media, techniques and processes in communicating artistic ideas.
- Discriminates between the qualities and characteristics of art media, techniques and processes for the purpose of selecting appropriate media to communicate artistic ideas.

- Compares and demonstrates various classical and contemporary visual and performing arts techniques and
- Develops and evaluates approaches in the use of creative and analytical principles and techniques of the arts, the humanities or the sciences.

# 1. Creates or performs in visual and performing arts to express ideas and feelings, and

d) Understands the roles, relationships and differences between and among the visual and performing arts and uses knowledge and skills in the arts in other disciplines.

#### ELEMENTARY

#### PK-2

- Identifies various functions and characteristics of visual and performing arts in daily experiences.
- Demonstrates ways in which visual and performing arts can interact through participation in interrelated activities.
- Discovers through participation that visual and performing arts imitate human experience, are a communal experience and encourage kinship with others.
- Investigates the similarities and differences in the characteristics and purposes of each of the arts to communicate ideas, moods and feelings.
- Is exposed to visual and performing arts by viewing a performance (live or video).

#### 3-4

- Describes the work of professionals in their communities who have a visual and performing arts component within their occupational environment.
- Demonstrates knowledge of human achievement in the arts.
- Describes and analyzes content and styles in various art forms.

# 5-8

 Summarizes the roles and relationships of the people who work together to create performances.

MIDDLE

- Compares in two or more arts how each can be used to transform an idea into works of art.
- Explores a variety of careers in visual and performing arts.
- Identifies those professionals in their communities who have an arts component within their occupational environment and reports on the requirements of that career.

- Explores the role of the individual in regard to community arts and summarizes possible personal involvement.
- Recognizes the personal value available through the creation of visual and performing art and the participation in the arts and identifies how that value changes from one social role to another.
- Recognizes that the arts play a dual role in the world of work, as a means of renewal/recreation and an occupational opportunity and enhancement of skills needed for the workplace.
- Uses knowledge of one art form to complement one of the other arts.
- Creates and supports a comparison of two or more visual and performing arts by identifying the genre, style, historical period and conditions, probably artist and cultural source.

2. Understands the cultural, social, ethical, and political dimensions and contributions of the visual and performing arts, and

a) Understands how the arts shape and are shaped by prevailing cultural and social beliefs and values and recognizes exemplary works from a variety of cultures and historical periods.

# ELEMENTARY

# PK-2

- Experiences or observes various styles/techniques of the arts from an historical multi-cultural or ethnic perspective and identifies personal likes and dislikes.
- Creates, replicates, or performs simple visual and performance art works from diverse cultures.
- Experiments with works exhibiting variety in style/technique, trends and culture.
- Recognizes the characteristics and purposes of artworks from various cultures, historical periods and social groups.
- Creates original art works that integrate one or more of the characteristics and purposes of artworks from various cultures, historical periods and social groups (includes own community and culture).
- Recognizes common subjects and central ideas in storics from various cultures.

#### 3-4

- Recognizes the potential of the arts to reflect cultural values
- Describes roles of visual and performing artists in various settings and cultures by comparing and contrasting how elements of the arts are used.
- Recognizes major periods of dance, music, theater and visual arts and identifies major artists and their work.

# 5-8

 Assesses how a "sense of place" is reflected in visual and performing arts.

MIDDLE

- Compares and contrasts the characteristics and purposes of the arts from various cultures, historical periods and social groups.
- Compares the characteristics and purposes of work in two or more art forms that share similar subject matter, historical periods, ethics or cultural context.
- Compares and contrasts cultural values in visual and performing arts and explains how they differ from daily experience.
- Explores the ways diverse visual and performing arts activities enrich people's artistic, intellectual, social and spiritual responses.
- Classifies by genre and style art works representing various cultures by identifying their distinguishing characteristics.

# SECONDARY

- Decides the appropriateness of various visual and/or performing arts in fulfilling social, religious, or ceremonial functions in a particular cultural or historical context.
- Defends the role of visual and/or performing arts in a given culture.
- Produces visual and/or performing art works in a variety of forms and identifies the social or historical importance of the form they have chosen.
- Develops visual or performing art work in response to a historical, social or cultural condition.
- Analyzes common characteristics and purposes in visual and performing artworks across time and among cultural and social groups.
- Compares and contrasts characteristics of visual and/or performing arts within a particular historical period or style with ideas, issues, or themes in the humanities or sciences.
- Interprets subtle and complex meaning in exemplary visual and/or performing artworks from their own and other cultures and historical periods.
- Recognizes and analyzes visual and/or performing art works of prominent artists from significant historical periods and movements in their own and other cultures.
- Utilizes concepts, theories, approaches, and styles from their own and other cultures in their own visual or performing art works.
- 2. Understands the cultural, social, ethical, and political dimensions and contributions of the visual and performing arts, and

5-8

b) Uses knowledge of artistic elements and principles to determine how and when the arts are being used to manipulate, persuade and influence.

# ELEMENTARY

# PK-2

 Identifies visual and performing art work that attempts to influence and persuade.

#### 3-4

 Recognizes how the elements, principles and structures of visual and performing arts can be manipulated to persuade and influence in advertising.

#### MIDDLE

- Differentiates between visual and performing art works in advertising that utilize art elements and principles to persuade and influence.
- Recognizes work from their own and other cultures and historical periods that are used to persuade, influence and manipulate.

- Analyzes and interprets subtle and complex meaning in visual and/or performing arts as used in television, electronic media, theater, commercial and political advertising that are used to persuade, influence and manipulate.
- Justifies and defends personal evaluations of visual and/or performing arts works that attempt to persuade, influence and manipulate.
- Creates visual and/or performing art work that is used to influence, persuade and manipulate.

			·			
 	 	, en an	 *** <u>*</u>	 	_ constants	

# Appendix C

# Connecting

the Task Force on Learning Results and Goals 2000

ļ
-
-
,
-
Transport of the same
THE RESIDENCE OF THE PERSON OF
:

# Connecting the Task Force on Learning Results and Goals 2000

In the spring of 1994 the U.S. Congress enacted the Goals 2000: Educate America Act, as part of its reauthorization of the Elementary and Secondary Education Act of 1965. The Act includes provisions for national, state and local action toward what have now become eight national education goals. Using the federal Goals 2000 Title III requirements as a framework, Maine created a plan to develop three sets of state standards, respond to the other requirements of Title III, and to organize and administer three categories of grant awards to local school districts. Goals 2000 provides five years of federal funding for states which choose to participate. In the first year, each state receives a smaller allocation of funds to support the development of the state plan. In years two through five a large amount is allocated with 90% designated for grants to local school districts.

Maine received first year Goals 2000 funds of \$495,000 in the 1995 fiscal year. Of the total allocation, \$75,000 was specified for the development of a state technology plan. Forty percent of the remaining funds were designated for state plan development and 60% for grants to school districts. Maine was able to document significant progress toward the development of the state plan and received FY 96 funds of \$1.6 million. Ninety percent of this allocation is designated for grants to local school districts.

One important difference between Goals 2000 Title III and other federal programs is that Maine was not required to create a group of new programs and services. Instead, we have been able to use Goals 2000 funds to support the work already required by the state legislature's charge to the State Board of Education and the Task Force on Learning Results.

# Requirements of Title III of the Goals 2000 Educate America Act

Title III of the Act requires that the state plan have the following components:

- A. A state panel to oversee the development of a state plan for systemic education reform.
- B. The state plan must provide for the development of three sets of standards for the state: 1) content area standards; 2) standards of student performance in the content areas; 3) opportunity to learn standards or strategies for all students and schools.
- C. In addition to the three sets of state standards described above, Maine's state plan for systemic education reform must also address the following components:

- 1. A "schoolhouse to statehouse" system of governance, management and accountability;
- 2. Parental and community support and involvement at both the state and local levels:
- 3. A process for planning and implementation of systemic reform at both the state and local levels which works from the "bottom up" and the top down simultaneously;
- 4. True coordination at the state and local levels of all federally-funded programs, and all school-to-work transition programs, and integration of academic and vocational education.
- 5. Integration of social services and other support for families and children with local schools.
- 6. A monitoring and evaluation system to track progress over the five-year period of the plan.

Once the plan is completed, the U.S. Department of Education will send a visiting team to ensure that the plan reflects widespread commitment from education stakeholders, holds reasonable promise of providing all students with the opportunity to achieve at high levels, and allows schools, districts and communities flexibility to implement local school improvement plans in ways which reflect local needs.

# Grants to School Districts

The Act requires that 60% of the funds in the first year and 90% of the funds in each subsequent year be awarded in competitive grants to LEAs. The state determines how to allocate funds among the three grant categories required by the Act. The three categories are:

- 1. The development of local school improvement plans, which includes the following local requirements:
  - a. involvement of parents and community members in developing and implementing the local plan;
  - b. allocating a percentage of the funds received to support work in individual schools as well as at the district level;
  - c. allocating a larger percentage of the funds received to schools within the district with a high population of needy students;
  - d. provision for districts to request waivers from the U.S. Department of Education to use federal funds in six other programs to support local systemic change:
  - e. a local plan to integrate services for children and families with local schools.
- 2. Support for innovative pre-service education programs for teachers;
- 3. Professional development for educators.

# Connecting the Task Force and Goals 2000

The federal Goals 2000 legislation requires the states who participate to name a state panel to oversee the effort. In Maine the state Goals 2000 panel is the Task Force on Learning Results, created by the legislature in 1993. Since Maine received its first Goals 2000 funding, the Task Force has acted in both capacities.

Goals 2000 activities undertaken by the Task Force include:

- 1. The development of a plan to integrate technology into education. The components of the plan will itself be integrated into the completed state plan for Goals 2000.
- 2. Reports by two study groups -- one to explore how to increase family and community involvement in schools, and one to identify ways to integrate social services for children and families within local schools. These reports will also be integrated into the Goals 2000 plan and will be the basis for additional recommended legislation in the regular session of the legislature.
- 3. The organization of the three grant programs. FY 95 grant funds were awarded, but so many good proposals were received that a portion of the FY 96 funds were also awarded at the same time. \_\_\_\_\_ school districts have received Goals 2000 grant funds.
- 4. Consolidation of the cluster of federal programs of the Improving America's Schools Act into one grant application for all 16 programs.
- 5. Collection of information about the resources, conditions and practices necessary if all Maine students are to have an equal opportunity to learn the Learning Results. Approximately 1100 education stakeholders have provided information about possible opportunity to learn standards.
- 6. The development of the Learning Results themselves.
- 7. An internal Department of Education study to assess the department's capacity to collect, analyze and communicate meaningful information about progress toward the achievement of the Learning Results and evaluation of progress toward the expected goals of the state Goals 2000 plan.
- 8. An analysis of the public input received about what Maine students should know and be able to do to identify public perceptions about the purpose of public education. The analysis revealed six distinct ideas about the purpose of public education, indicating a need for more discussions with stakeholders. Eighteen community forums were held as a result and more and being scheduled as requested.
- 9. An evaluation of the purposes and content of the professional development needed by Maine educators in order to implement the Learning Results.