

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)

STATE LAW LIBRARY
AUGUSTA, MAINE

L
156
.B1
M34
1987

1987
**PERFORMANCE
REPORT**
AUG 24 1987
ON MAINE'S PUBLIC SCHOOLS

Maine Public Schools Annual Performance Report 1987

JOHN R. McKERNAN, JR.
GOVERNOR

DEPARTMENT OF EDUCATIONAL AND CULTURAL SERVICES

EVE M. BITHER, COMMISSIONER
RALPH W. EGGERS, JR., DEPUTY COMMISSIONER

State Board of Education

Carol Wishecamper, *Chair*
Freeport

Jane deFrees, *Vice Chair*
Rumford Center

Ralph Conant
Winslow

Joyce Roach
Smyrna Mills

Joseph Murphy
Biddeford

Shirley Richard
Madison

Frank J. Farrington
Bangor

Carlton Day Reed, Jr.
Woolwich

Michael Aube
Bangor

MDECS Senior Staff

Lois Whitcomb, *Assistant to the Commissioner*

Lynn Bak, *Associate Commissioner for Instruction*

William Pagnano, *Associate Commissioner for School Management*

William Cassidy, *Associate Commissioner for Secondary Vocational Education and Adult Education*

Gregory Scott, *Director, State-Local Relations*

Stanley Sumner, *Director, Division of Finance*

Lucille Johnson, *Director, Division of Management Information*

Perleston L. Pert Jr., *Director, Special Services/Public Information*

Waldemar Buschmann, *Assistant Attorney General*

Ellen Egan George, *Staff Attorney*

Foreword

A statutory duty of the Commissioner of Educational and Cultural Services is the preparation and delivery to the Governor and Legislature of an annual report on the status of public education in the State including suggestions and recommendations for its improvement.

I am pleased to present the second annual copy of this report, which includes the results and recommendations from the first full year of tests administered to fourth, eighth and eleventh grade students in the Maine Educational Assessment Program mandated under the Education Reform Act of 1984.

Charts and graphs have been utilized to emphasize data having a significant impact on public education and Maine utilizing the latest available data. As reporting times for varying statistical information differ, it should be noted that the information presented here is the latest reported at this time.

Eve M. Bither, Commissioner
Maine Department of Educational
and Cultural Services

January 1987

Table of Contents

SECTION I:

EDUCATIONAL ACHIEVEMENT

• High School Graduation

<i>Graduation Rates</i>	1
<i>High School Completion Programs for Adults</i>	1

• Achievement of Public School Students

<i>Maine Educational Assessment 1985-86</i>	2
<i>Program Design, Administration</i>	2
<i>Reading Results, Summary</i>	3
<i>Writing Results, Summary</i>	4
<i>Mathematics Results, Summary</i>	5
<i>Comparisons</i>	5

• Achievement of College Bound Students

<i>Performance on SAT</i>	6
<i>Performance on Achievement Tests</i>	7

• Maine's Cultural Resources

<i>Maine State Library</i>	8
<i>Maine Arts Commission</i>	8
<i>Maine State Museum</i>	9
<i>Historic Preservation</i>	9

SECTION III:

FINANCING K-12 PUBLIC EDUCATION IN MAINE

• Local School Financing

<i>Types of Local Revenues and Expenditures</i>	20
<i>Maine Education Costs</i>	20
<i>Public School Pupil Transportation</i>	21
<i>School Nutrition Programs</i>	21
<i>Special Education Services</i>	21

• State of Maine Education Appropriations

<i>General Purpose Aid to Education</i>	22
---	----

• Federal Appropriations for Education

<i>Federally Funded Programs</i>	22
--	----

SECTION II:

DEMOGRAPHIC AND EDUCATIONAL PROFILE

• Profile of Maine

<i>Demographic Information</i>	10
<i>Educational Attainment</i>	10

• The Educational System

<i>Public School Enrollment</i>	11
<i>Maine's Public Schools</i>	12
<i>Maine's Educational Program</i>	13
<i>Secondary Vocational Education</i>	13
<i>Alcohol and Drug Education</i>	14
<i>Maine's School and Public Libraries</i>	14
<i>Gifted and Talented</i>	14

• Special Student Membership

<i>Educationally Disadvantaged (Chapter I)</i>	15
<i>Migrant Education (Chapter I)</i>	15
<i>Refugee Children in Maine</i>	15
<i>National Origin Minority Groups</i>	15
<i>Baxter School for the Deaf</i>	15
<i>Education of the Handicapped</i>	17
<i>Truancy and Dropouts</i>	18
<i>Home Study in Maine</i>	18

• School Personnel File

<i>Maine Educators</i>	18
<i>Average Annual Salaries</i>	19
<i>Teacher Education and Certification</i>	19
<i>Teacher Supply and Demand</i>	19

SECTION IV:

EDUCATIONAL DEVELOPMENTS & ISSUES

<i>Education Reform</i>	23
<i>The Issues</i>	23

SECTION I: EDUCATIONAL ACHIEVEMENT

High School Graduation

Graduation Rates

In 1985-86, 13,006 Maine seniors received their high school diplomas, reflecting a graduation rate of 72 percent. The graduation rate is the number of high school graduates measured against the ninth grade enrollment four years earlier. Within a state, the graduation rate does not take into account the number of students moving in to or out of the state. The national graduation rate is unaffected by student mobility between states.

- Maine graduation rates were constant through the 1974 to 1977 years, but have shown a steady increase since 1977 with the 1983-84 rate being 11 percent higher than that obtained in 1976-77.
- National graduation rates show a different pattern, with a steady decline for the period 1974-75 to 1979-80, followed by an increase in 1983-84.
- Over the 11-year period from 1973-74 to 1983-84 Maine's graduation rate has increased from a low point in 1973-74 (three percent below national average) to a high in 1983-84 (11 percent above national average).

High School Completion Programs

Maine adults who have not completed a high school program are given an opportunity to earn their high school credential by one of two major programs.

(1) **Regular High School Diploma.** Students are given the opportunity to add to their previous high school transcripts to allow them to graduate with a diploma. In Maine an academic course has a minimum of 45 hours of instruction.

(2) **High School Equivalency Certificates.** This program gives an opportunity to earn a High School Equivalency Certificate through the Maine Department of Educational and Cultural Service's General Educational Development (GED) Testing Program. The GED certificate is by Maine law equivalent to a high school diploma and is well accepted by Maine institutions of higher education and employers. The GED exam consists of five components: Writing, Math, Social Studies, Science and Reading skills.

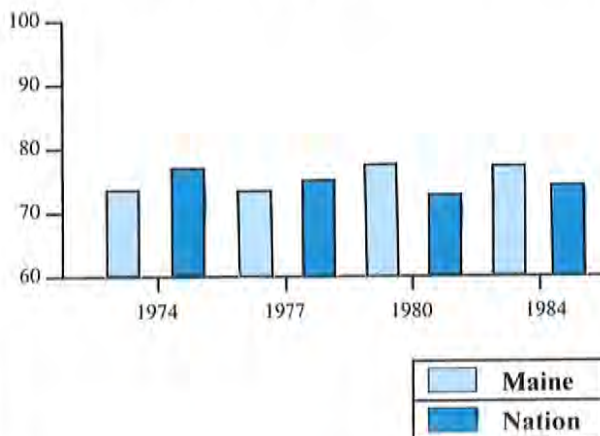
- In an attempt to reach a large number of the 238,822 adults without a high school credential, Maine has developed a new program called ECO (External Credit Option), administered by the Maine Department of Educational Services. This program is a series of home study curriculums that offer academic credit toward the high school diploma. It helps to eliminate such barriers as travel, child care and time commitment.

- During the fiscal year 1985-86, 2,934 people were issued GED certificates in the State of Maine. Fifty-one percent of the people earning certificates were between the ages of 17 and 23. **THIS TOTAL IS THE SECOND LARGEST NUMBER ISSUED IN ONE YEAR IN MAINE.**

- **THE PERCENT OF MAINE TEST TAKERS WHO PASSED THE GED AND RECEIVED CERTIFICATES WAS HIGHER THAN THE NATIONAL AVERAGE.** In 1986 in Maine 94 percent of those taking the exam passed it. This compared with 64 percent on the national level.

- From 1970 to 1980 the total number of non-high school credential adults in Maine decreased from 270,000 in 1970 to 238,822 in 1980 because of the impact of our credentialing programs.

PUBLIC HIGH SCHOOL GRADUATION RATES FOR MAINE AND THE NATION



Achievement of Public School Students

Maine Educational Assessment 1985-86

The Maine Educational Assessment is a program growing out of the Education Reform Act of 1984. That legislation called for a comprehensive set of reforms directed toward school improvement. According to the legislation, the goals to be achieved by the assessment program are to:

- provide information on the academic achievement and progress of Maine students;
- establish a process for continuing evaluation of state educational goals and to aid in the development of educational policies, standards and programs;
- provide school officials with information to assess the quality, effectiveness and appropriateness of educational materials, methods and curriculum needs, including remediation and enrichment;
- provide school staffs with information about the individual students which may be used, with other information, to meet individual educational needs of the student;
- identify year-to-year trends in student achievement; and
- provide parents with information about the achievement of their children on the assessment tests.

The assessment program is administered by the Division of Educational Assessment of the Department of Educational and Cultural Services with the cooperation of the Division of Curriculum, the Division of Special Education, and the Bureau of Vocational Education. Assisting the state personnel is the contractor for the assessment, Advanced Systems in Measurement and Evaluation, Inc. of Dover, New Hampshire.

The Maine Educational Assessment Program is a far more comprehensive statewide testing program than previously operated in Maine, and one with aspects making it unique among testing programs nationally.

In 1985-86, between 96 percent and 98 percent of the fourth, eighth, and eleventh grade students in Maine completed the testing, which required four and one-half to five and one-half hours of testing time. The students were tested in seven different subject areas. For purposes of program assessment, the test instruments were designed to provide coverage of a broad range of curricular objectives within each area.

Test development was a cooperative effort of state curriculum advisory committees (consisting of Maine educators), the Department of Educational and Cultural Services, and the contractor for the assessment. Those same groups were responsible for the interpretations of statewide results presented in this report. Individual student scores were reported in reading, writing, and mathe-

matics; and school and district scores were reported in those three areas as well as in writing conventions, science, social studies, and humanities.

Design of the Program

The MEA program combines aspects of standardized achievement testing and program assessment. A set of "common questions" in reading, mathematics, and writing were administered to all Maine students in grades 4, 8, and 11. This enabled the reporting of test scores for individual students in those three subject areas. The common question set alone does not provide the broad coverage of content areas required for purposes of program evaluation. Therefore, other questions, called "matrix sampled" questions, were distributed over many booklets so that each of these questions would be answered by only a sample of students. These additional questions pertained not only to reading and mathematics, but to other subject areas as well. There were sixteen test forms used at each grade level tested, and each contained the common questions and one-sixteenth of the matrix-sampled questions. Thus, the matrix sampling technique allowed for broader, more reliable assessment of many content areas at the school level using a minimum amount of testing time.

An assessment should be thought of as a survey of competencies covering as much of a subject domain as possible. In this way, it is unlike many other types of tests which address more restricted domains and include repeated measures of particular skills or concepts. In an assessment, it is appropriate to include not only questions on skills and concepts expected to be understood by any student in any school, but also questions dealing with content not taught to all students or in all schools.

Test Administration

The tests were administered by local school personnel in November at grade 8, February at grade 4, and late April/early May at grade 11. Scheduled testing sessions were held early in the two- to three-week testing periods so that there would be ample time to complete make-up testing. Detailed instruction manuals and regional training workshops conducted a few weeks prior to the testing at each grade level were asked to provide test coordinators and administrators with the information they needed regarding testing procedures.

All public school students and students approved for tuition purposes in the three target grades were tested. Most special education students were tested. An extensive list of approved testing modifications allowed the testing of these students in a manner consistent with their regular instructional programs.

The testing was organized into separate sessions — student questionnaire, reading, mixed subjects, mathematics,

open-ended mathematics, open-ended reading, first writing prompt, and second writing prompt. The total testing time required was approximately five and one-half hours at grades 8 and 11 and four and one-half hours at grade 4. It was recommended that the scheduled testing sessions be spread over a minimum of four days, thereby requiring only an hour to an hour and a half of testing on any one day.

School/district personnel were also responsible for providing accurate information on students who were partially or totally excluded from testing, who were tested with modifications, who belonged in special programs, etc.

Performance Reports

Results of the assessment were communicated to schools, parents, and the community through a variety of reports. Each parent received a letter informing them of the child's performance, along with a description of the major categories included in the assessment. Schools received detailed item analysis reports of their students performance on the common sections of the assessment tests. In addition, detailed summary reports were prepared for each school and each school administrative unit.

Students Tested, Test Modifications, and Exclusions

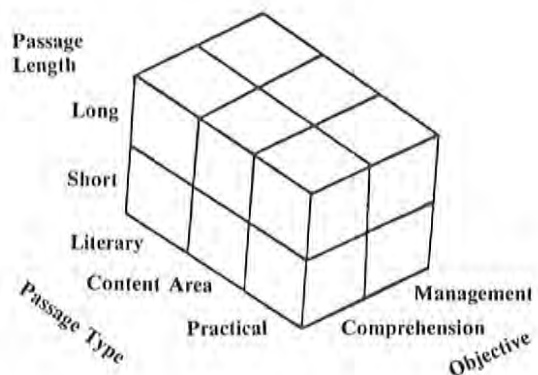
All public school students and students in schools approved for tuition purposes in grades 4, 8, and 11 were tested, including most special education students. A summary of participation for the three grades follows:

Numbers of Students Tested in the 1985-86 MEA			
	Grade 4 Number (%)	Grade 8 Number (%)	Grade 11 Number (%)
Students enrolled	14,657 (100%)	16,802 (100%)	15,546 (100%)
Handicapped students tested, but not included in reports	322 (2%)	337 (2%)	173 (1%)
Students excluded or otherwise unaccounted for	323 (2%)	597 (4%)	523 (3%)
Students included in report	14,012 (96%)	15,868 (94%)	14,850 (96%)
Students with handicapping conditions included in the reports	1,536 (10%)	1,796 (11%)	5,770 (4%)

The MEA program, as directed by the legislation, tests many students who might have been excluded from previous Maine testing programs. An extensive list of approved testing modifications allowed the testing of special education students in ways consistent with their regular instructional programs.

Reading

The reading portion of the 1985-86 MEA required students to read both long and short passages from literature, the content areas, and practical sources. Literary passages included selections from the genres of biography, drama, essay, novel, poetry, and short story. Passages in the content category included selections from content area magazines, nonfiction trade books, and excerpts from science and social studies textbooks. Practical sources included directions to complete a task, excerpts from manuals or pamphlets, and reference tools such as tables of contents and indexes. The reporting categories used for individual and school results are those shown in the figure below.



Reading reporting categories.

Interpretive Summary of Results

In comprehension, the complexity of the reading selection seems to influence results more than the complexity of the questions. Students seem able to handle a wide range of questions from simple and literal to complex and inferential if the reading task is within students' interest or experience, and if the text of the reading is not too demanding in length and syntax. When reading selections appear to extend beyond students' interest, experience, or comfort zone regarding length or syntax, students' ability or perhaps perseverance in handling all types of questions declines.

Especially when confronted with demanding reading selections, students demonstrate a tendency to make quick and often incorrect judgments based on conspicuous information or impressions gained by scanning the earliest portions of the text. They do not appear to return to the entire text to search and to consider the information, nor do they appear to move back and forth between the questions and the text to confirm their choices.

Students did well when the form of the question was familiar to them. For example, they were successful in

answering questions such as “How do you think the character felt when . . .?”. This type of question is common to instruction from the earliest years in school. Questions such as “Which of the following best expresses the theme of this story?” require students to generalize from the reading selection. The disappointing results of such questions suggest students are not experienced in considering how larger ideas are generated by the smaller details and nuances of the text. Students’ weaknesses in evaluating evidence also suggests a lack of exposure to situations requiring higher order thinking skills.

Results on the open-ended comprehension questions demonstrate students are not successful or perhaps experienced in producing answers as they are in choosing answers. Students must be more active when asked to generate a response to an open-ended question than they are when asked to select an answer in a multiple choice format. Instructional tools such as workbooks usually present information to students and ask them to identify or locate a single right answer. Too much emphasis on workbooks probably contributes to the formation of students who are better consumers of text than producers of text.

In reading management, results on questions that assessed students’ awareness of reading strategies suggest students are not accustomed to approaching a variety of reading tasks with a variety of reading strategies. In open-ended reading management questions, students’ difficulty in explaining the organization of informational pages and study aids may reflect an inability to talk about the area of reading management rather than a lack of understanding.

Responses to questions asking students to select appropriate sources for specific types of information suggest students across grade levels are not familiar with the wealth of resources that exist beyond the encyclopedia. Students do not appear to be familiar enough with using the reference section of the library, magazines, and other supplemental material in pursuing information.

Writing

Writing was assessed directly by asking students to produce two writing samples in response to special topics or prompts. In addition, half of the students were given multiple choice items measuring writing conventions.

The writing samples at all three grade levels were scored analytically in six categories by two trained readers, using a four-point scale. The scoring criteria are listed below.

- | | |
|----------------------|--------------|
| 1. Topic Development | 4. Sentences |
| 2. Organization | 5. Wording |
| 3. Details | 6. Mechanics |

Interpretive Summary of Results: Writing Samples

Overall, the fourth graders were more successful when they were asked to write from their personal experiences, in the narrative mode. They had more difficulty with the persuasive letter, particularly in generating good reasons to support their point of view. Committee members suggested that the task may have been too far removed from many of the students’ experiences at that grade level. Constructing a logical, persuasive argument is a more cognitively demanding task. Another possibility for this discrepancy is that there may be less instructional emphasis on persuasive writing than on narrative writing at the fourth grade level.

Eighth graders did only slightly better on the narrative piece than on the persuasive letter. There was not as large a discrepancy between these two modes as was evident at grade 4. Although the narrative prompt was the same for fourth and eighth graders, it is not valid to compare the performance of students at both grades. The scoring guide measured the same criteria, but the standards, exemplified by the anchor or training papers, took into consideration the different development levels at the two grades.

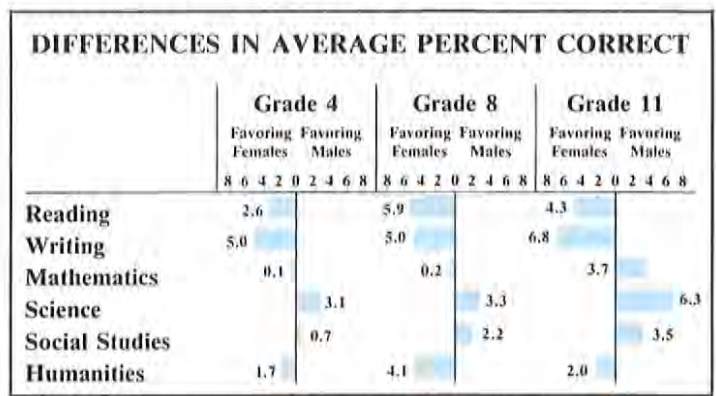
One grade 11 prompt asked students to imagine that they had gone to a job referral center to apply for a job. They were asked to write an informational report, specifying the type of job they would like and providing any relevant skills and experiences that would support their request. There was confusion on the part of some students as to whether their job had to be something realistic and current or could be a hypothetical future career. However, students generally handled the task fairly well and with unexpected creativity.

The expository prompt asked the eleventh graders to explain whether they saw music as a force that would bring people together or drive them apart. This task proved to be the more demanding of the two. Although students were able to draw on their personal experiences and observations, they had a more difficult time discussing music in global terms. As with cross-grade comparisons, caution must also be used in comparing performance within a grade on the two prompts, due to the different rhetorical demands of each.

Mathematics

The development of the mathematics portion of the MEA tests was guided by a content-by-process matrix. That is, every test question belonged to a content category and a process category. The process categories were computation, concepts, and application. The content categories are listed on the next page.

- A. Numbers and Numeration**
 - 1. Numeration
 - 2. Number Concepts
 - 3. Operations—Whole Numbers
 - 4. Operations—Fractions
 - 5. Operations—Decimals
 - 6. Operations—Integers
 - 7. Percent
 - 8. Properties
- B. Variables and Relationships**
 - 1. Equations and Inequalities
 - 2. Functions/Coordinate Systems
- C. Geometry**
 - 1. Plane and Solid Shapes
 - 2. Congruence and Similarity
 - 3. Properties of Triangles
 - 4. Properties of Quadrilaterals
 - 5. Constructions
 - 6. Sections of Solids
 - 7. Perimeter, Area, and Volume
 - 8. Rotations and Symmetry
 - 9. Other Theorems and Relations
- D. Measurement**
 - 1. Appropriate Units
 - 2. Unit Equivalents
 - 3. Instrument Reading
 - 4. Linear Measurement
 - 5. Nonstandard Units
- E. Problem Solving**
 - 1. Understanding the Problem
 - 2. Estimation/Reasonableness
 - 3. Relevant Information
 - 4. Strategies and Processes
- F. Other Topics**
 - 1. Probability
 - 2. Statistics
 - 3. Graphs, Tables, Charts
 - 4. Logic
 - 5. Operations w/Calculators



The table below shows two important findings. First, when course background is controlled (at least in terms of “Algebra II Status”), male students still have the advantage in mathematics performance. Second, by the time students have completed high school, males will have taken more and more advanced mathematics courses than females.

Interpretive Summary of Results

The findings and recommendations of the MEA Mathematics Committee all point to several key problems in areas of mathematics instruction. First, emphasis on problem solving through the use of real-life problems and the development of alternative approaches and strategies to problems must increase. Second, there should be an increased use of manipulatives and hands-on experiences to increase conceptual understanding. Third, various aspects of math must be interrelated rather than taught in isolation from one another. If any of the above changes in math instruction are to occur, it is necessary that the changes and the teachers’ implementation of those changes be supported by administrators. Above all else, it is imperative that an adequate supply of qualified math teachers be found to staff the Maine schools.

Average Percent Correct in Grade 11 Math by Gender and Algebra II Status

	Completed	Currently Enrolled	Algebra II Status	
			Will Take Next Year	Do Not Plan to Take
MALES				
% Correct	81	74	61	51
(% of Males)	(20)	(32)	(12)	(37)
FEMALES				
% Correct	74	71	59	50
(% of Females)	(18)	(29)	(10)	(43)

Gender Differences in Performance

The following group shows the differences in percents correct between males and females for the various reporting categories within each of the major areas tested. In reading and writing, female students consistently outperform male students across the grades and across the reporting categories. At grades 4 and 8, the mathematical performance of males and females is relatively close with two notable differences. At those grade levels females have the advantage in computation and males perform better in measurement. By grade 11, males seem to have the advantage in all areas of mathematics, the largest advantage being in the area of measurement where the greatest difference was evidenced at the earlier grades as well.

National Comparisons

The design of the Maine Educational Assessment allows for some comparisons to be made between Maine students at all levels and their peers nationwide. Generally, Maine students score at or slightly above national averages. In reading, Maine students perform slightly better than eighth and eleventh graders across the nation; fourth graders show a greater relative strength than the two upper grades. In mathematics, fourth graders again take the edge; eighth and eleventh grader scores are comparable to those of students nationwide. In science, students at all three levels continue to perform as well as fourth, eighth, and eleventh graders nationally. In social studies, fourth graders are on a par with students in that grade across the country; eighth and eleventh grade achievement may be slightly below national average.

National Comparisons

Difference from Nation in
Average Percent Correct
(Maine percentage minus U.S. percentage)

Subject		Grade 4	Grade 8	Grade 11
Reading	difference	+ 13.5	+ 3.7	+ 6.2
	(# questions)	(8)	(27)	(15)
Math	difference	+ 6.9	- 0.9	+ 1.3
	(# questions)	(11)	(19)	(4)
Science	difference	+ 2.2	+ 4.7	+ 4.2
	(# questions)	(17)	(18)	(13)
Social Studies	difference	+ 0.4	- 7.5	- 4.9
	(# questions)	(14)	(12)	(9)

Conclusion

From the results of the first year of assessment the advisory committees have developed some specific recommendations to Maine schools. A brief summary of these recommendations follows:

Reading: Maine students need exposure to a wide variety of reading materials and challenges, and need help in developing thinking and questioning skills necessary to evaluate the material they read.

Writing: The teaching of writing should be part of every subject, and not the sole responsibility of the English teacher. In addition, students should be given the opportunities to produce a wide variety of writing.

Mathematics: Math instruction should emphasize problem solving through the use of real-life problems and the development of alternative approaches and strategies. Students should see how the formulas and principles of math apply to familiar situations, rather than learning formulas and principles in isolation.

Science: Because the assessment showed a wide discrepancy in science performance between males and females, teachers and counselors are urged to encourage women's interests in science and science careers. In addition, science programs must be made more effective and relevant for non-college-bound students.

Social studies and humanities: Students need assistance in relating concepts across the social studies disciplines—in learning how geography, history and economics are related, for example, and in understanding how developments or factors in one discipline can affect others.

The second year of the Maine Educational Assessment is underway with eighth graders in public schools tested from November 3 through November 14. Fourth grade testing will begin in late-January, and eleventh grade testing is scheduled for early April.

The breadth of the findings and recommendations from this initial year of the Maine Educational Assessment Program cannot be adequately described in the limited space available in this report. A report entitled "The Maine Educational Assessment: State Summary and Interpretation Report" is available from the Department.

Achievement of College Bound Students

Performance on SAT

Maine college-bound high school seniors scored better than the national average on the verbal section of the Scholastic Aptitude Test given last March. On the math portion of the SAT, Maine seniors maintained the same average as last year.

Maine seniors averaged 434 on the verbal section of the test, an increase of two points from 1985. The national average was 431. Their 1986 math average was 466, which is the highest average in the state since 1980. National math average was 475.

At the national level, both the verbal and math averages remained the same as last year.

The SAT is a three-hour multiple-choice test that measures verbal and mathematical reasoning abilities. The verbal section of the SAT measures reading comprehension and vocabulary. The mathematical section contains questions on arithmetic reasoning, algebra, and informal geometry. The questions emphasize problem solving aptitude rather than advanced achievement in mathematics.

The SAT results show:

- The verbal test mean score for Maine seniors is the highest since 1976 and reflected an increase for the third consecutive year.
- Male and female students in Maine scored almost even on the verbal section of the test—434 and 433, respectively. Males outscored females on the math portion 488-445. Nationally, males outscored females 437-426 on the verbal section and 501-451 on the math section.
- The mean score for Maine college-bound seniors for reading comprehension rose for the fifth consecutive year to 43.4, the highest average since the same score was recorded in 1976. For the first time since 1980, females outscored males 43.5 to 43.2 on reading comprehension.
- The mean vocabulary score also was up for the third consecutive year to 43.6, highest score since that score was recorded in 1977.
- Fifty-five percent (8,674) of Maine's 15,700 high school graduates took the SAT compared to 39 percent nationally.

Performance on Achievement Tests

In 1986, 2,880 Maine high school seniors, representing 35 percent of the students who took the SAT in Maine, took at least one Achievement Test. Nationally, 21 percent who take the SAT also take at least one Achievement Test.

Achievement Tests are curriculum-based and are designed to measure educational outcomes or knowledge in specific subject matter areas, such as French, physics, American history, English composition.

Although there was a slight increase (0.4%) in the number of SAT takers in Maine, there was an 18.5 percent decline in the number of Maine students taking at least one Achievement Test this year. This may be due in large part to a change in the admissions policy at the University of Maine at Orono, according to the College Board, the non-profit educational association which administers the national Admissions Testing Program.

The Achievement Test results also show that:

- The average number of Achievement Tests taken by Maine students was three.
- Maine students who took at least one Achievement Test earned SAT scores well above the state average in both verbal (495) and math (535).
- Scores were significantly higher in two most frequently taken Achievement Tests—English composition, 497, up 15 points from 1985; and Mathematics Level I, 515, up 12 points from last year. The report also shows that an average of 20 percent less students took the tests in these subjects.
- The five most frequently taken Achievement Tests were English Composition (2,683), Mathematics Level I (2,144), biology (747), American history (670) and chemistry (569).
- The greatest declines in subject activity among the 10 most frequently taken Achievement Tests, were recorded in English composition (down 20.4%) and Math Level I (down 19.5%).
- The greatest increases in activity were recorded in Spanish (up 11.5%) and Mathematics Level 2 (up 11.2%).
- Almost half of the 7,348 students who designated a college to receive their Admissions Testing Program

scores listed the University of Maine at Orono. Nearly one out of four designated the University of Southern Maine.

Achievement Test Data

Maine 1986 Achievement (ACH) Test Data (score in parentheses are national averages)

ACH	Number of Tests Taken	ACH Test Average	Corresponding Maine SAT Averages	
			Verbal Average	Math Average
English Composition	2,683	497 (522)	497	537
Mathematics Level I	2,144	515 (541)	492	541
Biology	747	508 (551)	505	543
American History	670	495 (528)	502	521
Chemistry	569	526 (571)	523	595
Literature	443	506 (525)	523	501
Mathematics Level II	438	624 (660)	532	625
French	344	509 (541)	530	542
Physics	151	563 (594)	536	635
Spanish	116	476 (535)	496	528
Latin	53	516 (545)	526	528
European History	39	509 (550)	540	533
German	25	562 (574)	500	534

SAT SCORE AVERAGES 1965-1986: NATIONAL AND MAINE DATA

Year	National Data			Year	Maine Data		
	#Taking Tests	Verbal	Math		#Taking Tests	Verbal	Math
1972	1,381,400	453	484	1972	7,678	451	480
1973	1,014,853	445	481	1973	7,424	441	481
1974	985,239	444	480	1974	7,190	441	477
1975	996,428	434	472	1975	7,227	437	471
1976	999,809	431	472	1976	7,459	437	476
1977	979,396	429	470	1977	7,541	431	471
1978	989,185	429	468	1978	7,359	429	467
1979	991,617	427	467	1979	7,827	430	468
1980	991,245	424	466	1980	7,904	427	467
1981	994,046	424	466	1981	8,127	426	465
1982	988,270	426	467	1982	7,898	427	463
1983	962,542	425	468	1983	7,968	427	464
1984	964,684	426	471	1984	7,854	429	463
1985	977,361	431	475	1985	8,669	432	466
1986	1,000,748	431	475	1986	8,674	434	466

Maine's Cultural Resources

Maine Arts Commission

Maine State Library

The Maine State Library delivers informational services directly to state government and Maine citizens. It also encourages library cooperation statewide in order to enhance the local delivery of information. School libraries are a necessary and valued part of the Regional Library System, and of planning activities recently undertaken toward statewide library automation.

The 2nd session of the 112th Maine Legislature (1986) saw the passage of a bill to provide for the preservation of valuable Maine historical documents both at the State Library and at other institutions in Maine. Funds were also allocated for the acquisition of materials on the European Holocaust of 1933-45, to fill a perceived need to strengthen curriculum research holdings in that area. The acquisition of state government documents was enhanced by a bill that, with the cooperation of state printing operations, strengthened the State Library's ability to identify such documents and acquire them.

A serious problem of asbestos contamination in the Library building was identified toward the end of the fiscal year, with consequences still not fully resolved. Major renovations and repairs are now taking place. The library will be closed until early 1987. The fortunate acquisition of 10,000 square feet of storage space in the former Liquor Warehouse was timely in that it made dealing with the asbestos emergency easier and provided some much-needed long-range storage for the Library.

Services delivered during 1985-86 included:

- Circulating 150,000 items to library users statewide.
- Processing 50,000 requests for specific information on various subjects.
- Mailing 8,000 books to school and public libraries.
- Distributing approximately 10,000 educational videotape programs to schools.
- Providing more than 45,000 interlibrary loan items through the Maine Regional Library System for one of the highest per capita rates in the country.
- Circulating 140,000 talking books to 3,000 blind people.
- Mailing 72,000 books-by-mail items to nearly 10,000 users.
- Providing 21,000 computer-based citations.
- Processing 5,000 requests for books and periodical articles through the automated interlibrary loan system.
- Providing library consultant services to 300 members of the Maine Regional Library System.
- Providing free access to 12,000 non-residents to a major resource library.

The Art Commission's primary mission is to encourage and stimulate public interest and participation in the arts, to expand the state's cultural resources and to foster the freedom of artistic expression. The agency promotes excellence in the arts statewide through matching grants to museums, theaters, schools and other non-profit organizations for project support, touring, exhibition and residency programs, conferences, workshops and technical services.

In 1986, the Art Commission:

- Reached more than 1.4 million citizens and tourists, who attended arts events supported by grants from the Commission.
- Awarded 436 grants to non-profit organizations on an 8:1 matching basis which generated \$4.5 million in private funds.
- Reached 100,000 students, teachers and administrators with arts programs.

The Commission has taken a leadership role in insuring the integrity of the one-year fine arts requirement for high school graduation, as defined by the 1984 Education Reform Act. In 1986, in conjunction with the Maine Department of Educational and Cultural Services, the Commission reviewed grants for \$65,000 in new arts projects through the state Innovative Educational Grants Program, participated in the creation of an arts consultant position within the MDECS, helped establish gifted and talented programs which specifically include the arts, and cosponsored a major conference in art education.

Maine's Percent for Art/Art in Public Buildings Program is administered by the Art Commission. Since its inception the number of schools and other state-funded buildings with newly commissioned or purchased artwork has involved \$810,000 for public works of art.

In 1986, the Commission sponsored art exhibitions at the Governor's office and at the Attorney General's office, as well as a series of noontime concerts at the State House, all open to the public, to showcase the work of contemporary Maine visual and performing artists. Two Blaine House concerts, sponsored by the Commission and featuring some of Maine's most distinguished musicians, were televised statewide. The Commission's Writers at the Library project, cosponsored with the Maine State Library, brought five leading New England poets and writers to libraries from Fort Kent to Portland for public readings of their works.

Through its Traditional Arts/Folk Arts Program, initiated in 1984, the Commission sponsored the successful Cultural Heritage Week celebrations and continues to work closely with the cultural interests of traditional artists, minority audiences and the Franco-American community throughout the state.

Maine Historic Preservation Commission

The Maine Historic Preservation Commission in 1986 conducted surveys that covered more than 96 square miles and added more than 1,600 new properties to the state-wide historic resources inventory.

In the area of prehistoric archaeology, 120 new sites were discovered, ranging from Paleo-Indian villages in the north to Archaic and Ceramic/Contact Period encampments on the coast. One-hundred-fifty historic archaeological sites were recorded, including a large number of potential shipwrecks. Architectural surveys inventoried over 1,300 buildings.

The Commission nominated 312 properties to the National Register of Historic Places, 69 as individual buildings and sites and the balance as components of 4 historic districts.

In its regulatory role the Staff reviewed a thousand Federal and State projects to ensure that they would not damage or destroy significant historic resources. Under the Federal Economic Recovery Tax Act of 1981, owners of registered depreciable properties are eligible for investment tax credit as a result of rehabilitating such properties. The certification process is administered by the Commission. In 1986, 23 projects were processed, representing a private sector investment in preservation of at least \$28 million.

The year 1986 saw the first of a four-year program for 50% matching grants to restore public or non-profit owned buildings on the National Register of Historic Places. Funded by a \$2 million state bond issue, \$500,000 was divided in 1986 between 34 projects ranging from South Berwick to Houlton.

In the area of public education, the Commission funded four new publications and two public conferences, while the staff delivered dozens of public slide lectures on archaeology and architectural history. In addition, the Commission's three packaged slide lectures, "The Archaeology of Colonial Maine," "The Archaeology of Pre-historic Maine" and "200 Years of Maine Housing" were used by twenty-five public schools.

Maine State Museum

Following completion and opening in October 1985 of the Museum's largest and most ambitious exhibition, "Made in Maine", some 20,000 visitors toured the new installation in the month following and visitation to the Museum substantially exceeded any previous year.

Among the last of the major artifacts acquired for the exhibit was a 1908 Burrowes automobile, made in Portland, that was returned to Maine from New Jersey and driven back into the state over the Kittery bridge.

School visitation continued to increase above the previous record year. Some 28,000 school children toured the Museum during 1986, an increase of eight percent over the previous year. Children came from 246 Maine communities and participated in over 1,150 gallery demonstration programs provided by the visitor services staff of the Museum. School age groups accounted for 27 percent of total attendance during the school year, and 25 percent of the total attendance for 1986.

The exhibition program falls into three broad categories of work: long-range planning of major exhibitions of the future, construction of major exhibitions meant to be exhibited over a long period of time, and short-term temporary exhibit displays.

Long-range planning focused in two areas: the continued planning of the major prehistory exhibition entitled "12,000 Years in Maine" and the planned redesign of the main exhibit floor housing the logging and lumbering installation. Planning for the "12,000 Years in Maine" installation moved to the stage of model building, with a projected starting date for major construction in July of 1987. This installation will occupy two levels adjacent to the "Made in Maine" exhibition and, when completed, it will be the most substantial ethnographic and archaeological installation in northern New England and possibly in the northeast.

Construction of long-term exhibitions in the "Made in Maine" exhibit included the installation of 14 work environment scenes, among them a two-story woolen mill and a three-story working woodworking shop with operating water turbine and shafting.

Shorter-term installations included the "Maine-ly Children" exhibition on the second floor, a new gallery featuring numerous archaeological specimens from the Revolutionary War privateer, **Defence**, which sank in Stockton Harbor in 1779.

The most significant acquisition made in 1986 was the locomotive engine, **Lion**, acquired as a transfer from the trustees of the University of Maine. Built by Boston locomotive builders Hinkley and Drury in 1846, the engine operated on the Whitneyville and Machiasport Railroad for nearly 50 years before almost being scrapped in 1898. At the time, it was believed to be the oldest locomotive engine in New England. It was given to the University of Maine in 1905. It is the object of one of the largest restoration projects ever launched by the Museum. When restored, it is to be located near the main floor lobby.

SECTION II: DEMOGRAPHIC AND EDUCATIONAL PROFILE

Profile of Maine

Demographic Information

Demographic statistics provide policy and decision makers with valuable insight into population characteristics and trends. This information is helpful in planning for the present and future educational needs of our citizens. In the chart to the right, selected demographic statistics from the 1970 and 1980 census are displayed for Maine and the nation. Some of the more significant items have been highlighted below.

- The birth rate in Maine has declined over the 10 years from 17.9 to 14.6. This decline is substantially greater than that for the nation, which declined from 18.4 to 16.2.
- From 1970 to 1980 Maine's population grew faster than the nation's; during the same period our birth rate decreased. The reason for growth, is that immigration exceeds out-migration substantially. It should be noted that the largest age group migrating into Maine includes those in the 65 and older category, while the largest percent of out-migration is in the 25 to 45 age group. As a result school enrollment is projected to stabilize over the next few years.
- The population of Maine is slightly older than the population of the nation. In 1980 the median age was 30.4 in Maine and 30.0 in the nation. However, in 1970 the median age in Maine was 28.6. The increase over the decade reflects the high incidence of the immigration of citizens 65 and older.

Educational Attainment

The educational attainment of Maine's population is significantly higher than that of the nation. In Maine the percent of population completing 12 years of school with no education beyond grade 12 is 39.4. For the nation it is 34.6.

However, in higher education Maine seems to lag behind the nation. The percent of Maine's population with four or more years of college is 14.4 compared to the national figure of 16.2.

The percent of high school graduates in Maine's population is 69.1. That is 2.6 percentage points higher than the national figure of 66.5 percent.

Ethnicity	0-8 Years	9-11 Years	12 Years	College 1-3 Years	College 4 or More Years	% of High School Graduates
WHITE						
Maine	16.5%	14.8%	39.3%	15.0%	14.4%	69.5%
Nation	16.6	14.6	35.7	16.0	17.1	68.8
BLACK						
Maine	11.6	14.1	42.4	19.4	12.5	69.3
Nation	27.0	21.8	29.3	13.5	8.4	51.2
HISPANIC						
Maine	18.8	15.2	33.3	19.8	12.9	63.5
Nation	40.1	15.9	24.4	12.0	7.6	44.0
ASIAN/PACIFIC ISLANDER						
Maine	14.8	12.1	31.0	16.6	25.5	66.7
Nation	16.4	8.8	24.7	17.2	32.9	74.8
AMERICAN INDIAN/ NATIVE ALASKAN						
Maine	31.1	15.3	32.1	16.3	5.2	51.1
Nation	25.0	19.5	31.3	16.5	7.7	55.5
TOTAL						
Maine	16.6	14.8	39.4	15.0	14.4	69.1
Nation	18.3	15.3	34.6	15.6	16.2	66.5

The Educational System

Public School Enrollment

The public schools enrollment for Maine has shown a steady decline since 1973. The last two years indicate a slowing trend in enrollment drops. With kindergarten classes now increasing and the birth rates rising slightly, enrollments should level off by the early 1990s.

MAINE PUBLIC SCHOOL ENROLLMENT				
FALL 1985-86				
GRADE	TOTAL	E.U.T.	S.I.C.	STATE TOTALS
Ungraded Elementary	60	0	0	60
Special Elementary	1,668	0	0	1,668
Pre-Kindergarten	608	0	8	616
Kindergarten	16,638	36	35	16,709
Grade 1	16,926	26	48	17,000
Grade 2	15,424	38	36	15,498
Grade 3	14,622	43	32	14,697
Grade 4	14,283	41	29	14,353
Grade 5	14,584	38	33	14,655
Grade 6	14,884	38	45	14,967
TOTAL K-6	109,697	260	266	110,223
Grade 7	15,941	13	17	15,971
Grade 8	16,562	11	23	16,596
TOTAL 7-8	32,503	24	40	32,567
TOTAL K-8	142,200	284	306	142,790
Grade 9	17,943	0	0	17,943
Grade 10	16,385	0	0	16,385
Grade 11	15,281	0	0	15,281
Grade 12	13,800	0	0	13,800
Special Secondary	577	0	0	577
Post Graduates	51	0	0	51
TOTAL 9-12	64,037	0	0	64,037
TOTAL K-12	206,237	284	306	206,827

DISTRIBUTION OF LOCAL EDUCATION AGENCIES IN MAINE

	Number Of Systems	Number Of Local Admin. Units	Number Of Towns
Cities and Towns having Individual Supervision	36	36	36
School Administrative Districts	73	73	278
Unions of Towns	35	137	119*
Towns Under District Superintendents and Agents of the Commissioner	21	21	21
Community School Districts	13	13	39
Schooling of Indian Children	1	3	3
TOTALS	179	283	496

*18 Towns are counted with C.S.D.'s

Maine's Public Schools

Because of geographic and economic differences in Maine, schools have evolved over the years into different organizations. A brief explanation of each follows:

Cities or Towns with Individual Supervision

A city or town with individual school organization is a single municipality of comparatively large size for Maine (generally 75 or more teachers). One school committee administers the education of all grades in the city or town through a superintendent of schools. City or town charter usually determines the method of budget approval. In many cities and towns, the city council or town council has final budget approval. Since it is a single municipality, cost sharing is not a factor.

School Administrative Districts

A school administrative district (SAD) is a combination of two or more municipalities which pool their educational resources to educate all students. One school committee (comprised of representatives from each of the municipalities) administers the education of grades kindergarten through 12 through a superintendent of schools. Budget approval is by majority vote of those present and voting at a district budget meeting. Cost sharing is based on a formula which includes state valuation and/or number of pupils.

Community School Districts

A community school district (CSD) is a combination of two or more municipalities formed to build, maintain, and operate a school building or buildings to educate any or all grades. For example, a CSD may be formed to build and operate a grade seven through 12 school for all towns in the CSD. These same towns will maintain individual control (or belong to a union) for the education of their kindergarten through grade six students. A CSD also may include education of all grades kindergarten through grade 12.

The CSD school committee is comprised of members of each town's local school committee if one exists. CSD school committees are apportioned according to the one person one vote principle. Cost sharing is based on a formula including number of pupils in each town and/or state valuation or any combination of each.

CSD budgets are approved by majority vote of voters present and voting at a district budget meeting.

Unions of Towns

A union is a combination of two or more towns joined together for **administrative purposes only**. Since none of the towns is large enough to justify the cost of employing a superintendent of schools, they share a superintendent's office. Each of the towns maintains its own budget and school board elected at town meetings and operates in every way as a separate unit except for the sharing of superintendent services. A union school committee is comprised of members of each town's school committees, and

it conducts the business of the union. All votes of the union committee are cast on a weighted basis in proportion to the population of the towns involved.

Cost sharing for union services are apportioned to each town in proportion to the amount of the superintendent's services required in that town.

Budget approval is accomplished for each town's individual budget in town meetings.

The union budget is approved by weighted vote of the union committee.

Schooling of Indian Children

There are three reservations of Indian children in Maine. These three reservations are organized exactly as a union of towns described previously.

The reservations are Indian Township, adjacent to Princeton, and Pleasant Point, adjacent to Perry and Eastport, both of the Passamaquoddy Tribe in Washington County, and the Penobscot Nation on Indian Island, north of Old Town in Penobscot County.

SUMMARY OF SCHOOLS IN MAINE		
1986-87		
	Public	Private
ELEMENTARY	599	62
SECONDARY	103	20
COMBINED ELEMENTARY/SECONDARY	41	23
TOTAL SCHOOLS IN MAINE	743	108
TYPES OF SCHOOLS:		
HIGH SCHOOLS	90	18
JUNIOR HIGH SCHOOLS	60	0
JR./SR. HIGH SCHOOLS	23	3
INTERMEDIATE SCHOOLS	38	0
UNGRADED SCHOOLS	1	6
SPECIAL EDUCATION SCHOOLS	9	13
OTHER (ELEM./VOC./K-12)	512	68
TOTAL	743	108
SPECIAL EDUCATION CLASSES:		
ELEMENTARY CLASS	162	1
SECONDARY CLASS	29	1
COMBINED ELEM./SEC. CLASS	8	0
OTHER CLASSES:		
UNGRADED CLASS	10	0
PRE-KINDERGARTEN CLASS	30	13
POST-GRADUATE CLASS	25	10

Education in Unorganized Territories (EUT)

Education in Unorganized Territories (EUT) in Maine is a responsibility of the State. The education of territory children is accomplished by the State operating schools which are in unorganized territories and by the assignment of agent superintendents to assure that each child in an unorganized territory receives education. These agents are assigned by the Commissioner of Education through the Division of Unorganized Territories.

The unorganized territory schools include the Blaine School at Rockwood, Brookton Elementary School at Brookton, Connor Consolidated School at Caribou, Kingman Elementary School at Kingman, Edmunds Consolidated School at Dennysville, and Patrick Therriault School at Sinclair.

Educational Program

In Maine, there are 743 public schools located in 283 local educational agencies. Generally, school is in session from early September to mid-June for a minimum of 180 school days. Standards and curriculum content vary for elementary schools and secondary schools. The length of the school week is 25 hours of instructional time except that kindergarten is twelve and one-half hours.

The elementary school curriculum includes, but is not limited to, instruction in:

- Language Arts (reading, writing, spelling, grammar, handwriting, listening and speaking skills)
- Mathematics
- Science
- Maine studies
- Social studies
- Fine arts
- Physical education
- Health
- Library skills

The secondary level enrollment, grades nine through 12, is approximately 31 percent of the total public school membership.

Required for high school graduation in the secondary school curriculum are:

- English, four credits
- Social studies, one credit
- American history, one credit
- Science, including at least one credit of laboratory study, two credits
- Fine arts, which may include art, music, forensics or drama, one credit
- Health, one-half credit
- Physical education, one credit
- Mathematics, two credits
- Computer proficiency

Other secondary school instructional requirements include foreign language, health education, computer and library skills, vocational education and Maine studies.

Leadership and technical assistance in all curriculum areas is provided by the Division of Curriculum of the MDECS. In addition the Division provides regulatory functions which include school approval, accreditation, inspections, home-study and other assigned duties. It also has administrative responsibilities for certain federal and privately funded programs. These priorities have been established by legislative and executive department mandate. The target populations served include Maine students, teachers, school administrators and members of the greater community.

Secondary Vocational Education in Maine

Vocational Center — Facilities providing vocational education to secondary students governed by a single school administrative unit. It may serve students from other affiliated school administrative units and may include satellite center facilities and programs.

At each vocational center an advisory committee consists of a superintendent and a school board member from each participating administrative unit. There are 17 vocational centers in Maine at Augusta, Bath, Biddeford, Calais, Caribou, Dexter, Ellsworth, Farmington, Lewiston, Naples, Portland, Presque Isle, Sanford, Skowhegan, Waterville, Westbrook and Machias.

Vocational Satellite Program — A facility or program providing vocational education to secondary students administered by a school administrative unit affiliated with a vocational center.

The school principal and the director of the vocational center jointly make recommendations to the local superintendent and supervise personnel working in the vocational satellite program.

There are 31 vocational satellite programs in Maine.

Vocational Region — Facilities or programs providing vocational education to secondary school students, governed by a cooperative board consisting of residents from each school administrative unit.

Superintendents within each region serve as an advisory committee to the cooperative board.

There are 9 vocational regions in Maine at northern Aroostook County, southern Aroostook County, northern Penobscot County, southern Penobscot County, Waldo County, Knox County, northern Oxford County, eastern Cumberland-Sagadahoc County and southern Oxford County.

Alcohol and Drug Education

A state-wide program of education and training activities designed to increase knowledge about chemical use, abuse and dependency and its impact on individuals, families and communities was continued during fiscal 1986 by the Division of Alcohol and Drug Education Services of the DECS.

- Seven new school/community teams were trained, bringing the total in the state to 70. As part of developing comprehensive local programs, schools involved in the team development program agree to hold a two-day in-service program for all school staff. In 12 school systems, 4,350 people participated in that program last year.
- Over 1,300 people participated in specialized workshops or advanced training programs related to adolescent chemical dependency issues and curriculum and support groups for elementary children.
- There were 128 on-site consultations with 60 different school systems related to school/community team development.
- Division consultants did presentations on chemical dependency and/or prevention/education programs for 52 school and community groups, including 7 out-of-state conferences and 8 state-wide conferences, and 2,850 students as part of student awareness programs in 14 schools.
- To further enhance alcohol and drug prevention, education, and treatment programs of schools and community groups statewide; 5,946 films and videocassettes were circulated, 36,400 pamphlets were distributed, and 545 books and 60 chemical dependency curricula were circulated.
- New initiatives included a pilot education program through School Administrative District 6 for students in the long-term Day One treatment program, submission of recommendations on special education and chemical dependency to the commissioner with the resulting establishment of an ISG position for FY '87, the establishment of a coaches' initiative to develop prevention strategies for coaches and athletes, and ongoing work with task forces addressing potential certification for chemical health coordinators and communication issues between schools and treatment providers.
- In 1986, 98 percent of Maine's high schools participated in Project Graduation, a process whereby high school seniors are offered a chemical-free alternative to celebrate their graduation. The National Highway Traffic Safety Administration reported that in 1986 all 50 states had some degree of Project Graduation, which was initiated with one school in Maine in 1980.

Maine's School and Public Libraries

Maine has 485 public school libraries and 226 public libraries. Most school libraries are one-person operations. Although not surveyed, the number of volumes in school libraries statewide is probably around 2.5 million, according to consultant estimates. Surveys show 4.3 million volumes in public libraries. Annual circulation per capita is 6.6, which compares very well with national figures.

The Maine Regional Library System, under the direction of the Maine State Library, promotes the sharing of books and other resources among all Maine libraries. Maine is believed to be among the top 10 states in terms of interlibrary loans per capita, and probably among the top three, depending on how the figures are interpreted. Within New England, network statistics show that Maine libraries lend to each other more, and borrow outside of the region less, than is the case with any other New England state.

School libraries have joined with Maine's other library constituencies to study and work toward the implementation of an effective statewide library network based on the rapidly evolving computer products and services now offered in the national library marketplace. An Ad-Hoc statewide Library Automation Committee received and analyzed a study of Maine's situation by respected national consultant Susan Berg Epstein in January 1986, and with that study as a basis of common understanding, a realistic and step-by-step plan is emerging from the Committee's work.

Education of the Gifted and Talented

Under State permissive legislation, 7,666 students were served state-wide. This represents 3.7 percent of the approximately 10 percent of the school-age population eligible for services. It also represents an increase of 20 percent in the number of students served last year.

The majority of students served were in academic programs. Approximately 46 percent of the programs fit this category, while 44 percent of the programs served students in both the academics and the arts. The remaining 10 percent of the program served creative or artistic students.

Eighty-two school administrative units supported programs for the gifted and talented. This represents 50 percent of the school units in Maine and is a 6 percent increase over the previous year. There were three regional programs, each serving five school units.

Three state-sponsored one and two-week summer programs were available for gifted and talented secondary school students. The Maine Summer Humanities Program served 60 students, the Maine Summer Arts Program served 75 students, and the Maine Talented Youth Program served 35 students. In addition, two state-affiliated programs were held, one in science and math at the University of Maine at Orono serving 60 students, and the other at the University of Southern Maine serving 50 students in the social science area.

Special Student Membership

Educationally Disadvantaged (Chapter I)

Chapter I of the Federal Education Consolidation and Improvement Act of 1981 replaced Title I ESEA, which was designed to meet the special needs of educationally deprived children. It provides funds for supplementary programs of reading and mathematics for disadvantaged children in low-income areas; for children in institutions for the handicapped; for neglected or delinquent children; and for children of migratory agricultural workers.

In 1985-86, 175 projects provided services to approximately 20,482 students enrolled in public and private schools in Maine. Of these students, 75 percent were in grades one through six, 15 percent in grades seven through 12 and 10 percent in kindergarten.

Maine Chapter I programs in both reading and math have made a substantial impact on bringing students who were behind their classmates closer to average achievement rates. The gains exceed more than a year of growth per student average.

Maine Migrant Education

Approximately 68 school systems in Maine participated in the Maine Migrant Education Program in 1986.

There were 6,016 students identified as eligible children of migrant agricultural workers. Of that number, 2,607 were settled out migrants (their families have stopped moving from place to place to seek seasonal farm work); 1,123 were interstate migrants (moving from state to state for transient harvest work); and 640 were intrastate migrants (did not cross the state line in search of work).

General areas of occupational employment were picking potatoes, apples, blueberries, various fishery related gathering and processing, dairying and poultry processing.

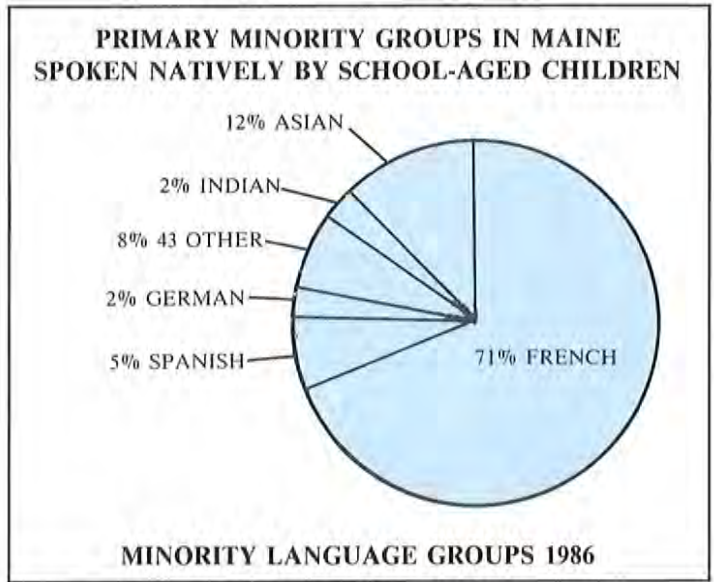
Refugee Children in Maine

The current year marks the final year of funding of the Refugee Act of 1980, which supports supplementary educational services for 321 eligible refugee children. The program is the only source of funding that 29 out of the 30 eligible school districts in Maine utilize, except for local tax support. Refugee children here longer than three years are not eligible for assistance under this program; ineligible, too, are any other limited English proficient children not designated as refugees. The total number of refugee children funded under this program since 1978 is given below.

1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
45	131	123	218	289	320	337	347	372	321

National Origin Minority Groups

Most of Maine's 42,000 minority children (1980 U.S. Census) are of French, Asian, American Indian and Spanish descent. The 6,000 of these who are natively bilingual are the primary beneficiaries of services provided under Title IV of the Civil Rights Act. Such services include on-site technical assistance for English as a Second Language as well as statewide conferences and institutes on culturally relevant curriculum development and teaching methodology.



Governor Baxter School for the Deaf

The Governor Baxter School for the Deaf was established for the purpose of providing an educational and residential program for Maine's deaf children. The school also is mandated to provide assistance to educators of hearing impaired children in Maine's public schools.

In the fall of 1985, a new organizational structure which reflects the concept of a state-wide resource model was implemented. Two major branches of operation, **Baxter School** and **Baxter Center**, were established.

Baxter School, the educational program, provides direct services to commuter and residential students.

Baxter Center provides support and evaluative services to Baxter School students and through the Outreach program provides technical assistance for hearing impaired students and their families, deaf adults, educators and other service providers throughout the state.

School Improvement

Administration, school and center staff have been involved in a cycle of short and long-range planning, goal setting, and evaluation activities in order to facilitate optimum student achievement. A broad-based collaborative planning process which includes parents and other members of the school community has been involved in school improvement activities. As a result of these efforts, five major goals were established:

1. Develop and implement a comprehensive K-12 curriculum within a total communication philosophy.
2. Be in compliance with the Maine Educational Reform Act of 1984 by its effective date of August 1988.
3. Expand the staff development program to continue school improvement efforts on a systematic and ongoing basis.
4. Provide a coordinated system of services to parents including education, counseling, support groups and recreation.
5. Work in cooperation with the Maine Department of Educational and Cultural Services, University System, professionals and parents to develop a systematic approach for providing education and support for professionals and parents of hearing impaired children in Maine.

These goals will be implemented over the next five years. A school improvement plan has been developed for the 1986-87 school year.

Baxter School

The educational program includes preschool, elementary, mid-school, and high school and services approximately 75 students at the school. More than 50 percent of these students are partially mainstreamed into Falmouth and other nearby towns. A comprehensive support service is provided for mainstream teachers and students.

The HUG Team, a substance abuse team established in 1983 with the assistance of the Division of Alcohol and Drug Education, continues to increase awareness and understanding of issues related to chemical dependency. The HEX (Health and Sex Education) Team, established in 1985, is composed of staff, parents, students and community members who are in the early stages of designing and developing a comprehensive health and family life education curriculum appropriate for hearing impaired students K-12. A classroom-based speech program continues. Computer literacy courses have expanded and are available to increased numbers of students and staff. The

pre-vocational program (computer science, career education, work study and vocational counseling) is designed for mid-school and high school students. Selected students attend Portland Regional Vocational Technical Center for more advanced vocational training.

The residential program involves about half of the school population. Programming is provided for non-commuting students, and students participating in the Independent Living Program and/or extracurricular activities.

The Independent Living Program (ILP) is a developmental, structured program designed to teach independent living skills and decision-making skills in an apartment-like setting. The program will be refined and expanded to meet the needs of all residential students. Dormitory renovations are planned to meet fire safety regulations and enhance the ILP experience.

The resource center on deafness provides library, media and captioned film services to Baxter School students and faculty while providing support to the Outreach program.

Baxter Center

In addition to providing support and evaluative services to Governor Baxter School for the Deaf students, Baxter Center has provided consultations and technical assistance to over 45 school districts and other service providers. In-service training on education of the hearing impaired has been conducted at various locations throughout the state. A pre-school consultant provides services to hearing impaired children 0-5 and their families. A public school outreach consultant joined the staff in August of 1986. An adult education program is in the initial stages of design. The parent professional resource center has established a parent advisory committee and started a newsletter.

Members of the Center's interdisciplinary team work together to provide comprehensive three-year evaluations, as mandated by P.L. 94-142, for all Baxter School students. The team also provides comprehensive four-day evaluations including speech, language (English and/or another language if appropriate), audiological, psychological, educational and occupational therapy. The evaluation is for hearing impaired children in public schools regardless of their preferred mode of communication. The team makes recommendations to the referring school districts and parents for appropriate programming needs. Approximately 20 Baxter School students and 20 outreach students were evaluated during the 1985-86 school year.

Since 1983, family learning weekends have been offered for hearing impaired students and their families from throughout Maine. Parents and their deaf and hearing children participate in educational and recreational programs designed and implemented by Governor Baxter School staff.

Education of the Handicapped

Twenty-seven thousand, nine hundred and twenty-eight handicapped students were provided Special Education and Related Services in 1985-86. This represents 12.63 percent of the total estimated 5-17 school age population in Maine.

The majority of handicapped students served were 9,916 learning disabled students. This represents 35.5 percent of all handicapped served or 4.7 percent of Maine's 5-17 school age population. Four thousand, three hundred and eighty-three or 2.0 percent of the 5-17 school age population were identified as having emotional problems.

Eighteen thousand, one hundred and forty-nine special education students were educated in *resource rooms, 2,234 in **composite classrooms, 2,789 in self-contained classrooms, 501 in ***regional day programs, 909 in hospital or home instruction and the remaining 3,246 students were educated in alternative or tutorial, private or institutional programs.

The Special Education enrollment from 1976-77 to 1985-86 increased by 4,227 students or 13.6 percent.

Number of Handicapped Students Served 1985-86

Preschool:	2,577
6-17	24,085
18-21	1,266
Total	27,928

Mentally Retarded:	4,593
Hard of Hearing:	282
Deaf:	190
Speech Impaired:	6,814
Visually Impaired:	165
Emotionally Disturbed:	4,383
Orthopedically Impaired:	436
Other Health Impaired:	422
Learning Disabled:	9,916
Deaf/Blind:	13
Multi-Handicapped:	714
Total	27,928

*Resource Room: A resource program is a special education program in which mildly to moderately handicapped children receive less than half of their academic and behavioral instruction from a teacher who is certified in one or more special education training areas.

**Composite Classroom: A composite classroom is a program where the number of students requiring self-contained and resource programs is insufficient for separate activities, a composite program may be used.

***Regional Day Program: A program for severely handicapped students operated for or by several school administrative units.

National and Maine Summary of Students Receiving Special Education and Related Services Under P. L. 94-142 and 89-313 School Year 1985-86

Ages:	Maine	National
3-5	2,577	259,483
6-17	24,085	3,661,393
18-21	1,266	192,438
Total of P.L. 94-142	26,532	4,113,312
Percent of School Age Regulation (5-17)	12.63	9.27
Total of P.L. 89-313	1,396	249,719
Percent of School Age Population (5-17)	0.66	0.56
Total of P.L. 94-142 and 89-313 Combined	27,928	4,363,031
Combined Percent of School Population Enrollment (5-17)	13.3	9.84
Percent of Handicapped	100.00	100.00

NUMBER AND CHANGE IN NUMBER OF CHILDREN AGES 3-17

Served Under P.L. 89-313 and P.L. 94-142

+ _____ Number _____ +		+ Change in Number Served +		+ Percent Changes in Number Served +		
1976-77	1981-82	1985-86	1985-86 1976-77	1985-86 1981-82	1985-86 1976-77	1985-86 1981-82
23,701	25,947	27,928	4,227	1,981	13.6	9.5

Home Study in Maine

The home-study movement in Maine has grown dramatically in the past six years as the program has become more widely utilized by parents and better understood by all.

In the summer of 1984, a task force made up of school superintendents, home schoolers and department staff developed comprehensive guidelines to augment rules established by the Commissioner.

The guidelines became effective in the 1985-86 school year.

The guidelines were developed to establish consistency from district to district and to establish a continuity from the local level to the Commissioner's office. This was needed to protect the individual's rights and to ensure the integrity of the program.

A feature of the new guidelines is the process of appeal. If a family is denied program approval at the local level, the appeal to the Commissioner is first reviewed by a state level review panel. This panel consists of three people representing home schoolers, one person representing public school administration and one representative from the MDECS.

The number of home-schooling approvals in the 1986-87 school year totalled 225.

Truancy and Dropouts

A Task Force on Truancy, Dropouts and Alternative Programs was created in August of 1985 by former Commissioner Robert E. Boose and was scheduled to issue a formal report at the end of the year in 1986.

The committee, chaired by State Rep. Merle Nelson, spearheaded the passage of legislation creating a consultant position within the Department of Educational and Cultural Services.

The consultant will work with an advisory committee to establish reliable data collection methods, implement programs at the local level and identify successful prevention models.

School Personnel Profile

Maine Educators—Fall 1985-86

Maine has 13,085 full-time equivalent teachers, of whom 8,209 (62.7 percent) are females and 4,876 (37.3 percent) are males.

Males occupy 72.2 percent of all administrative/supervisory positions.

Twenty-one point four percent (21.4 percent) of all Maine teachers have 19 years or more of teaching experience.

Forty-four percent (44 percent) of Maine teachers are between the ages of 30 and 39.

Fifty-six point one percent (56.1 percent) of Maine teachers have a Bachelor's Degree as their highest level of educational attainment.

Twenty-two point five percent (22.5 percent) of Maine teachers have a Master's Degree as their highest level of educational attainment.

**MAINE
ADMINISTRATOR/SUPERVISORY POSITIONS
BY MALE & FEMALE
FALL 1985**

Position	Number of Positions	Number of Males	% of Total Males	Number of Females	% of Total Females
Superintendent	141	135	95.7%	6	4.3%
Principals:					
Elementary	399	292	73.2%	107	26.8%
Secondary	86	83	96.5%	3	3.5%
Combined	119	93	78.2%	26	21.8%
Director of Services for Exceptional Children	105	37	35.2%	68	64.8%
Guidance Counselor	381	198	52.0%	183	48.0%
Assistant Principal	289	206	71.3%	83	28.7%
Assistant Superintendent	57	49	86.0%	8	14.0%
TOTAL	1,577	1,093	69.3%	484	30.7%

Teacher Education and Certification

Twelve institutions of higher education are preparing teachers in the State of Maine. Approximately 1,700 people obtained an initial Maine certificate during the 1985-86 school year with about two-thirds of these obtaining their first degree at a Maine college.

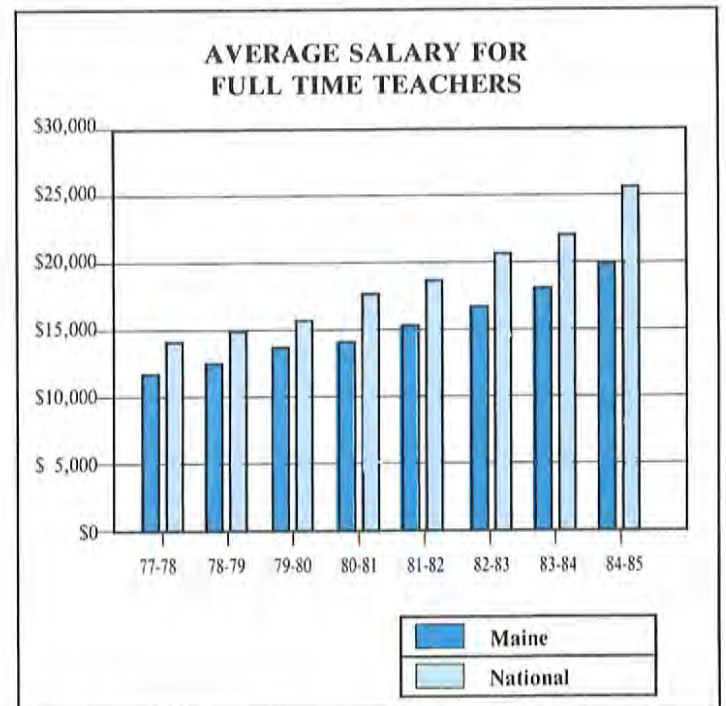
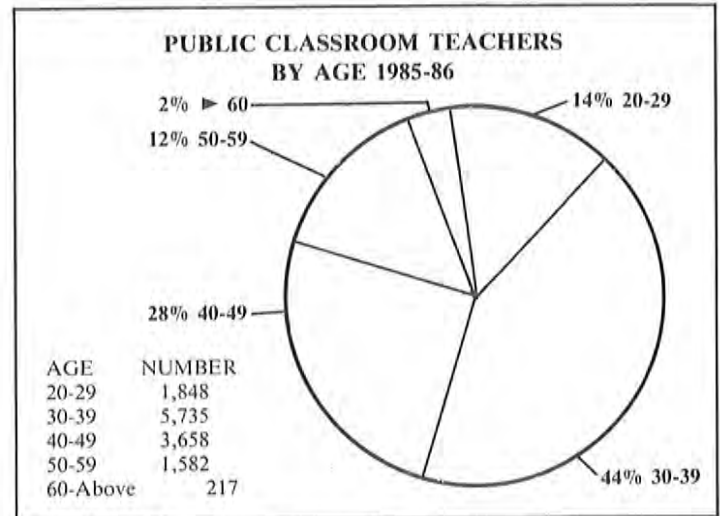
The DECS conducts program visits to each institution on a five year cycle to review the various teacher training programs to assure state standards are being met.

The number of individuals entering teacher training programs has declined over the past few years, especially in areas of math, science, business education and special education. Maine expects shortages in these areas to continue along with possible shortages in English and foreign languages until at least 1990.

For recertification, Maine teachers must earn the equivalent of six semester hours of approved course work within a five year period. These credits may be earned through approved university courses, approved in-service courses, and through individual professional growth activities approved by the MDECS. In all, approximately 7,500 educators renewed teaching credentials during the 1985-86 school year.

As the result of 1984 legislation Maine will be changing certification procedures on July 1, 1988. Maine has 20 pilot project sites to identify procedures for training and certifying master teachers and beginning teachers in preparation of the new law. The pilot projects are a collaborative process facilitating communication among teachers, principals, administrators, board of education members, university staff and MDECS personnel.

1985 legislation now requires all new teachers to complete a teacher qualifying exam in communication skills, general knowledge, and professional knowledge, in addition to regular certification standards.



Teacher Supply and Demand

The Commissioner of Educational and Cultural Services established a committee to study teacher supply and demand in August of 1986.

The committee was charged with identifying and examining critical issues relating to supply and demand and making appropriate recommendations to meet the needs of the state.

The committee is to report its findings in January of 1987 to the Commissioner.

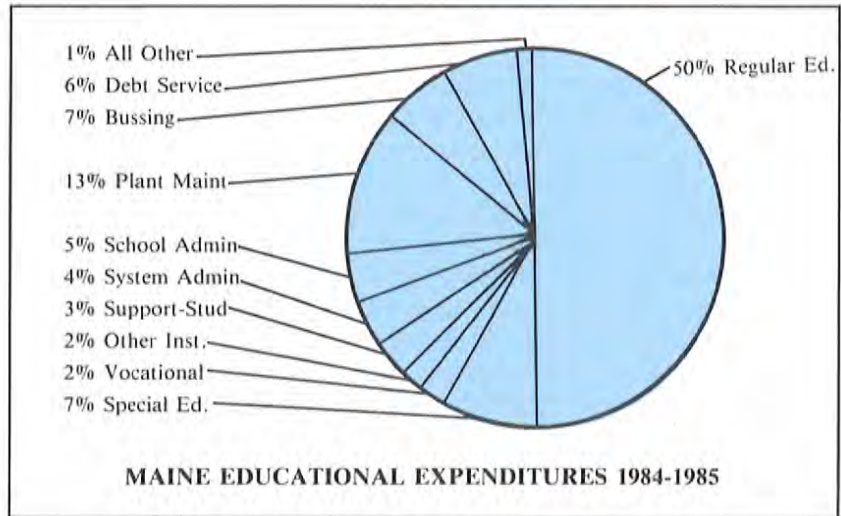
SECTION III: FINANCING K-12 PUBLIC EDUCATION IN MAINE

Local School Financing

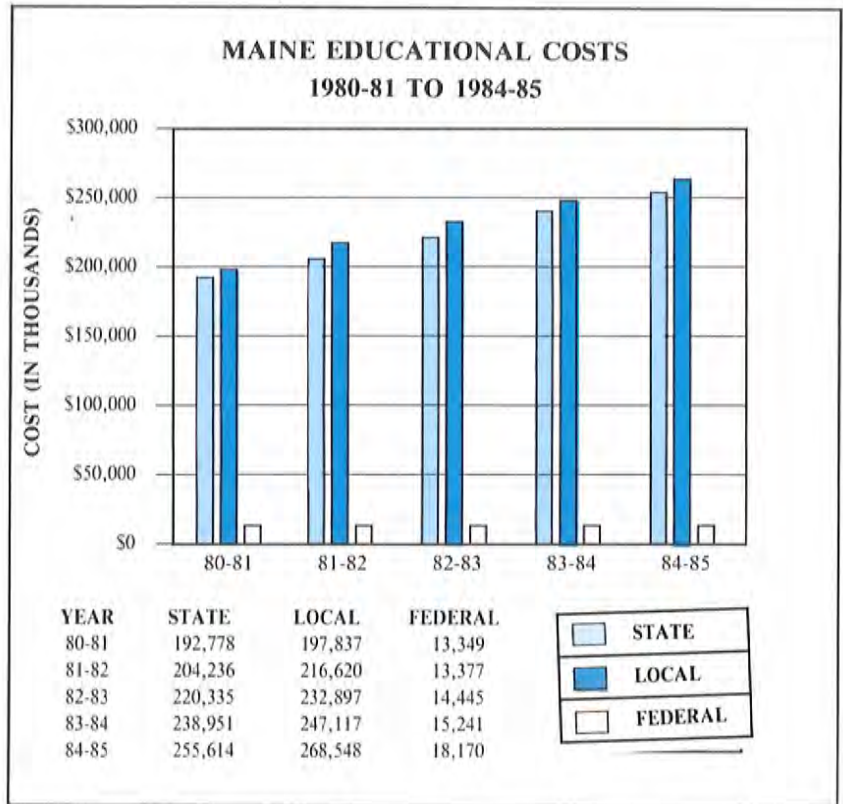
Types of Local Revenues and Expenditures

In 1984-85, educational expenditures in Maine from State, local and Federal sources totalled approximately \$524,162,610.

A breakdown of the percentages of the total for the various costs are shown in the accompanying graph.



Maine Education Costs



Special Education Services

Since the enactment of Federal Public Law 94-142, the Education of All Handicapped Children's Act, considerable progress has been made toward assuring that handicapped children and youth of Maine have a genuine opportunity to receive an education commensurate with their needs. Federal, state and local funds have increased significantly over the past 10 years. However, most of the necessary fiscal effort to provide special education and related services has come from state and local funding.

State funding, including subsidy for special education and related services, pre-school programs and gifted and talented has increased from \$12.4 million in 1981-82 to \$29.1 million in 1985-86, an increase of 136 percent.

Local funding increased from \$14.5 million in 1981-82 to \$21.0 million in 1985-86, an increase of 45 percent.

Federal funding increased from \$6.5 million in 1981-82 to \$8.4 million in 1985-86, an increase of 28 percent.

Costs for special education and related services, pre-school programs, and gifted and talented programs increased from \$33.4 million in 1981-82 to \$58.7 million in 1985-86, an increase of 94 percent.

Although costs have increased, the distribution of cost sharing has changed. In 1981-82, the State supported 37 percent of these costs while in 1985-86 the State's share rose to 50 percent. In 1981-82, the local share was 43 percent, while in 1985-86 the local share is 36 percent. In 1981-82, the Federal share equaled 20 percent of these costs while in 1985-86 the Federal share is 14 percent.

Public School Transportation

An average of 165,183 school children were transported daily on school buses to public and private schools in Maine in 1986.

Average cost per mile for the 1,859 publicly owned and 404 privately owned buses was \$1.28, an increase of six cents per mile from 1984. Miles traveled during the year totaled 27,234,708 at an average cost of \$194.22 per student.

Expenditures for school transportation totaled \$34,843,555.52 for the year. Purchases of school buses totaled \$3,999,767.56.

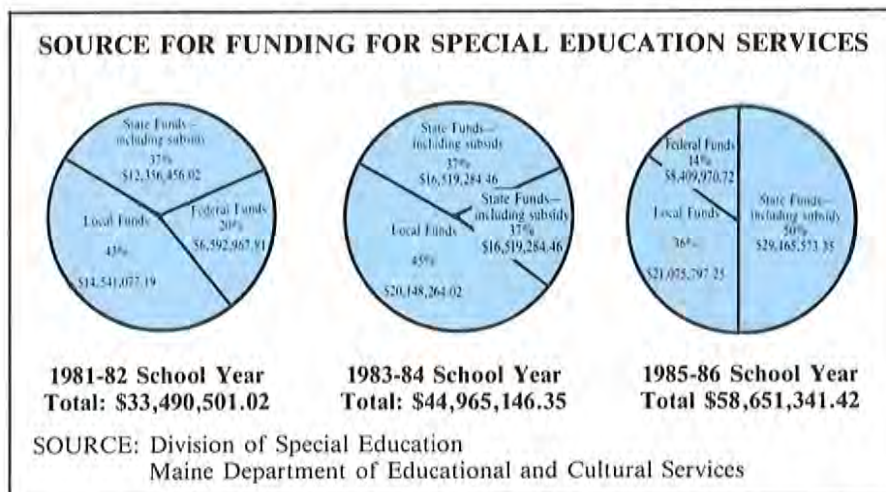
School Nutrition Programs

During the 1985-86 school year, Maine school feeding programs prepared and served 19,285,563 student meals in 723 public schools, 57 private schools and five state institutions. Reimbursement to school feeding programs during the 1985-86 school year was \$11,639,105 in Federal funds and required State matching funds of \$1,052,299.

The number of free and reduced price meals served increased 1½% to 49.5% of the total meals served to students. Schools offering breakfast programs increased 18.6% to 182 programs.

Comparing the month of April 1985 to April 1986 Maine school enrollment decreased .3% while school lunch participation increased 3.4%.

The average cost of producing a Maine school lunch for the 1985-86 school year increased 4.9% while the Federal reimbursement paid for all student meals increased 4%. The average price to a paying student in the State of Maine has not increased in the last four years.



State of Maine Education Appropriations

General Purpose Aid

The principle of Maine's school finance law is to equalize the financial effort made by the state's school districts in providing more state aid for poorer school districts and fewer state dollars for richer districts. The principle, and the formulas used to implement it, is designed to assure that the quality of education a pupil receives does not depend upon the wealth of his or her school district.

School district wealth is measured by the per pupil value of real property in each district because real property taxes are almost the only means by which districts raise funds. (All property valuations used in school funding formulas are based on figures compiled by the state and therefore, are not subject to local variations in assessing practices.)

Under the 1984 law, at least 55 percent of the total operating cost of Maine's public school system is paid by the state, with the balance coming from local districts. This does not mean, however, that each district receives 55 percent. Depending on its wealth, a district may receive nothing or it may receive up to 90 percent from the state.

Federally Funded Programs

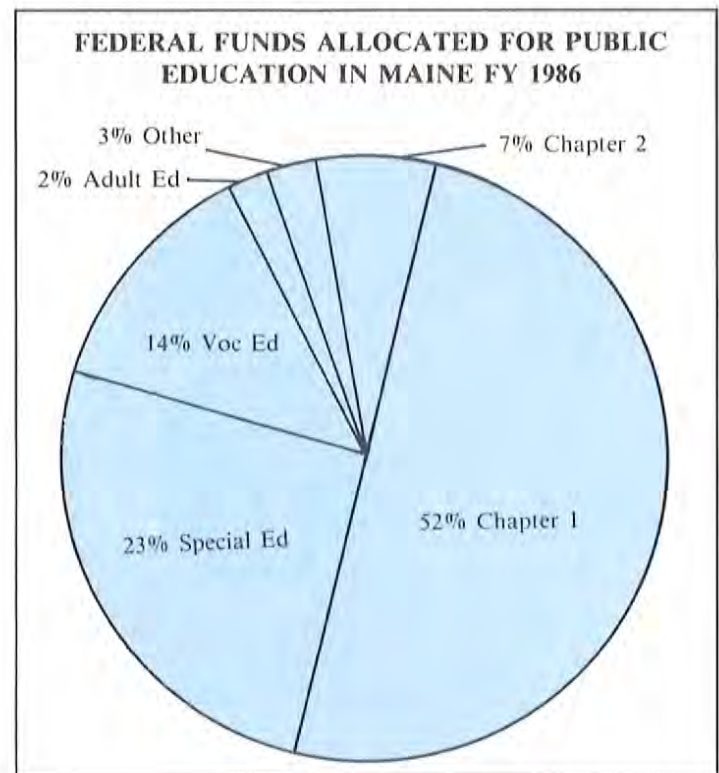
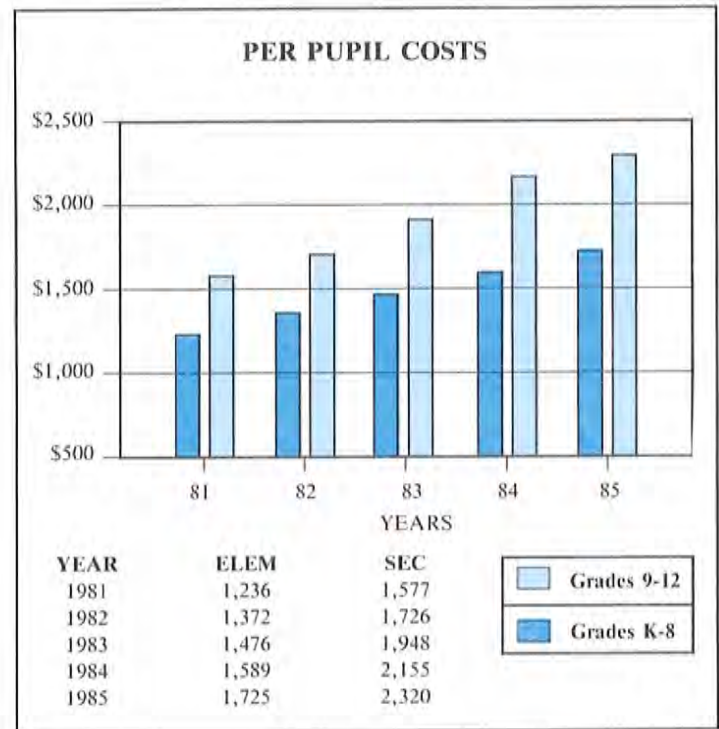
Federally funded programs administered by the Maine Department of Educational and Cultural Services are intended to supplement state and local public education efforts. Each program responds to educational needs which Congress has determined to be a national priority.

The federal contribution for public education in Maine has increased from 27.9 million in 1981 to 30.6 million in 1985.

The school price index for this time period has risen over 43 percent. While the federal contribution has increased by 11 percent, federal appropriations for the past five years have not kept up with inflation.

Federal contributions have been further reduced through the establishment of the Block Grant concept (which consolidates categorical programs) called the Education Consolidation and Improvement Act. This act allocates fewer dollars through this block grant concept than had been allocated to the individually funded categorical programs that now fall under the act.

In short, federal dollars allocated to Maine's educational efforts have declined in purchasing power.



SECTION IV: EDUCATIONAL DEVELOPMENTS AND ISSUES

The Issues

The biggest issues facing education in the next few years will be:

- How do we fund the Education Reform Act without placing an undue burden on the local property tax?
- How do we ensure an adequate supply of qualified classroom teachers, particularly in subject area shortages and in geographically-isolated parts of the State?
- How do we ensure an adequate supply of qualified administrators (superintendents, principals, vocational administrators, and special education directors)?
- How do we strengthen our undergraduate teacher training programs to be able to provide an adequate supply of teachers throughout the State, and to provide ongoing training and staff development of teachers in the field?
- How do we keep teacher salaries competitive enough to retain competent teachers and attract some of the outstanding high school graduates to the education field?
- How do we provide more flexibility in Secondary Vocational Education by encouraging more participation from the non-traditional and college preparatory students?
- How do we encourage increased use of the secondary vocational facilities to serve Maine's changing work force?
- How do we reduce the number of school dropouts while at the same time increasing the number of adults who receive high school diplomas and GED (high school equivalency) certificates?
- How do we encourage teenage girls who have children to continue their education or to return to school?
- How do we ensure that all school administrative units become involved in Alcohol and Drug Education Programs.
- How do we ensure that the decline in Federal funds for education will not adversely affect the services to the students of this State?
- How do we provide incentives and encouragement to the thousands of functionally illiterates to interest them in attending programs to improve their job skills?

These issues should not be looked at as problems without solutions, but as opportunities for local and State government officials and educators to work together for the common benefit of more than 200,000 youngsters in this State.

The road to school reform is always under construction.

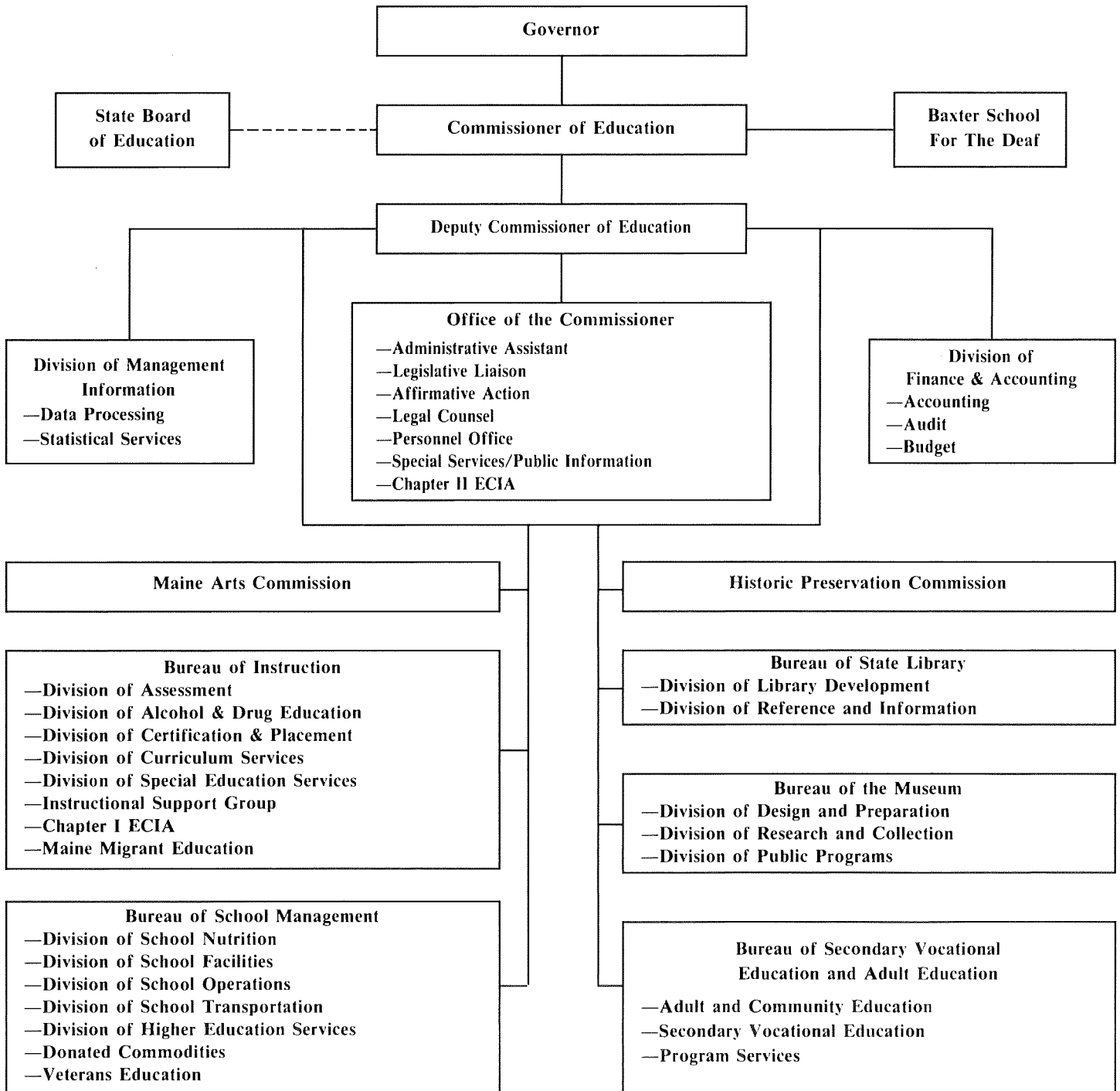
Education Reform

The Education Reform Act of 1984 and the teacher and administrator certification laws were the most comprehensive education laws enacted in Maine in the past thirty years. These laws will have a great impact on education in this State for the next ten years. It was important to get this legislation passed, but passing it was only the first step in improving education in Maine. In the next few years, we must continue to monitor the implementation of these laws and provide the funding necessary to insure their success.

The educators and legislators who worked on the passage of the Education Reform legislation were aware that there would be some additional costs to this effort. Former Commissioner Robert Eugene Boose, in his address to the Legislature on January 15, 1986, stated: "All of us knew and were openly aware that these initiatives in our reform effort would require an increasing demand for adequate funding and resources." The questions now are—how do we project what the costs will be and how do we fund them? The recurrent theme during the debate on the Reform legislation was that the cost should not fall heavily on the local property tax. Our efforts must be to provide State funds for legitimate costs attributed to educational reform while at the same time maintaining the same level of support from the local property tax.

State of Maine
DEPARTMENT OF EDUCATIONAL AND CULTURAL SERVICES
Augusta 04333

ORGANIZATIONAL CHART



TOTAL AUTHORIZED POSITIONS

Department of Educational and Cultural Services

*Total Positions Authorized by the Legislature
(Effective Date 7-01-86)

Governor Baxter School for the Deaf	122
Maine Arts Commission	9
Bureau of Historic Preservation	9
Maine State Library Bureau	61.5
State Museum Bureau (Seasonal)	32 3
Unorganized Territory	65
Commission to Study the University of Maine	<u>0</u>
	301.5
DECS Central Office Staff Positions	<u>241.5</u>
Total Positions	543

*Position Count includes general fund, federal, block grant,
and special revenue positions.

**Maine Public Schools
Annual Performance Report**

**Editing and layout by Perlestone L. Pert, Jr., Director
*Special Services/Public Information***

**Statistical content coordinated by Dale Elliot
*Division of Management Information***

**Charts and graphs prepared by Dale Elliot and Shirley McQuarrie
*Division of Management Information***

The Maine Department of Educational and Cultural Services insures equal employment, equal education opportunities, and affirmative action regardless to race, sex, color, national origin, religion, marital status, age or handicap.