FRAMEWORK FOR IMPLEMENTING K-12 SCHOOL TRANSFORMATION IN OREGON

School Transformation Advisory Council

August 1997

This document was written by the
School Transformation Implementation Team:
Jean Thorne, Governor's Office (Team Leader)
Joanne Flint, Oregon Department of Education
Judy Patterson, Oregon Department of Education
Michael Dalton, Oregon Department of Education
Tanya Gross, Oregon Department of Education
Elaine Yandle-Roth, Office of Community College Services
Dave Conley, Oregon State System of Higher Education
Christine Tell, Oregon State System of Higher Education
Duncan Wyse, Oregon Business Council
Mimi Bushman, Oregon Business Council
John Svicarovich, Consulting Writer and Editor

It was reviewed and approved for distribution
by the School Transformation Advisory Council:
Keith Thomson, Intel (Chair)
Gail Black, Teacher, Jefferson High School, Portland
Robert Bolden, Principal, Thomas Jefferson Middle School, Eugene
Alcena Boozer, Principal (retired), Jefferson High School, Portland
Meredith Brodsky, Dean, School of Education, Western Oregon University (TSPC)
Don Brown, Providence Health System
Joe Calpin, Teacher, Tigard High School
Ginny Christensen, Teacher, West Sutherlin Intermediate School
Dave Conley, Associate Professor, University of Oregon
Dick Darst, Director of Curriculum & Institutional Programs, Crook County SD
Barbara Davey, Associate Dean, Southwestern Oregon Community College
Dennis Douglass, Superintendent, Douglas ESD, Roseburg
Chris Dudley, Executive Director, Oregon School Boards Association
Kristie Duyckinck, Teacher, Century High School, Hillsboro (Oregon Education Association)
Jim Harper, Wacker Siltronic Corporation
Dave Hauser, Eugene Area Chambers of Commerce (Oregon Chamber Executives)
Bill Johnson, Teacher, Lava Ridge Elementary School, Bend
William Lansing, President, Menasha Forest Products Group, North Bend
Rey Mayoral, Principal, McKay High School, Salem
Tish Mendenhall, Principal, Independence Elementary School
Ford Morishita, Teacher, Clackamas High School
Paul Risser, President, Oregon State University
Ozzie Rose, Executive Director, Confederation of Oregon School Administrators
Ron Saxton, Board Member, Portland Public Schools
Judy Stiegler, Chair, State Board of Education
Steve Swisher, Superintendent, Sisters School District
Michael Taylor, Superintendent, Ontario School District
Bill Thorndike, Jr., Medford Fabrication
Vickie Totten, Executive Director, Oregon Community College Association
Grace Wiesner, Teacher, Toledo Middle School
Duncan Wyse, President, Oregon Business Council

Contents

EXECUTIVE SUMMARY

This is an eight-year framework for implementing the Oregon Educational Act for the 21st Century. The Act calls for dramatically raising student performance standards, enriching classroom learning, overhauling curriculum and instruction, using the community as a learning resource, and forging new working partnerships between schools and communities. In short, this legislation intends to *transform* Oregon's K-12 schools for the better.

What Makes This Effort Different Is Its Scale and Consistency

Many of the improvements envisioned in the Act are already in place in a number of Oregon schools. These include curriculum with the new high standards, extended student learning time for in-depth study, integrated instruction across academic subjects, context-oriented teaching, and community-based learning. Before long, such practices will be common in Oregon schools. Right now, however, these practices are not widely in use.

Several things make school transformation different from progressive practices already in place. One is the comprehensive vision, scale, and consistency of the overall effort. Another is accountability, made possible by a statewide assessment system. Yet another is the way that the components of school transformation (particularly high standards and community-based learning) extend and reinforce each other both within and among schools.

Schools Must Begin the Effort Today

Schools have a great deal of work to do in adapting curriculum and instruction to help more students achieve high academic standards. This effort must begin now. The first assessments to award the Certificate of Initial Mastery, beginning with English and math, will be given to tenth graders in the 1998-99 school year. Assessments for other subjects will be phased in each year thereafter. School districts must focus their resources to help students acquire the higher skills needed to pass those assessments.

The Outlines of Oregon School Transformation

What's at Stake

Schools continue to have a central role in creating literate, competent individuals. The data suggest that they are doing a relatively good job, even better than two decades ago. However, other social forces are putting new demands on the education system.

Today's competitive economy has created higher expectations of workers and more demands on those who educate them. Job holders must be more capable in tasks that require high levels of language and math literacy and the application of computer technology. They must function more effectively in teams, make more decisions, and take more responsibility for quality control in what they do. This requires greater capability in problem solving, working in groups, communicating with others, and taking initiative.

A phenomenon called the "school-career gap" has grown up among many recent graduates. Too many have failed to make a solid career connection upon completing their formal schooling. Those without sufficient education and skills have found limited job choices and income potential, and greater prospects of unemployment and poverty. Even those with more education sometimes find that the choices they made in first jobs or fields of study haven't been as satisfying as they hoped.

Schools must also deal with the impact of intergenerational poverty. Because many high school graduates do not have skills that match the demands of the economy, there has been a rise in the percentage of young Oregon adults living in poverty. An increasing number of young children who grow up in poverty are entering school unprepared to learn. Too many of them fail to catch up. Too many suffer emotional damage and diminished prospects, which, in turn, perpetuate poverty into the next generation. This impacts schools in another way. The less effective they are in preparing one generation of students to hold well-paying jobs and be contributing members of the community, the greater the likelihood they will spend more resources on remediation and non-educational support services with the next generation of students.

The Vision of School Transformation

Oregon's school improvement legislation envisions increasing majorities of students coming out of their K-12 years competent in rigorous academic and career-related studies that apply directly to further schooling, employment, and fulfilling lives.

Students will meet high performance standards in academic subjects. They will develop useful knowledge and skills in a career field of interest. They will develop competence in reasoning, solving problems, communicating with other people, working in teams, using technology, and planning their own futures.

The classroom experiences through which they acquire these capabilities will be rich and varied. Subjects will be taught in the context of applications outside school. Learning will occur through interdisciplinary approaches and project-based assignments. Students will spend significant time in the community learning about adult work and responsibilities, and gaining insight into the way that academic knowledge is applied in work and life. Such learning and achievement will build methodically from kindergarten through twelfth grade.

Post-secondary schools and employers will find that graduates of Oregon schools come to them with solid academic skills, a strong work ethic, and the readiness to grow, intellectually, occupationally, and personally.

The Scale and Difficulty of the Undertaking

Perhaps the most imposing task in school transformation is winning people and institutions over to the changes that will be required. The standards ask more of everyone. At the school level, curriculum, classroom organization, teaching methods, learning process management, school scheduling, and staff development will probably have to be modified. To embrace such changes, the people affected need to understand why change is

important, how their lives will be made better, what the trade-offs are, what they must do, and how to do it. The institutions responsible for change must become more adaptive and improvement oriented.

The Principles and Components of School Transformation

Two concepts are key to education improvement in Oregon: 1) students must meet high standards, and 2) students should be prepared for successful transition to post-secondary education, or the job market if they choose, as a result of 12 years of schooling. Under the current system of credits leading to a diploma, far too many students are not prepared for anything further in life.

The school will continue to be the main learning environment, but it will not be the only one. Teachers will still impart content knowledge, but they will also manage student learning experiences, often in partnership with others. Students will assume more responsibility, learning will extend beyond the classroom, and parents and community members —including employers —will have responsibilities to participate in the education of the community's young.

High Standards Will Begin in First Grade, Culminate With Certificates

The principal mechanisms for ensuring high standards of learning for Oregon students are the certificates of mastery —*initial* mastery and *advanced* mastery. These will be awarded to students who achieve demanding content standards and who demonstrate that achievement through assessments and classroom assignments. Students who do not qualify for a CIM or a CAM but who accumulate required class credits will still receive a diploma.

The Certificate of Initial Mastery (CIM). The CIM represents rigorous academic standards in English, mathematics, science, social sciences, the arts, and a second language. Students pursuing a CIM must meet knowledge and skill benchmarks measured through state and local assessments.

School districts in Oregon must be ready to award the CIM in English and math to Oregon tenth graders in the 1998-99 school year. Science, social sciences, the arts, and a second language will be added to CIM assessments over the following four years. Student progress toward the CIM will be assessed at grades 3, 5, and 8. Students who do not pass all or portions of CIM assessments by the end grade 10 will have opportunities to strengthen their skills and try again.

The Certificate of Advanced Mastery (CAM). The CAM represents the next level of achievement for high school students. All schools must be ready to award the CAM by the 2004-05 school year. Typically, students who have attained the CIM at or close to grade 10 will move on to the CAM. Building on the foundation provided by the content standards leading to the CIM, students pursuing a CAM must achieve grade 12 benchmarks measured through state and local assessments. Student must also attain what are called "career-related learning standards." These include such career and life skills as problem solving,

working in teams, and communication, and an understanding of the workplace and career development. Students in the CAM program will also begin to develop useful knowledge and skills in at least one career field of interest known as an endorsement area of study. All students must participate in a career endorsement area to receive a CAM.

A Range of School-Level Initiatives Will Be Required
To Support Student Achievement of the New Standards

To implement the reforms envisioned in the Act, schools will need to:

Make standards-based curriculum and instruction a priority in school and school district improvement plans

- Adapt curriculum and instruction to the higher standards
- Focus career guidance programs so students see that achievement of academic standards, selection of an endorsement area of study, and participation in community-based learning experiences are an integral part of post-high school planning
- Work with community partners to create community-based learning opportunities for students
- Become adept at using and developing performance-based assessments
- Implement other components of school transformation such as improved early childhood education programs.
- Work with two- and four-year colleges and other post-secondary education programs to help high school students make smooth transitions to post-secondary schooling. Program entry standards for Oregon's community college and admission standards for state-funded colleges and universities have been developed in conjunction with the new K-12 standards.

Standards-based curriculum and instruction. To help students reach the standards envisioned in the CIM and CAM, schools will need to try a variety of approaches to both curriculum and instruction. In mathematics, for example, subjects such as algebra and geometry might be taught earlier and in fewer but more concentrated segments. In grades K-5, children of mixed ages might participate in classes that are organized to study concepts in greater depth for longer blocks of time.

School-to-work opportunities. Students will have much better prospects for attaining academic standards in both CIM and CAM programs by participating in school-to-work experiences, most often in the community and especially the workplace. Through exposure to the workplace, students can learn firsthand about occupational skills, broaden their career horizons, and see the importance of academic study to career success.

In the elementary and middle school grades, school to work is more geared to occupational awareness. At grades eight through ten it contains elements of both career awareness and career exploration. At the CAM program level (grades eleven and twelve), it becomes more

structured, hands on, and tied to career decision making and endorsement areas.

Performance-based assessments. Learning how to use standards-based assessment tools is one of the first tasks that schools will need to accomplish in school transformation. Teachers and other educators will be responsible for administering state-developed assessments in English, math, science, and social sciences for students in grades 3, 5, 8, 10, and 12. In second languages and the arts, schools will have the added responsibility of developing assessments as well as administering them.

K-12 Standards Will Fit With Public University and Community College Standards

Oregon's public school standards will mesh with the new Proficiency-based Admission Standards System (PASS) of the Oregon State System of Higher Education. PASS, in conjunction with the K-12 system, will assess student readiness for college-level work in academic subjects that integrate process proficiency skills. K-12 standards will also mesh with standards for success in community college programs known as PRoficiencies for Entry into Programs (PREP).

Assessment Systems

Assessment has a pivotal role in Oregon's effort to create rigorous academic standards. Assessment gives educators better diagnostic tools for helping students reach standards, and it creates system wide accountability in standards-based education by measuring how well schools perform in raising student achievement to meaningful standards. Since 1991 Oregon has been testing student achievement. This assessment system is being revised and expanded to measure student attainment of the new standards.

The new system will create uniform, statewide measures of student performance in the early grades, in effect providing a map of student progress toward meeting CIM and CAM standards in high school. At the high school level, the system will provide a reliable mechanism for determining that students merit certificates of initial and advanced mastery. Students will be assessed for knowledge of content, problem solving and reasoning skills, and ability to apply content knowledge in specific situations.

How All Parties Will Be Affected

Students will meet higher standards, learn in new ways. Students will notice that much is expected of them academically, and they will be much more exposed to information about adult careers and further education. They will also notice that there is a more concentrated focus on particular subjects for a greater length of time and that the pace of learning will be faster because more is being covered in depth.

School life for those in the CAM program will be very different than it is for students in grades 11 and 12 today. Students will spend longer blocks of time on subjects, they will work on projects that integrate academic disciplines, and their pursuit of knowledge will not be confined to the traditional classroom. Students will also notice the integration of career-related learning in their studies, stressing such skills as planning and managing time and tasks, working effectively in team situations, assuming responsibility for results,

solving organizational problems, and developing an understanding of potential career options.

Teachers will expect more of all students, work with a wider array of partners and resources. Teachers at all grade levels will expect more and demand more of all students. Teachers will also think about their work with students in a continuum extending from kindergarten through post-secondary education. They will know more about the skills needed by students coming to them from lower grades, as well as the skills their students will need when they reach the upper grades. Teachers up and down the grade levels will work together to make decisions about curriculum content and alignment and instructional strategies. Teachers will go beyond textbooks, supplementing them with material that they find and adapt themselves from a variety of sources, including professional publications, research, other teachers, and the Internet. Teachers will find themselves partnering more often with one another and with people in the larger community. Teachers will also have opportunities to intern with businesses and other organizations in the community, and thus increase their own capabilities and learn more about workplace skills needed by students.

School leadership will focus on student achievement. The year-to-year progress that students exhibit in meeting standards will become one of the most important criteria for judging the effectiveness of schools and their leaders.

Parents will see their children get more from school. Parents will know how their children are progressing, where they need additional help, and what should be done to get them that help. Parents will find that they need to do more to help their children succeed in meeting higher standards. This will include taking time to understand what the new standards require of their children, reading more to their young children, doing more tutoring where they can, making sure their children are doing their homework, staying in close touch with the school, and looking for opportunities outside school to help their children acquire skills that will help them meet standards.

Employers will become more active partners in helping public schools perform their mission. Thousands of Oregon employers are already working in partnership with schools, and such partnerships will increase. The most prevalent form of cooperation will be employers providing sites for students in school-to-work programs, assisting schools in establishing school-based business simulations or enterprises, and providing intern opportunities for teachers.

Implementation Requirements

Implementation Timelines

The timeline for implementing school transformation over the next eight years is governed by the phase-in of assessments to measure student attainment of the new standards.

The first CIMs will be awarded in English and mathematics in the 1998-99 school year to students who achieve the necessary assessment scores. In each succeeding year, CIM

assessments and awards will be added for science, social sciences, the arts, and second languages, until the CIM is fully in place for all categories in the 2002-03 school year.

Full implementation of the CAM in all subjects by all Oregon high schools is required in the 2004-05 school year, two years after the CIM is in place in all subject areas. However, the CAM phase-in strategy is different than the CIM phase-in. Starting in 1998-99, high schools will have two academic years to take advantage of state-supported technical assistance in developing CAM-related curriculum and instruction. Then, over the next four years, as CAM assessments come on line, schools that are ready can begin building CAM programs related to academic standards and assessments. During this time, certain schools will be selected and given support to help develop CAM models for possible use by other schools.

PASS entry standards for the Oregon State System of Higher Education and PREP standards for community college programs are timed to coordinate with the CIM and CAM implementation schedule.

CIM Implementation Timeline							
CIM Awarded in All Schools				CIM Fully Implemented			
98-99	99-2000	2000-01	01-02	02-03	03-04	04-05	05-06
English math	+ science	+ social sciences	+ the arts	+ 2nd language			

CAM Implementation Timeline							
Schools Receive Technical Assistance To Develop CAM Programs		CAM Awarded in Selected Schools				CAM Fully Implemented	
1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
		English math career-related learning	+ science	+ social sciences	+ the arts	+ 2nd language	

PASS Admission Requirements for College Class Entering							
Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006
		PASS proficiency expected in: English math	PASS proficiency expected in: English math science	PASS proficiency expected in: English math science soc. sciences	PASS proficiency expected in: English math science soc. sciences the arts	PASS fully implemented; proficiency expected in: English math science soc. sciences the arts 2nd language	
GPA and subject area requirements; SAT score requirement will continue at least through 2005		GPA for other subject requirements	GPA for other subject requirements	GPA for other subject requirements	GPA for other subject requirements	By waiver: GPA	

Community College PRoficiencies for Entry Into Programs (PREP)							
Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006
Beginning in the 1999-2000 school year, community colleges will publish program entrance standards in their catalogs.							

What Needs To Happen To Launch School Transformation

The strategy must accommodate uncertain resources. School transformation should accommodate different levels of funding support, place responsibility and accountability for results with the schools themselves, and give the schools considerable latitude to accomplish results with assistance from the Department of Education, higher education, employers, and other institutional partners. As a part of the approach envisioned, schools should:

1. Incorporate school transformation in district improvement plans. School transformation should be treated as a fundamental part of meeting state requirements for school effectiveness.

2. Pursue school transformation at the school level. It has to occur at the school level, driven by local school stakeholders. Moreover, it must be vertically integrated in grades K through 12. Individual schools should organize to accomplish school transformation through a "catchment" approach. Clusters of elementary, middle, and high schools linked by attendance area and feeder relationships (catchments) — and supported by business and community members — should work closely with one another to accomplish objectives spelled out in school and school district improvement plans.

3. Provide incentives and support to encourage and reward schools for aggressively pursuing school transformation. Schools should be provided with direct financial incentives and State-sponsored technical assistance for a period of several years. How the schools achieve performance indicators would not be prescribed. Schools and catchments would be encouraged to leverage funding with internal and community resources to underwrite the costs of change.

The Parties to School Transformation
Must Assume Responsibility for Doing Their Part

Schools must shift their focus to school transformation. At a minimum, schools must embrace the achievement of CIM and CAM standards by students as the top organizational priority. They must do so through school improvement plans that refocus school in-service training objectives and budgets, particularly to insure that teachers and counselors develop capabilities in administering and scoring student performance assessments, implementing contextual learning in the classroom, and adapting curriculum to the higher standards of CIM and CAM. They must also give teachers time to work together on curriculum and instruction changes, to network with personnel in other schools, and to work with businesses in giving students more relevant learning experiences.

The State of Oregon and publicly funded post-secondary institutions must support local efforts. With the involvement of institutional partners from the Governor's Office, the

State System of Higher Education, and the community college system, the Department of Education will support school transformation in a variety of ways. These will include continuing to define the standards of achievement for Oregon K-12 students, continuing to develop the statewide assessment system and curriculum resources to support standards-based education, sponsoring forums to orient school district leaders to the requirements of school transformation, and collecting and disseminating information about exemplary practices developed by schools to help their students achieve higher standards. The department will also design and operate a data collection system on student achievement both during and after K-12 years.

Oregon's public universities and community colleges, which are now partners in planning the implementation of standards-based education, can help public school teachers gear up to meet the new standards, and their faculties can help teachers with such tasks as scoring assessments and developing new curriculum attuned to the standards.

Oregon employers have a large support role. It is essential that employers partner with schools statewide to help students achieve high academic standards and develop career-related knowledge and skills. In particular, employers should participate at a large-scale in school-to-work partnerships with schools, help schools define skills to be developed by students in career endorsement studies, give weight to the CIM and CAM as credentials held by young job seekers who have attended Oregon high schools, and work in partnership with schools to create more internship opportunities for teachers.

Professional Development Has a Critical Role in School Transformation

Given the magnitude of the improvements envisioned, school transformation will require a substantial commitment to refocus and retrain everyone with professional responsibilities, and to give them the time and support they need to achieve results. School-based staff development efforts will require schools, school districts, and education service districts to give higher priority to standards-based education in annual planning and budgeting. School-based staff development will also require support from a variety of resources such as the Department of Education, colleges and private trainers, and professional organizations.

Teacher training and certification will have a long-range impact on school transformation. They must be modified so new teachers coming into the system are more knowledgeable about their subject areas and stronger practitioners of standards-based teaching methods.

Preparing for the First CIM Assessments

Less than half of Oregon tenth graders who take the initial assessment to receive a CIM are expected to achieve the scores needed on their first try. More and more students will meet these standards as curriculum and instruction are redesigned. Meanwhile, schools should try to prepare as many students as possible to pass the tenth grade English and math assessments in 1998-99. Individual schools and the K-12 system must pay attention to five issues before the first 10th grade assessments:

- They must help teachers and students prepare for the assessment in the short time frame available.
- They must lay the groundwork for public understanding of what has been done to prepare students for the assessment, they must make clear the importance and difficulty of the assessment, and they must help people realize that not all students will pass the CIM assessment on the first try.
- They must put systems in place to help students retake and pass those portions of the CIM assessment that they do not pass the first time.
- They should regard the initial assessments and the period leading up to the assessments as a learning opportunity, a time to figure out what works and what doesn't, and then to make adjustments accordingly.
- They should have a plan for improving student performance over time so that more students meet the standards each year.

Communication with the public, especially parents, will be critical in keeping the initial CIM assessments in perspective. People should be informed what the assessments contain, how they will be scored, and what it will take to qualify for a CIM award. In particular, they should be urged to understand 1) that the standards are very high and that there is no shame in students not meeting them on the first assessments, 2) students will have a number of opportunities to pass the CIM, 3) students who don't make the cut scores the first time will receive support and instruction to build skills in areas needed, and 4) failure to meet CIM performance standards will not keep a student from receiving a diploma.

Stakeholder and Public Communication

The school changes envisioned in this document will require the understanding, support, and involvement of a great many stakeholders. The communication strategy being developed will first reach out to a core audience of institutional partners and educators, and then extend to a larger audience of students, parents, and the public at large.

Inter-organizational partnerships are crucial to this effort because the job of reaching both internal and external audiences is too big and complex for the State or any other single institutional player to accomplish.

Long-term Commitment To School Transformation

The legislation, policies, and institutional arrangements already in place underscore Oregon's long-term commitment to school transformation. These are the basic principles which should guide the work of leaders involved in school transformation:

- ***Adhere to the vision***. Keep a steady compass. Periodically take stock.
- ***Be patient***. Nothing this big or worthwhile can be accomplished quickly.
- ***Build strong partnerships***. School transformation cannot be accomplished without them.
- ***Keep everyone involved well informed***. There should be no surprises. Everyone with a

leadership role should share common themes and key messages in what they say.

- ***Use resources effectively***. New resources should be directed to the extent possible to school transformation, but it will also be necessary to rearrange or redirect existing resources.
- ***Use local flexibility effectively***. Local schools have substantial flexibility to achieve the results envisioned in the Oregon Educational Act for the 21st Century. They must learn to use this flexibility.
- ***Measure results***. Oregon should measure its own progress in school transformation as much as it measures the academic progress of its K-12 students. Such measurement should emphasize results more than activities intended to achieve results.
- ***Use data in decision making***. Oregon should expand and improve its systems for gathering education data, and it should employ data to make decisions and improvements in the school transformation process.

INTRODUCTION

This is an eight-year framework for implementing the Oregon Educational Act for the 21st Century. Although it establishes the context and basic requirements for implementing the Act, it is also a living document. With time and experience, its scope will grow and its focus will sharpen. This is just the first edition.

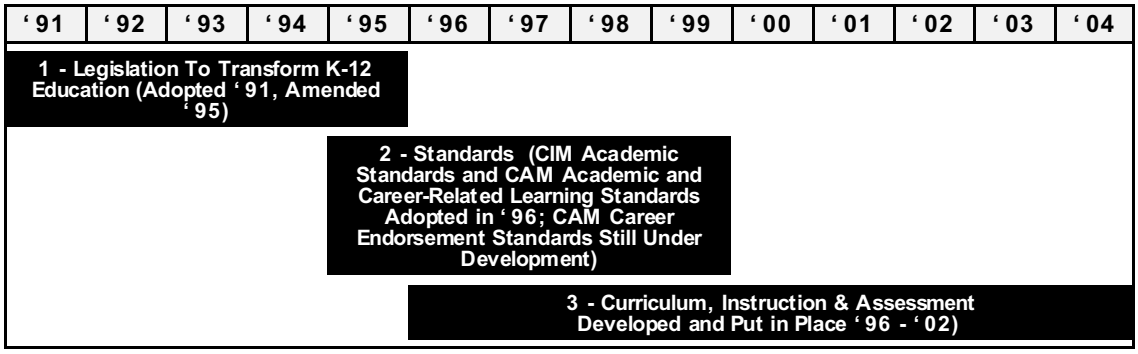
What the Act Calls for Defines School Transformation

The Act calls for dramatically raising student performance standards, enriching classroom learning, overhauling curriculum and instruction, using the community as a learning resource, and forging new working partnerships between schools and communities. It insists that students leave high school better prepared for further schooling, employment, and the responsibilities of adult life. In short, this legislation intends to *transform* Oregon's K-12 schools for the better.

The Foundation for This Change Was Laid Years Ago

Implementing this transformation represents the third and most difficult stage of a school change process that began six years ago but whose roots go back even farther.[1] The Act itself was the first significant part. It was created in 1991 through HB 3565 and then revised in 1995 through HB 2991. The second stage involved the adoption of high achievement standards that are central to the legislation and to the vision of school transformation. The State Board of Education completed that task in 1996. In September it adopted content and performance standards for the Certificate of Initial Mastery. In December it adopted content standards for the Certificate of Advanced Mastery. The Department of Education is now developing performance standards for the Certificate of Advanced Mastery.

Figure 1. The Three Stages of Oregon School Transformation



The third stage, which this plan addresses, got under way several years ago when the Department of Education began developing systems to assess student achievement of

[1] For a summary of recent milestones in Oregon school policy, see Appendix A.

standards. Despite progress in developing assessment systems, most of the third stage still lies ahead. It involves everything required to help students achieve standards, including continued development of assessment systems, overhaul of curriculum and instruction, creation of career-related studies, and establishment of community-based learning. It is a huge but feasible undertaking that will require cooperation from a wide spectrum of partners. School districts and individual schools will carry the main weight of this responsibility, but they will need support from the Oregon Department of Education, the state's higher education and community college systems, professional associations, the Teacher Standards and Practices Commission, teacher training programs, community leaders, and thousands of Oregon employers.

What Makes This Effort Different Is Its Scale and Consistency

Many of the improvements envisioned in the Act are already in place in a number of Oregon schools. Some, for example, have aligned their curriculum with the new high standards and have extended student learning time for in-depth study. Some have adopted integrated instruction across academic subjects, context-oriented teaching, and community-based learning. In some schools students work to understand science and math concepts and then apply them to real-world contexts. In many schools performance assessment has become an integral part of the feedback students, parents, and teachers use to improve student achievement.

Before long, these will all be common practices in Oregon schools. In this respect, school transformation in Oregon already has a foundation. Right now, however, these practices are not widely in use. They are scattered, and they are frequently isolated from other parts of a school's curriculum and instruction or from what feeder schools and other schools in the same attendance area are doing. Several things make school transformation different from progressive practices already in place. One is the comprehensive vision, scale, and consistency of the overall effort. Another is accountability, made possible by a statewide assessment system. Yet another is the way that the components of school transformation (particularly high standards and community-based learning) extend and reinforce each other, both within and among schools.

Schools Must Begin the Effort Today

Even when combined, all of the programs in place are a long way from achieving the scale required for the statewide, system-wide transformation envisioned in the legislation. In particular, schools have a great deal of work to do in adapting curriculum and instruction to help more students achieve high academic standards. This effort must begin now. The first assessments to award the Certificate of Initial Mastery, limited to English and math, will be given to tenth graders in the 1998-99 school year. Assessments for other subjects will be phased in each year thereafter. School districts must focus their resources to help students acquire the higher skills needed to pass those assessments.

This Document Is Written for Those With a Role in School Improvement

This implementation framework is addressed primarily to education policy makers, school

administrators, other school-level personnel, professional organizations, and business and community leaders who will have responsibilities as partners in school transformation. But what it has to say should be of interest to all Oregonians, particularly teachers and parents. The document has three objectives: 1) to educate readers about the nature and requirements of school transformation, 2) to define for partners in school transformation the tasks that lie ahead, and 3) to identify for those partners what will be required in the way of responsibilities, timing, and resources to accomplish school transformation.

The partners expected to implement school transformation are well represented in the development of this document. The Governor and the Superintendent of Public Instruction have recently appointed a panel of K through 16 educators and community and business leaders to advise this planning effort. This group, the School Transformation Advisory Council, is working closely with the team of staff members who have developed this plan.

This Document Lays Out a Vision, Then Basic Requirements

This framework is divided into two parts. Part I outlines why school transformation is vital to Oregonians, what is envisioned in school transformation, and how various parties will be affected. Part II lays out the basic requirements for putting school improvements in place and it discusses how those improvements might be sustained after the initial implementation period.

I. The Outlines of Oregon School Transformation

1. WHAT'S AT STAKE

Along with the family, schools have a central role in preparing the young to lead responsible, successful, and rewarding lives. Schools help shape within the young an understanding of human experience, a shared sense of community, civic values, intellectual curiosity, critical thinking skills, and the ability to communicate and work with other people. Schools deepen students' connection to their common heritage, to the arts, and to constructive leisure pursuits. Schools impart the knowledge and skills that enable individuals to make reasoned decisions, function effectively as citizens, succeed in careers, and contribute to the welfare of their communities.

Relative to most other states, Oregon has a good K-12 school system. Oregon adults have the highest levels of prose, document, and quantitative literacy of the 14 states that have tested, and Oregon far outranks overall national performance. Oregon ranks consistently at or near the top on high school SAT scores among the 23 states where SATs are taken by at least 40 percent of high school students. The vast majority of parents still send their children to public schools. In particular, Portland is one of the few urban systems in the nation that has not experienced significant flight from public education.

Oregonians are better educated today than they were two decades ago. In the Portland school system, elementary student scores the past 14 years in reading and math have improved by one full grade level. Oregon adults today have spent more time in school than adults a generation ago (see Table 1).

Table 1. Educational Attainment, Oregon Adults

	1960	1980	Today
High School	48%	76%	84%
Some College	20%	39%	61%
College	9%	18%	24%

The System Doesn't Match the Need

There is little evidence that the performance of Oregon students has deteriorated over the past two decades. If anything, in terms of standards of achievement, it is better than ever. However, the world has changed dramatically during this same period, creating critical new demands that Oregon's school system has barely begun to address.

The Changing Economy Is Demanding More of Schools

The American economy is becoming far more competitive than ever before. Products and services must meet more exacting standards, and work now demands far higher skills. Oregon is a part of this evolution. Oregon's future depends on a thriving, competitive economy, not only as a source of employment for individuals, but as the foundation for family and community stability, and as the means for people to live more enriching lives.

Given its assets in location, livability, and work force, Oregon has prospered in the past decade. But whether it can maintain that momentum will depend to a great extent on its

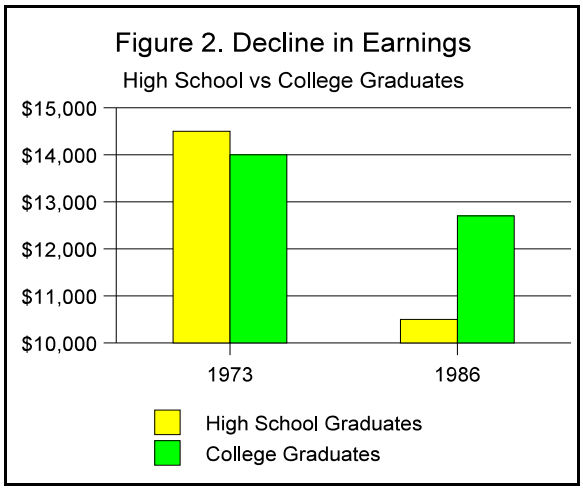
efforts to improve its public education system. The success of these efforts will also have a strong bearing on whether the attractive new jobs created by the state's dynamic economy go to resident Oregonians or to highly skilled individuals from elsewhere.

Oregon Can't Keep Pace With the Skill Needs of its Economy

In just the past two years, Oregon's successful economy has created thousands of openings in well paying, skilled positions for which there is a shortage of qualified Oregonians. As a result, employers have begun importing the workers they need. The new talent is Oregon's gain, but when Oregonians are left behind because of skill deficiencies, everyone loses. The shortage of skilled workers is impairing Oregon's economic competitiveness by restricting productive capacity and increasing the costs of remedial training. Individuals who lack sufficient education and skills are vulnerable to lower income, higher unemployment, and more limited prospects in life. These, in turn, impair family and community stability. None of these outcomes is acceptable.

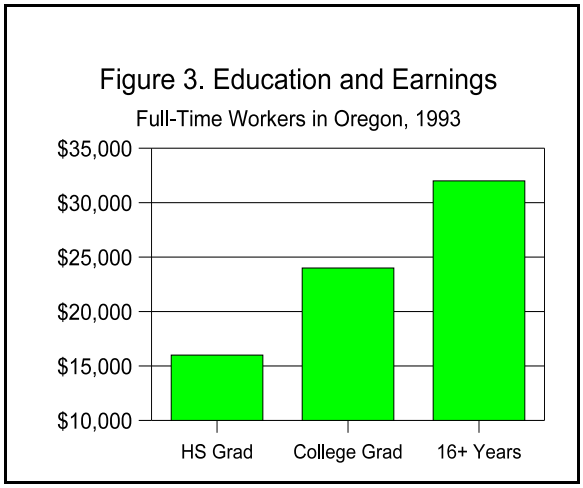
Low-Skill, High-Wage Jobs Have All But Disappeared

Workplace demand for skilled employees has changed dramatically. Two decades ago in Oregon, it was possible to secure a family wage job right out of high school, in logging or mill work or other blue collar jobs. Those jobs required a good work ethic, but very few skills that couldn't be learned on the job. Over the past two decades, global competition and new technology in the workplace have caused those low-skill, high-wage jobs to virtually disappear. Adjusting for inflation, wages for young adults with high school degrees or less have fallen precipitously (Figure 2). This reflects the lower value that employers place on low skills.

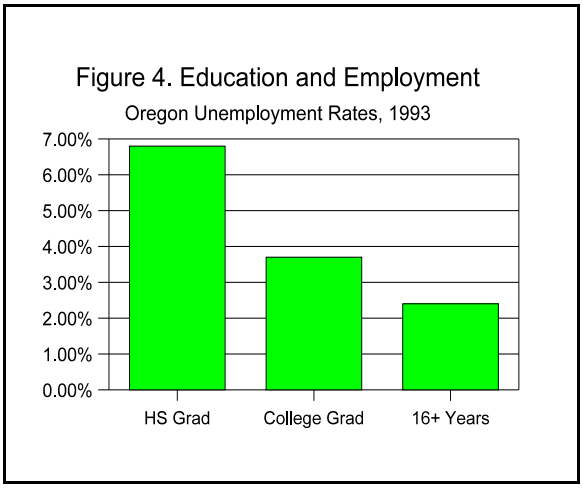


Workers Today Must Know More and Do More

Today's economy has created higher expectations of workers. They must be more capable in tasks that require high levels of language and math literacy and the application of computer technology. They must function more effectively in teams, make more decisions, and take more responsibility for quality control in what they do. This requires greater capability in problem solving, working in



groups, communicating with others, and taking initiative.



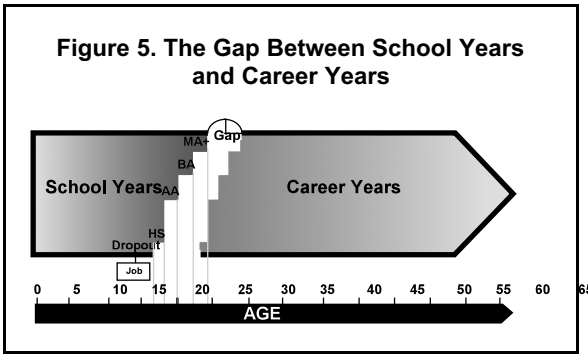
Such workers typically have more education than workers without such skills, and they are in strong demand. Because their skills are valuable and because they are in short supply, they command higher earnings and suffer lower unemployment (Figures 3,4). Employers report shortages of technically skilled workers in a broad spectrum of sectors. If Oregon schools could turn out graduates with higher fundamental and job-specific skills, more of those graduates would find high paying work and industries that need such workers would find it easier to locate and grow in Oregon.

Table 2. New Realities for Workers and Families

	20+ Years Ago	Today
Future of male with only high school diploma	Blue collar job at good wages sufficient to support a family	Service sector job at low wages barely sufficient to support self
Future of female with only high school diploma	Full-time home maker with children	Perhaps a full-time home maker; more likely a low-income worker
Births to unwed mothers	10 percent of all births	30 percent of all births
Percentage of children with parent at home	70 percent	25 percent

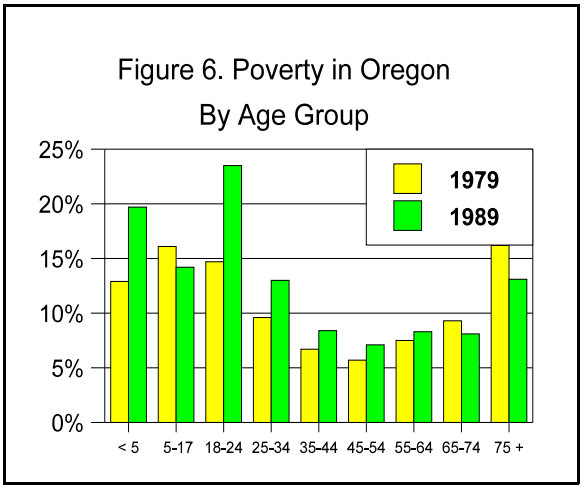
So while Oregonians who graduate from college (roughly 30 percent of young adults) are doing reasonably well, many of those not on a traditional college track are faring poorly in the Oregon economy. Based on data from Oregon's 1996 statewide assessment, we know that at least half of today's tenth graders probably would not meet CIM math standards. About 25 percent of our high school students do not graduate with their classmates. Such results are not acceptable.

Many Are Failing To Connect Education With Satisfying Careers



There was once a time when most young people began jobs or careers immediately after finishing school. In recent decades, however, too many graduates have failed to make a solid career connection upon completing their formal schooling. Those without sufficient education and skills have found limited job choices and income potential, and greater prospects of unemployment and poverty. Even those with more education sometimes find that the choices they made in first jobs or fields of study

haven' t been as satisfying as they hoped. Too many people from their late teens to late twenties have found themselves frustrated or in dead-end jobs. This trend, illustrated in Figure 5, has been called the school-career gap.



This gap can be closed by school-to-work programs, especially at the high school level, which give students more opportunities to become aware of career options, to explore career possibilities, and to gain relevant work experience. Through school-to-work programs, students can explore their career interests earlier and make more informed decisions about what they want to do, thus bringing the school and career phases of life closer together. Once in careers, these same individuals can blend schooling into various stages of their working years just as work awareness and experience were once blended into their schooling.

Some Students Are Trapped in a Cycle of Poverty and Academic Struggle

Because many high school graduates do not have skills that match the demands of the economy, there has been a sharp rise in the percentage of young Oregon adults living in poverty (Figure 6). Also, an increasing number of young children are growing up in poverty and entering school unprepared to learn. (Oregon kindergartners today are substantially behind those just 15 years ago.) Some of these children are able to catch up with their peers, but too many fall permanently behind. Too many fail to develop the skills they need, often become alienated, and develop a diminished sense of worth. Many drop out of school or fail to connect with further education or satisfying post-secondary employment.

These trends portend an alarming intergenerational cycle. Poor job skills and poor job prospects in one generation lead to family stress, which —in turn —leads to children in the next generation who have trouble learning. Unless schools can do a better job in creating student outcomes that match the realities of the new economy —and fast — a growing chasm could make it hard for many Oregonians to break out of the cycle of poverty in which they are trapped. School systems become trapped in this cycle, too. The less effective they are in preparing one generation of students to hold well-paying jobs and become contributing members of the community, the greater the likelihood they will spend more resources on remediation and non-educational support services with the next generation of students.

Even though schools are caught up in this problem, they often have no control over much of it. They have little say about how much students are encouraged to read at home, how

much television they watch, or how much family encouragement they receive to do their homework and excel academically. In addition, as Oregon's population becomes more diverse, schools must address the special needs of children who come from widely different cultures and language backgrounds.

Oregon's Future Depends on Student Performance Today

The system wide school improvement envisioned in the Act has profound implications for Oregonians and Oregon. The changes outlined here will help more Oregonians realize their full potential as individuals, family members, citizens, and workers. They will contribute to family and social stability. They will make it more feasible for employers to find skilled workers, maintain productivity, uphold product quality, control costs, and confront competition in other states and countries.

2. THE VISION OF SCHOOL TRANSFORMATION

Oregon's school improvement legislation envisions increasing majorities of students coming out of their K-12 years competent in rigorous academic and career-related studies that apply directly to further schooling, employment, and fulfilling lives. There will no longer be, by design or circumstance, separate academic and vocational tracks. Rigorous academic and occupational learning will become reinforcing extensions of one another. All students will learn with the expectation that they are preparing for demanding responsibilities after high school not only as post-secondary students and employees, but also as individuals, family members, and citizens.

Learning Will Be More Rigorous and Varied

Students will meet high performance standards in English, mathematics, science, the social sciences, the arts, and a second language. They will develop useful knowledge and skills in a career field of interest. They will develop competence in reasoning, solving problems, communicating with other people, working in teams, using technology, and planning their own futures. They will be recognized for these accomplishments with certificates of initial and advanced mastery. The classroom experiences through which they acquire these capabilities will be rich and varied. Subjects will be taught in the context of applications outside school. Learning will occur through interdisciplinary approaches and project-based assignments. Community members will be encouraged to enrich classroom teaching. Students will spend significant time in the community learning about adult work and responsibilities, and gaining insight into the way that academic knowledge is applied in work and life. Such learning and achievement will build methodically from kindergarten through twelfth grade and will take place in all schools across Oregon.

Students Will Be Rewarded for Their Stronger Capabilities

Students completing twelfth grade will make a smooth transition to post-secondary schooling, work, and adult responsibility. Post-secondary schools and employers will find that graduates of Oregon schools come to them with solid academic skills, a strong work ethic, and the readiness to grow, intellectually, occupationally, and personally. High school graduates will find that post-secondary schools and employers will accord extra value and status to their certificates of mastery. Graduates who hold these certificates will exhibit maturity, responsibility, and initiative. They will be successful in post-secondary schooling, careers, and family and community life.

3. THE SCALE AND DIFFICULTY OF THE UNDERTAKING

Oregon's new K-12 education standards and related improvements require not just incremental change but fundamental *transformation* of the existing school system. The challenge of accomplishing that transformation is enormous when one considers the scale of the system, the logistics of the changes required, and the task of winning people over to those changes.

Thousands of People Will Be Affected

The scale of the system is formidable. The state has 220 school districts with more than 561,000 students and approximately 27,000 teachers in over 1,200 buildings scattered across 98,000 square miles. The annual cost of running this system exceeds $2.7 billion.

Just two examples illustrate the logistics of transforming the system. Several thousand teacher candidates now in undergraduate programs, 27,000 teachers in Oregon schools, and the school administrators who support them will require extensive orientation and training. Second, employers must be involved statewide in school-to-work programs that are a part of the new curriculum. A preliminary scale analysis suggests that among Oregon's 145,000 high school students, 40,000 ninth and tenth graders will require at least one job shadow and 30,000 eleventh and twelfth graders will require one structured work experience. To meet this demand, 7,000 employers representing 280,000 jobs would have to provide one job shadow for every seven employees and one work experience for every 10 employees. Forming the employer-school partnerships required and coordinating both the school and employer end of these student experiences is a huge undertaking.

School Transformation Will Ask More of Everyone

Perhaps the most imposing task in school transformation is winning people and institutions over to the changes that will be required. The standards ask more of everyone. At the school level, curriculum, classroom organization, teaching methods, learning process management, and school scheduling will probably have to be modified. In-service training will have to be refocused to help teachers, counselors, administrators, and support personnel make these modifications. The content knowledge of both existing and prospective teachers must be enhanced to support school transformation. The way teachers are trained and certified must be improved, too. These changes will involve new structures and new ways of thinking, planning, scheduling, working, communicating, and evaluating. To embrace such changes, the people affected need to understand why change is important, how their lives will be made better, what the trade-offs are, what they must do, and how to do it. The institutions responsible for change must become more adaptive and improvement oriented. This will require greater flexibility on the part of both individuals and organizations.

4. THE PRINCIPLES AND COMPONENTS OF SCHOOL TRANSFORMATION

A few key concepts and goals underlie education improvement in Oregon. Two in particular are paramount: 1) students must meet high standards, and 2) students should be prepared for successful transition to post-secondary education, or the job market if they choose, as a result of 12 years of schooling. Traditional practice allows students simply to accumulate "credits" and to receive a diploma after four years and a specified number of credits. In fact, a student can receive a diploma with only a D- grade average. As a result, far too many students are not prepared for anything further in life. Education programs must allow choices, but they must ensure that any choice a student makes will lead somewhere.

Additionally, the idea that education can simply be delegated to schools and teachers alone must give way to a more inclusive learning process. In this process the school will be the main learning environment, but not the only one. Teachers will still impart content knowledge, but they will also manage student learning experiences, often in partnership with other teachers and with adults from beyond the school campus. Students will assume more responsibility, learning will extend beyond the classroom, and parents and community members —including employers —will have responsibilities to participate in the education of the community's young. Responsibilities of the employer community will go beyond supporting tax increases, going to school events, and donating money or equipment. More employers must be willing to spend time with students, either at the school or at the workplace, and accommodate their needs to learn about the world generally and about the world of work specifically. Employers should send a message to students about the importance of higher standards by favoring the certificates of mastery in their recruiting and hiring practices. Employers must also be willing to work directly with teachers, in many instances providing them internship opportunities, so teachers have a better understanding of the academic skills, and the application of those skills, required of students in the workplace.

High Standards Will Begin in First Grade, Culminate With Certificates

The principal mechanisms for ensuring high standards of learning for Oregon students (rather than credits and "seat time") are the certificates of mastery —*initial* mastery and *advanced* mastery. These are awarded to students who achieve demanding content standards and who demonstrate that achievement through assessments and classroom assignments. Students who do not qualify for a CIM or a CAM but who accumulate required class credits will still receive a diploma.

Oregon's academic content standards at both the CIM and CAM level are stated in *benchmarks*, indicators of student proficiency at particular grade levels that can be measured by assessment instruments. The academic requirements of the CIM build a foundation for the CAM. Panels of teachers, assisted by curriculum and assessment

specialists, business representatives, and other interested parties, have developed benchmarks for grades 3, 5, and 8 leading to the grade 10 CIM benchmarks and the grade 12 CAM benchmarks.

The Certificate of Initial Mastery (CIM). The CIM represents rigorous academic standards in English, mathematics, science, social sciences, the arts, and a second language. Students pursuing a CIM must meet knowledge and skill benchmarks measured through state and local assessments. Table 3 contains samples of typical benchmarks leading to a CIM.

Table 3. Sample Benchmarks That Typify CIM Standards and Grade 12 CAM Standards

Subject	Grade 3	Grade 5	Grade 8	Grade 10	Grade 12
English (reading section)	Retell, summarize, or identify events, main ideas, and facts in a literary and informative reading selection	In literary, informative, and practical selections, identify sequence of events, main ideas, facts, supporting details, and opinions	In literary, informative, and practical selections, identify sequence of events, main ideas, facts, supporting details, and opinions	In literary, informative, and practical selections, identify sequence of events, main ideas, facts, supporting details, and opinions	In literary, informative, and practical selections, summarize literal meaning and analyze and evaluate implied meaning
Math (calculations and estimations section)	Perform whole number calculations using paper, pencil, and calculators	Model, explain, and perform calculations on whole numbers, fractions and decimals, using paper, pencil, and calculators	Model, explain, and perform calculations on whole numbers, fractions and decimals, using paper, pencil, and calculators	Perform numeric and algebraic calculations using paper and pencil, calculators, and computer programs	Perform calculations involving: matrices and all real numbers including their absolute values and numbers in exponential radical and scientific notation form
Science (physical science section)	Describe objects according to their physical properties	Identify substances as they exist in different states of matter	Compare and contrast the physical and chemical properties of specific substances	Describe and explain properties of elements and their relationship to the periodic table	Analyze the interactions of molecules and their relationship to the physical properties of compounds
Social Science (geography section)	Describe characteristics of places	Describe and explain physical and cultural characteristics of regions in the United States	Compare physical and cultural characteristics of the regions of the world	Compare physical and cultural characteristics of the same place at different times in history	Identify and explain how physical and cultural characteristics of a place have, over time, contributed to a contemporary issue

School districts in Oregon must be ready to award the CIM in English and math to Oregon tenth graders in the 1998-99 school year. Science, social sciences, the arts, and a second language will be added to CIM assessments over the following four years. Student progress toward the CIM will be assessed at grades 3, 5, and 8. Students who do not pass all or portions of CIM assessments by the end of the tenth grade will have opportunities to strengthen their skills and try again.

Certificate of Advanced Mastery (CAM). The CAM represents the next level of achievement for high school students. Typically, students who have attained the CIM at or close to grade 10 will move on to the CAM. Although it is possible for students to move into the CAM program before receiving a CIM, they cannot be awarded a CAM until they are

awarded a CIM. The CAM program, which is still under development, has several defining elements:

- ***High academic standards***. Building on the foundation provided by the content standards leading to the CIM, students pursuing a CAM must achieve grade 12 benchmarks measured through state and local assessments.
- ***Career-related learning standards***. These constitute fundamental knowledge and skills essential for students to succeed after high school in employment, further schooling, and family and community life. They include such career and life skills as problem solving, working in teams, and communication, and an understanding of the workplace and career development.
- ***Participation in a career endorsement area***. Students in the CAM program will begin to develop useful knowledge and skills in at least one career field of interest known as an endorsement area of study. Career endorsement areas are arts and communication, business and management, natural resource systems, industrial and engineering systems, human resources, and health services. All students must participate in a career endorsement area to receive a CAM.
- ***An endorsement area credential***. As a part of their CAM program, students may elect to pursue in-depth study for a credential in their career field of interest. The Department of Education is designing the credential with representatives from the employer community.

All schools must be ready to award the CAM by the 2004-05 school year. However, beginning in 2001, when the first CAM assessments become available, schools should begin to develop CAM programs tied to academic standards and assessments.

A Range of School-Level Initiatives Will Be Required
To Support Student Achievement of the New Standards

Helping students achieve CIM and CAM standards will require schools to make a number of critical changes in the way they operate. Most importantly, they must make a commitment to help students achieve the new standards and they must focus on school improvement as a priority. As a part of that effort, they will need to:

- Make standards-based curriculum and instruction a priority in school and school district improvement plans
- Adapt curriculum and instruction to the higher standards
- Focus career guidance programs so students see that achievement of academic standards, selection of an endorsement area of study, and participation in community-based learning experiences are an integral part of post-high school planning
- Work with community partners to create community-based learning opportunities for students
- Become adept at using and developing performance-based assessments
- Implement other components of school transformation such as improved early childhood

education programs.

- Work with two- and four-year colleges and other post-secondary education programs to help high school students make smooth transitions to post-secondary schooling. Program entry standards for Oregon's community college and admission standards for state-funded colleges and universities have been developed in conjunction with the new K-12 standards.

District and School Improvement Plans. The legislation creating school transformation envisioned a flexible, school-based approach to implementation of the new standards. It created site councils composed of teachers, parents, classified employees, and principals for this purpose. Site councils help write and coordinate the school's improvement plan to define how students will achieve CIM and CAM standards. School improvement plans form the basis for the more comprehensive district improvement plans submitted biennially to the Department of Education. Although they have been charged with significant authority to implement reform at the building level, site councils cannot interfere with the duties or rights of locally elected school boards.

Standards-Based Curriculum and Instruction. To help students reach the standards envisioned in the CIM and CAM, schools will need to try a variety of approaches to both curriculum and instruction. Key changes are likely to include the following:

- All curriculum and instruction will be tied to the new standards. Every decision about what to teach and how to teach it should be based on what is required to help students meet standards.
- In mathematics, subjects such as algebra and geometry will be taught earlier and in fewer but more concentrated segments.
- In grades K-5 children of mixed ages will participate in classes that are organized to study concepts in greater depth for longer blocks of time.
- Teachers will have to use new materials that they develop and share with one another through such media as the Internet. Textbooks will not be sufficient by themselves to prepare students to meet higher standards.
- Teachers at all levels will need to adopt the best practices available to help students meet standards, often from other teachers and often across grade levels. It will be particularly important for teachers at different grade levels to talk to one another and to reach agreement on how curriculum and instruction should be employed at various stages so students can meet the standards.
- Teachers will need to find ways to make learning more relevant and compelling to students by helping them see the relationships among subjects and by helping them see the relationships between knowledge and the real-world application of that knowledge. This is sometimes called contextual learning.
- Many elementary and middle school teachers will need to develop stronger content mastery. Many high school teachers will need to adopt teaching methods that better

engage students in learning what they need to meet the new standards.

- Schools will need to capitalize on technology, particularly computer programs and Internet connections. Technology will provide students with opportunities to learn through instant feedback on problem-solving and skill-building programs and to conduct independent research.

Options To Help Students Succeed. Students will have different strengths and needs. A student strong in English, for example, might struggle in math and science. The law requires that if students are not meeting or exceeding all standards at grades 3, 5, 8, and 10, their school district must make available additional services or public school options. Students will be able to transfer to any school in or out of their district if they are unable to achieve CIM standards at grades 3, 5, 8, and 10 after supplemental instructional services have been provided by the district. Students will be able to attend any public educational institution which offers the CAM program they choose.

Large-Scale School to Work. Students will have much better prospects for attaining academic standards in both CIM and CAM programs by participating in community-based learning experiences, often referred to as school to work or school to careers. The idea behind school to work is to give youth the attitudes, skills, and informed expectations that will make them successful individuals and productive employees in a competitive 21st century economy. Through exposure to the workplace, students can learn firsthand about occupational skills, broaden their career horizons, and see the importance of academic study to career success.

School to work applies to students at all grade levels but in different ways. In the elementary and middle school grades, it is more geared to occupational awareness. At grades eight through ten it contains elements of both career awareness and career exploration. At the CAM program level (grades eleven and twelve), it becomes more structured, hands on, and tied to career decision making and endorsement areas.

Table 4. Typical School-to-Work Activities

Category	Grade Levels	Examples	Duration	Site
Career Awareness (Introduce students to the world of work)	1-10	field trips	1-2 hours	employer
		community speakers	1-2 hours	school
Career Exploration (Expose students to a variety of career options)	9-10	information interviews	1-2 hours	employer or school
		job shadows	half day to full day	employer
Structured Career Experience (Develop and assess CAM-related skills according to individual learning plan)	11-12	paid work	several weeks to months	employer
		simulated work	several weeks to months	school
		school-based enterprise	several weeks to months	school
		unpaid work such as internships	several weeks to months	employer

Table 4 shows typical school-to-work activities appropriate for various grade levels. School

site experiences might include projects on real-world topics, presentations or demonstrations by outside experts, or workplace simulations. Work site experiences at businesses, government agencies, or nonprofit organizations might include visits to learn about jobs, "job shadowing," mentorships, or internships.

Performance-Based Assessments. Student performance assessment, described in the following section, is a major component of Oregon school transformation, and schools will have a key role in the assessment system. Learning how to use standards-based assessment tools is one of the first tasks that schools will need to accomplish in school transformation. Teachers and other educators will be responsible for administering state-developed assessments in English, math, science, and social sciences for students in grades 3, 5, 8, 10, and 12. In second languages and the arts, schools will have the added responsibility of developing assessments as well as administering them.

Early Childhood Education. Success in later grades depends on the readiness of children to learn upon entering kindergarten and the early grades. Therefore, school transformation envisions expanded preschool education for an increased number of eligible children deemed to be at risk of starting school unprepared to learn, falling behind early, and failing as they move into higher grades. When young children enter school ready to learn, they are more likely to perform well academically, stay in school, and succeed in life. They are also less likely to need costly remedial education, drop out, or get into trouble.

PASS — Standards for Success in Oregon Higher Education. Just as employers and policy makers have been concerned about insufficiently stringent skill standards for high school students, so have officials in higher education, particularly Oregon's state-funded four-year colleges and universities. About 50 percent of Oregon high school graduates go directly to college upon graduation. Perhaps a fourth of these new collegians do not have college-level skills in math and writing. Concurrent with the development of CIM and CAM standards, the Oregon State System of Higher Education, at the request of the State Board of Education, has developed standards for admitting Oregon high school graduates to Oregon's public colleges and universities. OSSHE created the Proficiency-based Admission Standards System (PASS). PASS, in conjunction with the statewide K-12 assessment system, will assess student readiness for college-level work in math, science, the social sciences, a second language, literature, the humanities, and the arts. Students also must develop what are called "process proficiency skills" in reading, writing, oral communication, analytical thinking, integrative thinking, problem solving, using technology, and working in teams. These skills are similar to career-related learning standards required for the CAM.

PREP — Standards for Success in Community College Programs. Oregon's community college system is developing standards to help students understand what it will take to succeed in various programs offered at two-year institutions. Known as PRoficiencies for Entry into Programs (PREP), these entry standards are for all students (not just recent Oregon high school graduates), and they differ for each program at each community

college. The standards are being developed to clarify for students what they need to know and be able to do to enter and complete in a timely fashion both academic and technical programs. The standards will involve assessments, some of which are already in place, but they will be a diagnostic tool, not a barrier to entry. Community colleges will remain open-door institutions. Students who do not meet PREP entry standards will be offered preparatory courses and activities to develop requisite knowledge and skills. PREP standards have been aligned with CAM and PASS standards for the benefit of students coming out of high school CAM programs or leaving community college to pursue a baccalaureate degree at one of Oregon's state-supported schools.

5. ASSESSMENT SYSTEMS

Assessment has a pivotal role in Oregon's effort to create rigorous academic standards. Assessment gives educators better diagnostic tools for helping students reach standards, and assessment creates systemwide accountability in standards-based education by measuring how well schools perform in raising student achievement to meaningful standards. Since 1991 Oregon has been testing student achievement at grades 3, 5, 8, and 11[2]. This assessment system is being revised and expanded to measure student attainment of the new standards.

The new system will create uniform, statewide measures of student performance in the early grades, in effect providing a map of student progress toward meeting CIM and CAM standards in high school. At the high school level, the system will provide a reliable mechanism for determining that students merit certificates of initial and advanced mastery. Valid and reliable assessment requires testing student knowledge of content, student problem solving and reasoning skills, and student ability to apply content knowledge in specific situations. Table 5 illustrates how the assessment system can best measure each kind of student capability.

Table 5. Assessment System Measures

Capability Assessed	Form of Measure	Source of Measure
Knowledge and skills	Multiple-choice tests	Developed by state and administered and scored by teachers and other local educators
Problem solving and reasoning skills	Performance assessments (scored work assignments, such as writing samples or solutions to math problems)	
Application of knowledge and skills in specific situations	Teacher evaluated classroom project work samples	Developed and generated by teachers

Significantly, the test portion of Oregon's assessment system will be "criterion-referenced" rather than "norm referenced." This means that a student's test performance will be evaluated against a set of predetermined criteria rather than compared to the performance of a national sample of students (or norm group). Norm-referenced testing only determines how well a student performs compared to other students at the same grade level, not whether a student has achieved rigorous academic standards.

Student proficiency in content benchmarks for English, math, science, and the social sciences, as well as career-related learning standards, will be measured through a combination of statewide and local assessments. Proficiency in the arts, second languages, and career-related learning will be measured through local assessments. The assessment system under development at the Department of Education includes not only assessments in English, mathematics, science, and the social sciences, but also procedures for

[2] In 1996 the grade 11 assessment was changed to a grade 10 assessment in anticipation of converting it to the tenth grade CIM assessment.

administering and scoring the assessments.

Assessments Will Be Used To Measure Student Progress and Determine CIM and CAM Awards

Assessments at all grade levels will be similar in design but at certain grade levels they will differ in purpose. Assessments at grades 3, 5, and 8 will be *progress assessments* used to measure student progress toward the high academic standards represented by the CIM and the CAM. Assessments at grade 10 and 12 will be *award assessments* used to confer, respectively, the CIM and the CAM.

Progress assessments are important because they help schools determine how well students are acquiring the knowledge and skills that they will need to be awarded the CIM and CAM. They have additional importance because state law mandates that school districts provide special support or alternative education options for students who are not performing up to standards. Not only must a district do this for students who do not meet all the grade 10 CIM assessment standards, but also for students who are below performance standards in all progress assessments at grade 3, 5, and 8. The resource burden posed by this requirement on school districts makes it imperative that these assessments accurately determine whether students meet standards and where program changes are needed.

Table 6 shows the phase-in of assessments to award the CIM. Assessments for each subject leading to the CIM will be ready to use at grades 3, 5, 8, and 10 two years before the initial grade 10 CIM assessment is administered. Because the first grade 10 CIM assessments will apply to English and math, assessments for these subjects in earlier grades are available now. The grade 10 CIM assessment for science will be introduced in 1999-2000, so the assessments for science in grades 3, 5, and 8 will be available in the 1997-98 school year. Given this timing, the first third grade assessment in all subjects will occur in the 2000-01 school year.

Table 6. CIM 10th Grade Assessment Timeline

98-99	99-2000	2000-01	01-02	02-03	03-04	04-05	05-06
English math	English math science	English math science soc. sciences	English math science soc. sciences the arts*	English math, science soc. sciences the arts* 2nd language*	English math, science soc. sciences the arts* 2nd language*	English math, science soc. sciences the arts* 2nd language*	English math, science soc. sciences the arts* 2nd language*

* Local assessments (may be introduced at the discretion of school districts prior to full implementation of the CIM in 2002-03)

The CAM Assessment Is Still Under Development

The Department of Education is now developing the CAM assessment system, which will be phased in according to the timeline in Table 7. This phase-in schedule ensures that school districts have assessment models available two years prior to the deadline for implementation. The Department of Education is currently testing assessment tools at the

twelfth grade in reading and literature, math, and science. It is also coordinating CAM assessments with PASS proficiencies and performance standards so teachers will be able to apply the same procedures and skills in using both systems.

Table 7. CAM Assessment Timeline

98-99	99-2000	2000-01	01-02	02-03	03-04	04-05	05-06
		English math career-related learning (CRL)	English math CRL science	English math CRL science soc. sciences	English math CRL science soc. sciences the arts*	English math CRL science soc. sciences the arts* 2nd language*	English math CRL science soc.sciences the arts* 2nd language*

* Local assessments (may be introduced at the discretion of school districts prior to full implementation of the CAM in 2004-05)

Students Must Achieve High Performance Levels for Certificates

As illustrated in Table 8, the Board of Education has set high performance standards for students to be awarded a Certificate of Initial Mastery in English and mathematics. In the near future, the board will set the scores required for students to achieve in science and the social sciences as part of the CIM, and school districts will set their own scores in the arts and in second languages for the CIM. The board will set performance levels for academic standards and career-related learning standards for the Certificate of Advanced Mastery.

Table 8. Required Performance Levels for 1998-99 CIM Awards

Subject	State Assessment	Local Assessment	Minimum Acceptable Performance
English			
Reading and literature	test		Score of 239
		classroom assignments	On three grade-level reading selections, students must achieve a score of 4 on a 6-point scale in each of four different skill areas
Writing	test		Score of 4 on a 6-point scale in each of four different skill areas
		classroom assignments	On five writing assignments, students must achieve a score of 4 on a 6-point scale in each of five different skill areas
Speaking	none		
		classroom assignments	On 3 speaking assignments, students must achieve a score of 4 on a 6-point scale in each of four different skill areas
Mathematics	multiple-choice test		Score of 239
	problem solving test		Score of 4 on a 6-point scale in each of four different skill areas
		classroom assignments	On five math problems, students must achieve a score of 4 on a 6-point scale in each of five different skill areas

6. HOW ALL PARTIES WILL BE AFFECTED

The demands and benefits of school transformation will touch virtually everyone in Oregon, especially students, parents, teachers, counselors, and employers. Table 9 provides both a summary of the principal changes involved and a snapshot of how they relate to one another. For example, more is expected of front-line workers, which has implications for the mission of schools in preparing everyone for demanding post-secondary responsibilities. Students must meet higher standards, and higher standards require different approaches to curriculum and instruction. Teachers, students, parents, and employers all must assume different responsibilities than at present. In many cases, they will assume more responsibility. At the same time, they will find that the improvements discussed here will yield a range of benefits not possible under traditional approaches to education.

Table 9. The Transition Taking Place

	Where We've Been	Where We're Going
Assumptions about work	A few lead, everyone else takes direction	Front line workers are skilled; they make decisions and take responsibility; they often work in teams
Mission of school	Prepare the brightest for college; the rest to be good workers, citizens	Prepare everyone for more demanding skill requirements of post-secondary education, work, and living
Role of standardized testing	Sorting the best from the rest	Assuring that everyone meets high standards
Structure of schools	Hierarchy (modeled after mass production business)	Site-based autonomy (modeled after high performance business)
Curriculum	Disciplines independent of one another	Disciplines integrated through applied learning
Certification method	Graded units of instruction ("seat time") leading to diploma, regardless of grades or skills	Assessments to measure high standards of knowledge and skills leading to certificates of mastery in conjunction with diploma
Role of teachers	Dispensers of knowledge about subject matter	Content experts, coaches, resources, partners in school management, partners with community resource providers
Role of students	Stay put, listen, recite correct answer, achieve on tests	Learn by observation and application, develop both individual and group skills
Role of parents	Send child to school, help with homework, provide discipline	Choose school, help define school's education philosophy, encourage learning and provide discipline
Role of business	Support school levies and bond measures, sponsor athletic teams	Insist on competent graduates and set standards for such competence, help teachers learn workplace practices, provide educational work experiences for children
Place of learning	School building	Throughout community as well as at school

Here are some of the ways that school transformation will affect what people do and how they do it.

Students Will Meet Higher Standards, Learn in New Ways

Even though they don't realize it, students in their early elementary years will encounter curriculum and instruction that is geared to much higher academic standards culminating

in the certificates of mastery. Their progress toward these standards will be assessed for the first time at grade 3.

As they advance through elementary and middle school, students will continue to do academic work geared toward higher standards, and their progress will be assessed again at grades 5 and 8. During this time they will be exposed to information about adult careers and further education. Some of this will occur in the classroom, some in school activities, and some in the community. Students will notice that much is expected of them academically. They will notice that this is true not only of the best students, but of all students. They will also notice that there is a more concentrated focus on particular subjects for a greater length of time and that the pace of learning will be faster because more is being covered in depth. They will come to appreciate the increased rigor of their studies when they take the assessments at tenth grade for the Certificate of Initial Mastery.

In the eleventh and twelfth grades, students will begin to pursue the Certificate of Advanced Mastery. School life for those in the CAM program will be very different than it is for students in grades 11 and 12 today. Students will spend longer blocks of time on subjects, they will work on projects that integrate academic disciplines, and their pursuit of knowledge will not be confined to the traditional classroom. They may, for example, spend time at employer sites, team up with students at other campuses, or attend Saturday or evening classes. Students will also notice the integration of career-related learning in their studies, stressing such skills as planning and managing time and tasks, working effectively in team situations, assuming responsibility for results, solving organizational problems, and developing an understanding of potential career options.

Research shows that the achievement of high school students suffers if they work more than 12 hours a week in outside employment. Because the CIM and CAM standards are high, Oregon high school students will find that they cannot work more time than this number of hours in part-time jobs without jeopardizing their prospects of achieving a CIM and a CAM.

Teachers Will Expect More of All Students,
They Will See Student Learning in a Longer Continuum,
And They Will Work With a Wider Array of Partners and Resources

The greatest immediate impact of school transformation will fall on ninth and tenth grade teachers. They must prepare as many students as possible for the 1998-99 CIM assessments in English and math, they must learn how to perform assessments, and they must participate in programs to help students pass portions of the assessments that they don't pass on the first try.

Over the long term, teaching and the role of teachers will be far different than in the past. Teachers at all grade levels will expect more and demand more of all students, not just the brightest. In addition to what they are teaching at the moment to students, teachers will also think about their work with students in a continuum extending from kindergarten

through post-secondary education. Teachers will know more about the skills needed by students coming to them from lower grades, as well as the skills their students will need when they reach the upper grades. Teachers up and down the grade levels will work together to make decisions about what to emphasize in curriculum, to align curriculum in the most logical sequence, to eliminate unnecessary redundancy, to teach students concepts as much as skills, and to teach academic subjects in contexts that render learning more meaningful to students. Teachers will go beyond textbooks, supplementing them with material that they find and adapt themselves from a variety of sources, including professional publications, research, other teachers, and the Internet.

Teachers will find themselves partnering more often with one another and with people in the larger community, especially businesses, and they will use community resources more extensively than teachers do now. Teachers will also have opportunities to intern with businesses and other organizations in the community, and thus increase their own capabilities and learn more about workplace skills needed by students.

School Leadership Will Focus on Student Achievement

Creating the educational environment that helps as many students as possible to attain CIM and CAM standards will become the overriding priority of school boards and district and building administrators. In particular, administrators will be held more accountable for results. The year-to-year progress that students exhibit in meeting standards will become one of the most important criteria for judging the effectiveness of schools and their leaders.

Given this priority, superintendents, building principals, and other administrators will incorporate standards attainment in every aspect of school planning, budgeting, and operation. They will find ways to get teachers and other staff members the training and the planning time they need to become proficient in curriculum, instruction, and assessment geared to the new standards. In partnership with teachers and other staff members, administrators will analyze student assessment scores and other data in order to set school and district improvement goals, create plans for achieving the goals, organize schools to help meet the goals, evaluate progress, and make adjustments as needed.

Parents Will See Their Children Get More From School

Parents will have the assurance of knowing that the standards their children achieve will be more useful and meaningful than the system of credits and grades that define education at present. Through the assessment process, parents will know how their children are progressing, where they need additional help, and what should be done to get them that help. Through participation in site councils, parents will also have greater voice in how the school develops programs to help students achieve standards.

Because more is expected of their children in school, parents will find that they need to do more to help their children succeed in meeting higher standards. They will take time to understand what the new standards require of their children. They will read more to their young children, do more tutoring where they can, make sure their children are doing their homework, stay in close touch with the school, and look for opportunities outside school

to help their children acquire skills that will help them meet standards. Parents of employed high school students will also find it is important to monitor and, if necessary, limit the amount of time that students devote to part-time jobs. As noted earlier, part-time work has the potential to seriously interfere with achievement of the new academic standards.

Employers Will Become More Active Partners in Helping Public Schools Perform Their Mission

Thousands of Oregon employers are already working in partnership with schools, and such partnerships will increase as a part of Oregon school transformation. The most prevalent form of cooperation will be employers providing sites for students in school-to-work programs, assisting schools in establishing school-based business simulations or enterprises, and providing intern opportunities for teachers. Employers will also be a resource to schools in developing curriculum linked to industry skill standards. In the long term, employers can give added value to the certificates of mastery by favoring them in recruiting and hiring as a job qualification.

Employers of students who work part time can make an important contribution to standards-based education by 1) encouraging students who work for them to do well in school, and 2) scheduling student work hours so that part-time employment does not detract from the amount of study time that students need to achieve the new standards.

II. Implementation Requirements

7. IMPLEMENTATION TIMELINES

The timeline for implementing school transformation over the next eight years is governed by the phase-in of assessments to measure student attainment of the new standards. Table 10 shows when the CIM and CAM will be awarded in each subject area, and it shows how the implementation of the CIM, the CAM, and PASS will be coordinated.

Table 10. Projected CIM, CAM, PASS and PREP Implementation Timelines

CIM Implementation Timeline							
98-99	**99-2000**	**2000-01**	**01-02**	**02-03**	**03-04**	**04-05**	**05-06**
CIM awarded in all schools: English math	CIM awarded in all schools: English math science	CIM awarded in all schools: English math science soc. sciences	CIM awarded in all schools: English math science soc. sciences the arts	CIM fully implemented: English math science soc. sciences the arts 2nd language			

CAM Implementation Timeline							
1998-99	**1999-2000**	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**
Provide schools technical assistance to develop CAM programs		CAM awarded in schools that select endorsement area(s) of study and meet standards in: English math career-related learning (CRL)	CAM awarded in schools that select endorsement area(s) of study and meet standards in: English math CRL science	CAM awarded in schools that select endorsement area(s) of study and meet standards in: English math CRL science soc. sciences	CAM awarded in schools that select endorsement area(s) of study and meet standards in: English math CRL science soc. sciences the arts	CAM fully implemented: all schools select endorsement area(s) of study and meet standards in: English math CRL science soc. sciences the arts 2nd language	

PASS Admission Requirements for College Class Entering							
Fall 1999	**Fall 2000**	**Fall 2001**	**Fall 2002**	**Fall 2003**	**Fall 2004**	**Fall 2005**	**Fall 2006**
		PASS proficiency expected in: English math	PASS proficiency expected in: English math science	PASS proficiency expected in: English math science soc. sciences	PASS proficiency expected in: English math science soc. sciences the arts	PASS fully implemented; proficiency expected in: English math science soc. sciences the arts 2nd language	
GPA and subject area requirements; SAT score requirement will continue at least through 2005		GPA for other subject requirements	GPA for other subject requirements	GPA for other subject requirements	GPA for other subject requirements	By waiver: GPA	

Community College PRoficiencies for Entry Into Programs (PREP)							
Fall 1999	**Fall 2000**	**Fall 2001**	**Fall 2002**	**Fall 2003**	**Fall 2004**	**Fall 2005**	**Fall 2006**
Beginning in the 1999-2000 school year, community colleges will publish program entrance standards in their catalogs.							

CIM, CAM, and PASS Programs Will Be Phased in Over the Next Eight Years

CIM. Phase-in of the standards is mandated by the Act. As Table 10 illustrates, the first CIMs will be awarded in English and mathematics in the 1998-99 school year to students who achieve the necessary assessment scores. In each succeeding year, CIM assessments and awards will be added for science, social sciences, the arts, and second languages, until the CIM is fully in place for all categories in the 2002-03 school year.

CAM. Full implementation of the CAM in all subjects by all Oregon high schools is required in the 2004-05 school year, two years after the CIM is in place in all subject areas. However, the CAM phase-in strategy is different than the CIM phase-in. Starting in 1998-99, high schools will have two academic years to take advantage of state-supported technical assistance in developing CAM-related curriculum and instruction. Then, over the next four years, as CAM assessments come on line, schools that are ready can begin building CAM programs related to academic standards and assessments. During this time, certain schools will be selected and given support to help develop CAM models for possible use by other schools. (Funding for this support will be subject to future legislative budgets.)

PASS. PASS college proficiency standards will be implemented in step with CIM timelines. To be admitted as first-time freshmen to OSSHE schools, Oregon high school graduates who begin their studies in fall 2001 (two years after the first CIM awards) will be expected to meet proficiencies in English and math. Each succeeding year through 2005 proficiency areas will be added to reflect additional CIM requirements. Science will be added in fall 2002; social studies, 2003; the arts, 2004; and second languages, 2005. PASS standards will be fully in place beginning with admissions in the fall of 2005, concurrent with full implementation of the CAM.

PREP. Community colleges are selecting standards for PRoficiencies for Entry into Programs. These standards will be published in advising materials and catalogs in 1999-2000. They will continue to be refined as CIM, CAM, and PASS standards evolve.

8. WHAT NEEDS TO HAPPEN TO LAUNCH SCHOOL TRANSFORMATION

As the preceding implementation schedule suggests, it is time to begin implementing the Oregon Educational Act for the 21st Century in all school districts across Oregon. The foundation for this effort is in place. The content standards have been adopted, a statewide assessment system is under development, and the schedule for phasing in the CIM and CAM standards has been developed and coordinated with the PASS proficiencies for college admission. In addition, much has been learned from initial efforts by individual schools to adopt components of school reform envisioned in the Act.

Among those responsible for planning implementation of the Act, the predominant question has been which strategy or strategies to utilize.

The Strategy Must Accommodate Uncertain Resources

Adopting a strategy for statewide school transformation is made more difficult by uncertainty in funding levels. It is hard to predict not only likely levels of basic school support spanning several legislative sessions, but also the availability of funds earmarked to provide schools with incentives, technical assistance, and other forms of support. The debate over school funding in the 1997 legislative session illustrates this challenge.

The framers of this document recommend an approach to school transformation that accommodates different levels of funding support, that places responsibility and accountability for results with the schools themselves, and that gives the schools considerable latitude to accomplish results with assistance from the Department of Education, higher education, employers, and other institutional partners. Following are the basic elements of the approach envisioned.

1. Incorporate school transformation in district improvement plans. No matter what levels of resources are provided to schools specifically for school transformation, the school transformation effort should be treated as a fundamental part of meeting state requirements for school effectiveness. There is ample precedent and procedure for meeting such requirements. School districts have been expected to meet operational standards spelled out in Oregon administrative rules. For five years school districts have been required to submit school district improvement plans as a condition to receive state or federal grants. In 1995 school districts began submitting improvement plans focused on preparing students to meet the CIM.

Oregon's school reform legislation makes biennially updated school district improvement plans a requirement for all districts. The Department of Education has been encouraging districts to work with school site councils to develop individual school improvement plans to support the development and implementation of the district improvement plan.

2. Pursue school transformation at the school level. School transformation cannot be mandated with a top-down approach. It has to occur at the school level, driven by local

school personnel, parents, and community members. Moreover, it must be vertically integrated in grades K through 12. Because school improvement cannot be achieved in isolation, individual schools should organize to accomplish school transformation through a "catchment" approach. Clusters of elementary, middle, and high schools linked by attendance area and feeder relationships — and supported by business and community members —should form what is called a catchment. Each school in the catchment, through the agreement of its school site committee, should work closely with other schools in the catchment to accomplish objectives spelled out in school and school district improvement plans.

3. Provide incentives and support to encourage and reward schools for aggressively pursuing school transformation. In order to build momentum in school transformation at the local level, the framers of this plan recommend providing the schools with direct financial incentives and State-sponsored technical assistance for a period of several years. During this period, schools should be encouraged to show they are achieving the intent of the Oregon Educational Act for the 21st Century.

How the schools achieve performance indicators would not be prescribed. They would be free to spend funds, for example, on a school transformation coordinator, on staff development, on collaborative work time for teachers, on student performance incentives, or any other purpose deemed useful. Because incentive funds would be limited, schools and catchments would be encouraged to leverage such funds with internal and community resources to underwrite the costs of change. A significant portion of funds now being spent on various forms of staff development, for example, might be redirected by local jurisdictions to school transformation.

If incentive or technical support funding is provided to the schools through the Department of Education, the Department should be provided with additional operating funds to cover the added costs of supporting local school transformation.

The Parties to School Transformation
Must Assume Responsibility for Doing Their Part

Local schools will have the primary responsibility for transforming the K-12 education system, but they will receive support from State Government and they will benefit from partnerships with the employer community. These are the main responsibilities of the key institutional players:

Schools Must Shift Their Focus to School Transformation. If school transformation is to occur with statewide scale and consistency in Oregon, schools will have to make it the number one item on their institutional agenda. Following are the kinds of initiatives that will enable schools to raise their students to the new standards:

- Embrace the achievement of CIM and CAM standards by students as the top organizational priority.
- Develop school improvement plans organized to help students achieve the CIM and the

CAM (the items below should be covered in these plans).

- Refocus school in-service training objectives and budgets to help staff understand and address the requirements of bringing students up to CIM and CAM standards.
- See that teachers and counselors develop capabilities in administering and scoring student performance assessments, implementing contextual learning in the classroom, and adapting curriculum to the higher standards of CIM and CAM.
- Assign school-level coordinators to assist teachers, counselors, and others in making the changes required to help students achieve standards.
- Give teachers the time required to work together on curriculum and instruction changes, to network with personnel in other schools, and to work with businesses in giving students more relevant learning experiences.
- Provide teachers other incentives to help students achieve higher standards.
- Work in partnership with employers, both in developing career endorsement studies, and in providing students with community based learning experiences.

The State of Oregon and publicly funded post-secondary institutions must support local efforts. With the involvement of institutional partners from the Governor's Office, the State System of Higher Education, and the community college system, the Department of Education will provide the following support for school transformation:

- Continue to define the standards of achievement for Oregon K-12 students
- Continue to develop the statewide system to assess student achievement in English, mathematics, science, and the social sciences
- Continue to develop curriculum resources to support standards-based education
- Provide local districts with models for conducting assessments in the arts and second languages.
- Sponsor forums to orient school district leaders to the requirements of school transformation.
- Set criteria for the menu of staff development training that will be needed to assist the schools, and certify trainers that offer staff development services in school transformation.
- Administer incentive and support systems intended to help schools adopt school transformation.
- Collect and disseminate information about exemplary practices developed by schools to help their students achieve higher standards.
- Communicate to the public the general outlines of school transformation and its importance to the future of Oregon and its people.
- Design and operate a data collection system on student achievement both during and after K-12 years.

As additional support activities, the State may also:

- Coordinate an educator mentor program to provide schools with technical assistance. Educator mentors will be a cadre of people with skills in assessments, contextual learning, high-standards curriculum, and best practices in building organization and operation.
- Develop a training program for educator mentors which they can, in turn, use in providing technical assistance to school personnel.

Oregon's public universities and community colleges, which are now partners in planning the implementation of standards-based education, will have an important role in supporting the K-12 schools. They can help public school teachers gear up to meet the new standards, and their faculties can help teachers with such tasks as scoring assessments and developing new curriculum attuned to the standards. Community colleges will also be a resource to students who graduate from high school without completing a CAM but who want to continue to build their proficiencies and pursue post-secondary studies.

Oregon employers have a large support role. The success of school transformation in Oregon will depend on the large-scale support of employers. It is essential that they work in partnership with schools to help students achieve high academic standards and develop career-related knowledge and skills. Employers should provide the following support:

- Participate at a large-scale in school-to-work partnerships with schools.
- See that school-to-work opportunities are available to students in Oregon's more rural areas.
- Help schools define skills to be developed by students in career endorsement studies.
- Give weight to the CIM and CAM as credentials held by young job seekers who have attended Oregon high schools
- Work in partnership with schools to create more internship opportunities for teachers.

Professional Development Has a Critical Role in School Transformation

Given the magnitude of the improvements envisioned, school transformation will require a substantial commitment to refocus and retrain everyone with professional responsibilities, and to give them the time and support they need to achieve results. Veterans of private industry restructuring estimate that changing the objectives and operation of a business can take twice the routine investment in staff development, not only for training, but for on-the-job meetings, planning, and development of new materials and operating methods. Time should also be treated as an investment. It takes, by some estimates, four to five years of concentrated, deliberate action to change an institution's direction and way of doing things. Educators involved in developing this document believe that at the school building level it takes at least three years, with good leadership, to accomplish the team building, to teach the skills, and to establish the operational changes required to implement a standards-based approach to education.

To support school transformation, professional development must not only be more intensive than usual, it must also be broader. In particular, it must be broader than in-service training of teachers. Following are the minimum components of the professional development program required to implement standards-based education in Oregon:

1. School-based professional development. This will include a mix of activities, principally in-service training for teachers, counselors, and administrators, summer training programs, internships for teachers and other professionals, and visits to other school districts. It will also include planning and development time for teams of professionals working on inter-school and intra-school projects that support standards-based education. Professional development for teachers should focus not only on increased capabilities in developing and managing standards-based learning, but also greater mastery of academic content.

School-based staff development efforts will require schools, school districts, and education service districts to give higher priority to standards-based education in annual planning and budgeting. School-based staff development will also require support from a variety of resources. The Department of Education can help by establishing training content and standards, approving training providers, disseminating information on best practices, and operating the educator mentor program to provide schools with technical assistance. Colleges and private trainers can provide classes and seminars to schools. Professional organizations can also play a significant role. Organizations such as the Oregon Education Association, the Mathematics Education Council, and the Oregon Council of Teachers of English have established relationships with teachers and can work with them to upgrade both their content knowledge and their teaching methods.

2. Teacher training and certification. The long-term success of standards-based education rests in part on the way new generations of teachers are prepared in Oregon's public and private teacher training institutions. About 1,500 new educators come out of these program every year in Oregon, roughly half from state-funded schools and half from private colleges and universities. More than 60 percent of these obtain employment in the K-12 system, so the way they are trained today will affect the shape of education for years to come. Certification requirements also have an impact on the capabilities that teachers acquire from undergraduate and graduate programs, as well as the capabilities that they develop during their years of professional employment.

Representatives of various interests are currently debating the way that teacher training programs and certification standards should be reshaped. This document does not take a specific position on this issue except to say that it supports revisions in teacher training and certification that will make teachers more knowledgeable about their subject areas and stronger practitioners of standards-based teaching methods. Over time, changes in teacher training and certification should be evaluated to determine how effective they are in helping Oregon achieve standards-based education.

3. Training for advocates and leaders of standards-based education. All parties leading school transformation, from Department of Education personnel to school superintendents,

should receive training in systems change strategies and the techniques of supporting system transformation.

9. PREPARING FOR THE FIRST CIM ASSESSMENTS

Schools are already concerned about the first group of students to take the grade 10 CIM English and math assessments in the 1998-99 school year. The cohort of students now in the eighth grade is heading for the 1998-99 assessments without the benefit of nine years of curriculum and instruction geared to the higher achievement standards, and some school leaders are concerned about the difficulty many students face in meeting the new standards.

The concern is justified. Based on the most recent assessments of tenth graders, fewer than half of Oregon students who take the initial assessment to receive a CIM will probably achieve the scores needed on the first try.

This underscores the importance of approaching school transformation as a long-term process. Recent history shows that reading and writing performance has gradually improved since Oregon began statewide assessments in 1991. Unchanging math performance on the same assessments has triggered statewide efforts to improve mathematics education. Even more effort will be required to get students to the new, higher standards.

This process will take time. As student and parent expectations, curriculum, and instruction become focused on the new standards, more and more students will meet them. Meanwhile, schools should try to prepare as many students as possible to pass the tenth grade English and math assessments in 1998-99. Individual schools and the K-12 system must pay attention to five issues before the first 10th grade assessments:

- They must help teachers and students prepare for the assessment in the short time frame available.
- They must lay the groundwork for public understanding of what has been done to prepare students for the assessment, they must make clear the importance and difficulty of the assessment, and they must help people realize that not all students will pass the CIM assessment on the first try.
- They must put systems in place to help students retake and pass those portions of the CIM assessment that they do not pass the first time. Supplemental help can be provided through Saturday classes, summer school, tutoring, academic clubs, mentoring centers, and other avenues.
- They should regard the initial assessments and the period leading up to the assessments as a learning opportunity, a time to figure out what works and what doesn't, and then to make adjustments accordingly.
- They should have a plan for improving student performance over time so that more students meet the standards each year.

Communication with the public, especially parents, will be critical in keeping the initial CIM

assessments in perspective. People should be informed what the assessments contain, how they will be scored, and what it will take to qualify for a CIM award. In particular, they should be urged to understand that the standards are very high and that there is no shame in students not meeting them on the first assessments. Here are some other key points that will need to be made:

- Students will have a number of opportunities to pass the CIM (not making it the first time is not a failure, but an indication that the student needs to acquire additional skills, just as would be the case in the need to retake a driver's license examination)
- Students who don't make the cut scores the first time will receive support and instruction to build skills in areas needed
- Failure to meet CIM performance standards will not keep a student from receiving a diploma.

10. STAKEHOLDER AND PUBLIC COMMUNICATION

The school changes envisioned in this document will require the understanding, support, and involvement of a great many stakeholders. As suggested in the preceding section, it will be particularly helpful to have parent and public understanding during the time that students encounter the first assessments and discover how demanding they are. The difficulty of this transition and the long-term commitment required for success in school transformation make communication a critically important function.

Preliminary research indicates that there is a substantial body of support for the concept of standards-based education among both educators and the general public, as well as among students. But the research also suggests that these audiences do not have a clear idea what the implementation of this system will entail and what it will require of everyone involved. Achieving the buy-in needed calls for a communication program that is comprehensive and consistent at state, school district, and school levels.

As illustrated in Table 11 and outlined immediately below, the framers of this document envision a communication strategy consisting of several components that are mutually reinforcing. The principle at work in this effort is to first reach out to a core audience of institutional partners and educators, and then to extend that communication to a larger audience of students, parents, and the public at large.

Organization. The effort will get under way with an initial organizing phase that consists of developing a coordinated plan, conducting audience research, and developing institutional partnerships to share communication responsibilities. This will be the responsibility of the Implementation Team, which is the staff arm of the School Transformation Advisory Council.

Coordinated planning is crucial because of the number of audiences involved, the different levels of information appropriate to these audiences, the number of communication partners involved, and the importance of educating internal audiences before reaching out to students, parents, and the public.

Audience research, particularly among educators, parents, and the public, is needed to serve two purposes. First, it provides a baseline of perceptions about school transformation that is useful in shaping messages and planning the overall communication campaign. Second, in the form of focus groups and follow-up surveys, it provides valuable feedback on the effectiveness of messages and media.

Inter-organizational partnerships are crucial because the job of reaching both internal and external audiences is too big and complex for the State or any other single institutional player to accomplish. The involvement of organizations such as the Oregon Education Association, Oregon School Boards Association, the Confederation of Oregon School Administrators, the Oregon Community Colleges Association and others will yield a host of advantages. They have unequaled connections and credibility with their constitutents.

They also have organizational infrastructure, political clout, and budget resources that can benefit the communication program.

It is also important to bring employers on board as partners in the communication effort. In particular, they should be enlisted to support school-to-work programs, to adopt hiring policies that give value to the CIM and CAM in coming years, and to communicate those priorities to students and parents.

Informing internal audiences. Teachers, administrators, counselors, school board members, education service district personnel, and faculty in higher education all have a stake in carrying out or directly supporting the school changes envisioned. They need information that makes clear the benefits and vision of school transformation, and that provides the kind of technical detail that helps them carry out the work of implementing standards-based education. It will be important to reach them with such information through conferences, briefings, workshops, and organizational media well ahead of the public campaign.

Informing students and parents. Schools have the most direct contact with students and parents, and they will have the primary responsibility, with support from state level organizations, to inform students and parents about standards-based curriculum and assessments. They have a rich variety of existing media and formats to accomplish this task. Students can be reached, for example, through sessions with counselors and teachers, group briefings, promotional posters, and bulletin board information. Parents can be reached through such avenues as open houses, back-to-school nights, direct mail materials, school handbooks, school web sites, conferences with teachers, parent volunteer activities and organizations, redesigned report cards, site councils, and displays in school administrative offices (posters, bulletin boards, and handouts) where parents visit.

Informing the public and enlisting public support. With all of the above communication components in place, state government and its institutional partners will conduct a mass media campaign to inform the general public and enlist its support for standards-based school transformation. The messages in this campaign will be simple and clear. A wide variety of media should be employed, including a central web site, public service announcements, and print media advertising. If production funds become available, it may be possible to produce an informative documentary about school transformation through Oregon Public Broadcasting, which is interested in becoming involved.

Schools and school districts should support the statewide effort with local-level outreach to civic groups and the general public. School districts can do this by placing stories with local news media and by operating community speakers bureaus that supply educators, parents, and students to speak to local groups about standards-based education and its benefits.

Table 11. Communicating With Stakeholders in School Transformation

Components	Tasks	Examples of Media and Formats	Responsibility	Schedule
Organize the communication program	• Develop a coordinated plan • Conduct comprehensive research • Develop inter-organizational partnerships • Develop and refine messages with partners	n/a	state-level Implementation Team with cooperation of inter-organizational partners (education organizations, employers)	early to mid summer, 1997
Inform internal audiences (teachers, administrators, counselors, school board members)	Employ the connections, credibility, infrastructure, and budget resources of education organizations and other inter-organizational partners	organizational conferences, newsletters, direct mail materials, workshops	inter-organizational partners (OEA, OSBA, COSA, OSSHE, OCCA, ESDs, etc.)	mid summer to fall, 1997, and each year thereafter
Inform students and parents	Reach these audiences by using special media and by building communication about standards-based education into all facets of routine communication	• students: sessions with counselors and teachers, group briefings, posters, bulletin boards • parents: open houses, back-to-school nights, direct mail materials, school handbook, school web site, conferences with parents, parent volunteer groups, school newsletters, redesigned report cards, site councils, posters, bulletin boards, handouts in school offices	school districts and schools, with support from State and inter-organizational partners	1997-98 school year and each school year thereafter
Inform the public and enlist public support	Operate a statewide information campaign	central web site, public service announcements, print media advertising, public television documentary programming	state-level Implementation Team with support from inter-organizational partners and others, such as OPB	initial concentration on 1997-98 and 1998-99 school years
	Reinforce the state-level campaign with local outreach by schools and school districts assisted by employers and community leaders and organizations	• stories placed with local news media • community appearances by district educators, parents, students, employers, and community leaders to explain the workings and benefits of standards-based education	schools, school districts, education service districts, employers, and other community partners	1997-98 school year and thereafter

11. LONG-TERM COMMITMENT TO SCHOOL TRANSFORMATION

The legislation, policies, and institutional arrangements already in place underscore Oregon's long-term commitment to school transformation. That commitment is further solidified in the creation of the School Transformation Advisory Council, which brings major institutions together to oversee school change.

Here are the basic principles which should guide the work of all leaders involved in school transformation:

Adhere to the vision. Leaders in school transformation must adhere to the vision and keep a steady compass. Periodically, they should take stock to see if Oregon schools are on track, and to see if course corrections might be in order.

Be patient. Nothing this big or worthwhile can be accomplished quickly. The effort requires perspective, staying power, and a willingness to build steadily on accomplishments.

Build strong partnerships. So many people and institutions have a stake and a role in school transformation, it cannot be accomplished without strong partnerships —among schools, between K-12 schools and other education systems, between schools and employers, and between education officials and business, community, and political leaders. Existing partnerships must be continually strengthened, and new partners must be brought into the process and educated about it over time.

Keep everyone involved well informed. There should be no surprises. Everyone with a leadership role should share common themes and key messages in what they say, and the should give similar answers to the same questions so audiences will not be confused.

Use resources effectively. Resources have an important role in school transformation, but they are not as important as will and initiative. New resources should be directed to the extent possible to school transformation, but it will also be necessary to rearrange or redirect existing resources. Partnerships and in-kind resources, for example, can be far more effective than additional money. For school personnel, time is a critical resource, especially for planning and collaboration, and for scoring student work samples.

Use local flexibility effectively. Local schools have substantial flexibility to achieve the results envisioned in the Oregon Educational Act for the 21st Century. They must learn to use this flexibility to improve student learning.

Measure results. Oregon should measure its own progress in school transformation as much as it measures the academic progress of its K-12 students. In particular, such measurement should emphasize results more than activities intended to achieve results.

Use data in decision making. Oregon should expand and improve its systems for gathering education data, and it should employ data to make decisions and improvements in the

school transformation process, whether that data comes from assessment results, in-process research, or professional evaluations.

Appendices

A. MILESTONES IN OREGON SCHOOL IMPROVEMENT

In the **1970s**, Oregon's system of public education began changing from a system that emphasized the means and methods of instruction to a system that emphasizes student learning. Instead of evaluating schools based on the number of books in school libraries, the amount of light in classrooms and the names of textbooks in class use--as Oregon did at the time--Oregonians in the 1970s began to envision a system of public education that focused on the educational results expected of students.

In **1984,** the State Board of Education adopted the *Oregon Action Plan for Excellence.* This plan called on educators to set goals defining what students should know and be able to do, measure students against those goals and take corrective action when necessary to help students achieve the goals.

In **1987**, the Oregon legislature encouraged schools to design their own plans for improving education in their buildings. Under a new law, site councils composed of teachers, parents, school staff, administrators, and other school personnel created school improvement plans and applied for state grants to implement those plans in their buildings.

In **1989,** the Oregon legislature allowed the State Board of Education to waive certain state and local regulations hindering local improvement efforts.

In **1990,** Oregon began its first statewide tests, testing students in grades 3, 5, 8 and 11 in reading, writing, and mathematics. Test results are public, allowing parents and educators to compare performance of schools across the state.

In **1991,** the Oregon legislature passed the *Oregon Educational Act for the 21st Century.* The Act required site councils at every school to encourage local decision making and created Certificates of Initial and Advanced Mastery for students who achieve new high standards.

In **1992,** 10 task forces of more than 200 educators, parents, business people, and community members from around the state presented to the State Board of Education recommendations for implementing the Act, based on educational research and the best teaching practices in Oregon.

In **1993,** the Board presented a long-range plan for implementing the Act to the state legislature, based on task force recommendations and comments from educators and other citizens.

In **1994,** school districts developed district improvement plans, describing plans to improve curriculum, instruction, and teaching skills to reach the goals of the Act.

In **1995**, the Oregon legislature reaffirmed its commitment to the *Oregon Educational Act for the 2Ist Century.* By a vote of 71 to 19, it strengthened and clarified the Act. It required students to demonstrate their proficiency in English, mathematics, science, history, geography, civics, economics, the arts and a second language for the Certificate

of Initial Mastery. For the Certificate of Advanced Mastery, it required that students achieve high academic standards integrated with a quality work-related learning experiences in a career field of interest.

B. SCHOOL TRANSFORMATION GLOSSARY OF TERMS

Academic Content Standards: Knowledge and skills expected of students in English, mathematics, science, the social sciences, the arts, and second languages. English includes reading and writing. Social sciences include history, civics, geography, and economics. The arts include music, visual arts, dance, theater, and cinema. Second languages include American Sign Language. These standards answer the question, "What must a student know and be able to do?"

Assessment: A consistent method for measuring student performance relative to state standards.

Benchmark: The portion of the content standards to be assessed statewide at grades 3, 5, 8, 10, and 12.

Career-Related Learning: Planned experiences or opportunities to help students connect learning at school with life in the community and the workplace.

Career-Related Learning Standards: The knowledge and skills required for success in post-secondary education and employment.

Certificate of Advanced Mastery (CAM): A certificate awarded to students who meet grade 12 standards in academic content and career-related learning.

Certificate of Initial Mastery (CIM): A certificate awarded to students who meet grade 10 standards in academic content.

Content-Based Assessment: Evaluates a student's understanding of a predetermined body of knowledge and skills.

Contextual Teaching: An instructional approach that connects academic content with practical applications beyond school in order to make learning more relevant for students. It answers the questions " Why do I need to know this?" and " How will I use this later?"

Endorsement Area: A broad grouping of related careers which provides a context at the CAM level for academic study and a focus for career-related learning experiences. Endorsement areas include:

- **Arts and Communication**: The humanities and the performing, visual, literary and media arts, including instrumental and vocal music, architecture, creative writing, film and cinema studies, fine arts, graphic design and production, journalism, second languages, radio and television broadcasting, advertising, and public relations.
- **Business and Management**: Entrepreneurship, sales, marketing, hospitality and tourism, computer/information systems, finance, accounting, personnel, economics, and management.
- **Health Services**: Health promotion and treatment of injuries, medical conditions, and

disease through medicine, dentistry, nursing, therapy and rehabilitation, nutrition, fitness, and hygiene.

- **Human Resources**: Education, law and legal studies, law enforcement, public administration, child and family services, religion, and social services.
- **Industrial and Engineering Systems**: Technologies necessary to design, develop, install, operate or maintain physical systems, including engineering and related technologies, mechanics and repair, manufacturing technology, precision production, and construction.
- **Natural Resource Systems**: The environment and natural resources, including agriculture, earth sciences, environmental sciences, fisheries management, forestry, horticulture and wildlife management.

Endorsement Credential: A credential awarded to students who gain in-depth knowledge and skills from community-based experiences in their career focus area. The credential exceeds the CAM requirements. Students may earn it while in high school or after high school.

Performance-Based Assessment: Assessment that evaluates a student's ability to apply knowledge and skills to complete a complex task or produce a quality product.

Performance Standards: The minimum scores required of students on state and local assessments.

Proficiency-Based Admissions Standards System (PASS): Proficiencies in mathematics, science, social sciences, a second language, literature, the humanities and the arts required of students applying for admission to universities in the Oregon State System of Higher Education. Skills must be demonstrated in the process areas of reading, writing, oral communication, analytical thinking, integrative thinking, problem solving, using technology, quality assessment and working in teams.

PRoficiencies for Entry into Programs (PREP): Standards of performance set by individual community college programs, intended to inform students of the skills, knowledge and abilities needed to succeed in that program within its prescribed length. These proficiencies are not required for community college admission.

School-to-Work Opportunities: Any planned community, school or work-based activity designed to help students achieve high academic standards and prepare for productive careers and lifelong learning. School-to-work opportunities and the Certificate of Advanced Mastery share similar goals and strategies.

Scoring Guide: A scale used to evaluate student work samples in defined criteria.