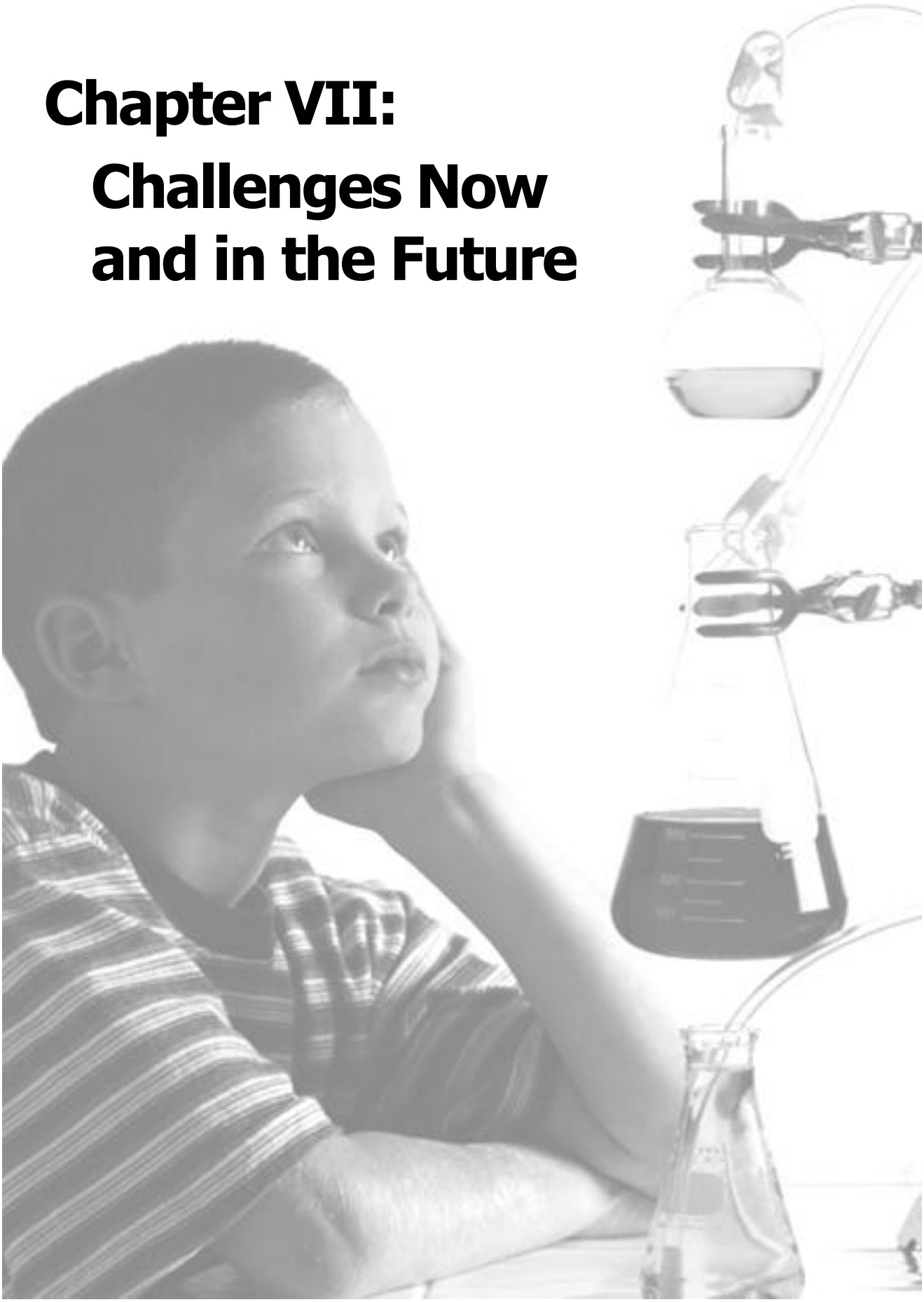
Chapter VII:
Challenges Now and in the Future



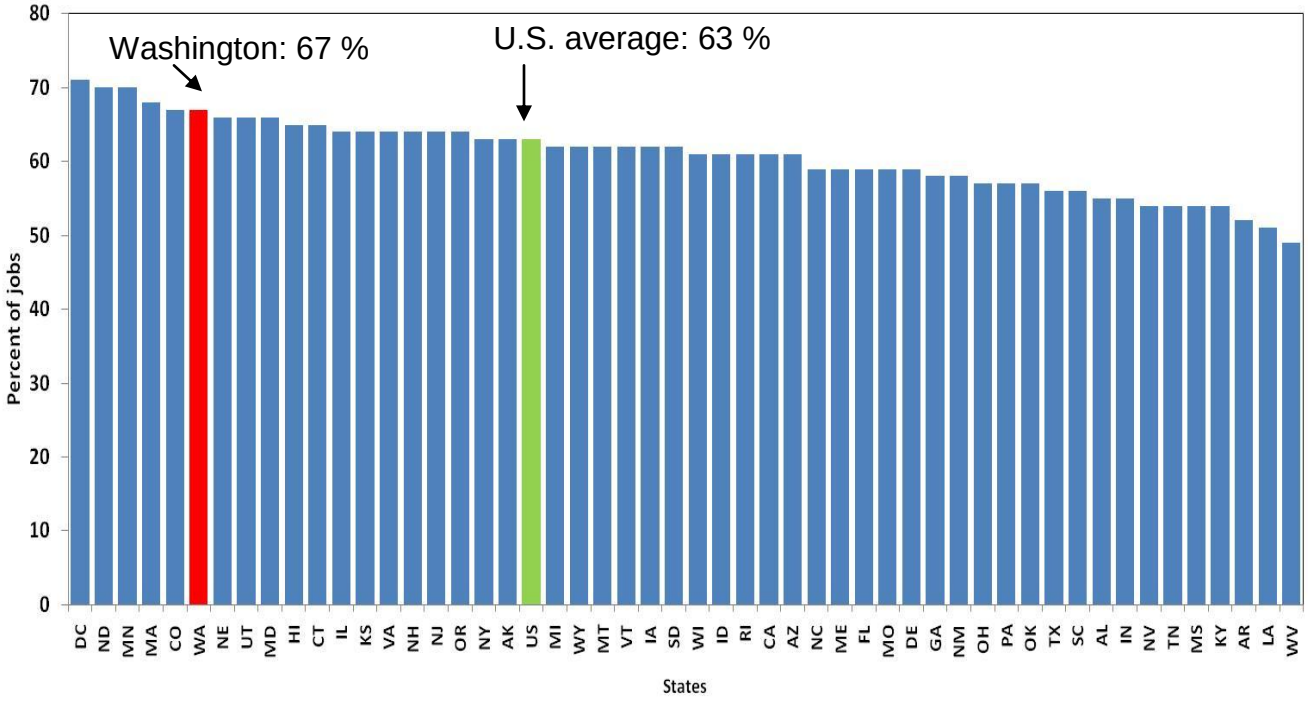
Washington near top among states in which jobs will require postsecondary education

Washington has not been spared from the painful effects of the nation's severe recession. However, the full impact of the economic downturn may have been buffered to some degree by past employment growth in areas such as medicine, technology, and engineering. Many of these jobs require higher levels of education. Workers with such skills remain in high demand, even during a recession.

Studies suggest that the number of jobs requiring postsecondary education will continue to grow in the years ahead, and Washington will remain above the national average in the percentage of such jobs. A study by the Georgetown University Center on Education and the Workforce projects that, between 2008 and 2018, 677,000 jobs requiring postsecondary credentials will open in Washington, either through the creation of new jobs or through retirements. This compares with 257,000 jobs for high school graduates and 94,000 jobs for high school dropouts. By 2018, 67 percent of Washington jobs are projected to require postsecondary education.

For Washington's educational system, these numbers present a serious challenge. Public and private colleges, universities, and trade schools will be called upon to educate the next generation of workers to fill the more knowledge-intensive jobs. The state's K-12 system will be asked to prepare more students—many from families without experience in higher education—to meet the academic demands of postsecondary education. Resources will be required to help needy, college-ready students acquire education beyond high school.

Percent of Jobs in 2018 That Will Require Postsecondary Education



Source: Projections of Jobs and Education Requirements through 2018, Georgetown University Center on Education and the Workforce (2010). http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/State-LevelAnalysis-web.pdf.

Washington is importing college-educated workers to meet demand

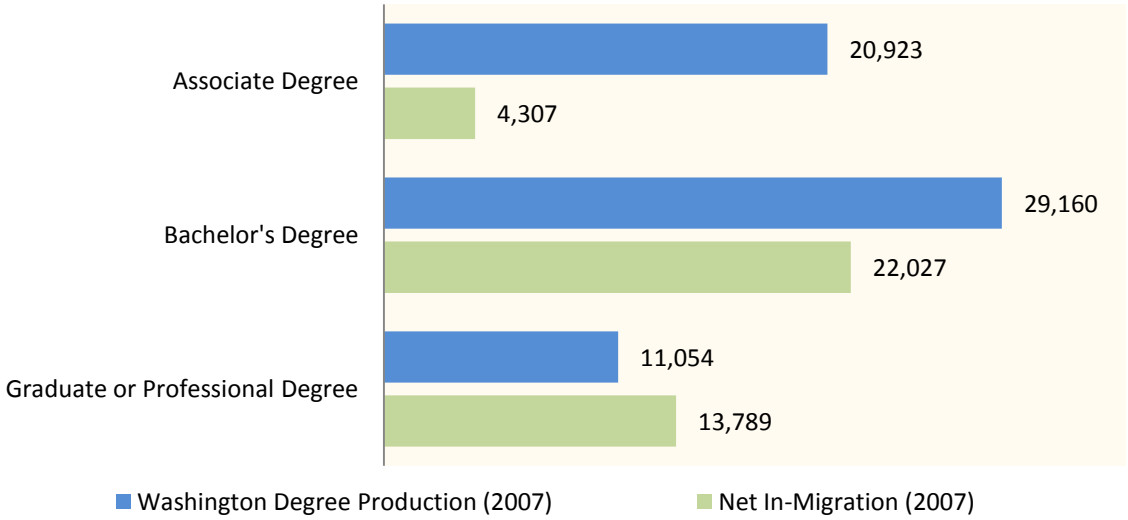
As the number of jobs requiring higher levels of education has grown, Washington has seen an increasing gap between the number of degrees needed to fill emerging jobs and the number being supplied by the state's higher education institutions. The gap exists across all levels of postsecondary education.

To a significant degree, employers have filled this gap by attracting educated workers from other states and countries. The chart below shows that while Washington colleges and universities produced more than 29,000 bachelor's degrees in 2007, another 22,000 bachelor's degree holders came to Washington from outside the state that year. The number of graduate- and professional-degree holders from outside the state actually exceeded the number who earned such degrees at Washington institutions.

Washington's reliance on out-of-state workers may be due in part to a scarcity of educational opportunities for native Washingtonians to earn degrees in the state within key employment disciplines.[1]

Meanwhile, the competition for graduates in knowledge-based businesses is growing. In 2000, Washington was one of 16 states that relied on net in-migration of educated workers—by 2007, 40 states were importing more talent than they produced.

Washington Degree Production and In-Migration, 2007



Source: HECB calculation based on NCHEMS analysis of Net In-migration and Postesecondary Education Opportunity compilation of state degree award data from IPEDS.

[1] The Impact of Interstate Migration on Human Capital Development in Washington, HECB (2010). http://www.hecb.wa.gov/research/documents/2010migrationReport-final.pdf.

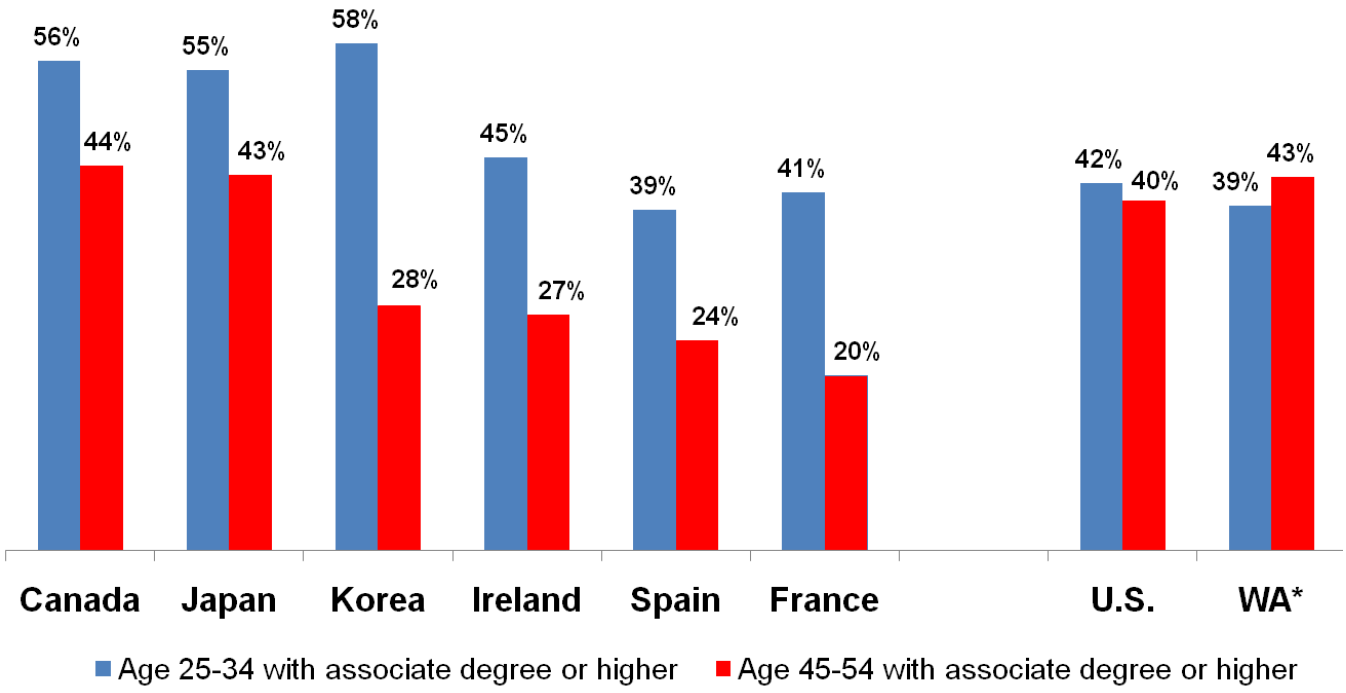
Many younger Washington residents have lower education levels than their parents

Higher education investments in the second half of the 20th Century helped make Washington's baby boom generation the most educated in state history. That commitment to expand the higher education system helped baby boomers transform Washington's economy and achieve a high level of financial well being.

But now, many baby boomers are approaching retirement age and their children and grandchildren are not reaching the same levels of educational attainment. That means a smaller proportion have the knowledge and skills necessary to fill today's education-intensive jobs and to advance the state economy to the next level in an increasingly competitive world.

The bar chart below shows that younger adults in other countries have substantially improved degree attainment compared to their parents' generation. In general, progress has been much slower in the United States. In Washington, the picture is even grimmer—a smaller percentage of younger adults have attained higher levels of education than the older generation.

Percentage of Population by Age with Associate Degree or Higher
For Selected Countries, U.S., Washington



*Age 45-64 with associate degree or higher reported for Washington

Sources: OECD Education at a Glance 2010, Table A1.3a; www.higheredinfo.org, Educational Attainment by Degree-Level & Age Group (ACS, 2008).

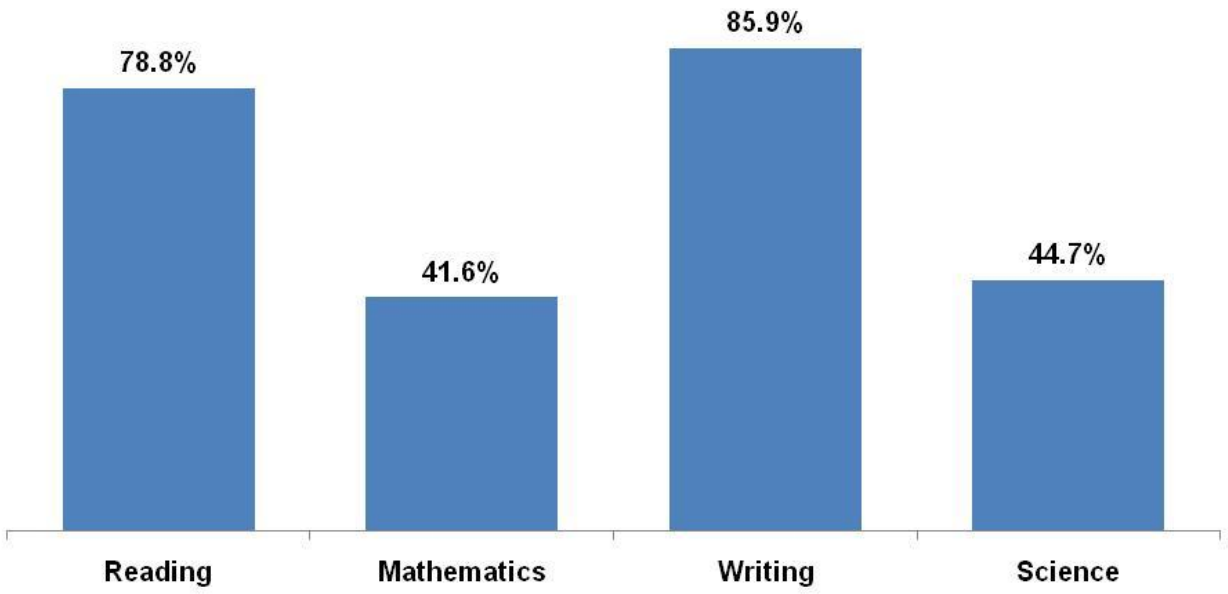
New high school assessment tool shows need for improvement in science and math

Insufficient academic progress at the K-12 level continues to be a major impediment to the successful completion of college-level work. This is especially true in the areas of science and mathematics, which constitute the educational cornerstones for many of Washington's higher-paying career fields.

Beginning in the 2009-10 school year, the Measurements of Student Progress (MSP) replaced the Washington Assessment of Student Learning (WASL) as the state's primary tool for assessing academic progress for students in grades 3-8. The High School Proficiency Exam (HSPE) replaced the WASL for students in grade 10.

The HSPE measures student progress on critical learning objectives in reading, mathematics, writing, and science. These academic standards specify what all students should know and be able to do by graduation. Like the WASL assessments that preceded them, the first year's HSPE results show a particular need for improvement in math and science subjects among high school students.

2009-10 Washington Public Schools 10th Grade HSPE Scores
Percentage of Test Takers Meeting Statewide Standards

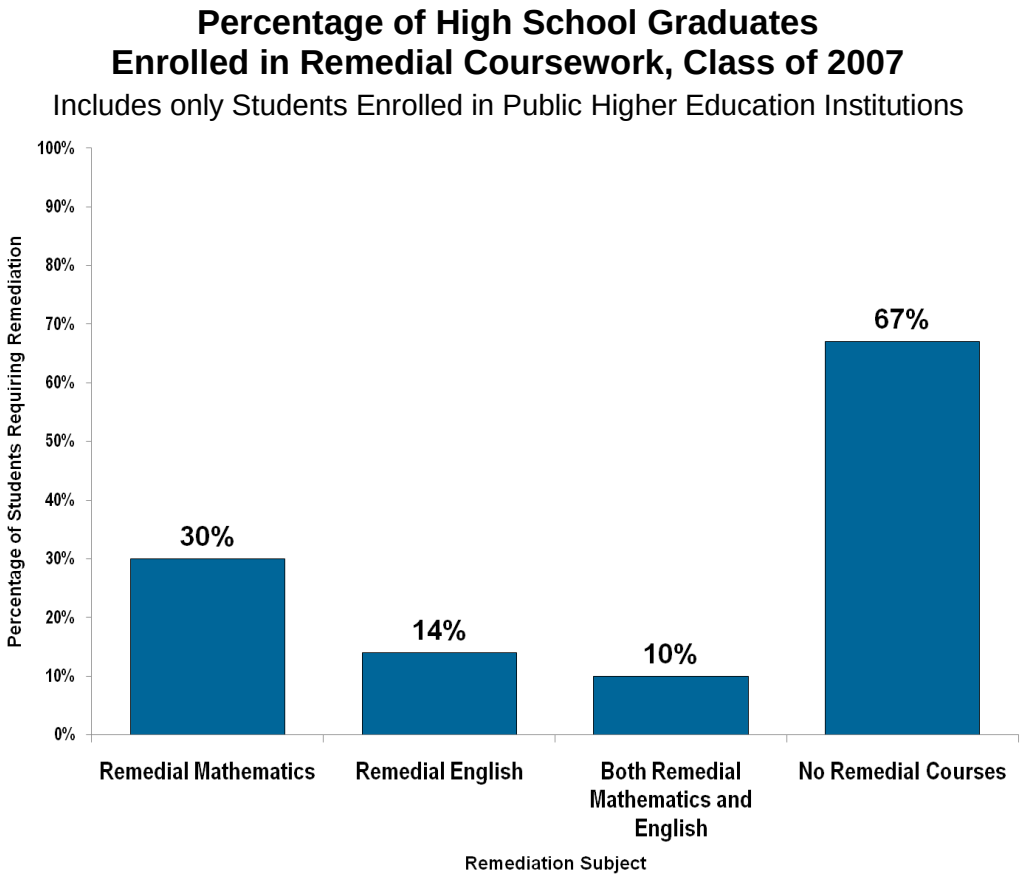


Source: Office of Superintendent of Public Instruction, 2010 Washington State Report Card Data.

Nearly a quarter of bachelor's graduates successfully complete remedial coursework

Students enter college with differing skill levels in subjects that are essential to successful completion of degree programs. Many require additional pre-college level coursework. This is most common in English and math and, particularly in math, occurs more often among older students who experience gaps in their education between high school and college.

In a recent study, the HECB found that among students graduating from public baccalaureate institutions in 2005-06, more than 4,500 (23 percent of the graduates) had successfully completed remedial coursework in English or math at a CTC prior to transfer. In addition, 35 percent of STEM graduates (*n*=232) and 50 percent of business graduates (*n*=505) took pre-college math coursework.



Source: WSU Social and Economic Services Research Center for the Office of Superintendent of Public Instruction, *Washington State Graduate Follow-up Study, Class of 2007*.

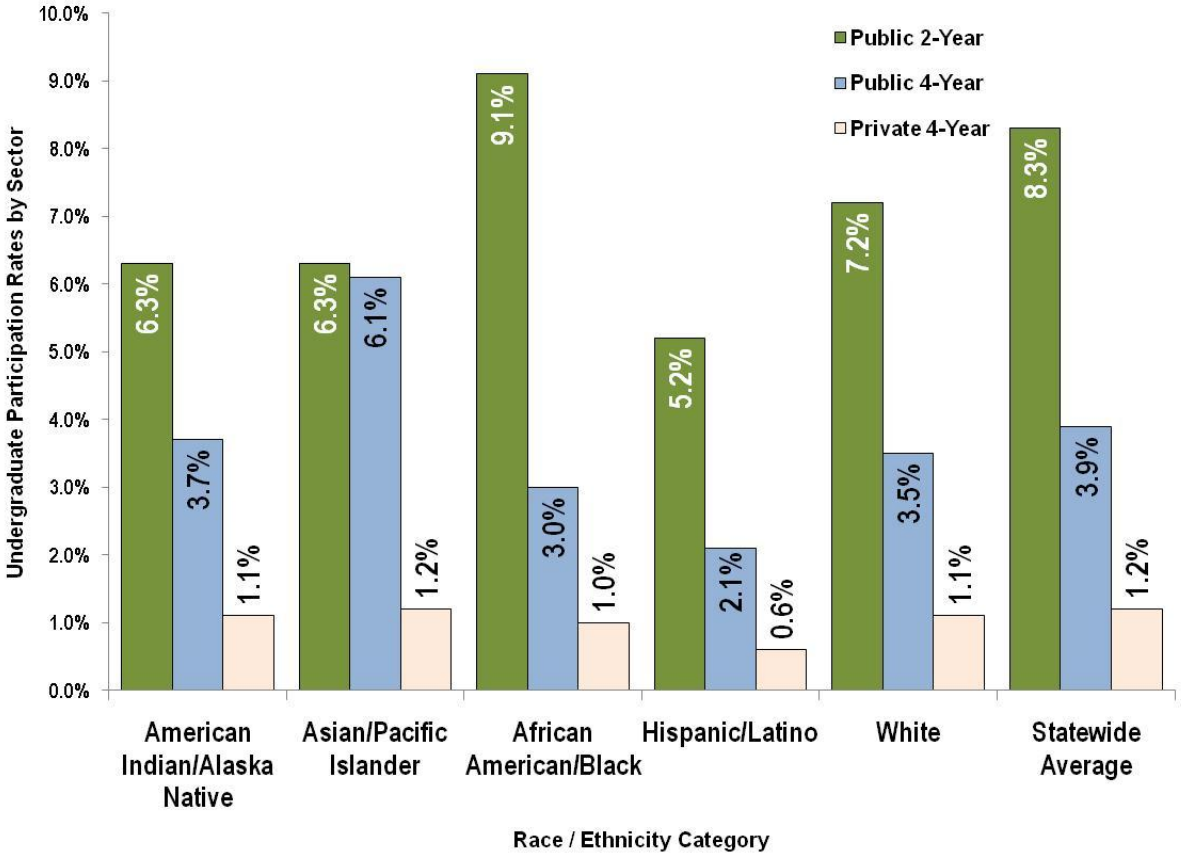
Some racial and ethnic groups have higher college participation rates than others

Racial and ethnic groups differ in their rates of college participation. Variations in family income may account for some of the differences. In addition, a lack of family history of college participation may influence the degree to which subsequent generations are encouraged to pursue postsecondary education.

Among racial and ethnic groups, college participation also varies by the type of institution. For example, participation by 18-44 year-old African Americans is higher than the state average at community and technical colleges, but below the state average at public four-year institutions. Hispanics, the state's fastest-growing racial and ethnic group, have lower than the state-average participation rates at both community and technical colleges, and public and private baccalaureate institutions.

Undergraduate Headcount Participation Rates by Race/Ethnicity and Sector, Fall 2009

Population Ages 18-44



Notes: To align with IPEDS enrollment data, census data for Asians and Pacific Islanders are combined and multiracial distributed among Hispanics and racial groups, except whites. Students with unknown status are then distributed among all the racial/ethnic groups. Nonresident aliens are not included in the analysis.

Sources: Integrated Postsecondary Education Data System, National Center for Education Statistics fall 2009 enrollments. Census Bureau.

Racial/ethnic groups vary in levels of degree attainment relative to share of population

As the percentage of Washington citizens from diverse ethnic and racial groups has grown, so has the overall percentage of students from these groups who earn bachelor's degrees at Washington's public and private colleges and universities. In fact, the percentage of minorities who earn bachelor's degrees has grown at a faster pace than their overall share of the population.

However, a closer look shows that minority groups vary in their levels of degree attainment. For example, the percentage of all students earning bachelor's degrees who are Hispanic/Latino is lower than their percentage of the overall population.

As the state's minority population expands, achieving the goal of increased degree production will require continued emphasis on improving degree attainment rates among groups that have had lower levels of college success in the past.

Proportionate Representation of Race/Ethnicity Groups
In 2008 Washington Population and 2008-09 Degrees Awarded

Race/Ethnicity	2009 Population	Associate's Degree	Bachelor's Degree	Advanced Degrees
American Indian/ Alaska Native	1.6%	1.4%	1.3%	1.1%
Asian/Pacific Islander	8.6%	7.6%	11.7%	6.9%
African American/Black	4.1%	3.3%	2.8%	2.6%
Hispanic/Latino	11.9%	6.2%	5.0%	3.3%
White	71.1%	66.2%	67.6%	61.7%
Two+ Races	<1%	<1%	<1%	<1%

Sources: Integrated Postsecondary Education Data System (U.S. Department of Education). U.S Census Bureau.

Washington has a pool of students who started college, but never finished

Thousands of Washingtonians have completed at least some college but, for many reasons, have not earned college degrees or certificates. By focusing on the more than 472,000 Washington residents age 18-44 who, in 2009, had earned "some college but no degree" and were not currently enrolled in college, the state could "begin to turn the tide fairly quickly"[2] in growing degree production.

Encouraging more to return to the higher education system to finish degree or certificate programs is one strategy for helping the state fill the growing demand for college-credentialed workers.

Washington's Residents Age 18-44
Whose Highest Educational Attainment is "Some College, No Degree"

By Race/Ethnicity	Total with "Some College, No Degree"	% Not Enrolled in College	# Not Enrolled in College
American Indian/ Alaskan Native	8,727	83%	7,284
Asian/Pacific Islander	45,221	59%	26,550
African American/Black	32,945	70%	22,943
White	512,747	70%	59,773
Multi-racial	24,926	63%	15,625
Hispanic	57,143	70%	39,905
TOTAL	**681,709**	**69%**	**472,080**

Source: American Community Survey, 2009, U.S. Bureau of the Census.

[2] *A Stronger Nation through Higher Education* (February 2009), Lumina Foundation for Education.

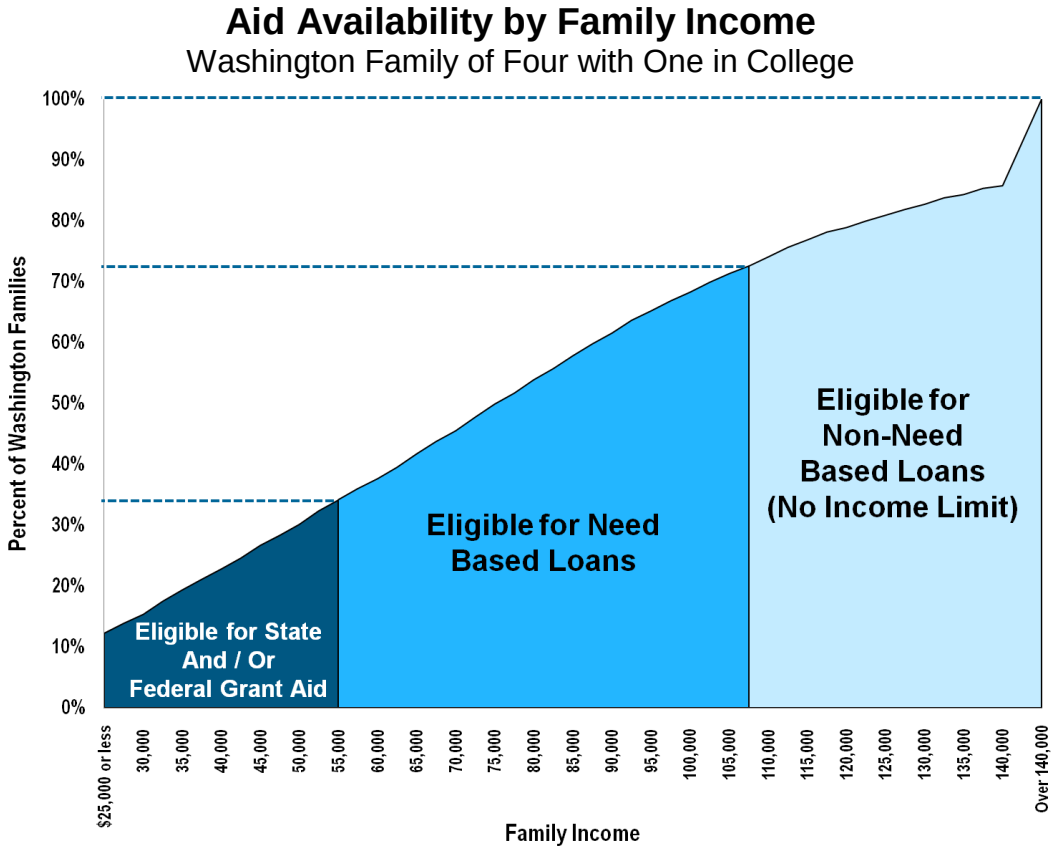
For families, the total cost of college depends on the institution and its tuition rate

Because the cost of instruction is higher at some public and private colleges and universities, the cost of attendance also is higher. Absent loans, scholarships, or other forms of financial assistance, some families will need higher levels of personal income or savings to enroll students in more expensive institutions.

Differing tuition rates are a major factor contributing to differing attendance costs. As tuition increases, the overall cost of attendance and, consequently, family income requirements also rise, unless these increases can be offset by financial aid through grants, scholarships, and loans – from federal, state, institutional sources, or personal family savings.

The table below shows family income cut-off points for various sources of aid based on family income and attendance at one of the state's public research universities. A family of four sending an 18-year-old unmarried student to one of Washington's research universities during the 2009-10 academic year needed an annual income of $108,500, absent other sources of financial assistance, family savings, personal savings, or GET savings.

As the chart shows, there is no income limit on non-need-based loans. A family of four that earns less than $108,500 with a student attending a Washington research university would likely be eligible to receive at least some need-based loans. Seventy-four percent of four-member families in Washington fall into this income category. A similar family earning less than about $55,000 (34 percent of families) would likely receive need-based grants (state, federal, or both).



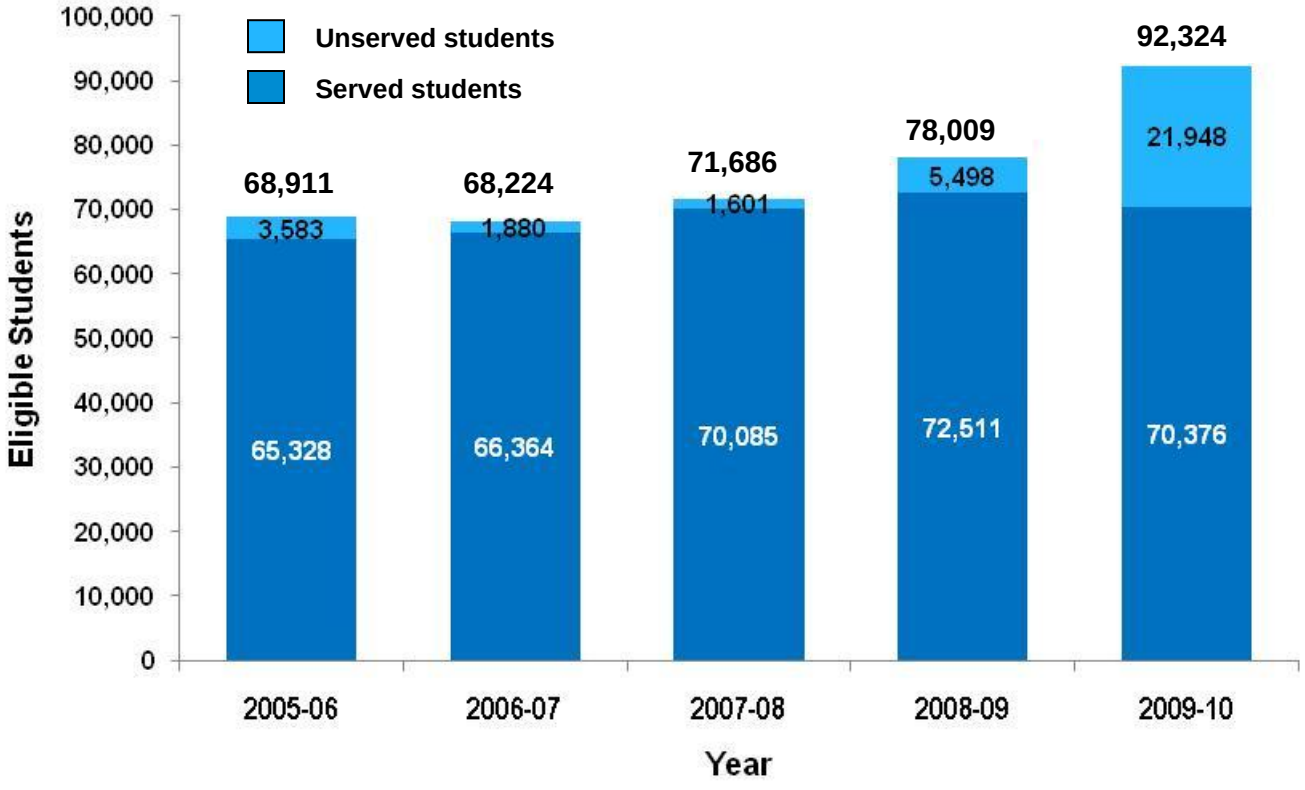
Source: HECB analysis of financial aid data, American Community Survey Three-Year, 2005-07, dataset.

Demand for financial aid has outstripped supply

The state's economic downturn has prompted thousands of Washington residents to turn to higher education for new career training or to improve their job skills. However, many students lack the personal financial resources to pay the full cost of tuition and other college expenses. These circumstances have combined to create additional pressure on state and federal financial assistance programs at a time when the state budget situation has prevented increases in student financial aid.

The number of students served by the State Need Grant (SNG)—the largest state-funded financial aid program—declined slightly, by about 3 percent, between 2008-09 and 2009-10. This occurred primarily because relatively more full-time students than part-time students were served. However, over the same period, the number of eligible students seeking SNG assistance grew dramatically—from 78,000 to about 92,000—an increase of about 18 percent in one year. As a result, the gap between the number of students who received SNG assistance and those who went unserved also increased.

State Need Grant-Eligible Students: Served Versus Unserved



Source: SNG Final Interim Report, 8/10/10.