

VII. STANDING COMMITTEE

A. Academic and Student Affairs Committee

In Joint Session With

B. Finance, Audit and Facilities Committee

HECB Master Plan

See Attached.

WASHINGTON
**HIGHER
EDUCATION**
COORDINATING BOARD

December 2007



Moving the blue arrow
Pathways to educational opportunity

**2008 Strategic Master Plan
for Higher Education
in Washington**

WASHINGTON
HIGHER
EDUCATION
COORDINATING BOARD



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Preface

The Washington Higher Education Coordinating Board is directed by state law (RCW 28B.76.200, as amended in 2007) to create a strategic master plan for higher education in Washington every 10 years and update the plan every four years. Following final review and adoption by the Board in December 2007, this plan will be submitted to the 2008 session of the Washington State Legislature, which will hold public hearings and pass a concurrent resolution approving or recommending changes to the plan.

To prepare the plan, the Higher Education Coordinating Board held a series of public meetings, open forums, and conversations throughout the state in 2007 to learn more about what people wanted and needed from their public higher education system. Citizens, educators, students, and parents participated, along with legislators, the leaders of other governing boards and councils; representatives from business and labor; local and regional economic development organizations; demographers; and public policy experts. These consultations crystallized two simple but challenging goals.

Goal 1: We will create a high-quality higher education system that provides expanded opportunity for more Washingtonians to complete postsecondary degrees, certificates, and apprenticeships.

Goal 2: We will create a higher education system that drives greater economic prosperity, innovation and opportunity.

The Board's discussions and public forums have been a rich source of ideas, information, and most important, passion. K-12 educators told the Board about the challenges of preparing teachers to teach higher levels of science and math, and to educate an increasingly diverse student population. College students spoke about the educational needs of veterans and other non-traditional students, the problem of student debt, and the critical need for more student advising, career counseling, and support services such as child care.

Students also asked for more seamless transfer from one college to another, and better, simpler information about financial aid. Leaders of independent and for-profit colleges and career schools showcased the contributions they are making to meet our state's educational needs and spoke of their willingness to collaborate more closely with the public system. Business leaders, economic development, and workforce training experts shared their worry about today's educational trends and what they mean for our state's economic future. Each of these issues is addressed in this plan.

While the scale and urgency of the challenge of educating more Washingtonians to higher levels is daunting, the Board is encouraged by the passionate support for doing so that comes from every corner of our state. In every community forum, we heard divergent opinions about many issues, but absolute unanimity on one overarching principle: We must expand educational opportunity to every young person and every adult in our state. This plan reflects our state's commitment to that principle.

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Moving Washington's blue arrow

Opportunity abounds in Washington. In the arts, in civic life and public service, and in science and industry there are openings for innovators, dreamers and doers. But to take advantage of this abundance of opportunity, more Washingtonians need higher levels of education.

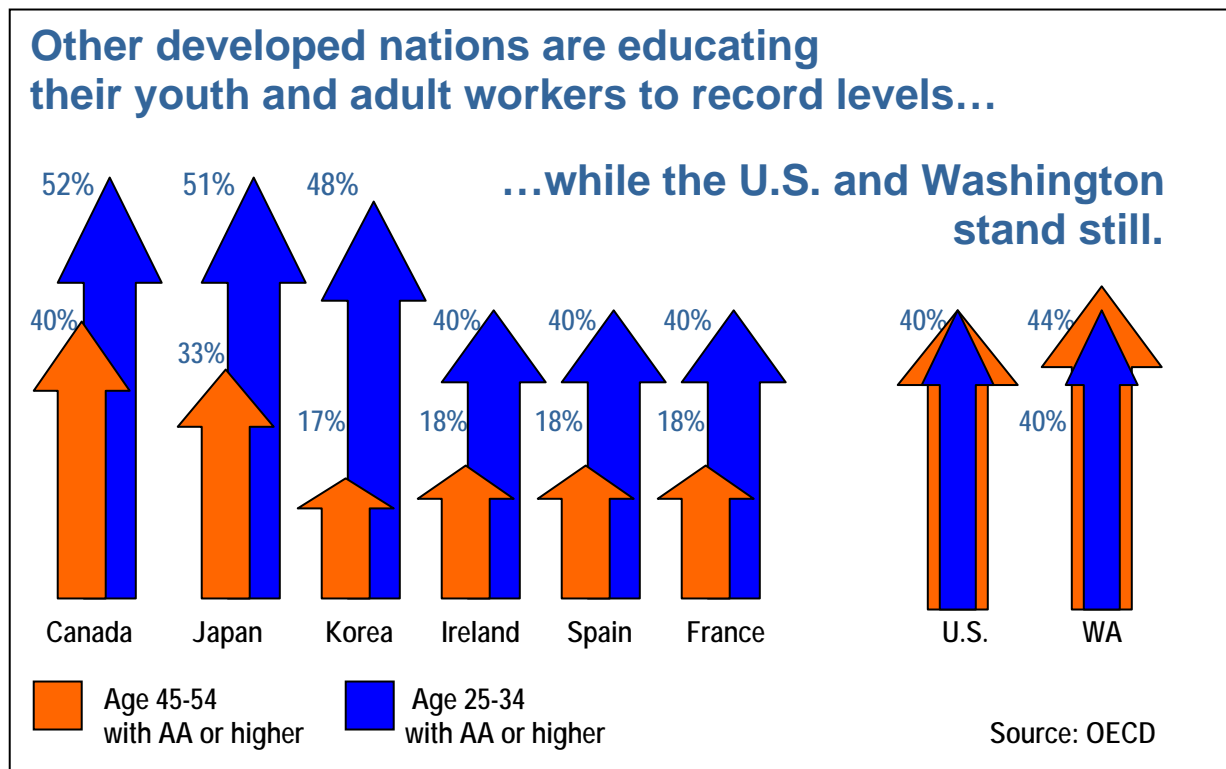
Washington's baby boomers (people born between 1946 and 1964) are the most highly educated generation in our history. Younger adults in our state have, on average, *less* education than boomers.

In many other countries, the reverse is true: younger adults are *more* educated than their elders, and the long-term trend shows a steady increase in the overall level of education of each new generation.

This is good for them, but not for us. Countries where education attainment is rising have rising incomes and productivity.







In these countries, parents can reasonably expect that their children will have more opportunity to make a good living, and to understand and shape the world around them. They can also expect that their children will live in societies characterized by economic, technological, scientific, cultural, civic and social progress.

We cannot share those expectations unless we *act now to reverse the trend* of falling educational attainment among our younger adults and children.



The goal of this 10-year plan is to move Washington's blue arrow up by raising educational attainment for adult workers and young people across our state.

Washington's changing demographics – 2005-2030

<p>There will be more of us</p> <p>2.5 million increase (+37%)</p>	<p>2005 - 6.2 million</p>  <p>2030 – 8.6 million</p> 
<p>We will be older</p> <p>Those over 65 will increase most rapidly (+72%)</p>	<p>2005 = 11% of population</p>  <p>2030 = 19% of population</p> 
<p>We will be more diverse</p> <p>We will experience a 39% increase in the diversity of our population</p>	<p>2005 = 23% people of color</p>  <p>2030 = 32% people of color</p> 

An aging workforce

Over the next 10 years, a generation of well-educated people will leave the workforce and be replaced by a generation with lower average levels of education and skill. As the baby boomers retire, some occupations and industries may have skill shortages such as: nursing, teaching, and "management occupations."

Washington's Office of Financial Management estimates that about 400,000 people aged 55 and older will leave the labor force in the next decade. This represents 11.7 percent of the current labor force.

These employees will take with them a great deal of knowledge and experience. It is often the case that those employees in management positions also are older workers – because they have invaluable industry wisdom – and so, as baby boomers retire, much of today's leadership in business, government, education, and civic life will retire as well.

Education and the public good

Education is the wellspring of economic growth. It also is the foundation of democracy, and the shared experience that knits a diverse society together.

Education Benefits

24.4% of those with less than a high school diploma are living below the poverty level. Only 2.4% of those with a bachelor's degree are below the poverty level. (U.S. Census)

• Although infant mortality rates are associated with race and ethnicity, they decrease proportionately with education attainment for all reported racial and ethnic categories. (NCHS).

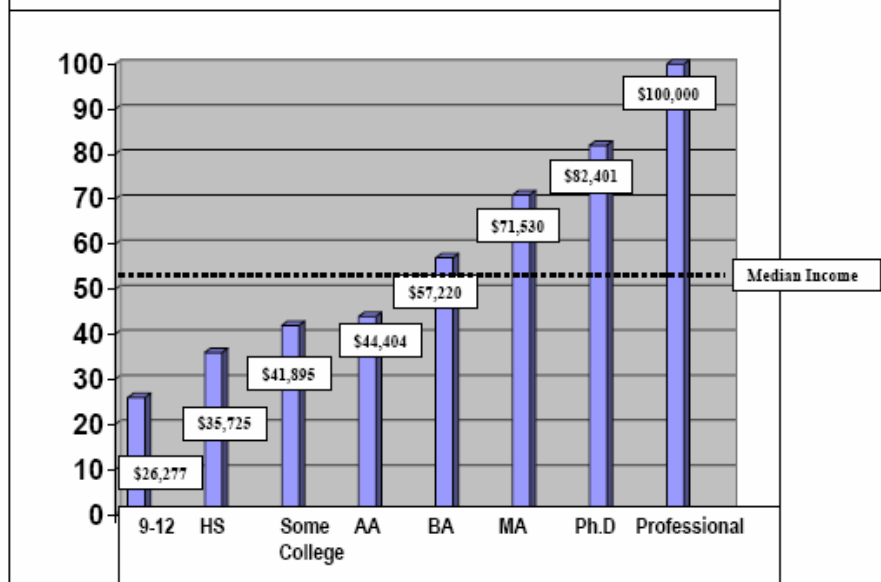
• College graduates have lower smoking rates, more positive perceptions of personal health, and healthier lifestyles than individuals who did not graduate from college. (CollegeBoard)

• Adults with higher levels of education are less likely to depend on social safety-net programs, generating decreased demand on public budgets. (CollegeBoard)

Overview – Education & the public good

<p>Societal benefits <i>Rising levels of education produce more engaged citizens who help make our society more stable and productive.</i></p>	<ul style="list-style-type: none"> • Voter participation increases • Volunteerism increases • Crime decreases • Welfare, health costs decrease
<p>Economic benefits <i>More degreed individuals in a regional economy produce higher wages for everyone.</i></p>	<ul style="list-style-type: none"> • Productivity increases • Technology innovation rises • Economy grows on fast track • Tax contributions increase
<p>Personal benefits <i>2.4% of those with a BA degree or higher live at or below the poverty level compared with 24.4% of those with less than a high school diploma.</i></p>	<p>A bachelor's degree brings</p> <ul style="list-style-type: none"> • \$357,000 additional lifetime income for men • \$156,000 additional lifetime income for women
<p>Generational benefits <i>Increasing college completion rates today will produce exponentially greater public return in the future.</i></p>	<ul style="list-style-type: none"> • Those whose parents have completed college are most likely to earn a college degree

Income increases as education increases

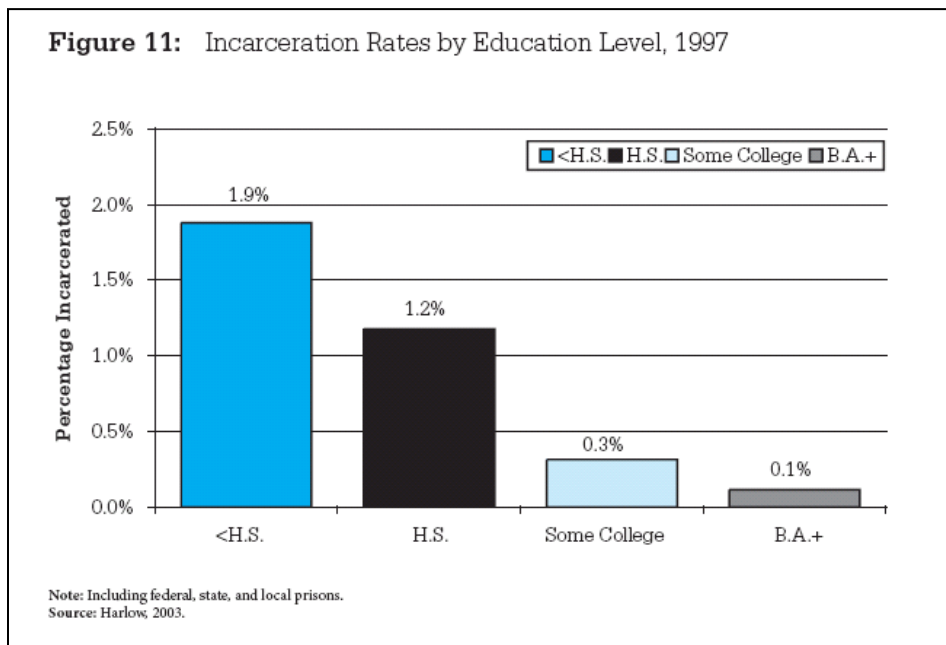


Source: U.S. Dept. of Commerce, Bureau of the Census, Current Population Reports, Series P-60, "Money Income of Households, Families, and Persons in the United States," "Income, Poverty, and Valuation of Noncash Benefits," various years; and Series P-60, "Money Income in the United States," various years. From *Digest of Education Statistics 2005*.

Costs associated with low education levels

The absence of education is the polar opposite: it drains our society of hope, opportunity, civic engagement and economic growth. It creates a downward spiral of poverty, dependence, ill-health, alienation, and crime.

That's why the challenge before us is so urgent. Our state's future is at stake. Our moral obligation to future generations requires a renewed and sustained commitment – a commitment of the time, resources, and creativity needed to transform our education system for a new economy, a new century, and a new mix of diverse and promising students.



Challenges in Washington

- Washington's under-educated working population is equal in size to its next 10 high school graduating classes.



- One out of four people aged 18-24 does not have a high school diploma.
- About 47% of Latinos 25 and over do not have a high school diploma.
- One in every three people 18-64 has only a high school diploma.

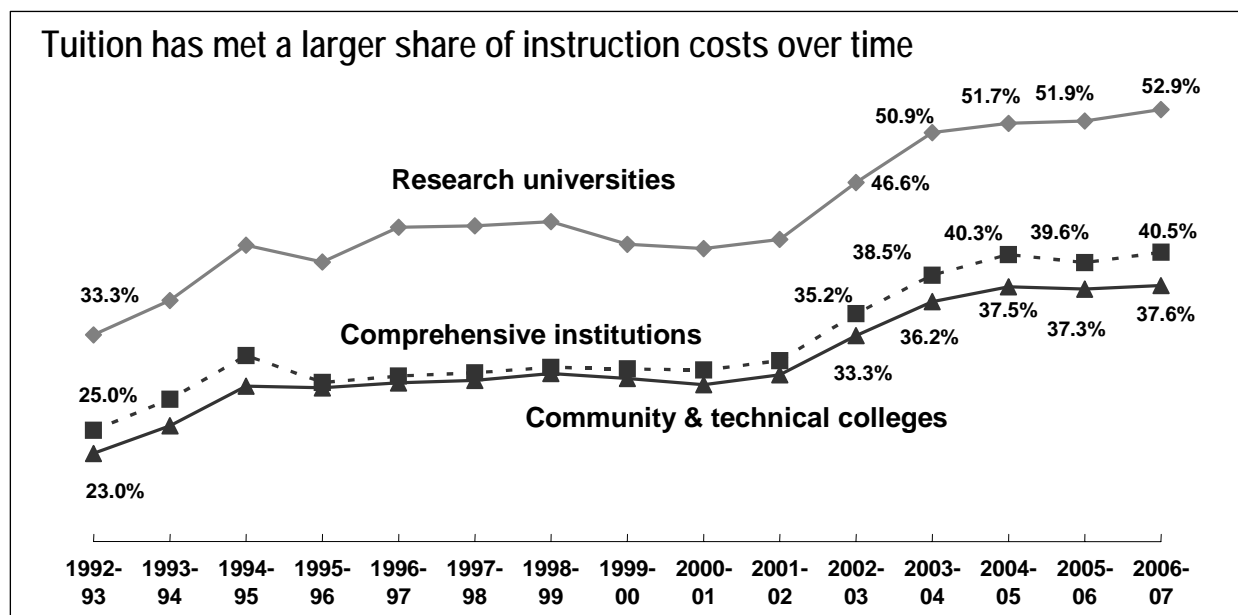
How did we fall behind?

If the need for rising levels of educational attainment is so obvious, why have we fallen behind? It's not because we've ignored our education needs; on the contrary, we have made enormous investments in education. We have world-class research and regional universities and a community and technical college system that is the envy of other states. We have held on – against considerable pressure – to academic standards that ensure that our high school graduates can read and write. And we've begun to make new investments in early learning through the Department of Early Learning.

Between 1996 and 2009, our public and independent higher education enrollments are expected to grow by about 23 percent. We added nearly 10,000 new full time equivalent (FTE) students in the 2007-09 biennium. In fact, in 2007 the state Legislature provided more than \$443 million for increased enrollment, financial aid, and other improvements. This was the largest increase in state funding for public higher education in history.

But we still have not come far enough, fast enough. And we have not fully grasped how both the size and the nature of our educational challenge are changing. Here are some of the changes we need to face up to:

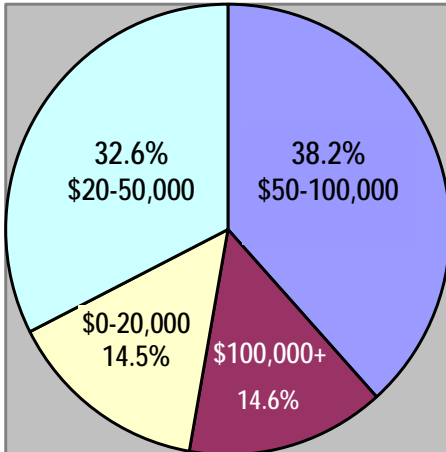
First, until the current biennium, our investment in postsecondary education has not kept pace with growth in the student population, especially in this decade. In a time of significantly rising costs, this has forced institutions to raise tuition to make up the difference.



Source: HECB

Our Legislature and governor have increased education spending steadily, but state spending on education must compete with rapid escalation in the cost of health care, prisons, and environmental protection. As a result, students have had to bear a much greater share of the cost of postsecondary education.

Second, our growing population includes more people who have not fared well in our education system – the poor, people of color, and recent immigrants. Poverty is the single most powerful risk factor for lack of academic attainment among children, and people of color – particularly Latino, Native American, and African American people – have disproportionately low incomes. Differences in culture, race, and language are growing in our state, and they also play an important role in how both children and adults learn, and what they need from our education system.

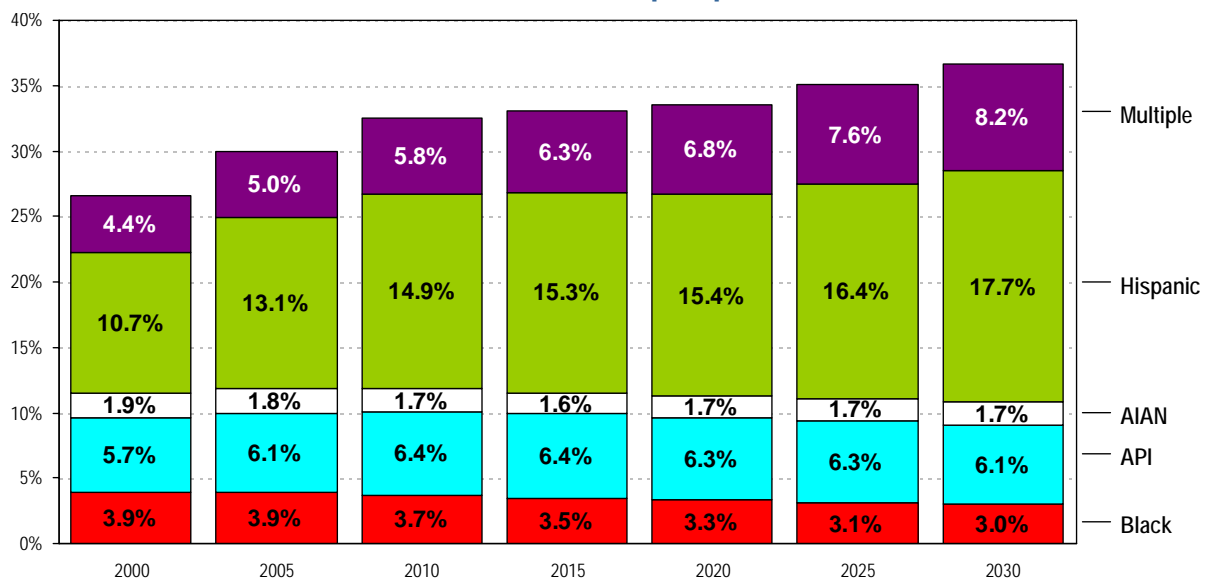


By 2013, 47.1 percent of high school graduates will come from families with incomes of \$50,000 a year or less.

These students are less likely to have parents who completed college and are at greater risk for not participating and succeeding in postsecondary education.

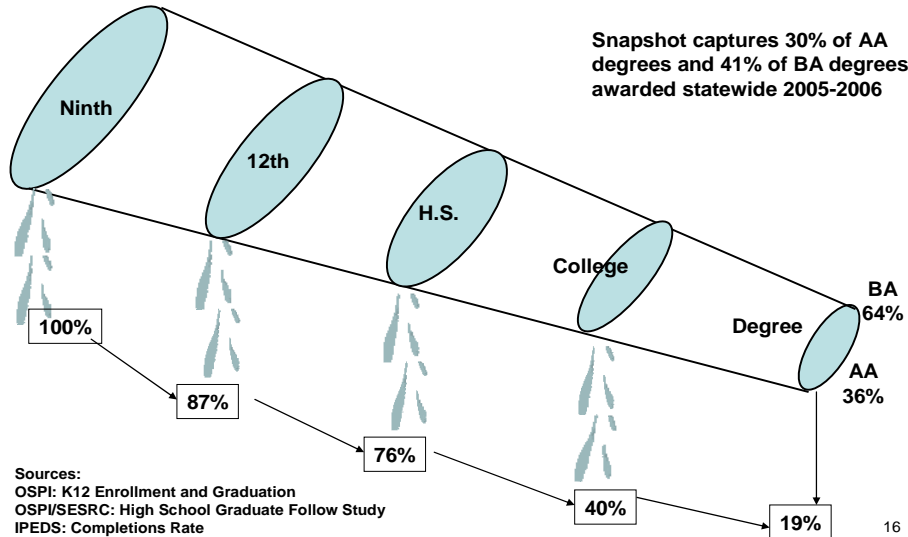
Source: WICHE, 2003

By 2030, more than 37 percent of Washington's K-12 students will be people of color



Source: OFM 2007

The pipeline is leaking...



Third, we have a “pipeline” problem. Too many of our young people start kindergarten already behind. Too many drop out of high school, and among those who graduate from high school, too many require remediation (especially in math) before they can do college-level work. Too few go on to postsecondary education, and even fewer complete the postsecondary programs they enroll in. At every stage, the “education pipeline” leaks like a sieve.

Fourth, we have a “way of thinking” problem that inhibits our progress, and it is expressed in the very term “education pipeline.” We think of education as something for young people – something that should be completed in our late teens or early twenties. And, we think of education as having an end point – in fact, academics actually use the rather odd phrase “terminal degrees” to describe it.

This just doesn’t match the reality of the 21st century, or of Washington’s education challenge. Education beyond high school *and* learning throughout our careers are the new norm, but we are late adapters to this change.

Equally important, our state has more than a million adults with a high school diploma or less. Each year, we add 15,000 high school dropouts to that population, along with 23,000 high school graduates who go straight into the workforce. The number of immigrants who need to learn English as well as job skills also is a growing; currently they account for half of all those enrolled in adult basic education programs.

Sixty percent of today’s jobs require some form of postsecondary education or job training, and 10 years from now, the percentage will be even higher. As the economy changes, skills must change, so that more and more adults will need to return to the well for more education time and time again, throughout their careers. But though we have talked about “lifetime learning” for what seems like a lifetime already, we have not re-engineered our education system to make adult learning accessible and user-friendly for those who need it.

Where do we begin?

This plan builds on the work of generations of visionary leaders who created today's higher education system. Those leaders founded both public and private colleges and universities across the state, built the community and technical college system, and created a financial aid system for low-income students. They were guided by the ethic of creating opportunity for the next generation. Now it is our turn to build on their legacy, and to live up to their ethical example.

This plan has more recent inspiration as well. One source is the *System Direction*, a document published by the State Board for Community and Technical Colleges in September 2006, (available on their Web site). It sets out bold ideas about innovation, student success, and economic growth, which have been incorporated into this plan.

The Workforce Training and Education Coordinating Board biennially develops the state's strategic plan for workforce development. *High Skills, High Wages 2006*, sets out goals for workforce development, including:

- Preparing youth for success in postsecondary education and work;
- Providing adults with access to lifelong education and training;
- Meeting the needs of industry for skilled employees; and
- Better integrating services to support learners of all ages.

These goals also are strongly embraced in the policies and recommendations of this plan.

The Washington Learns committee, convened by Governor Gregoire, also provided both data and ideas that inform, direct, and inspire this plan. The committee examined education from cradle through careers, and its final report calls for a single, seamless system of learning that tailors education to the needs of individual students. It emphasizes early learning, academic rigor, clear accountability, creativity, and new partnerships between families, the public sector and the private sector.

Its final report, issued in November 2006, *Washington Learns* set out 10-year goals for a world-class education system.

Washington Learns – 10-year goals:

1. *Parents will be their children's first and best teachers and will have the support they need to help their children "learn to learn" in their first years of life.*
2. *Families will have access to high-quality, affordable child care and early education programs staffed by providers and teachers who are adequately trained and compensated.*
3. *All children will enter kindergarten healthy and emotionally, socially, and cognitively ready to succeed in school and in life.*
4. *All students will transition from third grade with the ability to read well and do basic math, and with the ability to actively participate in a learning environment.*
5. *All students will transition from eighth grade with demonstrated ability in core academic subjects, citizenship skills and an initial plan for high school and beyond.*
6. *All students will graduate from high school with an international perspective and the skills to live, learn and work in a diverse state and a global society.*
7. *All students will complete a rigorous high school course of study and demonstrate the abilities needed to enter a postsecondary education program or career path.*
8. *All Washingtonians will have access to affordable postsecondary education and workforce training opportunities that provide them with the knowledge and skills to thrive personally and professionally.*
9. *Washington will have a well-trained and educated workforce that meets the needs of our knowledge-based economy.*
10. *Academic research will fuel discoveries and innovations that allow Washington business to compete globally.*

At first glance, one might think that higher education's role begins with goal number eight on this list. But ours is a larger challenge, because higher education institutions provide parent education, and education of early learning providers, K-12 teachers, and school administrators. Postsecondary education also plays a major role in providing the continuing education today's teachers need to meet the needs of children from every culture and to improve student achievement in math and science. Higher education is also called upon to reach out to students in middle and high school, and to help create the expectation that *all* students should plan and prepare for postsecondary education.

Even the first goal – that parents will be their children's first and best teachers – is profoundly connected to our higher education system, because the more educated parents are, the more likely their children are to succeed in school and life. When even one parent learns, many successive generations benefit.

The gift of educational opportunity has the power to change the trajectory of families, of communities, and our state. It has the power to move the blue arrow up.

That is the starting point and the aim of this 10-year plan.

A vision for 2018

In 2018, Washington's higher education institutions will be fully integrated into a cradle-through-career system that educates more people to higher levels of skill and knowledge than ever before. We will reduce employers' need to import people with advanced degrees or specialized skills from other states and countries. The best jobs in Washington will go to Washingtonians educated in our colleges and universities.

University-based research will foster innovation and the growth of leading-edge industries. Washington businesses will expand, fueled by skilled workers who have easy access to a system that helps them learn the skills they need to move up in the world.

Washington's engaged citizens will create a civic culture that sustains a strong sense of responsibility to the next generation. This will be expressed in concerted action to address global climate change, protect our natural heritage, foster community service, and continue to expand and improve our education system.

Washington will be a center of creativity, cultural vitality and innovation in the arts, business, technology, agriculture, renewable energy development and, of course, in education. By nurturing the dreams and the potential of every Washingtonian and embracing our growing diversity, our highly qualified educators – from early learning through graduate school – will build our state's reputation for educational excellence, and all educators will earn a higher level of remuneration and respect.

To achieve this vision, we will do more, and do it differently. We will provide more space and funding for more students. We will rethink and redesign educational programs to suit the needs of diverse learners and a changing economy. Education will be available where and when people need it.

Public, independent, and for-profit postsecondary institutions will forge strong partnerships with K-12 schools and communities to reach out to students in our public schools, to working professionals, and to under-educated adults and new immigrants; and will tailor programs to meet their needs. A wide array of programs will provide upward mobility, foster creativity and innovation, and stimulate the growth of our economy.

Washington's P-20 education system will be a more customized, responsive, and collaborative enterprise that puts the needs of individual learners first. The result will be a prosperous economy, a healthy society, and a shrinking gap between rich and poor.

To achieve this vision, three broad efforts are required:

- **First** and foremost, we will need to get more people into postsecondary education, and do more to help them succeed once they get there.
- **Second**, we will need to promote economic growth and innovation by mobilizing our education and research resources to match talent with opportunity.
- **Third**, we will need a new system of incentives and accountability that rewards higher education institutions that help achieve the goals spelled out in this plan

I. Raise educational attainment to create prosperity, opportunity

Educating more people to higher levels will require new efforts throughout our education system and our society. Early learning, more rigorous and relevant public education, strong mentors and advocates for students, more engaged communities, a renewed focus on math and science education, accessible financial aid, more user-friendly institutions, and focused outreach to students of color and low-income students are all essential.

Help more people earn degrees

But none of this will suffice if we do not expand the capacity of our higher education system. As our population grows, we will have to expand enrollments just to maintain our current level of degree attainment. To *increase* our level of degree attainment – the central goal of Washington Learns – we will have to expand even more. To meet the ambitious growth goal we have set, we will need to expand by an additional (27%) by 2018 over enrollment in 2006-07. This will require adding enrollment at an approximate rate of 2.7% per year.

We need more baccalaureate and advanced degrees, and more space for those who take their first two years of study toward a baccalaureate degree in a community or technical college. We will need to prepare more people for high-demand fields such as science, technology, engineering, mathematics and health care. We also will need more students completing job training certificate programs, associate degrees, and apprenticeship programs.

The number of students graduating from high school will level off in the next few years. The growing proportion of low-income and minority students in K-12 have been less likely to graduate from high school or to enroll in postsecondary education. We must undertake an aggressive, focused and consistent effort to inspire, support and encourage more students to reach higher.

There also will be a growing need among adults at all educational levels for intermittent education throughout their careers. The system should both stimulate and respond to this growth. This will require additional enrollment capacity. (It will also require raising expectations for K-12 students, improving outreach, and making the system more user-friendly and flexible for working adults. These topics are addressed in subsequent sections of this plan.)

All of these differences will have significant cost implications. Efficiency, productivity, and innovation will be prerequisites for meeting this challenge. Many of the high-demand programs such as nursing, engineering, and science are costly to provide. However, implementation of this plan also will produce significant cost savings, because increasing the user-friendliness and accessibility of the higher education system will raise the number of *graduates* relative to the number of students enrolled. Improvements in the system described in subsequent sections of this plan will help more students not just enroll, but persist and graduate in less time.

Improvement also needs to be measured. That's why we are establishing benchmarks for improvement based on the performance of states similar to our own, the Global Challenge States (GCS).

The GCS are ‘new economy’ states – states with great potential to succeed in the global economy. Washington is ranked fourth among the GCS based on indicators such as knowledge jobs, economic dynamism, globalism, digital economy, and technical innovation capacity. The GCS also include Massachusetts, California, New Jersey, Connecticut, Colorado, Virginia, and Maryland.

However, Washington ranks sixth among the GCS in bachelor’s degrees awarded and last in advanced degrees awarded. We can and must do better to ensure best opportunities and to maintain our state’s competitive position in the global economy during the next decade and beyond.

Policy goal: Increase the total number of degrees and certificates produced annually to achieve Global Challenge State benchmarks.

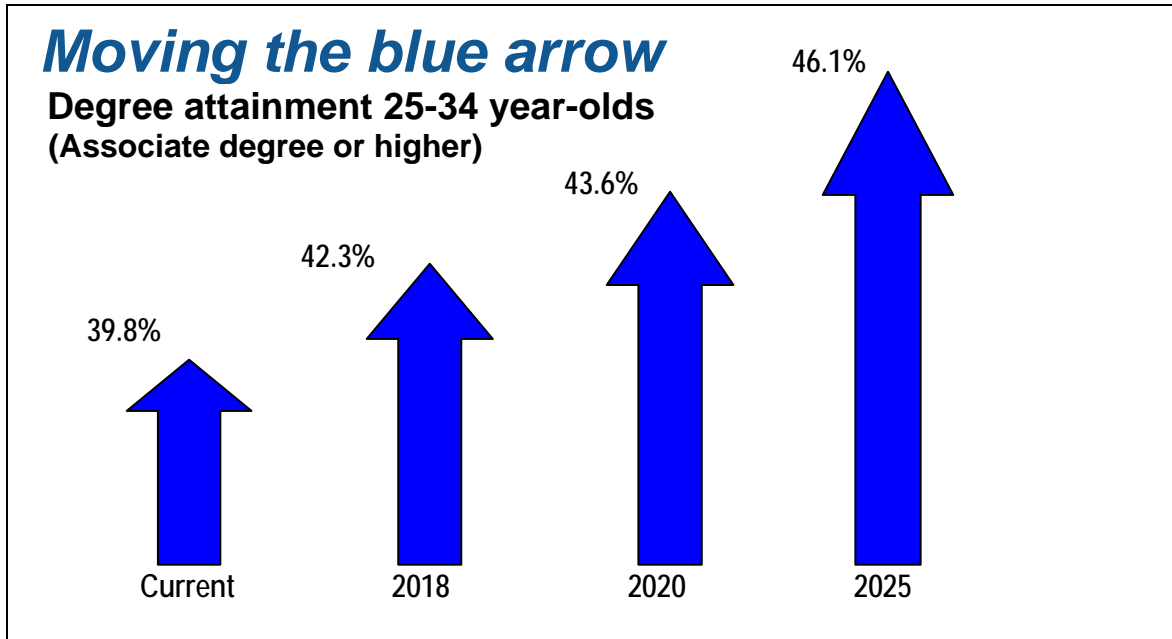
- By 2018, raise mid-level degrees and certificates to 36,200 annually, an increase of 9,400 degrees annually.
- By 2018, raise baccalaureate degree production to 42,400 per year, an increase of 13,800 degrees annually. This equals the 75th percentile of the GCS.
- By 2018, raise advanced degree production to 19,800 per year, an increase of 8,600 degrees annually. This equals the 50th percentile of the GCS.
- By 2018, we would need a total higher education enrollment of 297,000 FTEs, an increase of 27 percent compared the current biennium.

Action: *To achieve these degree goals, by October 2008, the HECB, SBCTC, public and independent sector institutions, and other key partners will develop a detailed enrollment plan that draws on the current strengths of the system and expands pathways to degrees for Washington citizens.*

Outcome: Washington would continue to lead the GCS in awarding middle-level degrees.

Outcome: Washington would move from sixth to third among the GCS in terms of bachelor’s degrees awarded and from last to fifth in advanced degrees awarded.

Outcome: Washington would raise the overall level of degree attainment among its 25-34-year-old population from just under 40% to 42.5% by 2018. That rate would continue to climb as more students move through a postsecondary system with high expectations and levels of support for academic achievement, one designed to more equitably provide opportunities for access and success in higher education.



Washington’s effort to move the blue arrow upward more quickly by funding additional enrollment and through systemic improvement will produce exponentially greater results over time, HECB degree projections indicate.

New strategies for expansion

In the past, expanding the higher education system has meant building new buildings. To some extent, that will always be true, but distance-learning technologies, the location of university programs on community college campuses, and leased facilities in remote locations have added new options for expansion. Serving place-bound students, providing programs on job sites, and creating community-based learning in church basements and community centers have also helped to change the equation of higher education with ivy-covered brick buildings.

Nonetheless, buildings are hardly obsolete, and we will need more of them. We are now in the final biennium of capital funding provided by a bonding measure championed by former Governors Booth Gardner and Dan Evans and passed by the Legislature in 2003. The Gardner-Evans bonds have helped address a backlog of need for expansion and maintenance, but unmet needs remain.

Work is underway to site a new campus to serve the North Puget Sound region, and that will require new funding. And more work is needed to accurately plan the way our system will grow to serve other regions of the state. In addition, there is a \$1.2 billion backlog of maintenance required to protect our investment in the buildings we already have.

The policy question we face is how to plan strategically to meet the needs of more diverse learners, in every corner of our state, in the most economical and efficient fashion.

Policy goal: Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state.

Four strategies to raise educational attainment

Washington cannot raise the level of educational attainment – and move the blue arrow up – by doing what we have always done. Higher education institutions must actively recruit and encourage prospective students who currently think further education is beyond their reach because of cost, competing work and family obligations, or lack of academic preparation. Postsecondary education must become more accessible and user-friendly to everyone who can benefit from it.

Four broad strategies are called for: 1) focusing on student diversity; 2) creating the expectation among K-12 students that all will get education beyond high school; 3) creating a higher education system that is user-friendly for all adult learners; and 4) making college more affordable and accessible.

1. Focus on diversity

In 2006, the Higher Education Coordinating Board published *Diversity in Washington Higher Education* following a series of public forums, stakeholder meetings, and focused research. The report concludes that low-income and minority Washingtonians are chronically under-represented among students, staff, faculty and leadership in the higher education system. The data show the state is maintaining the status quo in some areas, and actually losing ground in others. Clearly, current efforts to achieve greater representation are insufficient.

If closing the gap were easy, it would have been done by now. But this is a complex challenge, involving issues of both race and class. The largest *number* of disadvantaged students are low-income whites. But a much larger *percentage* of students of color are poor or near-poor. They face the double disadvantage of diminished expectations based on both economic status and race. Raising the expectations of all these students – and their families, teachers and communities – is the critical test we have failed so far.

The demographic shift that is taking place in Washington raises the stakes. We cannot meet our enrollment or degree goals unless and until we do a better job of educating low-income students and students of color. But even if that were not so, closing this chronic and long-standing academic opportunity gap is a moral obligation of our society. In a century in which education is the primary path to upward mobility, neglecting this work is tantamount to turning our backs on our most basic American values.

To enroll and graduate low-income students and students of color, the Diversity Report recommends increased effort in several areas, including:

- More collaboration with K-12 schools to recruit and prepare students beginning in elementary and middle school; and to expand and coordinate existing pre-college programs;
- Smoothing transitions from high school to college, and from two- to four-year colleges;
- Building the capacity of both K-12 and higher education faculty to educate more students from diverse backgrounds through expanded recruitment and retention efforts;

- Providing training and professional development for K-12 and higher education faculty and staff to ensure strong, culturally competent educators;
- Creating incentives for students of color and low-income students to pursue graduate degrees;
- Expanding and improving support services such as student advising and child care that help students stay in school;
- Increasing the diversity of faculty, staff and leadership in higher education; and
- Increasing accountability, collaboration and shared responsibility for achieving parity.

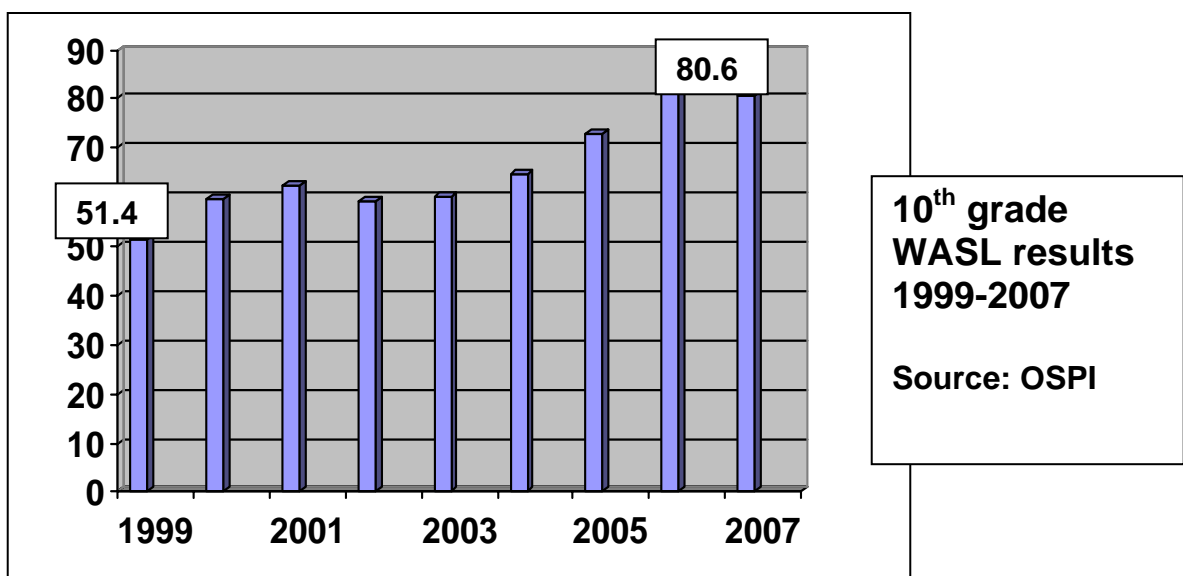
Policy goal: Increase the number and percentage of underrepresented students, staff, and faculty of color in postsecondary education.

2. Create higher expectations for all K-12 students

Postsecondary education is no longer optional. Virtually everyone needs some education or job training beyond high school, and everyone deserves the opportunity to get whatever level of education they need to meet their personal and career goals.

To enter many apprenticeship programs today, high school graduates need the same skill levels in reading, writing, math and science as they would to enter a four-year college program. (In fact, a higher level of reading skill may be required to read a car repair manual than some college textbooks.) As the need for more educated workers increases, an intense and important policy debate is being held about whether our high school graduation requirements are rigorous enough.

Since 1997, when the Washington Assessment of Student Learning (WASL) was first administered, student achievement in reading and writing has risen steadily. Math and science skills have not advanced as quickly, and, while we debate requiring a third year of high school math, we still have not aligned high school graduation requirements and postsecondary admission requirements.



The Transition Math Project has developed college readiness standards to reduce the percentage of college freshmen who require remedial math. Similar standards are being developed for English and science. These initiatives will help bolster the rigor and relevance of high school, and ensure that every high school graduate is college and career ready. In fact, completing rigorous high school coursework is a stronger predictor of college success than family income – a powerful testament to the importance of sustaining efforts to improve secondary education.

However, at the same time that the State Board of Education is considering more rigorous graduation requirements, a quarter of Washington’s students are dropping out of high school. How can we improve the skills of high school graduates *and* reduce the dropout rate?

We need to create a culture in our public schools that helps every student imagine and prepare for a successful adult life. We need high expectations for students from every income level and ethnic group. We need more opportunities for hands-on, applied learning in skills centers and in high school classrooms. We need immediate improvement in programs for immigrant students who struggle to learn English and to navigate a new culture. Every K-12 educator ought to expect all students to pursue education or job training beyond high school, and should help them plan and prepare to do so.

Every student should have clear incentives for learning and persisting in school. The new College Bound Scholarship, which promises full financial aid to low-income seventh graders who graduate from high school and demonstrate good citizenship, is an important step in this direction. But we must be even bolder to create a universal expectation among students that every one of them can plan on graduating from high school and getting some postsecondary education. In today’s economy, a high school diploma is simply not enough.

Scale up successful student advising and mentoring programs

Many students don’t know about the opportunities available to them in our postsecondary education system, or in the world of work. Nor do they learn early enough about what preparation they will need to pursue these opportunities. Public schools lack sufficient counseling and advising staff and many have no formal academic advisory program. As a result, our state ranks 32nd nationally in the percentage of low-income students who participate in postsecondary education.

Students need to know far more about what jobs and professions the world has to offer, and what the world will need their generation to accomplish. They need early and consistent learning opportunities to explore their own aptitudes and interests, and more information about all the possible ways they can leverage their best abilities into meaningful careers. They need opportunities for job shadowing, internships, and volunteer work.

Most middle and upper-class students have family and community networks that provide a great deal of this learning; low-income students often do not. To fill this gap for low-income students, students in foster care, students of color, and students in the juvenile justice system, there are some programs that offer students mentoring, help with study skills, early outreach from higher education institutions, and a curriculum that teaches students and their families the skills they need to take charge of their own education and to plan and prepare for their future.

Despite their effectiveness at improving student achievement, reducing the dropout rate, and stimulating participation in higher education, these programs have not become an intrinsic part of every student's education. They serve only a fraction of students in a fraction of our schools.

Policy goal: Higher education will partner with K-12 to provide every student, in every public school, the mentoring, academic advising, and skill development necessary to plan, prepare for, and enter postsecondary education.

Engage families and communities

Expanded early learning programs and more engaging and culturally responsive public schools can do a great deal to close the achievement gap. But schools cannot succeed alone. To plan for their futures, students need to see and experience what life is like in a variety of trades and professions. They need stable, ongoing relationships with adult mentors and role models. They need opportunities to serve their communities and to participate in cultural and civic events. They need to learn and practice both academic skills and democratic values.

This requires a web of family and community support. Our state has a rich array of such supports – including faith communities, youth service organizations, business associations, and parent organizations. But there are critical gaps. Far too many boys – especially boys of color – are not achieving the academic success we know they are capable of. And far too many children from low-income families lack the role models and relationships they need to raise their expectations.

Policy goal: Foster the creation of community-based programs that will help low-income and minority children and families prepare for postsecondary education.

Create multiple pathways from high school to college or workforce training

Running Start, College in the High School, Advanced Placement, Tech Prep and similar programs are helping high school students move to more advanced levels of education faster. The state's investment in additional skills centers, combined with articulated programs between skills centers and community and technical colleges, also provide a growing array of opportunities for high school students to achieve their education and career goals quickly and efficiently.

But growth in key programs is constrained by insufficient funding, and sometimes by a lack of student knowledge about them. For example, Running Start is used mostly by students who want a head start on earning a college degree, but it is also available – though underutilized – for students who want an early start in workforce training programs.

A new Running Start program for the trades is a small step toward helping more students meet their career goals sooner. Similarly, we need to increase awareness and visibility of our Tech-Prep programs, which provide high school students with dual-credit courses in an articulated pathway to postsecondary workforce education programs. Tech-Prep enrollment has grown and is now on par with Running Start enrollment statewide and deserves similar levels of support and recognition.

We need even more innovative thinking about the last two years of high school and the first year or two years of postsecondary education or job training. Our students need much more flexibility so that those who want to accelerate can, and those who need extra help receive it. And all students need more opportunities to explore the world of work, and access to the information and skills necessary to chart their own path from school to a rewarding career.

Policy goal: Provide high school juniors and seniors multiple pathways to success, including an expanded array of learning options for accelerated advancement or intensive help to meet rigorous academic standards.

Prepare educators for the 21st century

The higher education system prepares Washington's public school teachers, principals, and other school administrators, and provides professional development for those who are already working in our schools. OSPI also provides extensive professional development opportunities. Improving these programs could pay big dividends.

The higher education system also will play a key role improving the quality of early learning programs in Washington by expanding and improving the education of early learning providers. Among the areas of emphasis needed are improved parent education and education of early learning providers ranging from certificates to masters' degrees. Immediate and significant expansion of these programs is needed.

For example, one of the impediments to bringing programs such as Navigation 101 to scale in our public schools is that many of today's teachers are not prepared to take on the role of academic advisors or mentors. Some welcome this new role and learn the skills needed to lead Navigation or AVID classes; others do not believe this should be part of their job description.

Similarly, certainly not all, but many of today's teachers were prepared to teach students like themselves – students who are white, middle-class, without disabilities, and college-bound from birth. Many teachers have gained insight into the cultures and expectations of diverse students in order to motivate and engage them. Others have not. There also is a chronic shortage of teachers of color, and especially of teachers who are bilingual, as well as a chronic shortage of special education teachers.

In elementary and middle schools especially, many teachers feel unprepared to help students achieve the higher levels of skill in math and science they will need. These teachers need help. And in middle and high schools, many teachers need to hone their skills to provide better instruction in advanced levels of math and science.

To improve learning in math and science and help close the achievement gap for low-income students and students of color, we will need to recruit strong teacher candidates and offer those candidates effective preparation in both subject matter and pedagogy. We also will need to expand professional development programs for incumbent teachers.

The HECB sponsors professional development for K-12 educators through its federally funded Improving Teacher Quality Program. This program provides competitive partnership grants for projects that provide professional development for teachers, principals, and highly qualified paraprofessionals. The program's purpose is to increase student achievement in core academic subjects by improving educator quality through professional development.

Policy goal: Invest in teacher preparation (pre-service and in-service) to produce early learning providers, K-12 school teachers and administrators who can effectively engage families and communities to close the achievement gap, raise student proficiency in math and science, provide high-quality academic advising, and increase college attendance .

3. Create a system of support for lifelong learning

Study, learn, work . . . and repeat

College isn't just for young people any more. Today about half of state financial aid is used by people who are over 24, or who already have a family. These students come to the higher education system with a wide range of educational needs. Some already have a bachelor's degree but need a specific job skill; others come back for a second bachelor's degree, a graduate degree, or a specific course related to their profession.

Our community and technical colleges serve a wide range of adult students: new immigrants or former high school dropouts who need basic literacy skills and job training; adults who are getting the first two years toward a baccalaureate degree; and college graduates who need technical skills.

There also are many adults who go to public, independent or for-profit career schools and colleges intermittently, alternating periods of work and education. They take classes when they can find a babysitter or synchronize work and class schedules, or enroll in school when they lose a job and need new skills for another. They move between two- and four-year institutions – or between public, independent, and private career colleges – and come in and out of the system. At times they take only one class; at others they may attend full time; at still other times – for example, upon the arrival of a new baby in the family – they may not continue their education for awhile.

These students confound traditional ideas of education coming in predictable, tidy sequences and timelines. They also frustrate those who would measure higher education productivity by how quickly students earn degrees. But these students are the system's customers as surely as "traditional" 18-year-old high school graduates. And the learning that these "non-traditional" students pursue is every bit as important to their future and to the future of our state. We need to do more to adapt the system to their needs. We also need to offer these and other students more help designing individual pathways to meet their career and life goals.

Make transfer user friendly

Increasing numbers of high school graduates are accessing postsecondary education through a "cafeteria" approach, taking classes at multiple institutions before obtaining a degree. Improving students' ability to transfer from community and technical colleges to baccalaureate institutions and among all types of colleges and universities is necessary to ensure greater levels of bachelor's and advanced degree attainment in Washington.

About 41 percent of the 16,800 students awarded degrees at Washington public baccalaureate institutions in the 2000-01 academic year had completed at least 40 credits at a community or technical college. Of these students, 67 percent (27 percent of those earning baccalaureate degrees) had completed an academic associate degree, and another five percent (two percent of baccalaureate degree earners) had completed both an academic and a technical associate degree prior to transfer.

Despite these successes, some students who begin their academic journey at community colleges with the intention of transferring and completing a baccalaureate degree never reach their goal. In the 2004-05 academic year, about half of the students who had enrolled in 2001-02 intending to transfer in pursuit of a bachelor's degree actually had transferred to public four-year colleges in Washington.

Students don't reach their goals for a number of reasons, such as: changes in their personal lives, their finances, or their employment. But higher education can do more to help all students navigate the system. We can help them map out individual pathways to career and life goals without having to repeat courses, lose credits that don't transfer, or wait for classes that aren't available when needed.

To recognize increasing mobility among students, two separate but connected initiatives are necessary. The first would further align institutional policies and practice to ensure that students have flexibility in designing their path to a degree. The second would get the right information to students at the right time.

To provide students with maximum flexibility in planning their route to a degree, we must:

- ◆ As needed in the future, design additional pathways that allow community and technical college students to prepare for entry into selective majors at more than one baccalaureate institution.

- ◆ Connect faculty and administrators across institutions and sectors more broadly and more regularly, to ensure that pathways stay current with expectations of industry, and that other obstacles can be dismantled. This ‘behind-the-scenes’ communication among institutions is critical to ensure that the transfer pathways for students are, and continue to be, effective and efficient.
- ◆ Regularly assess these pathways in greater depth to ensure they are providing students with the most efficient road to their educational goals.

New and improved pathways to degrees are useful only if students know about them. Clear communication with students and their families is needed to make transfer work well. A single, statewide Web site, with information on course articulation, transfer requirements, and other relevant information is needed. The site will provide students a better understanding of the different paths available to help them make better choices in coursework, and spell out their transfer options more completely.

Such a Web site could:

- ◆ Provide students with a one-stop shop that contains information for every public, independent, and private college and career school in the state;
- ◆ Give students the ability to manage their own information and share it with the institutions they choose in an electronic format;
- ◆ Show high school students that the academic choices they make can influence the time it will take them to complete certain major courses of study in college;
- ◆ Provide information about all of the available pathways for efficient transfer;
- ◆ Illustrate for students how transfer to different colleges will affect their time to degree and requirements for graduation; and
- ◆ Connect the community and technical college registration process with the baccalaureate admissions process.

The Higher Education Coordinating Board can coordinate these efforts to avoid duplication and ensure integration of technology approaches and applications.

Policy goal: Develop an array of simple and accessible information tools to help students and adult learners understand and navigate through the postsecondary education system.

Schedule learning differently and customize instruction

Scheduling issues are also a major barrier for many adult learners. Some institutions have responded by creating new ways of “packaging” education. For example, some offer intensive weekend courses that allow students to complete a semester or quarter of credit in one month. Others offer blocks of classes early in the day or late in the day, so students can still get in a full shift at work. Many also combine in-person and online learning and offer more Web-based learning resources. As the proportion of working adults in our higher education system grows, it is becoming more important to tailor programs to student needs in this way. New technologies offer a wealth of opportunity for expanding the array of education delivery systems, and for creating powerful e-learning communities.

There also is a growing need for “just-in-time” learning. Many adult workers may suddenly need skill upgrade training, and only have time for just what they need. The need may arise from a new business opportunity, a new technology or piece of equipment, a new product line or service, a new market. Just-in-time and customized training are often the solution to a pressing business need.

Delivering this type of training presents a significant challenge for colleges and universities, whose traditional approach has been to provide courses in sequence over time. Institutions will need to develop customized curricula, modular course units, and more effective assessment tools to pinpoint specific learning gaps. And they also will need to determine how to grant academic credit for prior learning or knowledge and skills acquired on the job. Institutional academic leadership will need to work closely with the continuing education and extended learning communities to achieve fully integrated institutional support for just-in-time learning.

Policy goal: Develop the capacity to respond to the “just-in-time” learning needs of non-traditional students, adult workers and Washington businesses.

Improve student advising, support services, and child care

Improving academic advising services, child care, and other support services also is becoming a more urgent need as the adult student population grows. Improved student advising and support can help students achieve their goals faster, thus reducing costs to both students and the system.

Child care – care that provides high quality early learning – should be available and affordable for students and higher education staff and faculty. Student parents who advocate for child care cite it as one of the most important obstacles to student success, and a high priority for system improvement.

Its absence is an enormous barrier to both student participation and staff recruitment and retention. Our colleges ought to become a model for the nation in the provision of this important support service. Campus-based early learning programs also can serve as a training tool for early learning providers, thus helping the state achieve the goal of improved early learning for all.

Policy goal: Provide an array of student support services, including academic advising and high-quality child care.

Adult education: the route to upward mobility

As the skill levels required for family wage jobs increase, so does the need for expanded and improved programs for under-educated adults. In today's economy, education and training are the primary route out of poverty. Improving the skills of workers at the bottom of the wage ladder also improves economic productivity and prosperity in the communities in which they live.

Perhaps even more important, educating parents significantly improves their children's likelihood of success in school and in life. Helping under-educated adults has multi-generational benefits. Today's low-income adult learners face formidable barriers. Most have competing demands from children and jobs. Many lack transportation. And many are recent immigrants who need to learn English as well as job skills. It is difficult for them to find and enter education programs; it is even more difficult for them to persist and complete them.

Yet within the community and technical college system, adult basic education and English as a Second Language programs have the least amount of funding. Because these programs serve people who are not ready for college-level coursework, they are often treated as the step-children of the larger higher education system. Raising public and policymakers' awareness of their importance, their power to change lives and communities, and their need for funding and support must be a higher priority. It does not make sense for those who need education the most to get the least.

In the past few years, there have been significant innovations and successes in adult basic education and English as a Second Language programs, and in connecting them with workforce training programs that give people more earning power. In the past, students were required to progress through ESL and basic education programs *before* they could learn job skills. Now programs that combine ESL, basic skills and job skills (Integrated Basic Education and Job Skills, or I-BEST) have produced much faster gains and higher earnings for students.

The federal contribution to programs serving under-educated adults has been shrinking, and the state's most effective programs, such as I-BEST and Opportunity Grants, serve only a small fraction of those who could benefit. There is also a need for more outreach to the least educated, who are often unlikely to hear about the educational opportunities that do exist, or to receive the encouragement and support they need to take advantage of those opportunities.

Policy goal: Expand opportunities for immigrants and under-educated adults to enroll and succeed in postsecondary education and job training programs.

4. Make college affordable and easy to access

The State Need Grant (SNG) program, which serves students in public and private, two- and four-year colleges and universities across the state, is expected to serve about 72,000 students in 2007-08. SNG helps both recent high school graduates and non-traditional adult students participate in postsecondary education. Almost half of all SNG recipients are over the age of 24 (25 percent are over the age of 30) and about a third have children of their own. A growing number of SNG recipients are attending part time (16 percent in 2006-07, up from 12 percent the year before).

New financial aid programs created by the 2007 Legislature include:

- ♦ The **Opportunity Grant Program**, which is administered by the State Board for Community and Technical Colleges, helps low-income adults enroll in and complete job training programs for skills that are in high demand by employers.
- ♦ The **College Bound Scholarship** provides a promise of financial aid as an incentive for low-income middle school students to plan and prepare for college. And, a complementary program expansion extends the early awareness and college preparation services of GEAR UP to 25 additional school districts.
- ♦ The **Passport to College Promise Scholarship** encourages foster youth to prepare for, attend, and successfully complete postsecondary education.
- ♦ The **GET Ready for Math and Science Conditional Scholarship Program** provides high school students who excel in math or science with an incentive to enroll and work in these fields.

Project future needs and refine programs

The number of low-income students in the educational pipeline is expected to grow in the next decade and beyond. The state should expect greater rates of participation as a result of programs designed to increase the level of aspiration and preparation for postsecondary education. And student aid administrators will need to anticipate and respond to the needs of future student populations such as increasing numbers of adult learners, first-generation college students, students of color and others.

Policy goal: Maintain the state's leadership role in providing need-based financial aid by expanding and refining need-based financial aid programs to serve more low-income students.

Simplify financial aid and admissions

Decisions about whether and where to attend college and how to pay for it can be daunting for many students and families. The processes to apply for admission to college and financial aid can be mystifying. Students often apply only to those colleges they believe will admit them, and those they think they can afford. Often they make these decisions with too little information, and miss important opportunities. Simple, high-quality, clear and consistent information on college planning, choice, preparation, and financing is needed. Lack of this information acts as a significant barrier to low-income, first generation students and families for whom higher education is unfamiliar territory.

There is no statewide, personalized assistance to address concerns and questions on preparing and paying for college. Nor is there a system for helping prospective students with the lengthy, complex federal form that must be completed to apply for financial aid. Any high school student – or inexperienced adult, for that matter – who lacks help filling out these forms is at a serious disadvantage.

The state cannot alter the federal student aid application process. It can, however, seek ways to make state and local financial aid and scholarship processes simpler, more user-friendly, and much better known to prospective students of every age, income group, culture, and walk of life.

Policy goal: Provide clear and comprehensive information about admission procedures and financial aid and improve the simplicity and transparency of financial aid administration.

The dilemma of middle-class students and growing debt

The Higher Education Coordinating Board has been encouraging Washington families to save for college now and reduce the amount of money they borrow later. And today more than 70,000 future students have money set aside for their college expenses through the Board's Guaranteed Education Tuition (GET) program.

But despite this increase in family savings, thousands of students continue to graduate from college with record levels of debt. Last year 65,000 resident undergraduate students took out student loans at an average of \$6,600 per student. About 22,000 students borrowed more than \$8,000, and about 6,000 students borrowed more than \$15,000 in that year. It is likely that thousands of students are also borrowing through private market loans.

Too many low-income students are borrowing heavily. State and federal grants and work study make it possible for many students to avoid over-indebtedness, but many students are enticed by the direct-to-consumer marketing and ease with which they can borrow. Outreach and financial aid awareness activities could provide greater financial literacy for prospective students.

For a family of four, the maximum family income to be eligible for the State Need Grant is \$50,500. Many students and families who are above this limit and who borrow, tend to accumulate higher student debt than SNG recipients. For some people fear about taking on debt may keep them from enrolling in higher education.

Washington is missing the opportunity to reap the civic, cultural, and economic contributions of these people by not providing adequate levels of aid to ensure access to postsecondary education. Expanding the income limits for State Need Grant eligibility even further will be necessary in the next decade to ensure more people 'on the margin' do not find college costs a barrier.

Subsidized jobs provided by the State Work Study program also can play a significant role in helping students avoid taking on debt. Demand for work study jobs has outstripped the available funding to support the positions. Today, the state's work study funding is sufficient to assist about one in every 16 needy students. This compares to an historical ratio of one in 12 just a decade ago.

Policy goal: Reduce student indebtedness by providing accurate information and advising about alternatives to borrowing; and expanding need-based financial aid to middle-income students and families.

II. Promote economic growth and innovation

In a knowledge-driven economy, higher education plays a vital role in promoting economic growth. Leading-edge scholarship and research help create new industries and products, solve pressing problems in environmental protection, climate change, food safety and animal and human health. These innovations create new industries and jobs that require a well-educated workforce.

But getting the full potential economic gain from higher education requires more careful planning, forecasting of workforce, entrepreneurial, and research needs, and better incentives for both institutions and students to respond to specific economic opportunities.

Fill unmet needs in high-demand fields

A 2006 HECB report found shortages of people with baccalaureate and graduate degrees in engineering, computer science, the medical professions, editing, writing and performing occupations, human and protective service occupations, research, scientific, and technical occupations.

Mid-level postsecondary education degree and certificate programs that prepare students to enter an occupation or trade also are not meeting employer demand in Washington. There are shortages of qualified workers in the construction trades, health care, early childhood education, auto mechanics, the installation/maintenance/repair fields, and aircraft mechanics.

Thanks to sustained funding, the community and technical college system has expanded high-demand enrollments since 2000, focusing primarily on health sciences. The results are an increase of 71 percent in Allied Health and Health Services degree awards between 2000 and 2006. Still, further expansion is needed to meet employer demand for jobs requiring mid-level preparation.

A similar sustained and focused investment to expand high-demand enrollments is underway, and needs to be sustained at the baccalaureate and graduate levels that focus on science, technology, engineering, mathematics, and health services. Expansion of high-demand enrollments should be based on a recently agreed upon definition of high demand that was developed for use by state agencies and institutions.

Policy goal: Expand bachelor's and advanced degree programs in science, technology, engineering, mathematics and health sciences and mid-level degree programs in the construction trades, health care, early childhood education and other middle-wage occupations.

Promote student enrollment in STEM fields

More must be done to inform prospective students about career opportunities in high-demand fields, and to actively recruit students for these occupations. Responding to this need can serve two goals: the goal of economic growth, and the goal of equal access to opportunity.

For example, too few women and people of color earn degrees in science, technology, engineering and mathematics (STEM) fields. Women of all races and people of color are also under-represented in the most lucrative high-demand professions.

Several effective outreach programs have been developed to encourage middle and high school students of color to enter STEM fields by providing educational experiences and encouragement. However, far too few of these programs exist to serve all the students who would benefit from them.

A comprehensive approach to development and expansion of the number of students enrolling in high-demand fields must include:

- ◆ A sustained, statewide public information campaign, in collaboration with the Puget Sound Regional Council's Prosperity Partnership, to inform students, parents, and educators about the opportunities available in high-demand programs and how to prepare for them;
- ◆ Student access to career exploration opportunities in middle and high school;
- ◆ Student opportunities to interact with professionals and potential role models in high-demand fields;
- ◆ Experiential, project-oriented learning in K-12 schools, including science fairs, career academies, summer science camps, field trips and guest speakers;
- ◆ College counseling, student retention, and academic support services that target low income and first-generation college students; and
- ◆ Diverse college faculty in high-demand fields of study.

Policy goal: Improve student interest in and preparation for STEM programs in high demand by employers.

Expand research capacity

The University of Washington is the nation's number one public higher education recipient of federal research dollars. But celebrating this fact can create a misguided complacency regarding our need to invest in basic research – creating the false impression that the federal government has taken care of this for us. The truth is that we are not doing that well compared to other states with regard to federal research funding overall, and the total level of research and development investment in our state.

Both research and regional universities engage in research that is vital to our state's future, but they struggle to sustain and expand their research capacity, and to provide opportunities for students to participate in research projects. Researchers often lack the support services they need to apply for and win grant funding that would support their work.

Research is vital not only to our state's economic growth, but also to excellence in teaching. Research and teaching go hand-in-hand, and students who participate in research reap lasting benefits from participation in the quest for new knowledge. Students who have the opportunity to participate in research as undergraduates also are more likely to become researchers.

Policy goal: Invest in university- and college-based research that improves student learning and drives innovation and economic growth.

Contribute to the innovation economy

As the governor's *Next Washington* economic development strategy notes, high tech, research-intensive industries are a critical part of our state economy. Among the "smart strategies" proposed are initiatives to strengthen research capacity at our higher education institutions and improve commercialization of research products.

This must include attention to each stage of the technology commercialization process: bringing star researchers to our state, funding basic and applied research, identifying commercially promising research results, and developing license agreements with outside organizations.

Both the University of Washington and Washington State University have technology transfer offices that comb the institution for research results that have commercial potential. These offices also support the intellectual property rights of the researcher and the institution, collect information on innovations and inventions from academic research, help file patent applications, develop technology licensing or option to license agreements, and identify commercial research opportunities. They may also help licensees start and develop new businesses, or direct them to business development assistance. Our state needs to do more to support the success of these offices.

Policy goal: Promote commercialization of university research innovations.

Stimulate capital formation and create an entrepreneurial environment

Many institutions lack researchers and staff interested in taking a research product through all of the stages necessary for the development of research commercialization. Entrepreneurial skills and assistance, access to finance capital, and business development resources may also be lacking.

Policy goal: Develop centers of entrepreneurial innovation and training in Washington colleges and universities.

Build a coherent approach to workforce development

In 1991, the governor and Legislature set out to create a coordinated system for preparing workers for jobs that do not require a baccalaureate degree. These steps included moving the technical colleges into the community college system, placing programs for adult literacy at a new Office for Adult Literacy, and creating the Workforce Training and Educating Coordinating Board (WTECB) to coordinate policy, planning and evaluation for the workforce training system.

The governor and Legislature (through the 1991 statutes and a subsequent executive order) defined the training system to include 18 programs administered by seven different agencies. In addition to workforce and adult education programs at the community and technical colleges, the system includes apprenticeship programs, private career colleges (proprietary schools), the Division of Vocational Rehabilitation at the Department of Social and Health

Services, Workforce Investment Act programs for disadvantaged people and dislocated workers, WorkSource career centers that connect people with these programs and with the public labor exchange, and secondary career and technical education. The public and private colleges and apprenticeship programs provide most of the skills training and literacy instruction, while the other programs help provide funding and support services, including assistance with finding a job.

The Workforce Board maintains a comprehensive plan for this system, (see *High Skills, High Wages: Washington's Strategic Plan for Workforce Development*), including goals, objectives, and strategies. This plan helps students by providing a more seamless administrative structure for the system.

Workforce development, however, does not end at the 14th year of schooling. Baccalaureate, graduate, and professional programs are a critical part of preparing people for the labor market and for meeting employers' workforce needs. In fact, nearly a third of Washington's adult workforce holds a baccalaureate degree or beyond, and many more aspire to be in that group.

As our higher education system renews its emphasis on helping our state compete in the global economy, we must be more mindful of the role that four-year colleges and universities play in preparing the workforce. This will require more collaboration between four-year colleges and universities and the workforce preparation that occurs in the sub-baccalaureate workforce training system to create worker friendly career pathways among two-year and four-year degree programs. Collaboration needs to take place at the local, state, and regional levels.

Policy goal: Develop a statewide consensus that public and private, two- and four-year colleges and universities comprise the workforce education system.

Find new ways to finance work-related education and training

Job tenure has declined dramatically in the last 20 years, and changing jobs often makes it more difficult for workers to rely on employer support for their professional development. Not all employers offer tuition reimbursement to their employees, and the benefit is not portable from one employer to another. Furthermore, research indicates that lower-paid workers are less likely to be offered training opportunities, or to take advantage of them when they are available.

More portable and flexible options for promoting and financing skill upgrade training and professional development are needed. The HECB, WTECB, and their partners are exploring Lifelong Learning Accounts (LiLAs). LiLAs are employer-matched, portable individual savings accounts used to finance education and training—like a 401(k) for skill building and career advancement. The HECB will participate in a LiLA pilot project in 2008 in collaboration with the Workforce Training and Education Coordinating Board, to investigate the feasibility of this option for statewide implementation.

Policy goal: Broaden and coordinate the mission of educating the state's future workforce to be shared by all two- and four-year colleges and universities.

III. Monitor and fund higher education for results

The state currently funds public higher education based on enrollment. The state budget assumes specific enrollment numbers for each four-year institution and for the community and technical college system as a whole, and allocates an average dollar amount per full time student. Students are counted on the 10th day of the quarter or semester to determine actual (as distinct from budgeted) enrollment levels.

This is a common method of funding higher education, but it has several limitations. First, by funding each full-time enrollment at the *average* cost of educating all students at that institution, there is a built-in disincentive for institutions to offer or expand degree and certificate programs that are more costly than average. The Legislature has recognized this disincentive in recent budgets by providing higher funding levels for specified enrollments in high-demand programs in science, mathematics, engineering and allied health professions that have higher than average costs.

A second limitation is that enrollment-based funding is disconnected from results. It assumes results, but does not direct them. Policy makers in Washington and in many other states are searching for ways to connect funding to state policy priorities and to create incentives for improved outcomes.

It is time for change

This strategic master plan advocates for a dramatic increase in the number of Washingtonians who hold degrees and certificates beyond high school. It is unlikely that these ambitious aspirations can be accomplished with our current funding and accountability structure. In order to achieve the magnitude of system-wide growth and the dramatic gains in educational outcomes advocated in this plan, we need to (1) improve over time the amount of per-student funding levels, (2) strengthen and refocus our accountability strategies, and (3) provide at least some portion of funding that rewards desired outcomes. These are interrelated challenges.

Funding levels tied to Global Challenge State benchmarks

Per-student funding levels are addressed by new state policy adopted in 2007. Based on recommendations from *Washington Learns*, Senate Bill 5806 established a long-term goal to improve per-student funding, which includes both state appropriations and tuition revenue, over the next 10 years to at least the 60th percentile of similar institutions in the Global Challenge States. By also holding tuition to modest annual increases (7 percent per year), the new law requires the state to provide steady improvement in the level of funding per student. The Office of Financial Management is required to develop a “funding trajectory” from current funding levels to achieve the 60th percentile goal by 2017. OFM’s first report is due by September 2008.

Policy goal: Improve per-student funding levels consistent with Global Challenge State benchmarks established by SB 5806.

Focusing Accountability on Master Plan Goals

State law now requires institutions to report annually to the HECB on a number of specified outcomes: the number of degrees awarded, graduation and retention rates, transfer rates, and other results. Colleges are also required to report other accountability measures to a variety of oversight entities. The newly formed P-20 Council is in the process of developing a set of indicators to measure progress toward the 10-year goals advocated by *Washington Learns*. While these various and overlapping reports may provide a sense of public accountability, taken as a whole their lack of focus diminishes their power to drive results.

The purpose of a statewide strategic master plan is to identify the overarching goals of the state's postsecondary education system. A limited and focused set of accountability measures must be designed to monitor progress and incent institutional behavior that can accomplish these goals.

Policy goal: Modify and coordinate Washington's various postsecondary accountability systems to focus on monitoring progress toward achieving the goals of this strategic master plan.

Exploring financial incentives for educational attainment

Washington funds higher education based on enrollment under the assumption – well grounded in history – that if we fund the inputs (enrollments), the outputs we want (degrees and certificates) will follow. By modifying our funding methodology to reward performance, we could create powerful incentives for improving outcomes.

Several approaches for linking performance and funding are possible:

- Reward improvements in student progression toward degrees and certificates. The community and technical college system has begun to test a strategy to reward a modest amount of additional funding to colleges that improve student outcomes based on key benchmarks that mark progress toward degree and certificate completion.
- Provide some portion of funding based on *completed* course enrollments, in addition to funding based on enrollments measured on the 10th day of the quarter or semester. This would represent a progress point on the path to program completion.
- Fund completed degrees or certificates in addition to enrollments.
- Develop performance agreements as a mechanism to connect funding with desired outcomes.

Policy goal: Create a new funding methodology that focuses some revenue on results.

Moving the blue arrow

Pathways to educational opportunity

Implementation

December 2007

2008 Strategic Master Plan for Higher Education in Washington

Moving the blue arrow...

Implementation Plan

The 2008 Strategic Master Plan charts the course for improvement of the state's higher education system over the next decade and beyond. To get started with this important work, the Higher Education Coordinating Board will lead initiatives in three main areas of emphasis during the coming year.

The work immediately ahead consists of establishing strategies and crafting proposals that will, when carried out fully, achieve long-term goals. Following is a summary of the initiatives scheduled for the plan's first year.

- I. Raise educational attainment to create prosperity, opportunity
- II. Promote economic growth and innovation
- III. Monitor and fund higher education for results

I. Raise educational attainment to create prosperity, opportunity

Policy Goal: Increase the total number of degrees and certificates produced annually to achieve Global Challenge State benchmarks.

- By 2018, raise mid-level degrees and certificates to 36,200 annually, an increase of 9,400 degrees annually. Maintains our national leadership position.
- By 2018, raise baccalaureate degree production to 42,400 per year, an increase of 13,800 degrees annually. This equals the 75th percentile of the GCS.
- By 2018, raise advanced degree production to 19,800 per year, an increase of 8,600 degrees annually. This equals the 50th percentile of the GCS.
- By 2018, we would need a total higher education enrollment of 297,000 FTEs, an increase of 27 percent compared the current biennium.

Action: To achieve these degree goals, by October 2008, the HECB, SBCTC, public and independent sector institutions and other key partners will develop a detailed enrollment plan that draws on the current strengths of the existing system and proposes expanded pathways to degrees for Washington citizens.

Expected outcomes

- Move Washington from sixth to third among the GCS in terms of bachelor's degrees awarded and from last to fifth in advanced degrees awarded.
- Yearly reporting on progress toward degree goals as part of institutional accountability reporting.
- Numbers and types of new programs needed, including high-demand programs and programs for adult learners.

Policy Goal: Create innovative, efficient facilities and programs that meet the learning needs of students throughout the state.

Action: By October 2008, as directed in HB 3658, Section 610(6), the HECB, SBCTC, and institutional partners will complete a study of the physical and programmatic capacity needs of higher education, including an assessment of the technology needed to support teaching, learning, research, and course delivery.

Expected outcome

- Continued and increased funding for prioritized capital projects needed to support quality, sustainability, access and the priorities of the strategic master plan.

Participants: The HECB, SBCTC, Council of Presidents, public and independent baccalaureate institutions, the community and technical colleges, and the P-20 Council.

Four strategies to raise educational attainment

1. Focus on diversity

Policy Goal: Increase the number and percentage of students, staff and faculty of color in postsecondary education.

Action: By December 2008, in collaboration with public and independent baccalaureate institutions and the State Board for Community and Technical Colleges, the Higher Education Coordinating Board will propose to the governor and State Legislature a systemic framework for diversity in higher education that includes the development of effective, comprehensive data systems to provide for review, evaluation and accountability and to inform statewide decision making.

Expected outcomes

- No later than 2015, Washington state will place among the top 10 states in the nation in achieving parity for under-represented minority students and students in poverty in accessing higher education.
- By 2020, Washington state will place among the top 10 states in the nation in achieving parity for under-represented minority students and students in poverty in completing two- and four-year college degrees.

Participants: The HECB, SBCTC, public and independent baccalaureate institutions, Council of Presidents, ethnic commissions, students, and faculty members.

2. Create higher expectations for all K-12 students

Policy Goal: Provide every student in every public school the mentoring, academic advising and skill development necessary to plan, prepare for and enter postsecondary education.

Policy Goal: Invest in teacher preparation (pre-service and in-service) to produce early learning providers, K-12 school teachers and administrators who can effectively engage families and communities to close the achievement gap, raise student proficiency in math and science and provide high-quality academic advising.

Policy Goal: Create community-based programs to support and mentor low-income and minority children and their families to prepare for postsecondary education.

Action: *Expand access to early learning provider education programs and to teacher preparation programs in mathematics, science, bilingual education, special education, and other shortage areas. Assess the need for additional programs or locations, and encourage institutions of higher education to offer additional programs or use additional locations if appropriate. Incorporate the findings of the need assessment in the next revision of the HECB State and Regional Needs Assessment Report by May 2008.*

Action: *By October 2008, convene a statewide task force to project teacher shortages by field, and to work with the Professional Educator Standards Board to implement its policy to improve teacher preparation and professional development programs. This should include efforts to ensure that teachers are well versed in fields they will teach, including math and science, and that they are skilled in providing academic advising and mentoring that helps students plan for their futures. Findings and actions will be sent to the Legislature by October 2009.*

Action: *To ensure a welcoming and inclusive environment for students, training and professional development opportunities for K-12 and higher education faculty and staff focusing on cultural competency will be provide. A rubric will be developed by December 2008 that describes cultural competency standards.*

Action: *By October 2008, working with college access program partners and community-based organizations, the HECB will survey and review existing postsecondary outreach programs and efforts, evaluate which programs have the best outcomes, identify gaps, and propose a college and career aspiration campaign to reach students in every school district.*

Expected outcomes

- New educators will enter the teaching profession better prepared to teach core subjects such as math and science, well-prepared to teach students from diverse ethnic and racial backgrounds, and skilled in mentoring and advising.
- Practicing teachers will have improved access to professional development programs so they can obtain endorsements in teacher shortage fields and fully understand and use evolving academic and college readiness standards.
- College access programs will be expanded to reach increasing numbers of students identified as at-risk for not completing high school and continuing to postsecondary education.

Participants: The HECB, SBCTC, baccalaureate institutions, Independent Colleges of Washington, Office of the Superintendent of Public Instruction, P-20 Council, community and technical colleges, Professional Educators Standards Board, State Board of Education.

3. Create a system of support for lifelong learning

Policy Goal: Provide high school juniors and seniors multiple pathways to success, including an expanded array of learning options for accelerated advancement or intensive support to meet rigorous academic requirements.

Policy Goal: Develop an array of simple and accessible information tools to help students and adult learners understand and navigate the postsecondary education system.

Action: By June 2008, the HECB will initiate work with the Education Research and Data Center at the Office of Financial Management to develop ongoing assessment of student transitions through higher education, including the effectiveness of transfer pathways. Analysis will include HECB research into factors that influence students' rate of transfer, including geographic, financial and other relevant factors, and will be presented in the bi-annual HECB report to the Legislature and governor on transfer policy.

Action: The HECB will convene a task force to develop a comprehensive plan to expand the use of online communication (Web sites, software, e-mail) to support and retain students through their transitions among higher education institutions with specific emphasis on transfer pathways. The work group will recommend funding for the plan in the 2009-11 biennial budget.

Action: By June 2008, the HECB will initiate a task force to develop additional models and/or funding strategies to expand opportunities for high school juniors and seniors for Running Start and other accelerated options.

Action: The HECB will work with public and private higher education institutions through the Joint Access and Oversight Group (JAOG) to continue and strengthen policy work that smoothes transfer pathways for current and future students.

Expected outcomes

- Increased number of students who successfully use early college options to focus their learning goals and/or expedite their educational outcomes.
- Significant increase in the number of students who transfer successfully between two- and four-year institutions as measured under current accountability framework.
- Increased rates of participation in education and job training programs leading to greater economic productivity and personal prosperity.

Participants: The HECB, public and private baccalaureate institutions, community and technical colleges, Workforce Training and Education Coordinating Board, Council of Presidents, Office of the Superintendent of Public Instruction.

4. Make college affordable and easy to access

Policy Goal: *Maintain the state's leadership role in providing need-based financial aid by expanding and refining need-based financial aid programs to serve more low-income students.*

Policy Goal: *Provide clear and comprehensive information about admission procedures and financial aid and improve the simplicity and transparency of financial aid administration.*

Policy Goal: *Reduce student indebtedness by providing accurate information and advising about alternatives to borrowing and expanding need-based financial aid to middle-income students and families.*

Action: *By November 2008, the Board will seek a modification in the state's financial aid statute to affirm the Legislature's intent to provide the financial aid funding for low-income students needed to keep pace with tuition increases and to achieve enrollment and degree production goals.*

Action: *By November 2009, the Board will work with other state agencies and postsecondary institutions to evaluate all state financial aid programs for accessibility, outcomes, coordination, and efficiency.*

Action: *The Board will promote increasing the State Need Grant eligibility threshold from 70% of median family income to 85% of median family income.*

Action: *The Board will promote increasing funding for work study jobs sufficient to provide a subsidized job for at least one in 12 needy students.*

Expected outcomes

- The Legislature's commitment to provide adequate levels of financial aid to support enrollment and degree production goals will be formalized in statutory intent language.
- Clear policy goals for each state student aid program will guide development of administrative improvements, performance goals, greater coordination and efficiency.
- More people will go to college.

Participants: The HECB, the Legislature, public and private baccalaureate institutions, the SBCTC and community and technical colleges; the WTECB; and students.

II. Promote Economic Growth and Innovation

***Policy Goal:** Expand bachelor's and advanced degree programs in science, technology, engineering, mathematics and health sciences and mid-level degree programs in the construction trades, health care, early childhood education and other middle-wage occupations.*

***Policy Goal:** Improve student interest in and preparation for programs in high demand by employers.*

***Policy Goal:** Invest in university- and college-based research that improves student learning and drives innovation and economic growth.*

***Action:** By June 2008, the HECB will collaborate with the P-20 Council to coordinate efforts to increase the number of students who enroll and succeed in high-demand fields. The work group will report to the Council on a quarterly basis and develop initial policy actions for the 2009-11 biennial budget.*

***Action:** By October 2008, Washington's postsecondary education institutions and the HECB will develop a research task force to focus on expanding federal, state and private support for college-based research programs, improving technology commercialization, and developing entrepreneurial skills and capacity.*

***Action:** By June 2008, convene a work group to identify steps needed to more fully integrate our workforce development planning efforts and build better and more complete career pathways for Washington workers.*

Expected outcomes

- Increased statewide awareness about high-demand fields, new program development and delivery strategies, greater accessibility for under-served populations, increased enrollment and degree production.
- Increased levels of research support for both the regional and research universities: for new collaborative projects with business, and growing entrepreneurial capacity in postsecondary education.
- Improved student access to career exploration opportunities in middle and high school; far lower levels of college remediation; more portable and flexible means of financing career education.

Participants: The HECB, P-20 Council, Council of Presidents, public and private baccalaureate institutions, community and technical colleges, Workforce Training and Education Coordinating Board.

III. Monitor and fund higher education for results

***Policy Goal:** Improve per-student funding levels consistent with Global Challenge State benchmarks established by SB 5806.*

***Policy Goal:** Modify and coordinate Washington's various postsecondary accountability systems to focus on monitoring progress toward achieving the goals of this strategic master plan.*

***Policy Goal:** Create a new funding methodology that focuses some revenue on results.*

***Action:** By September 2008, OFM and the HECB will complete a study of the per student level of funding for Washington postsecondary education. The study will describe the funding trajectory needed to advance per-student funding levels to reach the 60th percentile of peer institutions in the Global Challenge States by 2017.*

***Action:** By April 2008, the Higher Education Coordinating Board will convene a task force of representatives of the Office of Financial Management, institutions, and other stakeholders to design a performance funding demonstration project for inclusion in the 2009-11 biennial budget.*

Expected outcomes

- State funding levels adequate to meet enrollment and degree production goals 2008-20, which include adding 61,500 FTE.
- Benchmarks and best practices to guide the further development of performance funding agreements in postsecondary education.

Participants: The HECB, public baccalaureate institutions, Council of Presidents, community and technical colleges, Office of Financial Management.