THE OREGON BUSINESS PLAN EDUCATION/WORKFORCE

For Discussion at 7th Annual Leadership Summit

SUMMARY

For Oregon to succeed in the 21st century, all Oregonians in all their diversity must be educated at higher levels than ever before. Oregon should embrace the ambitious education benchmarks proposed by the Governor and adopted by the Legislature:

- **40 percent of Oregon adults should have a bachelor's degree or higher (compared with 28 percent now)**
- **another 40 percent should have at least an associate's degree or other technical credential**
- **the remaining 20 percent should have a high school diploma that represents a high level of academic and work readiness skills.**

To meet these appropriately aggressive goals, business leaders call for both broad *systemic changes* to the PreK-20 education system, as well as a number of *targeted interventions*.

Oregon has set ambitious goals for education attainment and workforce development. To support these goals, in 2009-11 Oregon should fund and implement the following initiatives to the extent that current fiscal constraints allow:

1. ***Early childhood*. For high return on investment, expand Head Start for at-risk children and support student mentoring.**
2. ***The new high school diploma*. To earn a diploma, students entering high school in fall 2008 must earn credits in at least three math and three science classes and demonstrate proficiency in reading, writing, mathematics and speaking. To assist in implementation and to provide all students the opportunity to receive additional help to meet these standards, the Legislature should target dollars for this purpose in the state school fund and the state Department of Education budget.**
3. ***Post-secondary education financial access for all*. Over the past two legislative sessions, funding has been increased for the Oregon Opportunity Grant to provide aid to Oregonians to pay for college and technical and professional education. The legislature should expand the Opportunity Grant as much as possible, and it should provide additional dollars to the community college and university systems to meet increasing access goals.**
4. ***Four targeted initiatives to support industry and job creation*, including a strong focus on professional-technical education and training opportunities:**
   ● Manufacturing ● Engineering ● Clean Technology ● Health Care
5. ***The Career Readiness Certificate*. A value-added credential to aid employers, employees, and potential employees.**

Along with those specific initiatives, Oregon needs to continue the systemic changes currently in progress that support and accelerate student learning, including:

1. **Curriculum alignment across K-12, community college and higher education**
2. **A new data system that measures system performance**
3. **An integrated state budget system that ties funding to student learning outcomes**
4. **A fresh look at service delivery and governance across the education continuum**
5. **Stronger and more focused professional development programs that support teachers and improve teacher performance.**

Achieving these initiatives will require a joint effort among business, education, labor, and philanthropic stakeholders to help more Oregonians understand that greater education attainment is vital to Oregon's economic success.

The Vision We Are Trying to Accomplish

Education is the foundation of Oregon's economic aspirations. Even in a difficult and uncertain economy, we must maintain education and workforce development as a key priority. For its companies and its economy to compete effectively in the global marketplace, Oregon must educate as many of its people as possible at the highest levels to which they aspire. All competitive, efficient enterprises require well-educated, skilled employees. This is particularly true of businesses that compete globally through innovation driven by knowledge workers.

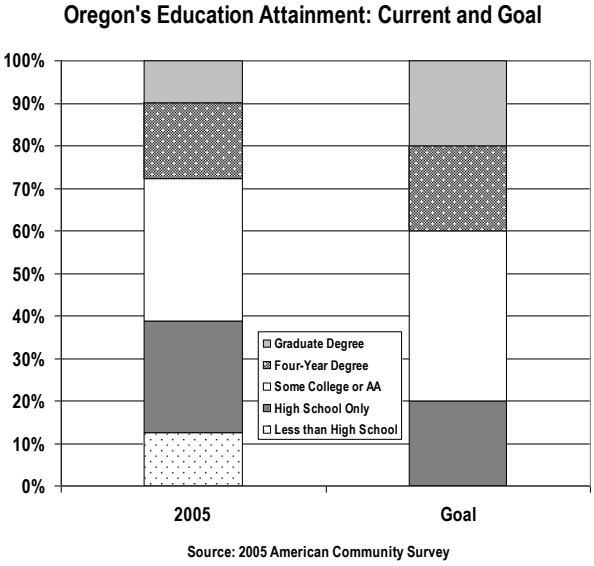
While it is clear that reading, writing, math and science skills are increasingly required of well paying in 21st century jobs, so are other capabilities such as critical thinking, problem-solving, communication, and collaboration. A well-rounded education in the humanities, including the arts and other languages and cultures, enriches the lives of individuals and fuels the creativity and innovation that new technologies and industry clusters require.

In keeping with this vision, the Business Plan proposes that Oregon dramatically increase the education attainment of Oregonians generally, and, at the same time, concentrate resources on specific skills and job readiness for high-demand occupations that will support economic growth in traded-sector industries.

40-40-20. The broad vision for education attainment is captured in a formulation that has come to be called "40-40-20":

> 40 percent of Oregon adults should have a bachelor's degree or higher, another 40 percent should have at least an associate's degree or other technical credential, and the remaining 20 percent should have a high school diploma that represents a high level of academic and work readiness skills.

These attainment targets were embraced by Governor Kulongoski in his 2007-09 education budget and adopted by the Legislature in HB 3141. As the adjacent chart illustrates, this vision represents substantial increases in attainment at all levels.



The challenge of achieving such attainment should not be underestimated because Oregon is moving in the wrong direction. The generation of young working-age Oregonians (age 25-34) is more likely to have dropped out of high school and less likely to have graduated with a postsecondary credential than the generation poised to retire (age 55-64). While ambitious, these are levels currently being pursued by other nations and states. To be competitive economically, Oregon needs to step up its education attainment.

Priming the Talent Pipeline: Oregon's Future Workforce Needs Analysis, a report commissioned by the Business and Economic Development Committee of the Oregon Workforce Investment Board, analyzed and defined Oregon's future workforce needs. A summary of that analysis is presented in the table below. There is a high degree of overlap between the workforce gaps identified in the report and the tactical and strategic initiatives for education that the Oregon Business Plan has consistently supported. The full report has a useful set of recommendations that can be found at www.worksourceoregon.org

	Major Identified Gaps/Needs	Discussion
1	Lack of 21st Century Foundation Skills among many high school graduates, potential hires and current workers	Academic skills: applied math, reading, science, computer applications Workplace skills: creativity/ innovation, ability to learn, critical thinking, decision making, teamwork, communications, lean/high performance Personal effectiveness: dependability, willingness to learn, drug free
2	Significant need to increase supply of operator level production workers (3,500 per year for ten years)	The gap between supply and demand for skilled operator-level production workers is already significant, and will increase over time, with new clean tech employers and traditional manufacturers needing basically the same set of foundation skills in employees.
3	Growing need to increase technician level certificate, AAS and apprenticeship program enrollments	As technology advances and becomes more integrated, skill requirements will increase and more structured training will be required. Current output in community college and industrial apprenticeship programs lags well behind projected demand.
4	Need to address skills mismatch in computer-related program areas	Given the fast pace of changes in computer technologies, applications and software, a persistent concern is whether graduates in computer related fields have the right skills to meet the needs of industry.
5	Need to strengthen employer linkages in engineering and applied science programs	Engineering is a key skill set for both process and product innovation, a critical requirement for both emerging and traditional industries. Ongoing partnerships with industry need to be built into more engineering programs to strengthen linkages and alignment.
6	Stovepipe approach to talent development	While coordination has increased in recent years, the public K-12, post-secondary education and federal workforce systems still function relatively independently. What is needed is a *systems approach* linked closely to economic development/traded sectors and aligned with the specific talent development needs of employers.
7	Pilot mentality/ Lack of funding to support movement to scale	The decade-long history of underinvestment in human capital development has left many systems compromised. Bold—but targeted—investment are needed to move Oregon beyond it's current "catch up" status to position its talent development systems to function at full capacity.
8	Restrictive funding sources	Policy leaders and decision makers must think outside the box and be willing to explore new, flexible sources of funding for talent development opportunities. Support for new and/or expanded initiatives must reflect joint public/ private investment.
9	Need for multiple messaging campaigns	• A general lack of information and old stereotypes (in some sectors) abound regarding high wage career opportunities • The pervasive message is that "value and success" equal college directly out of high school; Oregon needs to value "middle skill jobs" • The critical importance of life-long learning is not communicated to or valued by much of the general public • Many employers still view skill training as a cost, not an investment

Theis, A. and Horowitz, M. *Priming Oregon's Talent Pipeline: Future Workforce Needs Analysis*, May, 2008. See www.worksourceoregon.org.

Where We Stand Today

The report is mixed regarding Oregon's efforts to improve its PreK-20 education system. There were some big wins for education in 2007, and education officials have continued in earnest to make system improvements begun several years ago. We applaud and support these accomplishments, yet need to stress that a great deal lies ahead of us in achieving the 40-40-20 vision. In particular, Oregon must make the entire education experience from preschool to technical training to graduate school more seamless and cohesive, and it must fundamentally redesign the education experience for the adolescent age span that encompasses the end of middle school through the beginning of postsecondary education.

In particular, the high school experience must become more interesting, relevant, challenging, supportive, and rewarding for many more students.

Wins in 2007 and 2008. This year, Oregon renewed its focus on education with the following actions on Oregon Business Plan 2007 initiatives:

- *Funding Restoration.* With strong revenues in hand, the Legislature restored, at all system levels, a large share of the funding that had languished in recent years. Not only did the K-12, community college, and university systems receive significant increases, so did targeted investments such as Head Start, engineering (ETIC), health occupations, and the Oregon Opportunity Fund, the state's need-based grant program for college students.

- *New High School Diploma Standards.* In January 2007 the State Board of Education adopted rigorous new standards for earning a high school diploma. In the 2007 legislative session, these were adopted as law. Under these standards, the knowledge and skills required for success in postsecondary education are the same ones required for successful employment, in particular skills such as reading, writing, math, problem solving, and teamwork.

- *Action on Budget Overhaul.* The 2007 session authorized and funded an Education System Design Team through the Governor's Office to take on an overhaul of the state's fragmented legislative education budgeting process in support of the 40-40-20 vision.

- *K-12 Teacher and Administrator Mentoring.* All new Oregon teachers, principals, and superintendents will receive two years of high quality mentoring, which will phase in over four years. The assistance is designed to reduce the attrition rate among new teachers, 37 percent of whom leave the profession during the first five years.

- *Rewarding Transportation Innovation and Elevating Best K-12 Business Practices.* The Legislature charged the Oregon Department of Education with evaluating the K-12 transportation funding formula and developing alternatives that reward innovation. Lawmakers also funded a process through which the Secretary of State's Office will identify and disseminate best business practices in local school districts.

- *Manufacturing Workforce*: In 2007 Oregon was awarded a $5 million Workforce Innovation in Regional Economic Development (WIRED) Grant from the U.S. Department of Labor/Employment and Training Administration. Strategies for the initiative are grouped around four main goals: 1) supporting leadership for regional economic growth, 2) growing the talent pipeline, 3) aligning curriculum, and 4) increasing training opportunities. The initiative will be implemented over the next three years. For more information, go to www.wirednw.org.

Challenges for 2009-11 and Beyond

To meet Oregon's appropriately ambitious vision for education, business leaders call for Oregon to approach this work on two broad tracks. We must continue to pursue *systemic redesign* of the PreK-20 education system to meet our ambitious goals. And as we do this redesign work, we need to focus on *specific high priority tasks* that will have the most immediate and highest leverage in moving the broad agenda forward. The former are strategic and the latter tactical. Oregon needs both approaches to achieve its ambitions in education attainment. We'll begin with the shorter-term tactical challenges.

Tactical Initiatives for 2009-11

As we prepare for the 2009-11 biennium, we recognize that funding will be constrained. Even so, we can make targeted progress on Oregon's education agenda. The Governor's budget provides a good blueprint for the work ahead. These are the high-priority initiatives.

1. *Support early childhood investments.* The Quality Education Commission in 2004 studied the impact of dropouts on both our human capital and financial systems in Oregon. The study found that on average a dropout in Oregon costs the State $8,460 more each year in social services, food stamps, criminal justice system, and other costs than that individual contributes in state taxes, property taxes and fees paid into the system. This represents both a drag on our economy as well as a significant loss in unrealized human potential. Two investments in particular, early childhood education and mentoring of at-risk students, would yield significant return.

Head Start. Oregon made progress in the 2007-09 biennium by investing in early childhood education through an expansion of Head Start programs for more than 3,000 additional at-risk children. In 2009-11 the State should continue to expand its investment in Head Start to close the gap on the 5,600 children not being served, with some additional allotment of new funds set aside for Early Head Start Programs. Most economists studying this area of prevention among children ages birth to 5 estimate 10 to 15 percent annual returns on investment for early childhood programs, one of the highest returns in the education continuum. These children enter the K-12 system much better prepared to succeed, as illustrated by good results for third grade reading and math benchmarks.

Mentoring for Students. Many children in the PreK-20 system lack a responsible adult figure in their lives. This relationship void represents a significant reason why children drop out of school. In Oregon, more than 100,000 children lack these relationships, and today mentoring programs fill only about one-quarter of this need. Advocating for 40,000 mentors by 2010 and helping programs to extend capacity to meet these unfilled needs are important strategies in achieving student success. Outcomes from mentoring include increased standardized testing results, higher graduation rates, less truancy and criminal activity, reduced alcohol use, less substance abuse, and fewer teen pregnancies.

2. *Implement the new high school diploma*. Oregon's new high school graduation requirements, due to be phased in over the next seven years, are designed to better prepare Oregon students for postsecondary education, work, and citizenship. The new diploma raises the bar for graduation credits in two important ways. First, it increases the minimum number of required credits to graduate from 22 to 24. Second, it increases the number of required credits in the core subjects of math, English, and science, and further specifies that all math credits must be at the Algebra I level or higher. It should be noted that high school graduation requirements in some school districts already meet or exceed the new standards, and that a number of students, on their own initiative, have met or exceeded these requirements for years.

Just as importantly, the new diploma calls for competence in two broader sets of skills and knowledge that both postsecondary educators and employers agree are essential for success in studies and occupations after high school. Under the new requirements, students must leave high school competent in what are called *essential skills*. These are skills in reading, writing, math, listening, speaking, reasoning, and inquiry. Students must also meet *career related learning standards* – demonstration of personal management, problem solving,

communication with others, teamwork, an understanding of the employment environment, and capability in setting career goals and developing a plan to achieve them.

In order to give all students the opportunity to meet the new high school requirements, school districts will have to revamp their expectations and create additional opportunities for learning. Teachers and administrators must retool, and they'll need resources to do that. The Diploma Implementation Advisory Task Force is charged with advising the State Board on technical aspects of the transition, including cost, capacity, teacher supply and demand, and alignment with postsecondary curricula. The Oregon Business Plan will follow their work closely.

Selling the importance of the new diploma requirements calls for a stronger ongoing partnership between the business community and the schools, in particular efforts to expose students, faculty and counselors to career options relevant to a more demanding diploma. The Northwest Youth Career Expo, which brought more than 4,000 teenagers to the Oregon Convention Center last spring, exemplifies the kind of collaboration that is needed.

3. *Increase financial access to postsecondary education for all Oregonians.* Business leaders believe that Oregon should pledge that every student who meets the rigorous standards of the new diploma should be *guaranteed* access to an affordable postsecondary education, whether college or professional-technical education. Policymakers made a significant move in that direction through the Oregon Opportunity Grant and its "shared responsibility" approach. The grant reflects a partnership between working students, parents, and state and federal governments to meet college costs. The 2007 Legislature approved a major expansion of the grant program – more than doubling the resources available for state-funded grant aid.

Business leaders applaud the great beginning but call on the Legislature to make additional funding a priority in the 2009 Legislative Session. Oregon should aspire to levels of need-based aid delivered by our West Coast neighbors. In 2005-06, Oregon's need-based aid per undergraduate FTE student was $223 compared with $695 and $514 in Washington and California, respectively.

4. Act on targeted initiatives to support immediate industry needs. While the 40-40-20 vision is a long-term plan designed to address the state's educational and economic needs across multiple generations, Oregon industry also has clear and specific needs over the next five years. We are very pleased that the Governor and the Legislature have responded to four targeted areas recommended in the Oregon Business Plan. We have the opportunity to accelerate this work over the next two years.

Manufacturing. The Legislature should support the Governor's manufacturing workforce initiative. Manufacturing workforce education needs range from basic job competency skills to higher level technical, managerial, and professional expertise. To achieve this, workforce education should to be integrated into the high school, and the transitions between high school, career technical education, community college, and four-year undergraduate education must be strengthened with an integrated curriculum tied to business needs.

Engineering. Oregon should also make continued investments in engineering, through the highly successful Engineering and Technology Industry Council (ETIC), in pursuit of its goal of doubling the number of engineering graduates and increasing engineering research

five-fold. We recommend increased funding for 2009-11 with a focus on recruiting, retention, and clean-technology.

Clean Technology. A recent report shows that Oregon could create tens of thousands of jobs over the next 20 years in emerging clean technology industries such as renewable energy, green building design and services and smart grid technologies. Oregon has already become a North American hub for solar photovoltaic manufacturing and is recognized globally as a leader in green building design – a recognition that is creating global demand for the services of Portland firms.

Industry groups have been working hard to identify their workforce education needs and Oregon community colleges and universities have been working with them to develop curricula. We must rapidly accelerate this work. Regional competition for growth in clean tech business activity is fierce and having a prepared workforce provides a critical competitive advantage. In addition to the manufacturing initiative and ETIC, which contain clean tech components, we recommend that the Legislature fund a package specifically for clean tech workforce development.

Health Care. Finally, Oregon should make an additional investment in a health care career initiative to address the projected shortages of doctors, nurses and allied health professionals. The supply of licensed physicians, dentists and nurses in Oregon is decreasing while the population is increasing and aging. Oregon will need to graduate more than double the number of healthcare providers it currently trains to meet this shortfall. Failing that, Oregon will suffer a decline in available health care options – an occurrence that will have serious negative impacts on the quality of life, culture and economy for much of our state.

Combined, these investments in manufacturing, engineering, clean technology, and health care will increase opportunities for Oregonians to pursue rewarding technical careers and strengthen critical Oregon industries by providing greater access to the talent they need to compete in the global economy. Career and technical applied learning programs in high schools and community colleges will help address many of these industry needs and others as they become known.

UPDATE: DRUG-FREE WORKFORCE

The Workdrugfree Oregon (WDFO) Task Group made progress on four recommendations in last year's Business Plan:

Mount a statewide campaign to significantly increase the percentage of drug-free workplaces in Oregon.

- **WDFO became a program of AOI Foundation in July 2008, gaining a strong business voice and advocate.**
- **Greater Newport Chamber of Commerce and South Central Oregon Economic Development District/Lake County were added as partner sites.**
- **A Pacific Power Foundation grant improved the interactivity of the WDFO website for all 15 partner sites.**
- **An $11,000 fund-raising campaign supported a second statewide employer survey in Nov. 2008 to measure progress since 2006.**

Raise legislators' awareness of the impact of drugs on business competitiveness.

- **A policymaker conference in January on *The Economic Impact of Substance Abuse* attracted over 100 employers and legislators.**
- **A report by ECONorthwest found that the economic impact of substance abuse in Oregon is $5.9 billion per year**
- **Regional forums were held in Albany, Newport, Roseburg, Medford and Woodburn to raise awareness of the economic impact and the need for legislative solutions in 2009.**

Help Oregon Workforce Investment Board Implement a Substance Abuse Prevention Policy for job seekers.

- **WDFO served as a resource to Oregon Workforce Investment Board as it began implementation of a Job Seeker Substance Abuse Prevention Policy applicable to all WorkSource Oregon agencies.**

Help the State Board of Education create a Career-Related Learning Standard to prepare students for jobs in a drug-free workplace.

- **Drugfree workplace expectations were incorporated into new Oregon Diploma career-related learning standards.**

Over 500 high school students benefited from employer-delivered presentations on drug-free workplace policy and employment expectations.

From the perspective of economic development, the urgency of these targeted initiatives can hardly be overstated. In addition to the earlier citation *Priming the Talent Pipeline: Oregon's Future Workforce Needs Analysis,* previous Business Plan papers have documented the challenges facing Oregon: growing requirements for skilled labor and the shortages facing many employers. The Workforce Investment Board reached similar findings in its strategic plan, *Winning in the Global Market.* In focus groups with industry clusters for the Oregon Business Plan, nearly every group cited workforce issues as a key constraint to growth in Oregon. In manufacturing, for example, 43 percent of firms report a shortage of skilled workers *now*, according to the *Oregon Manufacturing Workforce Strategy*. Engineering companies report a severe shortage in engineers and computer scientists with a bachelor's degree or higher. Likewise, companies that depend on technology, such as banks, insurance companies, and hospitals, are encountering more difficulty in finding highly qualified candidates for technical positions.

Support the Career Readiness Certificate. Oregon has begun implementation of a new Career Readiness Certificate that will have value to employees, potential employees, and employers. Behind the certificate are two assessment tools developed by ACT that measure capabilities important to job performance and success in over 85 percent of jobs today. WorkKeys Foundational Skills assessments measure cognitive abilities such as applied mathematics, reading for information, and locating information. WorkKeys Personal Skills assessments are designed to predict job behavior and measure the full potential of individuals. These assessments are connected to the skill requirements of 15,000 jobs profiled nationwide. The individual's score indicates the level of proficiency in each category – basic, proficient, or advanced. For individuals and employers alike, this process verifies the skill level the applicant brings to the job. There is a computer-aided curriculum available to WorkKeys test takers that helps them improve their scores.

UPDATE: INCLUSION OF PEOPLE WITH DISABILITIES IN THE WORKFORCE

In 2004, Oregon's leading employers were invited by Oregon Business Leadership Network (OBLN) to write the business case for including people with disabilities in the workforce. They identified the credentials and skills of these workers as critical to business competitiveness. The OBLN developed recommendations that were included in the Oregon Business Plan. The following is an update.

Build a clearinghouse of resources with business to build its workforce inclusive of workers with disabilities.

- **2008: www.obln.org attracted 100,000 visitors browsing 5 minutes each. It added 150 new resources including OBLN's video "Look At my Ability," and Comcast interview.**
- **2009: Launch a statewide disability employment campaign. Launch Internship website.**

Create smooth interfaces between business and state resources to increase employment of people with disabilities.

- **2008: OBLN increased funding partnership with OVRS for 5 alternative recruiting resources linking business to skilled jobseekers with disabilities.**
- **2009: Grow OBLN chapters in Salem, Portland and Medford. Grow internship and employment opportunities.**

Provide business-led forums on linking accommodation strategies and diversity/inclusion measures to business plans.

- **2008: OBLN began developing business tools that build disability into corporate diversity.**
- **2009: Create an awareness campaign around disability and diversity.**

Maintain an interactive website that provides a forum for business to network and establish strategic links with disability expertise.

- **2008: Webinars were added. OBLN's e-magazine expanded coverage to national stories.**
- **2009: Expand webinars in diversity, alternative recruiting, and accommodation.**

A number of employers in Oregon have already agreed to use these WorkKeys assessments as a basis for hiring and promotion. The community colleges and the Employment Department have committed to making this tool available throughout Oregon. In addition, the Oregon Department of Education is examining how the tool may be used for

demonstrating mastery in the essential skills of reading and math for the new high school diploma. If implemented on a widespread basis, Oregon will have a common language and tool set for describing what a given job requires and what level of skill an individual possesses.

Employers should work with education institutions and the Department of Community Colleges and Workforce Development to bring this Career Readiness Certificate and the tools associated with it to scale as rapidly as possible.

Advancing Systemic Change through 2009-11 Initiatives

For several years the Oregon Business Plan has put forward a set of longer term strategic policy and infrastructure recommendations that are intended to dramatically improve Oregon's education system and close the gap between current results and the 40-40-20 goal. The analysis that underpins these recommendations is contained in the publication *Raising the Bar for PreK-20 Education in Oregon: 6 White Papers*. One initiative is new this year: a fresh look at delivery and governance. It is based on analysis in the new white paper *Taking Promising High School Practices to Scale: Challenges for Oregon in Service Delivery and Governance*. All of these papers can be accessed at www.orbusinesscouncil.org

1. ***Advance work on a seamless, engaging PreK-20 curriculum***. Oregon continues to make progress on key system improvements advocated in this and earlier policy papers of the Oregon Business Plan, especially integration of curriculum and student and school performance data.

*A Common Curriculum***.** Oregon's state boards of education and higher education are establishing curriculum standards, proficiencies and assessments, and aligning them across the continuum. Curriculum and instruction must be designed at each level specifically to prepare students for the next level, particularly at the most difficult transition points, such as middle school to high school, and then high school to postsecondary studies and training. In the range of grades from 10 to 14, not only should the curriculum be rigorous, relevant, and aligned at every phase, it should also be available to students at the pace that they need to learn and progress. In high school, all students must meet the minimum rigor of the diploma requirements in essential skills and academic credits, but also career learning experience. Some students will want to go beyond those requirements, with additional study in Advanced Placement, International Baccalaureate, career technical education pathways, or a combination of these advanced learning programs. High school students in particular should be well prepared for what they will encounter at the next level (whether school or a job), and in many cases, especially for juniors and seniors, advanced learning should be made available to them while they are still in high school. For example, concurrent enrollment in high school and community college classes, which now benefits many students, should be expanded even more.

2. ***Move forward on an integrated data system to track student progress.*** Oregon has been working for several years to create uniform, integrated, and automated student records to transfer student credits efficiently from school to school, both within and between education systems. This is needed to improve the movement of students along their chosen pathways, but it also represents the down payment on a much larger commitment to improve and integrate data systems across the education spectrum in Oregon. If Oregon does this work well, students will have better information about their skill development and education planning choices. Schools and policymakers will be able to track student

achievement and persistence more accurately. Longitudinal data, now in short supply across most state education systems, including Oregon's, will aid in the improvement of curriculum, instruction, and student services, and in holding institutions accountable for results.

A significant part of this effort is the student plan and profile, which will help students map the path to their education goals and track their progress. This part of the data system will also provide information on higher-grade requirements for lower-grade students and their parents. With this capability, students and their parents can see the full range of curriculum and assessment requirements along the full length of the pathway. Students, parents, teachers, and counselors will be able to go online, at any time, at any grade level, to compare a student's progress against the student's goals and against the requirements of a particular academic pathway.

The system wide implementation of the data system to accommodate student plan and profile is proceeding in stages. The Department of Education has designed the data system framework for the transfer of student records (the student profile), and is currently piloting this system in the Portland, Beaverton, Hillsboro, and Eugene 4J school districts. Full implementation of the student record component of the data system is expected in the 2009-2011 biennium. Work on integrating the student plan with the data system is proceeding more slowly, and is complicated by the need to comply with the restrictions of the Family Education Rights and Privacy Act (FERPA). Currently there is no estimated date to implement this component of the data system.

3. *Continue to redesign the way the state budgets its PreK-20 education investments*. The Governor and the Legislature have made a commitment to create a unified, transparent, student-centered budget model to help shape priorities and make more effective public investments in PreK-20 education. As noted earlier, an Education System Design Team authorized and funded in the 2007 session through HB 3141 has requested the Legislature to hear and review the Governor's entire education budget and policy agenda in one hearing at the beginning of the session to understand overall system priorities and performance expectations.

This budgeting overhaul grows from a policy analysis recommended by the last Business Plan and shaped in a policy paper in 2007 by a group of the state's education budget experts. The paper recommends a new budgeting framework that will:

- *Introduce a unified and comprehensive picture of PreK-20 education revenues and expenditures at the beginning of the legislative process*, accounting for all revenues available to spend on public education, determining which expenditures relate to instruction and which don't, and identifying what the state is spending or intends to spend in program categories on a per-student basis.
- *Link student progress and system performance to budget development*, building a common understanding of performance expected by the PreK-20 system
- *Create a common understanding of emerging trends, budget drivers, and assumptions underlying the budget*, utilizing improved database and forecasting tools.
- *Streamline, simplify, and standardize budget building methods across the education continuum*, utilizing one set of budget rules, expanding the State School Fund budget system to the whole education continuum, and organizing the ways and means process around students rather than systems or institutions.

- *Increase budget transparency and communication among the stakeholders*, a process that will be helped by cohesive data, rules, and performance expectations.

The sum of these actions should be to encourage education practices validated by rigorous research. Across the United States, the K-12 system's track record of turning more resources into better outcomes is mixed at best.

The national-based Coalition for Evidence Based Policy points to a shortage of evidence-based education policies as the key reason the country has not seen stronger progress on achievement. Districts and states have lacked capacity to evaluate education programs rigorously, so the knowledge base to invest in what works in a K-12 context is relatively thin.

Fortunately, Oregon has developed the capability through the Data Base Initiative to conduct research in K-12. The database provides information on school performance, demographics, and funding and helps spotlight results. This biennium the Quality Education Commission used this tool to study the practices of high-performing schools identified by the database. This kind of information can help local school districts and the state determine policy and budget priorities. There are also national studies on specific practices that can help inform state and local policy decisions. Examples of such well-documented programs include:

- *Head Start*
- *One-on-one tutoring in K-3*, using proven approaches and tutoring programs
- *K-1 class size reduction*
- *Monitors for students at risk of dropping out of high school*

The list of evidence-based practices will change over time as new research becomes available. Consequently, policy makers should monitor spending priorities and consider adjusting them each biennium based on the latest research.

4. ***Take a Fresh Look at Delivery and Governance.*** As noted earlier, too many Oregon students are left behind or delayed on the path to education attainment. This occurs at the very time more of them should be able to move faster and farther – for their own sake and for the sake of the Oregon economy.

Students bog down the most in high school where nearly a third of entering ninth graders don't achieve a diploma in four years. Among those who do, at least 40 percent are not prepared to succeed in postsecondary education.

Old model, old assumptions. The model we grew up with – instruction in particular – is out of date, the leftover product of a time that didn't believe all students can, nor necessarily should, achieve to the highest levels. That model makes time the constant and learning the variable. It often puts the needs of schools and adults in them above the needs of students. It tolerates student failure and dropouts. It is based on assumptions that not all students can learn and that public commitment to universal education ends at high school. It is based on nostalgic views of high schools as they once seemed to be, not as they need to be now.

Oregon and its young cannot afford that delivery model or those assumptions. The stakes are too high to let any student fail.

Promising new practices. In schools across the state, talented educators are breaking the old mold, employing new practices that are transforming student achievement. Taking any or all of them to larger scale can help Oregon achieve its ambitious objective to help more Oregonians attain more education than ever before. Our policies need to support such practices, and governance needs to change to accommodate those policies and practices.

Our higher expectations for high school graduation have sparked innovation in the design of schools and curricula within high schools. Large, impersonal high schools, which were originally designed to prepare a handful of young people for college and the majority for low-skill jobs, are insufficient to meet the needs of a large number of our students, as evidenced by very high dropout rates and very high rates of remediation in math and English for students who graduate from high school and enter post-secondary institutions unprepared for college-level work. New models including schools that base instruction, assessment, and the awarding of credits on proficiency, small schools, career academies, technology-based and "virtual" schools, and early college and other concurrent credit based programs are designed to deliver broad support to students and enable them to achieve the high standards established in the new diploma.

Recent research points to three practices, if taken to larger scale, that have the potential to transform high school education in Oregon: *proficiency-based assessment and instruction, small learning communities*, and *concurrent credit programs*.

Proficiency-based education. Proficiency-based practice has the greatest potential to realize the best outcomes at the least cost, and it completes Oregon's long journey to achieve a standards-based education system. Schools in Redmond, Scappoose, and Beaverton are showing the way. Others are starting to join them.

In a proficiency-based classroom, students start a course knowing exactly what proficiencies they need to master to demonstrate that they have acquired content knowledge and skills. They work at it at their own pace until they get it right. Teachers, often working in teams, use formative assessment at every step of the way to measure learning and to gauge and adjust instruction. When students master the required proficiencies, they are assessed and graded on that basis only. Inconsistent, arbitrary, and inflated grading across classrooms, schools, and districts is not a part of proficiency-based education. In a proficiency-based system, teachers flourish as much as students.

Oregon has laid a good policy foundation for proficiency-based education, but it needs to do more to encourage adoption of this practice statewide, to support professional learning communities, and to get its teacher education institutions, public and private, engaged with this practice and with the schools.

Small learning communities. With numerous demonstration sites supported by northwest foundations and the federal government, small learning communities in Oregon high schools are proving to be a valuable tool for personalizing the learning experience, injecting rigor and relevance into instruction, putting caring adults closer to students, and building professional learning communities. Small learning communities should be employed more flexibly in the schools, and Oregon policy should welcome more kinds of small learning communities, from schools within schools to age-based academies to charter schools, magnet schools, and online communities.

Concurrent credit programs. Concurrent credit programs are helping thousands of Oregon high school students, typically juniors and seniors, get a head start on college by enrolling in courses that count simultaneously toward a high school diploma and college credit. Students typically take lower division transfer courses, career technical courses, or both, either on the high school campus or at the postsecondary school.

As good as these programs are in giving students a jump on college, on saving them money, and in boosting their achievement and persistence once in college, only a fourth of Oregon students are involved in them. Oregon is beginning to do more to support student involvement in these programs, and it should. In particular, it should increase promotion and recruitment. It should restore its Expanded Options program, which the Legislature created in 2005 to make concurrent credit more affordable for at-risk students but then weakened in 2007.

Implications for governance. To support and expand its most promising practices and to achieve its education attainment goals, Oregon should re-examine its fragmented system design and equally fragmented governance system with an eye to streamlining both. Well-meaning – and partially successful – efforts to work around this fragmentation have not been sufficiently successful.

The state should consider unifying its governance structure, building greater capacity and access for students, increasing student options, funding students rather than institutions, and making other fundamental changes in the way it locally governs, serves students, and purchases services. And it should be ready to deal with disruptive innovations that come with technology advances and other changes in the world.

5. ***Revamp K-12 teacher professional development***. A broad consensus exists among policymakers, academics, and the general public that the key to lasting education improvement starts with excellent teachers. Researchers agree improving teacher quality is the most effective way to boost academic achievement and they believe rigorous professional development can play a key role in strengthening teaching practices. Yet, in Oregon, little is known about what's delivered and what's gained through professional development activities. Professional development is highly decentralized, with most of the work conceptualized and undertaken at the school and classroom levels. Fiscal accounting of the investment is incomplete, and officials struggle to evaluate outcomes.

With the new diploma standards on the way, teachers will need to retrain and retool to help students meet the higher expectations. The state should play an active role in creating a foundation of support for local professional development activities. The state should adopt and disseminate professional development standards, provide resources to small and remote districts that don't have equitable access to resources, and serve as a clearinghouse of specific practices proven to change teaching practice and, more importantly, improve student achievement. In a recently completed study of professional development in six Oregon school districts, the Chalkboard Project found that teachers and administrators want and need more high quality professional development to assure teaching and learning that translates into higher student achievement.

But the near-term challenges of attracting and retaining high quality teachers will be manifold. A disproportionate share of teachers is age 45 or older and will transition into retirement during the next two decades. Moreover, when schools attempt to replace those educators, they will face much stiffer competition from other professions for skilled workers

than they did when teachers in those age cohorts were first hired in the 1960s, 1970s, and 1980s.

For education to successfully compete with other professional occupations for skilled talent, schools will have to reward teachers more like industry professionals. The salary models in Oregon schools – like many across the country – rely almost exclusively on teacher's seniority and education level. Researchers have concluded that neither experience nor the attainment of a master's degree is a strong predictor of quality. Experience matters in the early years of a teacher's career, but its importance weakens over time. Moreover, the attainment of a master's degree in specific subjects (e.g., mathematics) may correlate with higher student achievement, but when measured across all teachers and all types of degrees, the average master's degree shows no correlation with achievement.

To address the shortcomings of the existing career path and compensation models, school districts should consider new career pathways and salary schedules tied to skills, knowledge, and responsibility. Teacher unions, administrators, and school boards in the Sherwood, Forest Grove, and Tillamook school districts are working through the complex transition to better compensation through Chalkboard's CLASS project. As lessons emerge from those districts during the next few months, other Oregon districts should follow their lead and reform compensation policy.

Communications

This agenda to transform education will succeed only with broad support from citizens across the state. Today, too many Oregonians remain unconvinced that education and skill attainment are critical to the state's economic success. So, before policymakers proceed with these ambitious proposals, they first must fine-tune their PreK-20 vision and then persuade Oregonians that postsecondary education is the key to individual and collective economic opportunity. To start on that critical work, business, education, labor and philanthropy should join together to communicate the importance of advancing this ambitious agenda to all Oregonians.

Education and Workforce Initiative Leaders

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Background Resources

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