

**DRAFT**

**FOR**

**STATE BOARD OF EDUCATION RECEIPT**

**SELECT PANEL REPORT**

## **PREFACE**

The Select Panel on Revisioning Education in Maine was convened by the State Board of Education pursuant to the statutory requirement under Title 20-A, 405(T), which asks the State Board of Education to develop plans "that include goals and policies for the education of children in kindergarten and grades one to twelve and that promotes services for preschool children." The members of the Panel (see Appendix A) were carefully selected on the basis of a variety of criteria: statewide representation reflective of demography and geography, people outside the traditional educational stakeholder groups, but with known interest and dedication to public education in Maine, creative, "out-of-the-box" thinkers, and individuals respected throughout the State for their proven leadership. The Panel met from the winter into the fall of 2005.

The central focus of The Select Panel's deliberations and recommendations is the improvement of student learning. The Maine Learning Results commits the State to high standards for ALL students. The Panel believes that fundamental, structural changes in a variety of areas—governance, quality of teaching and learning, time, technology, and societal attitudes--are essential to creating a learning environment that is fair for ALL students and maximizes the potential for ALL students to achieve these high standards.

This Report consciously does not address the Maine Learning Results (MLR) directly, albeit, they are central to our purpose of improving student learning. A statutory mandated review of the MLR is currently underway under the direction of the Department of Education, and its course is clear. The Select Panel is aware of its efforts, and we continue to support its goals, Guiding Principles, and high standards for all students. Further, the Panel encourages the

review to address the issue of accountability by providing authority for the State to intervene in supportive as well as appropriate directive ways in schools and districts that fail to make progress in providing desirable outcomes for students. As the expectations for student achievement increase to include all students—the great promise of the Maine learning Results—the Panel believes that it is imperative that capacity exists at all levels of the educational establishment—from the classroom to the State Department of Education—to ensure that each student, no matter what town he or she lives in, can be assured of an education that responds to the challenges that the student’s future will surely bring.

## **EXECUTIVE SUMMARY**

Maine's schools are not ready for the 21<sup>st</sup> century. In order for Maine people to flourish in the radically transformed landscape of this new century, significant, even transformative change must occur in Maine's schools.

The data is clear. Maine has one of the most expensive public school systems in the nation and yet our results measured by multiple indices are flat through recent years. We have strengths, which we must build upon, and we have weaknesses that we must address. The Select Panel Report addresses some of the root, structural changes that will be necessary to create a system that is nimble in adjusting to rapid change to insure that young people have the best learning environment possible. The Panel's central purpose throughout its work and the focus of this report are the improvement of student learning.

Changes need to occur in the **Governance and Political Organization** of the system. Several of these changes will free-up dollars that can be used to enhance learning in other ways.

The Report recommends:

- Reducing the number of SAUs to 35 from the current 286;
- Recognizing the significant increase in school construction costs per square foot per student when schools are much smaller than 350-450 students in size, and taking appropriate action to limit these costs;
- The establishments of local advisory boards to serve schools within expanded SAUs;
- Adequate alternative educational opportunities for all students who need to approach education from different, but equally rigorous, perspectives;
- An expansion of the current opportunities for school choice;
- Clear and focused definitions of school board responsibilities; and
- A single State collective bargaining agreement for all teachers.

**The Quality of Teaching and Student Learning** is dependent in large measure on the quality of instruction and leadership in the schools. The Select Panel recommends:

- Compensation levels necessary to attract well qualified teachers and pay schedules based more clearly on multiple credible indicators of performance;
- The creation of an incentive program for difficult to fill fields;
- Amendments to federal and state rules to allow people to collect social security and Maine State Retirement;
- The requirement of a Masters or National Certification within 10 years of entry into the profession; and
- The establishment of an annual leadership-training program with an emphasis on preparing school leaders as change agents.

All across the State educators complain that there is insufficient **Time** to satisfy the learning needs of many students. The Panel recommends:

- Twenty percent (20%) increase in school time, with half of that or 10% for professional development;
- An increased focus on core academic subjects as defined by the MLR;
- Flexibility within this framework to adjust to the varying needs of students; and
- Differentiated contracts including full-year contracts for teachers to respond to varied student needs.

**Technology** will be a major driver of change in the future. Today's students must understand and master technology. The Panel recommends:

- Each student from grade 5 on should have an individual wireless computer to take home from school;
- Teacher training to integrate technology into daily lesson work must be advanced; and

- An aggressive support system to enable teachers to remain current with rapidly changing new technologies.

To sustain this kind of dramatic change in the State's level of commitment to education, there must be a fundamental shift in the culture of Maine in regard to education. **Societal Attitudes** must support increased attention to education, especially postsecondary education, echoing the Compact for Higher Education, like never before in our history. All segments of our society, but most especially, government, educators, parents and students must accept responsibility for effecting this change. The Panel recommends:

- A public information campaign to underscore the importance of educational achievement;
- The establishment of a safe mutual fund education account for each child born in Maine;
- Half tuition (including the mutual fund accrument and other financial aid received) for two years of post-secondary education for students with financial need computed at the Community College average. The half-tuition award will continue for students seeking teacher certification who commit to teach for three years in a Maine school;
- The elimination of tracking as critical to the attainment of the MLR by all students; and
- Ensuring that all students enter kindergarten "ready to learn."

This agenda represents a beginning for Maine to move its educational system into the 21<sup>st</sup> century to serve today's and tomorrow's students.

## **INTRODUCTION**

Our schools are not ready for the 21<sup>st</sup> century. And, if our schools are not ready for the challenges and opportunities ahead, then our children cannot be. And, if our children are not ready, then they—and we—are destined to fall further behind.

A generation ago personal computers and fax machines were an oddity, cell phones did not exist, AIDS was virtually unknown and “global warming” not part of our vocabulary. International affairs were dominated by the Cold War; China, still engulfed in Mao’s Cultural Revolution, had neither automobiles nor bathrooms; we knew India only for her poverty; and the idea of 9/11 was unfathomable. Deoxyribonucleic Acid (DNA) was largely a laboratory curiosity and various medical advances from transplant surgery to anti-cholesterol drugs unavailable. Although the U.S. led the world in higher education access, still only a minority of its citizens went on to college. Maine still depended on a manufacturing and resource based economy. In short, the reality of the revolution in biotechnology, information technology and the emergence of a global market economy still lay ahead.

The changes we have witnessed in the last 30 years will probably be dwarfed by the changes our children will face over the next 30 years. No one can precisely predict what those changes might be. Will they mean that almost any job can be filled any place on the globe? Will it mean that almost everyone will require continuing education and training beyond high school? Will a cascade of discoveries in biology, genetics, and nanotechnology transform societies, cultures, and life itself? Will a global economy coupled with chemical and biological tools of war necessitate new forms of governance, citizenship, and divisions of world resources and power? We cannot really know.

But, we do know that the certainty of rapid and unparalleled change, driven by increasingly powerful discoveries in science and technology and upheavals in social and political structures, will pose immense challenges for what we understand as school and schooling as well as for the students who emerge from those schools. The evidence around us would suggest that models we have inherited from the past will be inadequate for the challenges we face. Maine's schools are the eighth most expensive in the nation with declining student numbers; too many young people are not meeting reasonable standards of competence. Maine's record for college going is beginning to lag other countries. The State still ties school schedules to an agricultural economy and very local agendas. Maine does not support teachers to reasonable expectations of professional development. Maine does not learn from the many things in education that we are doing well, and it has not yet learned how to make necessary fundamental changes to our education system.

We also know that while the world around us has changed rapidly, the world of schools has changed alarmingly little. Created on an agrarian calendar for an industrial society, the schools we know then are for a different time and a different culture.

We can build on the strengths we have in Maine. For example, the "Guiding Principles" that Maine adopted as part of its Learning Results define well the broad skills and capacities that will be indispensable for this new world (see Appendix B). But, we will need to be far more resourceful, bold, and creative if we are to fulfill those worthy ambitions for schools and schooling in Maine. This Report of the Select Panel on Revisioning Education in Maine is a first important step in reinventing schooling for the 21<sup>st</sup> Century. The implementation of this Report, as well as further ideas, proposals, and actions will need to follow.

## **VISION: A GLIMPSE OF THE FUTURE:**

ALL Maine students need to leave the educational system ready to compete with their counterparts across the globe for their place in the rapidly evolving global economy. The economic future of the whole state depends on their ability to do so. New high school graduates go on to post-secondary education and find rewarding work locally in the global economy. As a result, the median income in Maine rises to the midpoint of the New England states, the number of good paying jobs increases and poverty in Maine decreases.

Maine's PK-12 education system is organized in fewer, more cost effective districts with school and class sizes that meet the national norms for cost and student learning effectiveness. Students have more choices in schools and in alternative educational opportunities.

Schools attract well-qualified teachers. Teachers have contracts of differentiated length, including full-year contracts, and compensation is competitive in the market and based more clearly on multiple, credible measures of performance. Many teachers have appropriate master's degrees and/or are nationally certified. They participate regularly in leadership seminars. Education outcomes improve, reflecting increased teacher capacity in content and pedagogy.

The school year is significantly longer allowing more time for academics and for teacher development. Time is more flexible and oriented to the needs of children and teachers.

Students and teachers integrate technology into their learning, teaching, and lives. All students access technology in and out of the classroom and are creative in their use of it.

The entire statewide community supports and understands the importance of quality education, not only for the students and their future, but also for the community's own economic and social health. Young people enter school ready to learn and high school graduates are

supported in postsecondary education. Education is the primary driver of Maine's successful participation in the 21<sup>st</sup> century. (See Appendix C for vignettes exemplifying this vision).

## **WHAT THE DATA TELLS US:**

### **WHY FUNDAMENTAL CHANGE IS NECESSARY NOW**

Maine is not a wealthy State. It has been generous to education and must continue to be so in the future, but it must seek more efficient ways to deliver high-quality education with improved student learning. As a matter of fundamental fairness that focus on quality cannot be compromised, and the data below suggests that while we have real strengths, we need to pay careful attention in the future to ways, which raise student performance for ALL students to world-class standards.

#### **Structural Change: Governance and Political Organization**

Maine's educational structure and governance is complex to say the least. There are 286 School Administrative Units (SAU) with six different types of administrative systems:

- School administrative districts or SADs;
- Municipal units otherwise know as cities and towns;
- Unions;
- Community school districts or CSDs;
- Agents – towns under school agent supervision; and
- Education in the Unorganized Territories (EUT)

These school units oversee 689 separate public schools responsible for approximately 204,000 students. As Philip Trostel and Catherine Reilly point out in their recent study, this means that the average school in 2000-2001 had 290 students in comparison to the national

average of 506. They also note that there were 734 students on average per district compared to a national average of 3,177. Maine's K-12 public school system has one (1) FTE educator per 6.2 students--second lowest among the 50 states, and our administrator to student ratio places us among the lowest as well. In 2000-2001 Maine had one administrator per 393 students; the national average was one per 816. Maine has one principal and one assistant principal for every 230 students; nationally the ratio was one principal and assistant principal for every 333 students. Trostel and Reilly examined data on operating costs per student in Maine's school districts from 1998-99 to 2002-03. These data suggest that the unrealized economies of scale in Maine's public education system are \$270 million per year (almost 20% of the total cost). In other words, public education in Maine costs roughly \$270 million more than it would if all school districts were operated at the cost-minimizing enrollment size. Geographic considerations and transformation costs would mean that Maine would not realize a complete saving of \$270,000,000, but the Trostel and Reilly study gives a sense of the magnitude of resources that could be captured and redirected to other student learning needs identified in this report.

We simply must address the cumbersome inefficiency that diverts resources from student learning. This is particularly true when we recognize that the per capita income of Maine citizens is \$30,566, which places us 24th in the nation while Maine is 8<sup>th</sup> in the nation in per student subsidy.

### **Data: Structural Change: The Quality of Student Learning**

Maine is in a strong position to foster significant change. We have clear strengths, and yet there is a growing body of data that suggests that we must improve by building on our strengths and address our weaknesses in order to enhance student learning and prepare young

people for the 21<sup>st</sup> century.

### **Student Performance**

The national comparative data on student performance nationally as measured by the National Assessment of Educational Performance (NAEP) has been comparatively strong for Maine. The results on a scale of 0-500 with most state scores in the low 200's by grade for mathematics and reading for three years of available data are:

<b>Grade 4</b>	<b>2003</b>		<b>2000</b>		<b>1996</b>	
	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>
Mathematics	238	234	230	224	232	222

<b>Grade 4</b>	<b>2003</b>		<b>2002</b>		<b>1998</b>	
	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>
Reading	224	216	225	217	225	213

<b>Grade 8</b>	<b>2003</b>		<b>2000</b>		<b>1996</b>	
	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>
Mathematics	282	276	281	272	284	271

<b>Grade 8</b>	<b>2003</b>		<b>2002</b>		<b>1998</b>	
	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>	<b>State</b>	<b>National</b>
Reading	268	261	270	263	271	261

While the Panel takes note of some stagnation in results and recognizes that our student population is relatively homogenous (absent significant numbers of minorities), nevertheless, our State's performance on the NAEP exams is an indication of strength and should give us confidence as we move forward.

The results of the Maine Educational Assessments (MEA) continue to cause concern.

The data on the “Does not meet” and “Partially meets” standards are as follows for the last three available years in math and reading:

11TH GRADE

	2003-2004		2002-2003		2001-2002	
	Math	Reading	Math	Reading	Math	Reading
Partially Meets	41%	43%	40%	43%	43%	39%
Does Not Meet	34%	9%	41%	10%	38%	8%

8TH GRADE

	2003-2004		2002-2003		2001-2002	
	Math	Reading	Math	Reading	Math	Reading
Partially Meets	46%	50%	50%	43%	39%	44%
Does Not Meet	32%	13%	32%	12%	40%	12%

4TH GRADE

	2003-2004		2002-2003		2001-2002	
	Math	Reading	Math	Reading	Math	Reading
Partially Meets	48%	42%	43%	40%	49%	42%
Does Not Meet	20%	7%	28%	11%	29%	10%

Clearly, in spite of some progress, the panel is troubled that such a large portion of Maine’s students continues to score in these unacceptable categories. This is especially important since Maine has mandated by law to that ALL students meet the high standards of the Maine Learning Results.

Another disturbing indicator is the number of students who enter the University and

Community College systems and require remedial work before they can begin accumulating credit toward a degree. In 2002, 28% of U.S. freshman entering postsecondary education were recorded as taking at least one remedial course (42% at public two-year institutions, 20% at public four-year institutions, and 12% at private four-year institutions.) In Maine, the Department of Education reports that approximately 50% of students entering the community college system and the University of Maine System must take remedial work in literacy.

### **Global Comparisons of Student Performance**

What all of us must recognize, however, is that in this global economy where national boundaries are far less meaningful than in the past, we must pay attention to the performance of Maine children in comparison to other nations. According to the Trends in International Mathematics and Science (TIMSS) Study, the United States fares poorly in this international comparative context. Although above the average, the U.S. has slipped to 20<sup>th</sup> out of 45 nations in eighth grade mathematics. In the Program for International Student Assessment (PISA) of 15 year olds in industrial nations, the U.S. scored 24 out of 29 countries in mathematical literacy. Many of the countries achieving ahead of the U.S.A. have longer school years and provide greater time for professional development for teachers.

### **Teachers**

Teacher quality is an area of historic strength, but here also there is a need for improvement in the future. For example, 6,196 teachers in Maine have a Master's Degree. The number of teachers who have achieved National Certification is on the rise and has reached almost 73. We are moving in the right direction, and we should continue to build on this base.

Professor David Silvernail’s MEPRI study of high performing schools showed a distinctive positive correlation between faculty with advanced work and student achievement.

The correlation between teacher preparation and student performance is corroborated in national research on student performance. Ronald Ferguson’s 1991 study *“Paying for Public Education: New Evidence on How and Why Money Matters”* concluded:

“What the evidence suggests most strongly is that teacher quality matters and should be a major focus of efforts to upgrade the quality of schooling. Skilled teachers are the most critical of all schooling inputs.”

A 1997 study by the National Commission on Teaching and America’s Future found that 43% of student gains in mathematics from grade three to grade five were the result of teacher quality.

Teacher compensation must be a major focus area for successful recruitment and retention of quality teachers in the future. Yet, the extent of local responsibility for school funding means that economically struggling communities, where education offers a ladder out of poverty, are often unable to afford to hire the most experienced and qualified teachers. The most recent data on average faculty salaries shows that Maine stands 35<sup>th</sup> in the nation--down from 28 a few years ago. The ranking among New England states is as follows:

<b>State</b>	<b>Average Salary</b>	<b>Rank</b>
<b>National Average</b>	\$45,726	
Maine	\$38,864	35 <sup>th</sup>
Connecticut	\$57,337	2 <sup>nd</sup>
Massachusetts	\$53,076	7 <sup>th</sup>
Rhode Island	\$52,261	9 <sup>th</sup>
New Hampshire	\$42,689	25 <sup>th</sup>
Vermont	\$42,007	27 <sup>th</sup>

Related to this data is the disturbing fact that Maine is ranked 47<sup>th</sup> in the nation in beginning teacher salaries. There is also a great deal of disparity in compensation across the

State. Last year starting salaries ranged from \$20,750 to \$33,000. The range for a B.A. teacher at the top of the salary schedule was from \$32,050 to \$57,150. After ten years of teaching with a Bachelor's degree the range is \$28,750 to \$48,850. These disparities do not speak well for equity and fairness for both teachers and students.

Further, the teaching force is aging. The average age is 44. The number of retirements in the coming years will be significant. That makes it critical for Maine's compensation for teachers to be sufficient to attract high quality educators to the teaching force.

### **Data: Structural Change: Time**

The most telling data on time is the international comparison of student time in the classroom (see Appendix D). For example,

- “U.S. eight grade students instructional time is both longer and more compressed because it takes place within a school year of approximately 180 days as compared to 188 in Germany and 220 in Japan.” (U.S. – 143 hours, Germany - 114 hours, Japan - 117 hours in mathematics).
- For science: the U.S. – 140 hours, Germany - 136 hours and Japan – 90 hours. (1996) *Pursuing Excellence*. Office of Educational Research and Improvement, U.S. Department of Education.

There is also a correlation between high performing countries and the length of instructional time. In a study done in 1999 based on the TIMSS data, the high performing countries of Japan, Korea, and Singapore reported an average number of instructional days of 200 a year at both 4<sup>th</sup> and 8<sup>th</sup> grades. (Michael Martin, et. al., *The School Contexts for Learning and Instruction*). Indeed, all the countries that performed better than the U.S., except for Hong Kong, Singapore, and Belgium had longer school years ranging from 188 days to 225 days. Only two (2) of the thirteen nations in the TIMSS math and science study had fewer days in

schools than Americans. On average, students in participating countries had 193 school days compared to only 180 in America.

It was also pretty clear that students outside the U.S. spent more time out of school doing studies. In Singapore, 59% of eighth graders spent more than three hours on homework, while only 22% of Americans reported that they did

Similarly, on the national stage, Maine has among the shortest school years of any state. Only eight states have 175 days (Maine's minimum) or fewer as the minimum for student instruction. Thirty-two states have 180 or more.

### **Data: Technology**

In 2004 The Great Maine Schools Project studied Piscataquis Community High School, which had provided students grades 9-12 with a one-to-one computing beginning in 2002. The results were quite positive in a number of realms as follows:

- Computer Skills and Access to Resources:
  - 52% of students reported that their computer skills advanced;
  - Majorities of students used the computer for daily work, homework and e-mailing students and teachers;
  - 96% of teachers reported that their programs were enhanced;
  - 74% of parents reported that their child had greater access to educational resources.
- Student Motivation and Interest:
  - 79% of students indicated they were more motivated to do their school work;
  - Daily attendance improved by 7 points;
  - Teachers and parents report improved student engagement.
- Quality of Work and Student Achievement

- 71% of students agree that laptops improved the quality of their school work;
- 64% of teachers report improvement in the quality of student work;
- 42% of parents agree that the quality of their child’s work has improved.
- Classroom Practice:
  - Near majorities of teachers and students report they rely less on textbooks;
  - A majority of students report that they “explore a topic more on their own,” “write more than one page,” and “present their work in class;”

Finally, in the Piscataquis Community High School study, 86% of teachers report that they can provide more personalized instruction, about half of the teachers report increased rigor, and most importantly, a majority of teachers reported that at-risk and low-achieving students performed better.

In another school, a Career and Technology Education (CTE) center in central Maine, there were dramatic reductions in discipline issues (a half-dozen a year) as compared with the schools that send these students to the CTE center, and there were about 55% of graduates who matriculated to post-secondary school. Approximately 80% of students graduating from this school were employed in the regional area in their secondary school concentration.

**Data: Societal Attitudes Toward Learning**

Societies with greater numbers of college graduates tend to assign a greater value to post secondary education. Maine is at the bottom of the New England states in that regard in part because of a relative lack of jobs that require college degrees and in part because fewer Maine students persist in college.. The most recent data is as follows:

<b>State</b>	<b>Percent with Bachelor's Degree or Higher</b>
Massachusetts	37.6%
New Hampshire	34.0%
Connecticut	33.5%
Vermont	31.3%
Rhode Island	27.6%
United States	27.2%
Maine	23.7%

It is no coincidence that equally important and related data shows Maine as second to last on the numbers of secondary school graduates who enter postsecondary education.

<b>State</b>	<b>Percent High School Graduates Who Enroll in a Degree-granting Institution</b>
Maine	50%
Connecticut	63%
Massachusetts	65%
New Hampshire	58%
Rhode Island	54%
Vermont	45%

The data on return on educational investment for individuals and for the State is astounding. It is estimated that the annual average salary of a high school graduate will be \$27,915; the figure for a person with an Associate's degree is \$35,958; and the person with a Bachelor's degree earns \$51,206. These figures underscore the importance of postsecondary education to the quality of individual lives and the future economic viability of the State.

## **RECOMMENDATIONS**

### **Structural Reform: Governance and Political Organization**

Maine cannot afford the educational infrastructure currently in place. As noted, there are 286 SAUs administered by 152 superintendents and there are 45% more principals per student than the national average. Maine has 33% more educational employees than the national average. Maine has twice the number of school district officials per student than the average. Common sense tells us that administrative costs do not rise in proportion to increases in students, but are clearly more closely related to the number of administrative units—not their size. All of this suggests that we have an enormously cumbersome and inefficient system, the product of historical circumstance and geographic limitations of an earlier time. Maine does not have a rational system designed to streamline the effective delivery of services to improve student learning. There is an enormous cost to taxpayers that drains resources from the classrooms where they could positively impact student learning. The structures simply must change if we are to move forward.

The Select Panel believes that the recommendations that follow will begin to capture significant savings that can be redirected to classrooms across Maine to fund many of the changes for improved student learning advanced in this Report.

### **Goals for Government/Political Organization**

- 1. Create an efficient educational system—one with a more streamlined structure but still allows for local voice and connection;**
- 2. Bring administrator-to-student ratios more in line with national averages; and**

**3. Take a hard look at school size and reduce cost per square foot per student in school construction.**

1. STATE LEVEL:

A. Consistent with much of existing State law, SAU school boards will have responsibility for educational policy, the school district budget, and the employment of the Superintendent. Other governance and personnel matters will be within the purview of the Superintendent. In addition to the Superintendent and School Board for each school administrative unit (SAU) there will be “Local Advisory Boards” that will work with community or neighborhood schools to ensure local input and voice in these expanded districts.

B. In order to ensure greater equity across the State and to reduce the enormous amount of duplicative time, energy, and resources spent in contract negotiations with significant costs, there will be one State collective bargaining agreement for all teachers and school personnel in Maine. It will be negotiated by a team composed of representatives from DOE, the State’s superintendents and school boards, with teacher representatives from across the State. Unfair compensation inequities across the State can best be addressed by a single contract.

2. DISTRICT LEVEL: The number of SAUs will be reduced dramatically from the current 286 to coincide roughly and fairly with the thirty-five Senate Districts in the State, resulting in districts of roughly equal size, but still smaller than the largest district in the State currently.

3. SCHOOL LEVEL:

A. The State will move as rapidly as possible over time to minimum standards for school size—c.a. 350 students for schools that are not secondary schools and 450 students for high schools. Recent state and national studies show that per student per square foot construction costs for schools smaller than this skyrocket (See Appendix D). Exceptions should be made for isolated small schools and geographic areas where bus rides would be excessive. National and state studies show that there is not consistent correlation between school size and student performance, but some research supports learning environments structured in the size range recommended above as desirable for student achievement. In addition, "schools within schools" and other personalizing strategies should be established to ensure that each student has a sustainable relationship with a group of teachers—where students are known as individuals. The point is to move from tiny schools to small learning communities across the State.

B. All SAUs should be organized so that they provide adequate alternative educational programs to assist students in meeting the Maine Learning Results.

4. SCHOOL AND STUDENT LEVEL: The current "school choice" option administered

through "superintendent agreements" will be administered by the DOE and requests to attend another school will not be unreasonably denied by either the sending district or the receiving district as long as space is available. For students who move to a school outside their SAU will be funded at the state tuition rate by the sending district. Funding for special education students is the responsibility of the State. Students would have unfettered choice as between public schools within their districts, provided the parents would be responsible for arranging any additional transportation that might be necessary.

### **Structural Reform: Quality for Teaching and Student Learning**

As noted earlier, the research shows conclusively that the single most important variable in determining student performance is the quality and effectiveness of the teacher. This is more important than ever because of the high standards of the Maine Learning Results and the state's commitment that ALL students will achieve them. Leadership is also documented in the literature as critical to high performing schools. Hence, The Select Panel makes recommendations in these two areas forcefully.

Maine students have benefited from a high quality teaching force over the years. However, there are a large number of "baby boomer" retirements on the horizon, and we need to be sure that we have the best-qualified teachers possible in Maine schools. This is a challenge in a rural state with varying local resources. The Panel believes that the teaching profession must undergo a significant transformation in Maine that moves aggressively to professionalize the practice and the contexts that surround teaching.

### **Goals for Quality of Teaching and Learning**

- 1. Teaching must be conducted in an environment of both individual and shared accountability for results;**
- 2. Teachers must demonstrate individual responsibility for their own ongoing career development and enhancement of skills;**
- 3. The structure by which compensation for teachers is determined must reflect**

**both the need to differentiate roles within the profession and the market forces of the broader economy;**

- 4. The process by which teachers are inducted into and supported in the early years of their career must include extensive support from mentors and/or coaches; and**
- 5. The practice of teaching must be influenced by and evaluated on the basis of research.**

The Panel believes that the realization of these goals will encourage more of the best young people to consider careers in public education and remain in the profession.

### **Policy Recommendation for the Quality of Teaching and Learning**

1. The level of compensation for Maine teachers is a major impediment to attracting and retaining superior teachers. Of equal concern is a compensation structure that treats all teachers the same rather than rewarding teachers on the basis of performance as measured in part by student learning and the nature of responsibilities. A successful effort to address current inappropriate compensation structures will require fundamental attitudinal and organizational changes. The needed resources required by these changes will in large measure come from using current education resources more effectively and from savings generated by changes recommended elsewhere in this Report.
  - A. Within eight years beginning teacher compensation levels will attract well-qualified teachers, and pay schedules will to be more clearly aligned with performance. A "Maine Performance Based Program" must be developed that depends heavily on student learning and a credible, transparent evaluation system. The program should allow high performing teachers to advance financially at a faster pace than is currently the case. Two to five pilot systems should be operative within three years. Differences in pay should reflect not only success in improving student performance but also different responsibilities (teacher leader, e.g.) as defined by a career ladder model such as the Milken Model (See Appendix E).
  - B. To attract and retain teachers in difficult to fill fields (math, science, foreign language, special education, etc.) Maine needs to develop a financial incentive program and consider differential pay for these areas in order to make them competitive with other opportunities in these fields. In addition, Maine should consider the creation of a pilot Math/Science Teacher Corps and a Foreign Language Teacher Corps to serve schools throughout Maine in developing curriculum and pedagogical best practice, delivering instruction through distance learning and working in the schools in a direct way. If evaluations show this approach effective and efficient, similar teacher corps should be

developed in other difficult to fill fields.

2. In order to attract good candidates who are interested in making mid-career changes to the educational ranks, retirement system statutes must change to allow new teachers entering the profession to collect both social security, if they are eligible, and Maine State Retirement benefits.

A challenge in the future will be to continually grow the capacity of educators to meet the rapidly changing demands of the 21st century. To that end, The Panel recommends that all teachers must achieve a Master's degree in pedagogy or content discipline within 10 years of entering the profession or achieve National Certification. The cost (computed at the UMS rate) for courses taken for the Master's will be borne 25 percent by the educator with the balance borne equally by the School Administrative Unit (SAU) and the State. The State will assume the costs associated with achieving National Certification.

Next to teacher capacity, the quality of leadership is a constant factor for high performing schools. Particularly important is the capacity of leaders to serve as change agents in the school environment. The Select Panel recommends that:

- The DOE and The UMS offer annual leadership training institutes for teachers and administrators. The Institutes will focus on the skills of change agency, strategic planning, and the necessary background in organizational, human resource and financial management to meet the challenges of the future. Each Institute cohort will gather periodically in the year subsequent to the summer program to do follow-up work on real leadership issues facing schools in Maine. Educational administrators (principals and superintendents) must participate in the Institute every five years as a condition of recertification.

### **Structural Change: Time**

Many of Maine's students need more time to learn. Some students need less. Time must be restructured to be more flexible to address variable student needs and to allow greater emphasis on core academic subjects. It is more than a decade since the release of the national

study, *"Prisoners of Time."* That document called for a revolution in the way in which time functions as a variable in the educational arena. Simply put, it asserted that student learning and teacher needs should determine how time is structured rather than time or schedule dictating the limits in which student and teacher needs must fit.

This Report identifies time, both the amount of time and the flexibility of its use, as one of the basic structural variables that must be addressed for effective education in the 21st century. The changes recommended are fundamental and they respond to what we know from research about student learning. All recognize that schools are asked to accomplish much more than they did even 10 or 20 years ago, let alone a century or more past. Research tells us that good, solid teaching requires reflection and continuous learning. And, we know that children learn in different ways and at different rates. The Panel's recommendations are designed to address these realities for teaching and learning in the 21st century.

### **Goals for Time**

- 1. Increase time for Learning and teacher preparation, reflection, collaboration and professional development;**
- 2. Increase focus within that learning time on core subjects for students; and**
- 3. Increase flexibility for when and where students learn.**

The panel recommends the following policy changes in this area:

1. Many students and teachers need more time to accomplish the expanded goals of public schools. In order to deal with this time crunch while at the same time recognizing that this recommendation advances "outside parameters" within which flexibility to address student needs must be the final arbiter of school time, the Select Panel recommends a general increase of 20% in school time, half of which is for professional development for all educators. This should be phased in over a reasonable period of time. In addition, the Panel recommends:
  - A. The norm for the student's school day should allow for variability dictated by individual student needs and should be primarily dedicated to core academic subjects connected to

the Maine learning results. In addition, each day should include up to one hour for teacher reflection, collaboration and embedded professional development.

- B. The school year should expand over time until it reaches the point where there is sufficient time for all students to meet the Maine Learning Results. The calendar should include additional time for professional development for teachers and administrators.
  - C. Teacher contracts will be up to a full year with the option for differentiated contract lengths to correspond with student needs and teacher responsibilities with appropriate vacation time.
2. The school day and year must gain more flexibility. For example, Maine needs to move toward the abandonment of rigid adherence to grade spans and seat time. Students should be able to progress through the Maine Learning Results at different paces. Some students will need a longer day; others will need a shorter day. Some students will need a longer year; others will find 175 days or less more than sufficient. Some will need enrichment programs and/or early college. Others will need tutorial support. The point is student learning needs should determine the time structures.

## **Technology**

Technology is already arguably the principal driver of economic progress in the 21st century. It will become more so.

Maine made a significant step into the world of technology and learning with the laptop program for middle school children three years ago. Initial research shows that this has had a significant positive impact on our middle schools. Students are more engaged and responsible for their own learning. Efforts have been made to extend the initiative to high school students with very uneven success. Properly configured and fully integrated into student learning, technology can change what we mean by school and schooling. Not only can it transform the classroom, but also it opens up the possibility of greater student independence in learning away from the traditional confines of the school, online, in “virtual” learning situations. If Maine and its citizens are to be competitive in the 21<sup>st</sup> century global economy, then ALL students must be prepared for the world of technology. Recent research demonstrates that all students benefit

from their use of technology to improve learning—and that this benefit is most keenly realized by students who are not thriving in their traditional school settings.

The Select Panel is fully convinced that failure to fully integrate technology into the framework of 21st century education will condemn our young people to lives of compromised quality. It is important to emphasize that “fully integrate” means moving well beyond the “down the hall once a week” concept of technology as an adjunct to learning to the use of technology as an integral part of every day learning.

### **Goals for Technology:**

- 1. Increase student access to technology;**
- 2. Integrate technology into teaching and learning; and**
- 3. Increase teacher training in the use of technology—and do so on an ongoing basis to ensure we maintain expertise in the face of rapid change.**

The Select Panel makes the following recommendation in the area of technology:

1. Each student today must have an individual wireless computer starting at fifth grade that they may take home everyday and have for use at home during vacations.
2. All teachers must receive continuous training on the use of the computer and other new, emerging technologies in schools and on different models of effective integration into the daily work in the classroom. This training should be an integral part of teacher preparation, certification, and recertification. In order to support this important initiative, the State must provide effective professional development.

### **Societal Attitudes Toward Learning: The Case for Postsecondary Education**

The challenges and opportunities before Maine at this juncture are so significant and foundational that a successful response will require a concerted and collegial effort by all the stakeholders--policymakers, state and local administrators, the Legislature, the Governor's

Office, parents, teachers, and students. For effective engagement of these diverse groups there must be a shift that recognizes now more than ever that the key to quality individual lives and a robust Maine economy is a profoundly transformed educational system. The measures recommended in this report point the initial direction of that effort. The political will needed to enact such a transformation must come from Maine's people. That will cannot be driven by politicians alone rather it must be summoned by leaders capable of showing our citizens a realistic vision of a successful future for our children and a path to that vision.

Maine has the lowest percentage of citizens with baccalaureate degrees of any state in New England. That distinction cannot stand. The days when a high school diploma was the key to successful employment with a reasonable income are long past. We simply must graduate high school students ready for college. At least then they will have a choice--one that makes a huge difference. It is the \$1,000,000 choice--the estimated average earning difference over a lifetime between a holder of a high school diploma and the recipient of a college degree. We must take bold steps at this time to insure that all Maine kids who wish to pursue postsecondary degrees have an opportunity to do so if they are qualified. The Select Panel views this as a must for young people to have a chance to lead productive, successful lives. To aim to have all graduates be "college ready" and fail to make it possible for as many of the qualified students who wish to attend postsecondary programs is a wasteful exercise in rhetoric. We must act at this time to provide the support necessary for students to pursue their educations beyond high school. This is consistent with the goals of the Compact for Higher Education in Maine, whose goals and objectives have the full endorsement of the Select Panel (See Appendix F).

To achieve this higher level expectation for all of Maine's children, there must be a broad and pervasive change in societal attitudes to support and value the notion that education is

fundamentally important, achievement in school is respected and honored, and that each child should progress to the highest educational level of which they are capable.

**Goals for Shift in Societal Attitudes Towards Learning:**

- 1. Create a shared commitment among students, parents, educators community and policymakers to graduate every student ready for college, work, and citizenship;**
- 2. Make the necessary changes in structures and practices in our schools to ensure that all students graduate with this level of readiness; and**
- 3. Address the affordability gap—both perceptual and real.**

The Select Panel’s recommendations are designed to “jump start” this cultural change.

1. Emulating some of the successful strategies of the smoking cessation campaign in Maine and the nation, the State will develop a carefully constructed multimedia public information program that underlines the importance of educational achievement and the assumption that postsecondary education is the norm.
2. The State of Maine will open a safe mutual fund education account with an initial contribution of \$200 for every child born in Maine, redeemable as a Maine resident for payment for postsecondary education leading to an Associate’s or Bachelor’s degree.
3. All graduates of an accredited secondary school who are admitted to a postsecondary institution that offers an Associate's or Bachelor's degree will receive half tuition for two years computed at the average tuition of the Community College System if they demonstrate financial need. The total financial aid package will include the return on the mutual fund investment when appropriate as well as other forms of financial aid received by the candidate.
4. Eradicate “tracking” of students and move as rapidly as possible to a curriculum for all students that include four years of math, science, English, and social studies (history, economics, psychology, sociology, etc.).

## **CONCLUSION**

This report ends where it began: Our schools are not ready for the 21<sup>st</sup> century. The world our young people will inhabit will be dramatically different from the current one. While we cannot discern what it will be in detail, this much is clear; it will be a world where new knowledge and skills are essential to a satisfying, productive life. Failure to provide Maine's young people with these essential skills and knowledge for the 21<sup>st</sup> century destines them—and us—to fail. In other words, it will be a world where education is more important than at any time in our history—more important than when we enacted the G.I. Bill or when we mobilized to respond to Sputnik! We literally cannot afford to fail at this task.

The Select Panel believes the recommendations we bring forth address some of the major foundational issues necessary to improving student learning in the 21<sup>st</sup> Century. The whole focus of the changes we advance is the improvement of student learning for ALL students – that is the central driving force of this work. Implementation of these recommendations will be positively transformative for student learning.

Maine must continue to be generous in support of education, but it must also be more efficient in spending the taxpayer's money. We can no longer continue to support an irrational, inefficient infrastructure, which draws resources from direct impact on improving student learning. Change of this nature is difficult, but the Select Panel believes its recommendations in this area are crucial to the learning of Maine's students in the 21<sup>st</sup> Century. Savings realized through the changes advanced in this area can be funneled directly to support other initiatives in this Report designed to improve student learning.

The single most important factor in student learning is the quality of the teacher. The

Select Panel makes fundamental recommendations about compensation, contract length, and professional development. To be successful in the 21<sup>st</sup> Century our children need the best teachers possible. The Panel's recommendations seek to "professionalize" teachers, pay them adequately based on performance, and support their continued learning. The Panel believes it is past time for teachers to join the other professions, e.g., physicians and lawyers, where performance matters, where a calendar year commitment is the norm, and where respect is expected.

We must be smart and flexible about how we manage student time. We must recognize that 175 instructional days are not sufficient for many students. An agrarian calendar developed when much less was expected of public schools no longer suffices. Student learning should drive student and faculty time, requiring an abandonment of rigid schedules developed exclusively around grade spans.

While the Select Panel cannot define the future in detail, this Report is based on the fact that technology in multiple forms will be a part of the landscape Maine students will live and work in. The Select Panel urges Maine to be robust in its implementation of technology as a fundamental reality of student learning for ALL kids. The Panel's recommendations put us on the path to achieve that goal, but Maine will continually need to refine and adjust its approach to this area.

Finally, to repeat, the Select Panel believes that a successful response to the challenge of improving student learning for ALL Maine students will require a shift in societal attitudes. Maine must build on its exemplary tradition of support for public schools by becoming a "Learning State," which values education as the *sine qua non* of productive and rewarding citizenship in the global community. The Panel's recommendations are designed to jump start

this cultural transformation by insuring that students begin schools “ready to learn” and leave high school “college ready” with the means to pursue post-secondary education.

The Select Panel’s recommendations are foundational and transformational. They are interrelated. For example, the structural governance and organizational changes will generate significant resources to support many of the initiatives recommended for teachers and technology. Taken together the Panel believes that its recommendations will place Maine in a position to improve student learning dramatically and make Maine schools—and Maine people--ready for the 21<sup>st</sup> century.

## **REFERENCES**

- Barker, Michael and Michael Fullan, *Tri-Level Development, Putting Systems Thinking into Action*
- Colgin, Charles *Maine Demographics and School Enrollment Data, Presentation to the Education Committee*, March 7, 2005.
- Center for American Progress and Institute for America's Future *Renewing Our Schools, Securing Our Future: A National Task Force on Public Education*. 2005
- Committee on School Governance, *School Governance A Vital Factor in Student Achievement*.
- Cross, Christopher T. and Milt Goldberg *Time is a Resource We Still Haven't Figured Out How to Use Wisely. Prisoners of Time*. Education Commission of the States at [www.ecs.org](http://www.ecs.org)
- Dagell, Willard *America's Most Successful High Schools – What Makes Them Work*.  
Department of Education at [www.state.me.us/education](http://www.state.me.us/education)
- Ferguson, Ronald *Paying for Public Education: New Evidence on How and Why Money Matters*. Harvard Journal of Legislation, Summer 1991.
- Great Maine Schools Project *One to One Laptops in a High School Environment Piscataquis Community High School Study Final Report*. 2004
- Hanshek, Erick A. *Education and the Economy, Our School Performance Matters*.
- K-12 Education Recruitment and Retention Commission *Quality Educators: The Best Opportunity for Maine Children*.
- Koldrie, Ted *Creating the Capacity for Change*.
- Maine Children's Alliance *Maine Kids Count 2005 Data Book*.
- Maine Compact for Higher Education *Indicators of Higher Education Attainment in Maine*, August 2005.
- Maine Compact for Higher Education *Greater Expectations, College as a Right and Responsibility for all Maine People*. College for ME. May 2004.
- Maine Department of Education *Maine Recommendations for Core Indicators of School Readiness, 2004*.
- Maine Education Policy Research Institute *Legislative Districts Education Report 2005*.

Maine Education Policy Research Institute *The Condition of K-12 Public Education in Maine* 2005. January 2005

National Commission on Teaching and America's Future *Doing What Matters*. 1997

National Council on Teacher Quality *Increasing the Odds: How Good Policies Can Yield Better Teachers*.

National Commission on Time and Learning *Prisoners of Time*.

North Carolina State Board of Education *Building on Success for Superior Schools*.

Olson, Lynn *Calls for Revamping High Schools Intensively*. Education Week. January 26, 2005.

Report of the School Administrative Study Group. January 2004.

Schmidt, William H. *A Mile Wide, An Inch Deep*. Natural Selection. Winter 2005.

Silvernail, David L. *Exploratory Analysis of School Size, Performance and Expenditures in Maine*. March 2005.

Silvernail, David L. *Some Observations About Higher Performing Maine School Districts*. April 2003.

Task Force on Increasing Efficiency and Equity in the Use of K-12 Education Resources. January 20, 2004.

### TIMMS Study

Trostel, Philip and Catherine Reilly *Improving Educational Resource Allocation in Maine*. February 2005.

Tucker, Marc *Educating the Workforce that Employers Wants*. Wealth Management. 4<sup>th</sup> Quarter, 2004.

*Virtual Schooling Gets Real*. Scholastic Administrator. May 2005.

# APPENDIX A

## SELECT PANEL ON REVISIONING EDUCATION IN MAINE

### MEMBERS

Sandra Bernstein

Jean Gulliver

Weston Bonney

Seymour Papert

Yellow Light Breen

Pam Plumb

Jim Carignan

Colleen Quint

David Flanagan

James Tierney

Susan Gendron

Michael Wilhelm

Sherry Gould

Robert Woodbury

### IN SUPPORT

**Anita Bernhardt**

**Patrick Phillips**

**Rhonda Casey**

## **APPENDIX B**

(Excerpted from the Maine Learning Results Document)

### Guiding Principles

The building blocks for successful and fulfilled adulthood in the 21<sup>st</sup> century

Designed and Created by  
Sarah Simmonds  
Maine Department of Education

#### **Each Maine student must leave school as:**

##### **1. *A CLEAR AND EFFECTIVE COMMUNICATOR***

1. uses oral, written, visual, artistic, and technological modes of expression;
2. reads, listens to and interprets messages from multiple sources; and
3. uses English and at least one other language.

##### **2. *A SELF-DIRECTED AND LIFE-LONG LEARNER***

1. creates career and education plans that reflect personal goals, interests and skills, and available resources;
2. demonstrates the capacity to undertake independent study; and
3. finds and uses information from libraries, electronic data bases, and other resources.

##### **3. *A CREATIVE AND PRACTICAL PROBLEM SOLVER***

1. observes situations objectively to clearly and accurately define problems;
2. frames questions and designs data collection and analysis strategies from all disciplines to answer those questions;
3. identifies patterns, trends, and relationships that apply to solutions to problems; and
4. generates a variety of solutions, builds a case for the best response, and critically evaluates its effectiveness of this response.

##### **4. *A RESPONSIBLE AND INVOLVED CITIZEN***

1. recognizes the power of personal participation to affect the community and demonstrates participation skills;

2. understands the importance of accepting responsibility for personal decisions and actions;
3. knows the means of achieving personal and community health and well-being; and
4. recognizes and understands the diverse nature of society.

**5. *A COLLABORATIVE AND QUALITY WORKER***

1. knows the structure and functions of the labor market;
2. assesses individual interests, aptitudes, skills, and values in relation to demands of the workplace; and
3. demonstrates reliability, flexibility, and concern for quality.

**6. *AN INTEGRATIVE AND INFORMED THINKER***

1. applies knowledge and skills in and across English language arts, visual and performing arts, foreign languages, health and physical education, mathematics, science, social studies, and career preparation; and
2. comprehends relationships among different modes of thought and methods associated with the traditional disciplines

## **APPENDIX C**

### **Vignettes of the Future Vision**

In order to provide greater understanding of the spectrum of existing and possible classroom settings that can and should be developed better to serve a greater portion of the student body of Maine the following vignettes provide examples of changes in and alternatives to traditional high schools that:

- Create on site support for programs that allow students in traditional high school programs to access real world applications of the knowledge and skills they are learning and to ensure that students in applied learning settings with meaningful links to important theoretical knowledge and skills.
- Connect our schools from grade 5 on to online resources that meet the individual learning needs required to meet and exceed the standards of the MLR using schedules that are flexible and overcoming obstacles related to geographic isolation or local financial pressures.
- Create school settings that step outside of school walls and provide highly engaging, motivating settings for the acquisition of meaningful content.

### **Linking Career and Technical Education Centers and Traditional High Schools:**

Students from a variety of academic backgrounds sit in pairs puzzling over solutions to CAD designs problems in Lewiston Regional Technical Center. It makes no difference whether they are honors students seeking applied pre-engineering experiences or students from local high schools seeking real life contexts for traditional school learning, they are all busy trying to apply advanced mathematical understanding to a two dimensional problem to produce a three dimensional piece of plastic that will be their solution.

### **Access to Technology for Advanced and Remedial Instruction:**

A senior in a small community in Northern Maine sits at her computer at 10:30 on a Wednesday morning. She is just completing the morning session of her online course in physics before she leaves for her local high school for the rest of her academic programming. This online option provides her with access to learning that her local community could not otherwise provide due to limited enrollments. Two hundred miles away in Southern Maine another student leaves an ATM room where he has just finished his morning class in Japanese. The course is offered by an instructor at a central Maine high school. At Lewiston Regional Technical Center a student sits down to a computer terminal to work on developing basic competency in algebra, a course he previously failed. Unlike more traditional classes the program adjusts itself to the student's knowledge base, focusing only on those skills the student does not have. He can take the course before heading to the culinary arts center where he is assisting in the preparation of a luncheon for visiting Department of Education representatives and members from the Museum of Science in Boston.

### **New Conceptions of Secondary Learning:**

A high school student collects samples of water from a small pond in California. She takes the samples back to a laboratory where she analyzes the results and sorts through the information. Her demonstration of learning will be to communicate her understanding of the local industrial impacts on the aquifer. One hundred students in Portland, Maine collaborate with their teachers to identify community projects they will participate in during the first year of an expeditionary learning project. Their learning projects will connect them to individuals and resources globally.

As we advocate for all students to receive instruction focused on rigorous standards and insist that they demonstrate their proficiency it becomes increasingly clear that the opportunities we offer to students must be increasingly flexible to achieve this result. These vignettes challenge our current common assumptions about school structures and suggest that:

- school leaders must reach beyond thinking about individualization of instruction within classrooms to thinking about new contexts for delivery of instruction
- Technology will be an external driver, providing schools with a range of options to offer greater flexibility
- Learning must be more meaningful and authentic. Students of the future, and their parents, will demand a greater hand in designing experiences that have greater personal meaning and are connected to authentic societal issues. Howe and Strauss make note of this trend in their book, *Millennials Rising*, on the generation of students just beginning to graduate from our schools. Wilhelm's research on adolescent males further reminds us that our success with this group rests on our willingness to structure learning experiences with greater application and more meaningful relationship to life experiences.
- Timelines for learning will be more flexible and learning will be connected to resources and individuals throughout the globe.

Each of the vignettes above exists in a school in Maine or elsewhere in the United States. Today, being a part of these learning situations makes students a part of exceptional learning experiences. As we strive to assist all students in achieving high standards for learning our schools will be pressed to rethink our understanding of school structures to make exceptional learning contexts such as these the norm available to all students.

## *APPENDIX D*

Jim has the document to be inserted here.

## ***APPENDIX E***

Need electronic copy of An Analysis of Construction of Small Schools vs. Larger Schools

Prepared by An Ad Hock Committee of the Office of School Facilities Services

## ***APPENDIX F***

Excerpted from <http://www.mff.org/tap>

### **Research Support for the Teacher Advancement Program (TAP) of the Milken Family Foundation**

#### **TAP Principle #1: Multiple Career Paths**

- In the management field, Barrier (1996) finds a positive relationship between employee motivation and their ability to advance within their career. The consensus in this research is that employees who have opportunities for career advancement are motivated to improve the quality of their work.
- A review of educational research on career ladder programs suggests that career advancement programs must choose fiscal and work opportunity incentives to create a total package that appeals to teachers; further, career paths should focus on job enlargement with opportunities such as long term professional growth, teacher involvement in school decisions, involvement of senior teachers in induction of new teachers and the development of relatively permanent promotions to encourage career planning by teachers (Murphy and Hart, 1986).
- Further, research indicates that a successful career path program must have the following characteristics (Hawley, 1985):
  - The economic rewards for high performance must be significant;
  - Teachers should continuously demonstrate high performance in order to retain their advanced level of status and pay;
  - The standards by which teachers are measured should be clear;
  - Assessment must be viewed by the teachers as being fair;
  - Evaluation and feedback should be frequent;
  - Differences in compensation should lead to differences in roles and responsibilities; and
  - Teachers should be involved in the design and implementation of the plan.
- Work by Elmore (2000) on the concept of distributed leadership suggests that successful leadership is characterized by collective responsibility and sharing of knowledge and roles.

- A challenge of this paradigm shift is how to construct an orderly system for people to conduct their business that incorporates a new way of thinking about and doing their job.
- Further, these activities need to be put into a context and structure that leads to large-scale reform, rather than reinforcing what currently exists.
- These challenges guided us to develop a school structure that creates a change in how individuals within the school interact. And with this paradigm shift are incentives, both financial and in terms of professional support, that encourage a change in the traditional context of schooling

## ***APPENDIX G***

Excerpted Maine Compact for Higher Education *Greater Expectations, College as a Right and Responsibility for all Maine People. College for ME. May 2004.*

### **Executive Summary:**

**Fifty years ago**, about one-half of the jobs in Maine were in the manufacturing sector. A Maine resident with a high school diploma could earn a decent living at a paper mill or a textile factory. Good on-the-job training was often available. No college was needed. But, those jobs have all but disappeared.

The new jobs of the Knowledge Economy—office jobs, education and health care jobs and technology jobs—require problem-solving and interpersonal skills. What manufacturing jobs remain will likely be in “high-performance” workplaces where the latest technology takes care of rote, manual tasks, and frontline workers are responsible for making critical decisions on the shop floor. These jobs increasingly require college degrees.

Yet six of every 10 Maine ninth-graders will veer off the road to college—and off the road to the American Dream. With every child who fails to earn a college degree, another bit of Maine’s economic future is lost. And that’s not all. People who graduate from college not only get better jobs, earn more money, and pay more taxes than those with high school diplomas. They’re also more likely to vote, more likely to do volunteer work, more likely to serve on civic boards, and better prepared to understand the increasingly complex fiscal, educational and environmental questions facing local communities from Jackman to York.

For a half century, America has viewed completing high school as the minimum education accomplishment. Today, Maine faces the opportunity—and the imperative—to raise this bar. Maine’s future requires that we make college attainment as ubiquitous as high school attainment is today. The Compact’s Action Plan includes five strategies to begin moving Maine toward that goal:

#### **1. Create *Maine’s Promise Scholarship Program* to ensure that no Maine student is denied a college education for financial reasons.**

The **Maine’s Promise Scholarship Program** will eliminate *all* unmet need and *all* student loans for students from low-income households who go to college in Maine. Under this initiative, eligible students will still receive any available form of public and private merit-based and need-based financial aid (including tuition waivers, grants, scholarships, and Federal Work-Study). The **Maine’s Promise Scholarship Program** will fully cover any educational costs that remain after accounting for these other sources of student aid. And the scholarship program will be available to fill this “gap” for four consecutive years as long as students continue to meet the eligibility requirements.

**2. Create the *Maine Early College Initiative* to encourage students to continue their education beyond high school.**

The **Maine Early College Initiative** will enable every Maine high school to develop a program offering students a spectrum of early college experiences. These early college experiences may range from Advanced Placement (AP) classes to single courses at a local community college or university to opportunities to graduate from high school with significant college credit—in some cases, a full year of credit or even an associate degree.

**3. Introduce the *Maine College Transition Initiative* to help adults earn degrees.**

The **Maine College Transition Initiative** will establish high-quality, cost-effective, and accessible pathways to postsecondary education for adults. The initiative is designed to ensure that adults who are committed to earning a college degree, but have not completed high school or are academically under prepared for college work, get the support they need to earn high school diplomas and succeed in college. The **Maine College Transition Initiative** will help adults who are studying to earn high school diplomas to transition to college. It will provide preparatory support to adults who have a high school diploma but are not academically prepared to take college courses. And it will provide counseling, mentoring and support services to enable these adults to successfully transition to college and earn degrees.

**4. Establish the *College for ME Employer Initiative* to help employers support the education of their workforce.**

The **College for ME Employer Initiative** will provide Maine’s public and private employers with technical assistance, training and statewide recognition for forward-looking workforce education policies. The Compact will also advocate a simple state tax credit that reimburses employers for 50% of what they pay to help employees pursue college degree programs. The **College for ME Employer Initiative** will provide Maine employers with information, training and technical assistance delivered regionally and on site. This technical assistance could include help conducting audits of existing practices, setting five-year goals, increasing employee participation in tuition assistance programs and connecting increased educational attainment to workplace advancement.

**5. Launch a comprehensive *College for ME Campaign* to change public perceptions of higher education and behaviors toward going to college.**

The **College for ME Campaign** will use various media and partnerships to raise awareness of college opportunities, to change prevailing attitudes about the value of college education and ultimately to increase the number of Maine people earning college degrees. **College for ME** messages will reach across Maine through television, radio, newspaper and the Internet. **College for ME** will be visible in schools, communities, and businesses throughout the state. In time, **College for ME** will create a shared vision of college as the **Right and Responsibility** of all Maine residents.