

Quality Education Model

2000





December 2000

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Quality Education Commission

Dear Governor Kitzhaber and Superintendent Bunn:

You gave the Quality Education Commission a very daunting task – review, critique, validate, refine and revise the Oregon Quality Education Model (OQEM). Your eleven-member commission has spent the past year doing just that.

Elementary and secondary education is the foundation of a healthy society. Well educated youth are better prepared for post-secondary schools and for work, are much less likely to be involved in crime, and, as adults, pay more attention to their physical health and contribute more to their communities. All state and local government services benefit from strong, comprehensive public education. We have an opportunity to actually do something about “primary prevention” for many of society's ills by focusing resources early on the education of our youth. The recommendations contained in this report can move the state forward in its quest for a continued, enriched, high-livability status. And – save money down the road in many other state services!

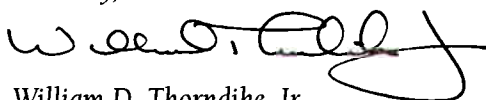
We believe developing a link between funding and student achievement is critical to Oregon K-12 public education improvement and accountability. We also believe providing a true quality education for our students is essential for Oregon. For a decade our state has enjoyed a favorable and robust economy. For Oregon to remain in its leading position among states we must assure that students are truly ready for the world they enter after high school graduation. We can not uniformly do that now for all our schools with conviction.

What is being proposed? For decades state decision makers have simply looked at the school budget as one which gets a percentage increase but little scrutiny. That day has now gone! You and the legislature have a tool in this report, the QEM – 2000, that has been credibly developed. It is a performance-based, funding decision model, founded on best research practices and tested against what teachers and principals know will work. It focuses on *all* children and it begins the process of building a true system of accountability that goes two ways ... how schools utilize the resources they have and how decision makers provide the resources that are needed.

Oregonians can be proud that with current school funding at the top of the second quartile (14th) we produce students who excel – Oregon Department of Education assessment data show we are getting a payback from our focus on rigorous state standards and from our investment for all kids to meet or exceed those standards. Nonetheless, the commission points to areas for progress and the need for all schools to improve in reducing the disproportionately lower performance of students of color and those from low income homes.

Are we doing well? Yes, the Commission believes Oregon schools are doing an exceptional job with the resources provided. Can we do better? The Commission is convinced we must do so if we are to become measurably the best system of schools in the country and the world.

Sincerely,



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Quality Education Commission

Transmittal Letter from Commission Chair and Vice Chair

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PREFACE

This report examines the quality of education that is required if we are to improve our children's lives and prepare them to maintain and increase the livability of their state.

Our basic conclusions are: education is fundamental to a robust economy, a healthy and involved electorate, a satisfied and fulfilled people. Our public schools are the cornerstone of the education system and deserve resources that assure their best efforts. We should connect our funding to schools' achievement, resources to state goals.

We need a concerted, focused effort that recognizes:

the importance of a comprehensive education;

the criticality of core academics; and

the need for continuous improvement of teaching, management, delivery and feedback.

This will only happen when all the community decides together that we will make public education our highest enduring priority.

The Commission recognizes the many needs of the state and its agencies. It does not have a diminished view of any of the state's services. It believes, however, that K-12 education is essential to keeping young people out of trouble, to instilling a sense of community and belonging, to establishing habits of good health and good citizenship, to maintaining and upgrading the economic well-being of the state as a whole and to assuring our children's and our own future.

Executive Summary

Chapter 1

A. INTRODUCTION

For decades state decision makers have built their school budget by calculating a simple percentage increase coupled with projected growth in student enrollment but have been able to give little scrutiny to the educational results of that funding.

Beginning in 1991 the State assumed major responsibility for funding K-12 schools and set high quality goals – the Certificates of Initial and Advanced Mastery (CIM and CAM) standards – for students to achieve, ***but state policymakers have not had an adequate tool to help establish the reasonable costs of providing a quality education necessary for Oregon’s children to meet those standards.***

In June of 1999 the Legislative Council on the Oregon Quality Education Model, formed by Speaker of the House Lynn Lundquist, published a report outlining a possible approach to determining the costs of providing a quality education necessary for Oregon’s children to meet the state’s high academic standards.¹ That approach, the Quality Education Model, was the first attempt in Oregon to establish a link, based on detailed cost information and current educational research, between the level of resources the state is devoting to schools and the student outcomes that can reasonably be expected.

Development of the Quality Education Model was an ambitious effort, and the Model was quickly recognized for its potential as a valuable policy tool. The Legislative Council stressed, however, that the model was a work in progress and it would require continued development, refinement, and updating if it was to remain a useful tool for policymakers in establishing education budgets and as a guide to evaluating how well Oregon’s schools are performing given the level of resources the state provides.

In October of 1999 Governor John Kitzhaber and Superintendent of Public Instruction Stan Bunn jointly appointed the Quality Education Commission to continue the development and refinement of the Quality Education Model. The charge to the Commission was to validate and refine the Model based on input from educators, business leaders, education policy experts, the public, and others, and to make recommendations regarding model development based on research, data, public input, and experience. This report is the culmination of the past year’s work by the Quality Education Commission.

B. SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

Based on a thorough review of the Quality Education Model, the Quality Education Commission made the following findings:

The model is conceptually sound in its approach to determining the costs of providing a quality education for Oregon’s students. The Quality Education Model is based on prototype schools designed to meet Oregon’s high standards and provide a quality education for each student. According to Management Analysis & Planning, Inc. (MAP), consultants to the Commission, “The Quality Education Model represents an excellent effort to identify and cost the essential elements of an adequate education.”

The level of resources recommended in the model is consistent with adequacy models in other states. MAP consultants found that the Oregon model, also referred to as an “adequacy model,” is consistent with other states’ efforts to determine adequate levels of funding to reach specified levels of performance. The components in the prototype schools are based on research and best practices. They are designed to provide opportunities for each student to reach high levels of

¹ Legislative Council on The Quality Education Model, Oregon Legislative Assembly, *The Oregon Quality Education Model: Relating Funding and Performance*, June 1999

achievement in all core subjects. The Model does not, and should not, prescribe programs to local schools. It is designed to be a flexible tool that can accommodate changes in the structure of prototype schools over time.

The Quality Education Model can estimate statewide school costs with reasonable accuracy. The Commission found that the Quality Education Model, based on the prototype schools approach, provides a reliable method for estimating reasonable education costs at a statewide level. Specifically, by using the baseline school characteristics, we derive costs per student that scale reasonably well to actual, state expenditures. Consequently, the Model represents a policy tool that can be used to evaluate the funding impacts of specific policy proposals. By inputting costs on each component of the prototype schools, the Model enables policymakers to identify and evaluate important tradeoffs in the costs of providing educational services to Oregon's children.

Based on these findings, the Commission concludes that ***the Quality Education Model represents an effective tool for policymakers to estimate the costs of providing a high-quality education to Oregon students and to evaluate the tradeoffs inherent in making policy decisions in an environment of limited resources.***

The Commission wants to stress, however, that the Model is not a substitute for local decision-making about how resources are best used to meet student needs. ***While the Model provides detailed information on the resources needed to operate schools for high performance, it does not prescribe how individual districts and schools should use those resources. Those decisions are best made locally.***

The Quality Education Model, like all models, requires ongoing adjustment and refinement if it is to adapt to changing conditions and remain an effective policy tool. For that reason, the Commission recommends that the state:

Increase the accuracy of salary and benefits estimates. For the largest cost component in the prototype schools—teacher salaries and benefits—the Commission spent considerable effort in verifying the accuracy of the available data and in developing an estimation and forecasting model that can provide accurate estimates of current and future teacher costs. The Oregon Department of Education (ODE) should continue to work on improving the accuracy of the salary and benefits data and on understanding the factors that influence changes in salaries and benefits over time.

Modify the components in the original prototype schools to reflect effective, research-based practices and add flexibility to the examples of resource use. The Commission addressed issues of time – time needed for direct instruction, to attend to retooling teaching and administration skills, to plan, and to provide for special needs students. The Commission made changes addressing the provision of a safe and orderly learning environment. There are adjustments to resources available for maintaining and enhancing teacher and administrator competence. There is a focus on resources for technology services and equipment, a recommendation for a different way to provide state funds for low-incidence, high-cost special education students and for strengthening the services of "inclusion" programs. Finally, the Commission continues to note CAM standards and assessment are not fully addressed. The Commission had concerns about achievement in the high school grades and recommends a review of the high school organization and delivery structure.

Make adjustments to improve the precision of the Model. The Commission identified several areas for improvement and made changes to costing methods, components, and calculations. Specifically, the model now includes funding for substitute teachers, maintenance costs were adjusted to more accurately reflect current costs, centralized special education services were adjusted up by 10 percent, and funding was provided for central curriculum and assessment.

Include the costs of services provided by Education Service Districts in the prototype schools by 2003-05. The role of Education Service Districts (ESDs) is to add value to education through the provision of regional services. These services may include, but not be limited to, state mandated services, information and technology, staff development, curriculum, special education, alternative education, library and media service and other services requested by constituent local districts. Services provided to school districts by Education Service Districts were excluded from the original model because: 1) *Per-student funding varies widely among ESDs; and, 2) ESDs have not uniformly accounted for costs of services provided to each school district.* The Commission recommends that ESD services be incorporated into the prototype schools once the roles of ESDs are better defined by the ESD Task force (September, 2000) and more progress has been made to address the funding disparity among ESDs. When adding ESDs to the Model, the services can be allocated as central costs within the prototype schools.

Keep the Model easy to understand and simple to use. One of the strengths of the Quality Education Model is that it is relatively easy to understand and can clearly demonstrate the impact that changes in state funding levels have on school programs as well as estimate the funding requirements of proposed new programs. As the Model evolves, it will be important to avoid complexity. The Model has been enhanced with clearer explanations and better documentation of data sources and assumptions.

THE COMMISSION'S CHARGE

1. Written Charge (Also see Appendix A)

The Governor and State Superintendent of Public Instruction charged the Quality Education Commission with:

- a) *Identifying key issues to address in further validating and refining the Quality Education Model;*
- b) *Soliciting input from educators, education policy experts, and others about the elements of the model;*
- c) *Soliciting public input regarding educational priorities for use in developing the model;*
- d) *Making recommendations regarding model development based on research, data, public input, and experience; and*
- e) *Communicating with stakeholders regarding model development.*

2. Commission Actions

The Commission determined the tasks leading to accomplishment of the charge would require that they:

- Establish what are the "Quality Goals" of education;
- Compare and contrast the model to other state-level school finance reform efforts aimed at addressing adequacy issues in the context of student performance;
- Identify characteristics and assumptions (both tangible and intangible) that should be included in the model to address variances in student learning;
- Review cost elements and components of the prototype schools to determine any omissions or needed revisions;
- Examine sources of cost information and methods of calculation and recommend methodologies to improve accuracy of cost estimates;
- Review costs explicitly excluded by the model and comment on how they might be addressed; and
- Prepare a report that describes a Quality Education Model for use by the Governor, State Superintendent and other state policymakers.

D. *The Quality Education Model*

The tool decision-makers need is now credibly developed. The model is the Oregon Quality Education Model–2000. It is a model in two respects:

1. *The Model as a tool. It is a framework for analyzing policy, a tool that can be used by decision-makers for the development of educational budgets.*

Decision-makers can make a variety of assumptions (full day kindergarten – no kindergarten, 20 students to a class – 25 students to a class, no reading and math specialists – a reading and math specialist in every elementary school, and so on). Whatever the assumptions, high or low, liberal or conservative, traditional or progressive, the Model can take the input and calculate a statewide estimated cost for that factor and integrate it into the whole for an estimated statewide total cost. This means, as the database grows and the level of sophistication and confidence in the Model develops, Oregon will be able to look at student performance resulting from the resources provided.

2. *The Model as a vision of high-performance schools. The Commission used the Model to evaluate the cost of Prototype Schools that have been developed based on research and best practices.* The components of the Prototype Schools are those which can reasonably be expected to yield educational outcomes based on the resources that have been supplied. Within actual schools, educators can use the Prototype School as a benchmark for staffing and activity levels needed, but they can modify and reallocate. They can add and subtract for specific program or staffing and then judge whether the outcome expected was achieved.

The Quality Education Model–2000 is both a tool for evaluating the costs of funding schools and a demonstration of what high-performance schools in Oregon might look like. In specific applications of the Model, policymakers may want to make estimates based on levels of resources considerably different from those used for full implementation of the Prototype Schools. If those estimates are to give meaningful guidance for policy, then the scenarios run through the Model need to be grounded in research and knowledge about which programs and practices have the most positive impact on student learning. The Model can then estimate the costs of implementing those programs and practices. The Model represents an effective tool for estimating the amount of statewide funding required to operate Oregon's schools at specified levels of performance. It can be used to assess Oregon's commitment to its public school children and Oregon's schools' level of commitment to improving opportunities of all kids. Policy makers can use the Quality Education Model–2000 both to examine the cost consequences of other education initiatives and to better understand the costs associated with "best practices" policies through the fully-implemented Prototype Schools example.

3. ASSUMPTIONS

The model uses three prototype schools, constructed to be examples of schools in Oregon that have been structured to provide resources consistent with best, research-based practices. The Commission has made assumptions about the demographics of each school – Elementary, Middle, and High:

- The size of each is at a level within a range the research literature recommends as optimal
- The assumed level of teacher experience is about average for schools in Oregon
- The prototype schools have internet access
- Teachers are using technology in classroom work
- The schools are located in close proximity to an urbanized area
- The schools are slightly below the state median in socioeconomic status (approximately 40th percentile)
- The schools have approximately 12 percent of their students identified for special education
- Five percent of the students are identified as speaking English as a second language
- The principal is reasonably supportive of reform goals
- The principal is relatively knowledgeable about reform requirements
- The principal is involved in reform implementation
- The principal is somewhat skilled as a leader and highly skilled as a manager
- Teachers are open to reform goals
- Teachers possess content knowledge necessary to teach to applicable state standards

4. THE MODEL'S COMPONENTS

The Commission recognized that creating a system of high performing schools requires both adequate resources and educational practices based on research and local decision-making. The model assumes the three prototype schools incorporate what research and practice declare are most important in helping students improve achievement and provide a level of resources that sustains that goal. The prototypes are not richly staffed, but they do staff at levels research and practice suggest will bring improvement to student learning and will provide a comprehensive, balanced education. The basic components of the prototype schools are:

In Each Prototype School

- Adequate staffing
- Added instructional time and activities for students having trouble meeting standards
- Curriculum development and technology support
- On-site instructional improvement
- Professional development for teachers and administrators
- Assistance with CIM record keeping
- Adequate classroom supplies
- Adequate funds for building maintenance

Elementary School - 340 Students

- All-day kindergarten
- Class size average of 20 in primary grades
- Class size of 24 in grades 4-5
- 4.5 FTE for specialists in areas such as art, music, P.E., reading, math, TAG, library, foreign language, ESL, Child Development

Middle School 500 Students

- Maximum class size of 29 in core academic courses
- 1.5 additional teachers for math, English, science
- Alternative programs for special needs and at-risk students
- Volunteer coordinator and community outreach worker
- One counselor for every 250 students
- Adequate campus security

High School 1,000 Students

- Maximum class size of 29 in core academic courses
- 3.0 additional teachers for math, English, science
- Alternative programs for special needs and at-risk students
- Volunteer coordinator & community outreach worker
- One counselor for every 250 students
- Adequate campus security
- School-to-work coordinator

5. BASELINE SCHOOLS COMPARED TO FULLY IMPLEMENTED PROTOTYPE SCHOOLS

The components of the three prototype schools – elementary, middle and high – are described in Tables 1, 2 and 3. The tables compare components under two different scenarios – the full prototype schools funded at the recommended research-based, best practice levels versus a baseline (current) school that assumes existing levels of funding will continue and, aside from inflation,

no new resources will be added.

In the tables, the features of the full prototype schools are compared with the features of a demographically comparable baseline school. The baseline school is an approximate characterization of what the prototype elementary, middle, and high schools would look like under current practice.

Table 1
Quality Education Model 2000 Key Components

Prototype **Elementary** School -- **140 Students**
Baseline Compared to Full Prototype

	Baseline	Full Prototype
Kindergarten	Half-day	Full-day
Class size	24 average, no cap	20 for grades K-3
K-5 classroom teachers	13.5 FTE	15.0 FTE
Specialists for areas such as art, music, PE, reading, math, TAG, ESL, library/media, second language, or child development	2.2 FTE	4.5 FTE
Special Education licensed staff	1.0 FTE	1.5 FTE
English as a second language licensed staff	0.5 FTE	0.5 FTE
Licensed substitute teachers	\$66 per student	\$66 per student
On-site instructional improvement staff	None	0.5 FTE
Instructional support staff	5.0 FTE	6.0 FTE
Principal	1.0 FTE	1.0 FTE
Additional instruction time for students not meeting standards	Limited	Summer school, after-school programs, Saturday school, or tutoring, 20% of students
Professional development time for teachers	3 days	Based on equivalent of 7 days, can be used for any combination of extended contracts, stipends, per diem, substitutes, etc.
Leadership training for administrators	Limited	Based on equivalent of 4 days
Students per computer	12	6
Textbooks	\$50 per student	\$60 per student
Classroom materials & equipment	\$113 per student	\$163 per student
Other supplies	\$47 per student	\$47 per student
Operations and maintenance	\$535 per student	\$535 per student
Student transportation	\$241 per student	\$241 per student
Centralized special education	\$60 per student	\$66 per student
Technology Services	\$95 per student	\$95 per student
Other centralized support	\$142 per student	\$142 per student
District administrative overhead	\$208 per student	\$208 per student
Total cost per ADMw in 1998-99 School Year*	\$4,393	\$5,448**
Percent of students currently meeting standards:		
Reading	3rd grade=81%/5th grade = 69%	90% (full prototype)
Math	3rd grade=70%/5th grade = 66%	90% (full prototype)
Percent of students expected to meet standards by year 2005:		
Reading	3rd grade=87%/5th grade = 84%	90% (full prototype)
Math	3rd grade=81%/5th grade = 77%	90% (full prototype)

* ADMw is weighted student enrollment which is adjusted to reflect the additional costs of educating students with special needs.

** Calculated based on ADMw with kindergarten at full-time.

Table 2
Quality Education Model 2000 Key Components
 Prototype **Middle School -- 500 Students**
 Baseline Compared to Full Prototype

	Baseline	Full Prototype
Class size in core subjects of math, English, science, social studies, second language, the arts	No cap	Maximum of 29 in core academic subjects
Staffing in core subjects	16.8 FTE	17.0 FTE
Extra teachers in math, English, and science	None	1.5 FTE
Additional staffing for core courses or electives	4.0 FTE	4.0 FTE
Special Education licensed staff	3.0 FTE	3.0 FTE
English as a second language licensed staff	0.5 FTE	0.5 FTE
Media/Librarian	1.0 FTE	1.0 FTE
Counselors	One for every 333 students	One for every 250 students
Licensed substitute teachers	\$66 per student	\$66 per student
On-site instructional improvement staff	None	1.0 FTE
Instructional support staff	11.0 FTE	11.0 FTE
Principal, Assistant Principal	2.0 FTE	2.0 FTE
Additional instruction time for students not meeting standards	Limited	4 weeks of Summer school, after-school programs, Saturday school, or tutoring, 20% of students
Professional development time for teachers	3 days	Based on equivalent of 7 days, can be used for any combination of extended contracts, stipends, per diem, substitutes, etc.
Leadership training for administrators	Limited	Based on equivalent of 4 days
Students per computer	12	6
Textbooks	\$50 per student	\$60 per student
Classroom materials & equipment	\$126 per student	\$176 per student
Other supplies	\$49 per student	\$49 per student
Operations and maintenance	\$535 per student	\$535 per student
Student transportation	\$241 per student	\$241 per student
Centralized special education	\$60 per student	\$66 per student
Technology Services	\$95 per student	\$95 per student
Other centralized support	\$142 per student	\$142 per student
District administrative overhead	\$208 per student	\$208 per student
Total cost per ADMw in 1998-99 School Year*	\$4,961	\$5,442
Percent of students currently meeting standards:		
Reading	58%	n/a
Math	52%	n/a
Percent of students expected to meet standards by year 2008:		
Reading	77%	90%
Math	69%	90%
Reading	3rd grade=81% / 5th grade = 69%	90% (full prototype)
Math	3rd grade=70% / 5th grade = 66%	90% (full prototype)
Percent of students expected to meet standards by year 2005:		
Reading	3rd grade=87% / 5th grade = 84%	90% (full prototype)
Math	3rd grade=81% / 5th grade = 77%	90% (full prototype)

* ADMw is weighted student enrollment which is adjusted to reflect the additional costs of educating students with special needs.

Table 3
Quality Education Model 2000 Key Components
 Prototype **High School** -- **100 Students**
 Baseline Compared to Full Prototype

	Baseline	Full Prototype
Class size in core subjects of math, English, science, social studies, second language, the arts	No cap	Maximum of 29 in core academic subjects
Staffing in core subjects	35.6 FTE	37.6 FTE
Extra teachers in math, English, and science	None	3.0 FTE
Additional staffing for core courses or electives	6.4 FTE	6.4 FTE
Special Education licensed staff	3.75 FTE	3.75 FTE
English as a second language licensed staff	0.5 FTE	0.5 FTE
Media/Librarian	1.0 FTE	1.0 FTE
Counselors	One for every 333 students	One for every 250 students
Licensed substitute teachers	\$66 per student	\$66 per student
On-site instructional improvement staff	None	1.0 FTE
Instructional support staff	20.0 FTE	20.0 FTE
Principal, Assistant Principal	3.0 FTE	3.0 FTE
Additional instruction time for students not meeting standards	Limited	4 weeks of Summer school, after-school programs, Saturday school, or tutoring, 20% of students
Professional development time for teachers	3 days	Based on equivalent of 7 days, can be used for any combination of extended contracts, stipends, per diem, substitutes, etc.
Leadership training for administrators	Limited	Based on equivalent of 4 days
Students per computer	12	6
Textbooks	\$50 per student	\$75 per student
Classroom materials & equipment	\$159 per student	\$279 per student
Other supplies	\$66 per student	\$66 per student
Operations and maintenance	\$535 per student	\$535 per student
Student transportation	\$231 per student	\$231 per student
Centralized special education	\$60 per student	\$66 per student
Technology Services	\$95 per student	\$95 per student
Other centralized support	\$142 per student	\$142 per student
District administrative overhead	\$208 per student	\$208 per student
Total cost per ADMw in 1998-99 School Year*	\$4,978	\$5,615
Percent of students currently meeting standards:		
Reading	52%	n/a
Math	36%	n/a
Percent of students expected to meet standards by year 2010:		
Reading	69%	90%**
Math	55%	90%**
Reading	3rd grade=81% / 5th grade = 69%	90% (full prototype)
Math	3rd grade=70% / 5th grade = 66%	90% (full prototype)
Percent of students expected to meet standards by year 2005:		
Reading	3rd grade=87% / 5th grade = 84%	90% (full prototype)
Math	3rd grade=81% / 5th grade = 77%	90% (full prototype)

* ADMw is weighted student enrollment which is adjusted to reflect the additional costs of educating students with special needs.

** The Commission was less confident forecasting the data by which 90% of 10th graders would meet standards, due to the unique challenges of educating high school students and to concerns that the high school may need to be radically redesigned before 90% of students can reach standards.

6. METHODOLOGY IN REVIEWING THE MODEL

The Commission used an extensive, broad-based review process to examine the Quality Education Model. They received advice from national consultants in school finance and education policy; a special legislative committee; a survey of public opinion; and four expert panels that included business and industry leaders, teachers, principals, superintendents, parents, economists, education policy experts, school business managers, school board members, certified public accountants, and representatives of education associations. The panels were separated into the following issue areas:

- **Perception & Communications** (what the public believes and wants)
- **Content & Goals** (what research says matters most)
- **Practice & Delivery** (what practitioners say works)
- **Resources & Costs** (what finance people say is a reasonable cost)

The panels and consultants studied the original Quality Education Model for alignment with research-based, best practices and with public values regarding Oregon's education system. A great deal of effort was spent on evaluating the accuracy of the model, including the appropriateness of each cost component, sources of cost information, methods of estimation, and assumptions behind the cost estimates.

The Commission has:

- evaluated the model;
- drawn conclusions about the model's conceptual framework, reliability, and accuracy;
- made suggestions for improvements;
- developed a revised model for use in the next budget cycle;
- set priorities for phasing-in the model if adequate resources are not available; and
- identified issues for future policy development.

Fully funding the model prototype schools at the level the research and practice recommended will take more resources than are currently provided. At our current expenditure level, the achievement of students has improved over the last decade. However, the Commission feels student performance must continue to improve. **There are too many students not at standard and disaggregated data show students from low income families, students of color, and English Language Learners are all disproportionately represented in the lower achievement ranks.** The Commission believes *all* students can be helped in making significant growth toward benchmark standards. Oregon's schools, in partnership with the community, businesses, and the state, can succeed at levels that would make our state system of public schools the envy of the nation – *indeed, the envy of the world.*

E COSTS OF IMPLEMENTING THE MODEL

1. Full Implementation of Prototype Schools

The State School Fund in 1999-2001 is \$4.562 billion. This has provided approximately \$4,853/ADMw (students weighted for exceptional cost factors) to schools the first year of this biennium and \$4,971/ADMw in the second. The state forecasts (December 2000) a Current Service Level (CSL) budget need for 2001-2003 of \$5.089 billion. This would provide a first year per ADMw average of \$5,216 and a second year of \$5,444/ADMw. The implementation of the full prototypes, QEM-2000, would require \$6.061 billion and would produce \$5,762/ADMw in the first year and \$5,880 in the second.

Table 4

Full Prototype QEM-2000

	1999-01	2001-03 CSL	2001-03 QEM
State School Fund Amt.	\$4.562 billion	\$5.089 billion	\$6.061 billion
Year 1 Amt. per ADMw	\$4,853	\$5,216	\$5,762
Year 2 Amt. per ADMw	\$4,971	\$5,444	\$5,880

Full implementation, which would cost an additional \$972 million above the Current Service Level in the next biennium, would restore state school funding per weighted student to 1992-93 levels, when adjusted for inflation.

Phased Implementation.

The Commission understands that a budget increase that is \$972 million above the Current Service Level is probably not to be expected within the current revenue forecasts. The Commission does believe, however, there are investments short of full prototype implementation that will significantly improve education, and **surveys show that voters are supportive of the investments suggested.**

If the fully implemented prototype schools cannot be funded and implemented at this time, the Commission strongly suggests starting a phase-in approach. An allocation of \$5,339 billion, \$250 million above the Current Service Level as a first step toward full implementation, would allow significant attention to be given to important goals. The general goals for implementation and improvement are:

a) Reading in the Early Grades

Provide a focus on reading. The Education Leadership Team (ELT) lists this as the first “strategic priority” of the state. The Commission agreed that developing reading skills in the early grades provides an essential foundation for student success. At the elementary school level the goal would be for at least 90% of students to be at or above state reading benchmarks for both 3rd grade and 5th grade within four years. Middle school years would work at sustaining and improving reading skills. The Commission believed that the reading goal was reasonable if elementary schools received additional resources that could be used for additional instructional time for students not meeting standards, staff development, and textbooks and materials. Schools might also choose to reduce class size in the primary grades or to hire reading and instructional improvement specialists.

b) Staff Professional Development

Provide the training and skill development needed. This for teachers and principals to gain the level of proficiency needed to deliver on the academic goals. Again, the Education Leadership Team listed this as a strategic priority and the Commission’s expert panels noted the importance of linking training and skill development to success in meeting academic goals.

c) High School Study.

Provide resources to study possible restructuring of educational services. This focus is needed at the secondary level in light of state CAM standards and the need for more contextual learning.

The commission believes that an increase in funding focused at the elementary level for reading and professional development, and providing resources to begin studying restructuring efforts in the high school, while well below the proposed full prototype Quality Education Model-2000 level, will be a major step toward the goal of having all of Oregon’s students meet or exceed the State quality education standards.

F LINKING THE MODEL TO STUDENT PERFORMANCE

Determining how much better Oregon students would perform if the QEM–2000 was implemented at the level of the prototype schools is challenging. Research has established that schools, and what goes on within them, have a much greater effect on student learning than was previously thought – students are not limited by family academic background, socioeconomic status, and environmental issues as much as was credited in earlier times. This is encouraging in and of itself, and suggests the Model can lead to real improvements in student learning in all Oregon schools because the Model was developed with specific reference to educational practices and organizational policies that make the most difference in student learning.

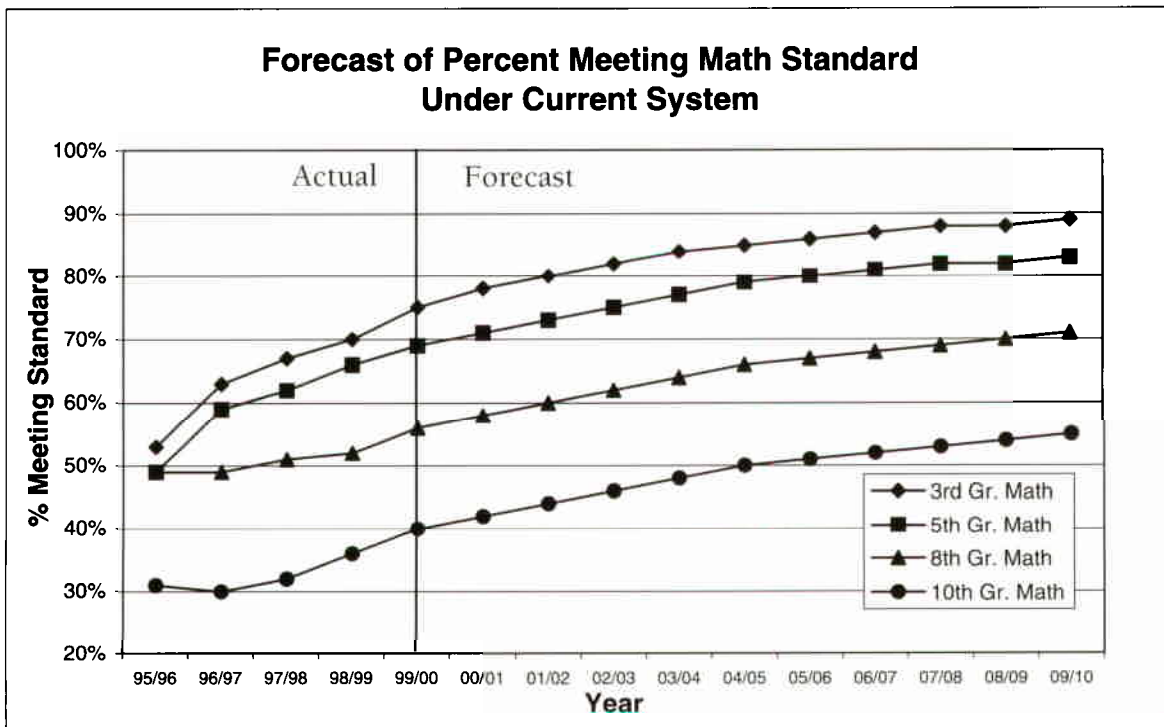
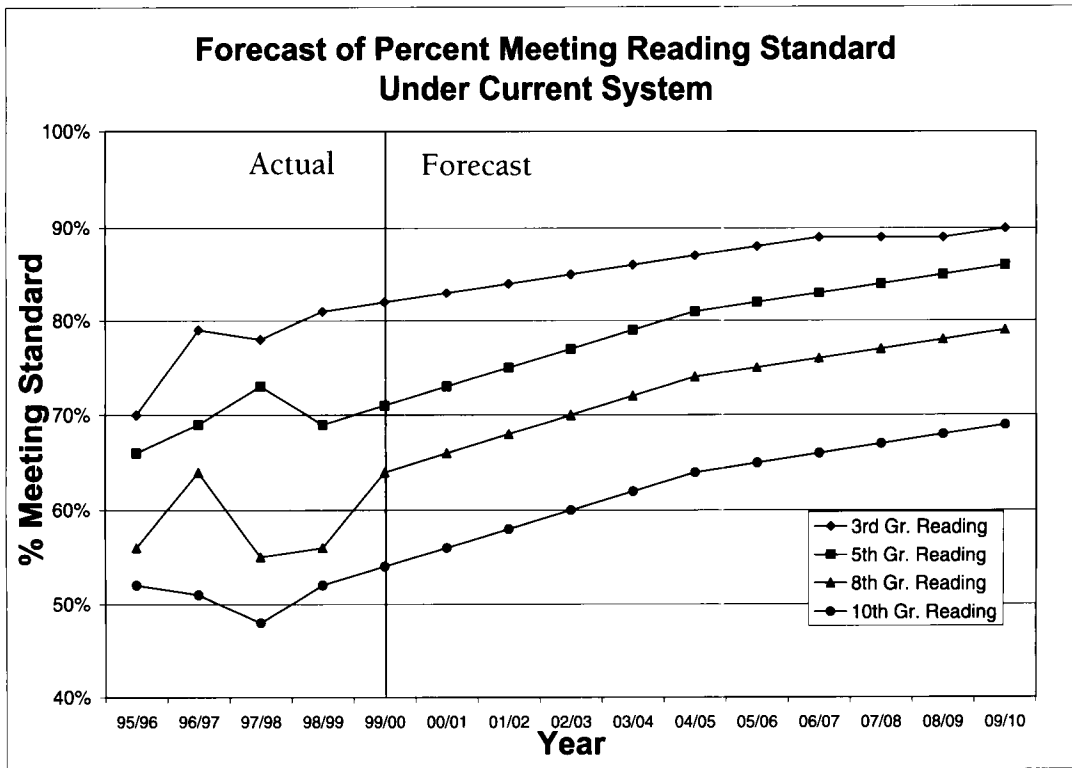
The Commission examined current academic performance as measured by state assessments; analyzed performance over time on these assessments at all benchmark levels; and looked closely at the score distributions over time, and at benchmark levels. It sought to determine the “cohort effects” realized as a group of students who benefited from full prototype implementation of the model at the third grade benchmark matriculated to the fifth grade benchmark level and so on up through the tenth grade benchmark.

The Commission reached the following general conclusions:

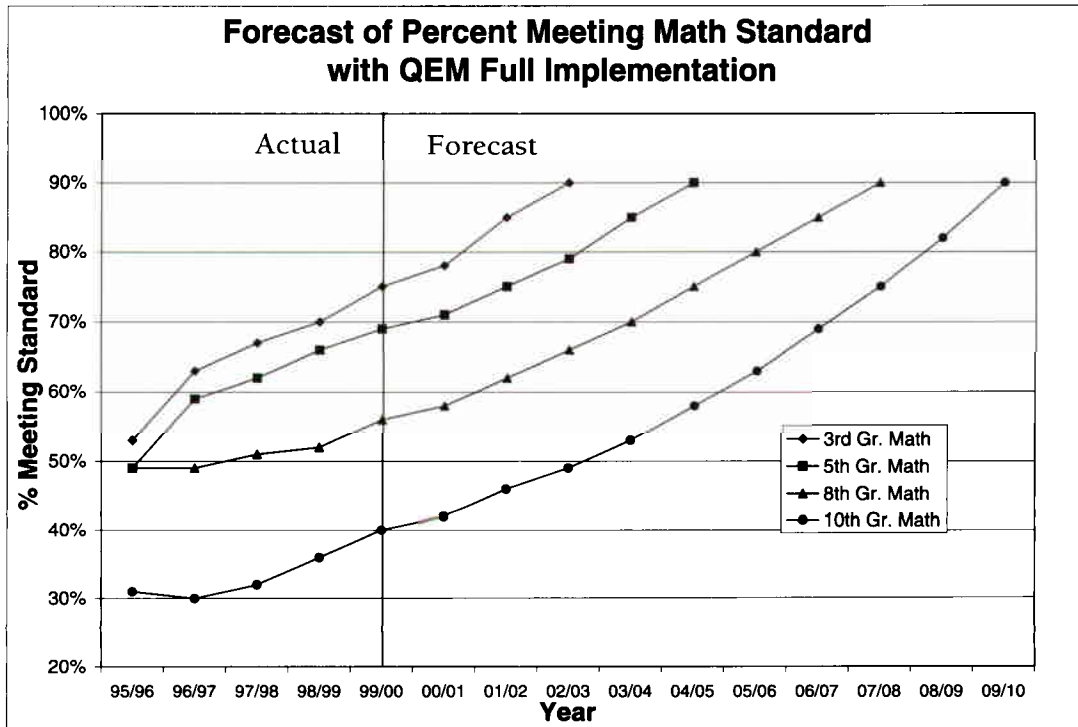
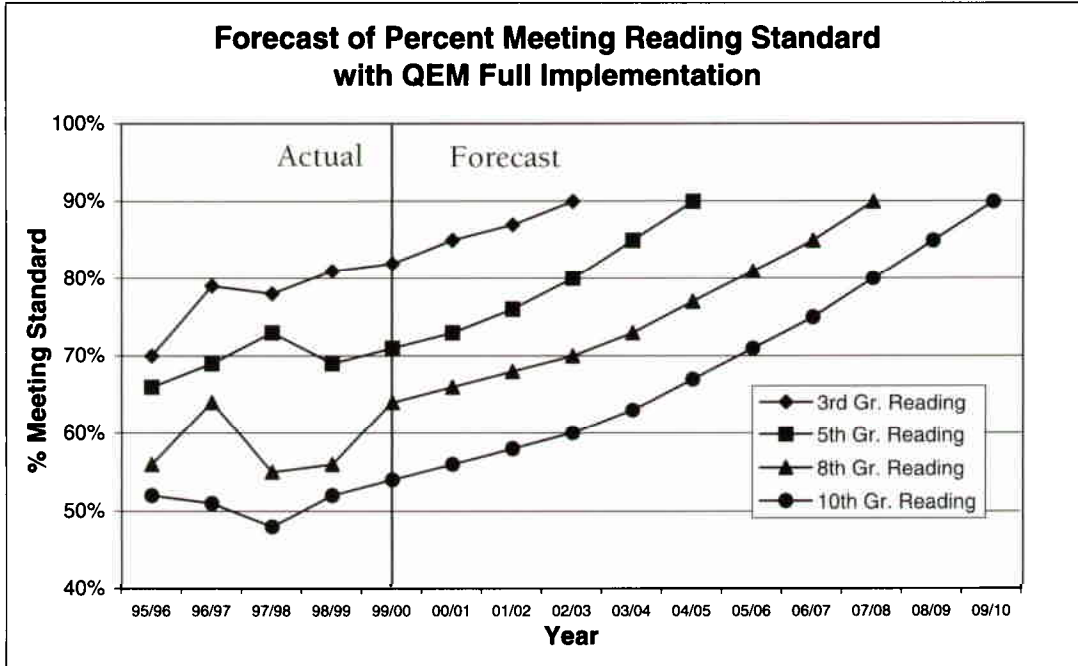
- The proportion of students reaching benchmark levels has generally increased over the past five years, with much greater and more consistent gains at the elementary level and less consistent and considerably smaller gains as students moved through middle and high school levels.
- It is probable the improvement rate at third and fifth grades will slow without additional targeted resources and practices of the sort identified in the QEM–2000.
 - Middle schools may achieve some sustained improvement as successive cohorts reach middle school with higher proportions of students meeting benchmark standards.
 - High schools have the potential for the greatest immediate improvement because the proportion of students meeting benchmark standards is the lowest of all benchmark levels.
- Trend extrapolations that assume full implementation of the Prototype Schools of the QEM–2000 suggest sustained improvement at third and fifth grades until 90 percent or more of students meet benchmark standards.
 - These gains subsequently will influence middle school and high school trends so that significant improvement occurs at the secondary level, but over a greater period of time.
 - The assumptions are based on both dimensions of the Prototype Schools being implemented: increased resources targeted to student learning, combined with consistent improvements in the Quality Indicators that identify effective educational practices and policies.

It is difficult to determine exact outcomes with and without the QEM–2000 many years into the future. With the current system and funding, and without the QEM–2000 focus, it is reasonable to assume that improvement rates will slow in future years as the students still not at the standard become increasingly challenging.

PROJECTIONS FOR READING AND MATH ARE REPRESENTED IN THE FOLLOWING TWO GRAPHS.



BASED ON THE ASSUMPTIONS IN THE PROTOTYPE SCHOOLS, THE NEXT TWO GRAPHS REPRESENT THE LIKELY EFFECTS OF THE QEM-2000 ON STUDENT ACHIEVEMENT IN THOSE SCHOOLS OVER THE NEXT TEN YEARS:



The differences in the percentage of students reaching standard between implementation and non-implementation are small the first few years, but grow in future years. Part of this projection is a result of the cohort effect – more students at or above standard in the earlier grades moving through the system. The effect becomes most marked at the high school level, where currently in ten years only 69 percent in reading and 55 percent in math would be forecast to be at standard, versus 90 percent with full QEM–2000 implementation.



G. QUALITY INDICATORS THAT MAKE A SIGNIFICANT DIFFERENCE

The Model must consider intangible factors in order to understand the relationship between educational inputs and student achievement. The Commission identified a number of intangible factors, or Quality Indicators, that do not have direct costs associated with them but have a strong effect on student achievement. These include teacher quality, leadership, effective instructional programs, parent and community involvement, data-driven planning, and program design. These factors have been documented in research literature for many years as having a strong relationship with improved student achievement. But, direct costs are difficult to assign to them and they are often ignored by budget makers due to a lack of understanding about their effect on student learning. The Quality Education Model–2000 acknowledges the importance of these Quality Indicators and recommends beginning collecting reliable data on these factors.

(See Appendix K and Chapter 3.C.b.)

H. ISSUES BEYOND THE CHARGE OF THE COMMISSION

The Commission has identified critical issues state policymakers will need to address, preferably in the next legislative interim, if the Quality Education Model is to be used as an effective and ongoing policy tool. Specifically, there are six areas of interest – - distribution of funds, accountability, governance, capital needs, high school structure, and mandates. The Quality Education Model provides an effective means of determining the cost of new education initiatives. It does not, however, determine the responsiveness and efficiency of the local school district. This instead is related to the method of **distribution** of funds to schools, and how much performance discipline is exerted by **accountability** policy and the **governance** structure of the education system. Likewise, we must examine the way Oregon addresses school **capital needs** (major capital improvements, routine maintenance, deferred maintenance, building replacement), the **way high schools structure and deliver education** and the **mandates** placed upon schools that sometimes confound the focus on instruction we are seeking. These are critical issues that require attention in the near future. While they are outside the scope of the Commission's charge, they do bear on the efficacy of a funding model.