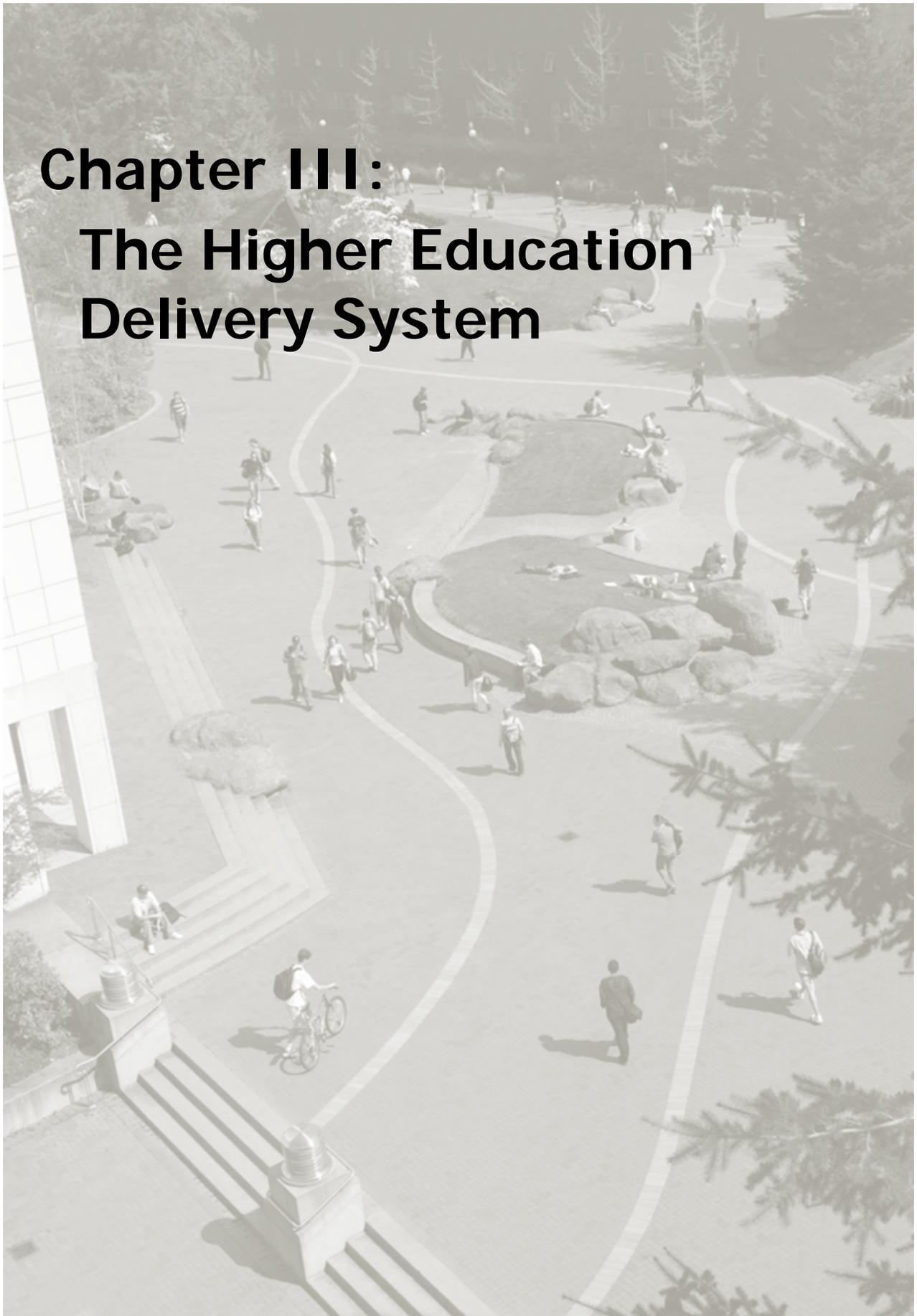


Chapter III: The Higher Education Delivery System



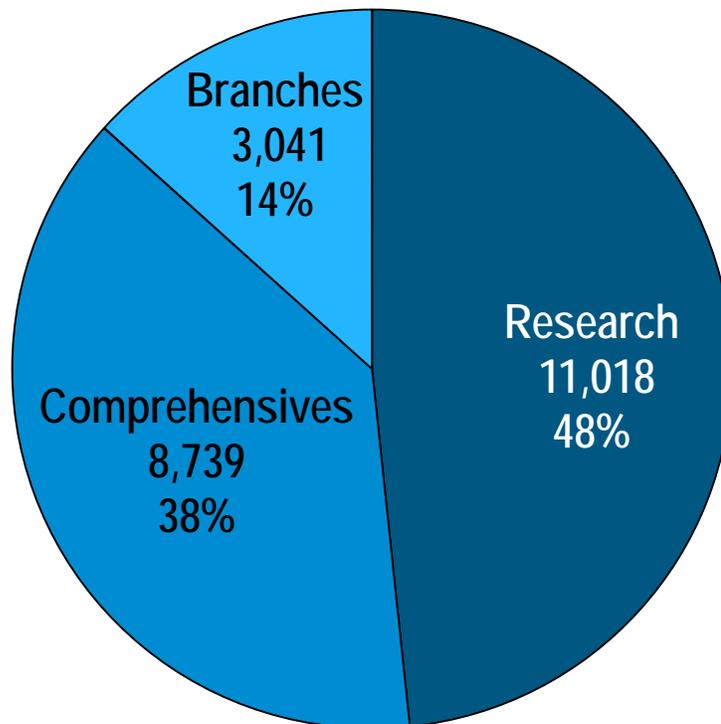
Variety in public institutions offers a wide range of academic opportunities

Bachelor's degree programs are widely available in Washington State through public and private institutions. The public institutions include two research universities (UW and WSU) and four comprehensive institutions (EWU, CWU, TESC, and WWU). The research universities also operate five branch campuses.

In addition, the state operates 10 higher education centers, which often are located on community college campuses. Centers house educational programs offered by one or more baccalaureate institutions whose main campuses are elsewhere in Washington or in another state. Baccalaureate institutions also offer teaching sites, which may be temporary and generally enroll fewer than 150 students in no more than three degree programs.

In 2009-10, Washington's public institutions produced about 75 percent of the state's bachelor's degree graduates, about 53 percent of its master's degree graduates, and 69 percent of its doctoral degree graduates. Among public institutions, the research universities with branch campuses accounted for about 60 percent of all baccalaureate degrees produced.

Public Baccalaureate Degrees Awarded by Location Type, 2009-10
Degrees Awarded: 22,798



Sources: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics; Washington State University Institutional Research Office, retrieved from <http://irwsu.edu/Degrees>.

CTCs prepare students for careers and college transfer

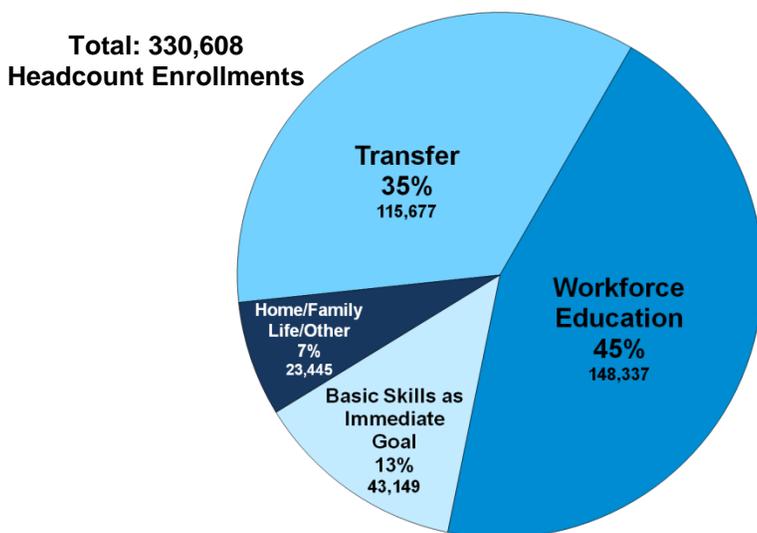
Washington maintains a system of 34 public community and technical colleges (CTCs) located in many parts of the state. These institutions offer a variety of two-year degrees and certificates.

Seven CTCs have been authorized to award nine applied baccalaureate degrees designed to provide advanced training, in fields in which technical associate degrees exist and there is industry, community, and student demand for applied bachelor’s degrees.

Community colleges award associate of arts degrees that prepare students for transfer to a baccalaureate institution or recognize two years of general education. They also award associate degrees in applied technologies in several hundred programs that provide workforce education for technical and paraprofessional positions.

In addition, community and technical colleges award certificates in various specific job-related programs. These programs can take from several weeks to more than two years to complete. Thousands of adults complete high school or earn their General Education Development (GED) certificates at community and technical colleges.

Percentage of Community and Technical Colleges’ State-Supported Students by Purpose for Attending, 2010-11



Source: State Board for Community and Technical Colleges, 2010-11 Academic Year Report.

CTC Student Goals

Academic transfer:

Earning credits that can be applied to a bachelor’s degree program when students transfer to four-year institutions.

Workforce education:

Preparing for jobs or upgrading job skills.

Basic skills as immediate goal:

Taking courses that focus on English as a second language, adult basic education, and courses leading to a high school diploma or General Education Development (GED) certificate.

Note: Some portion of students classified as “transfer” and “workforce” also enroll in one or more basic skills courses.

Home and family life, other, and not reported:

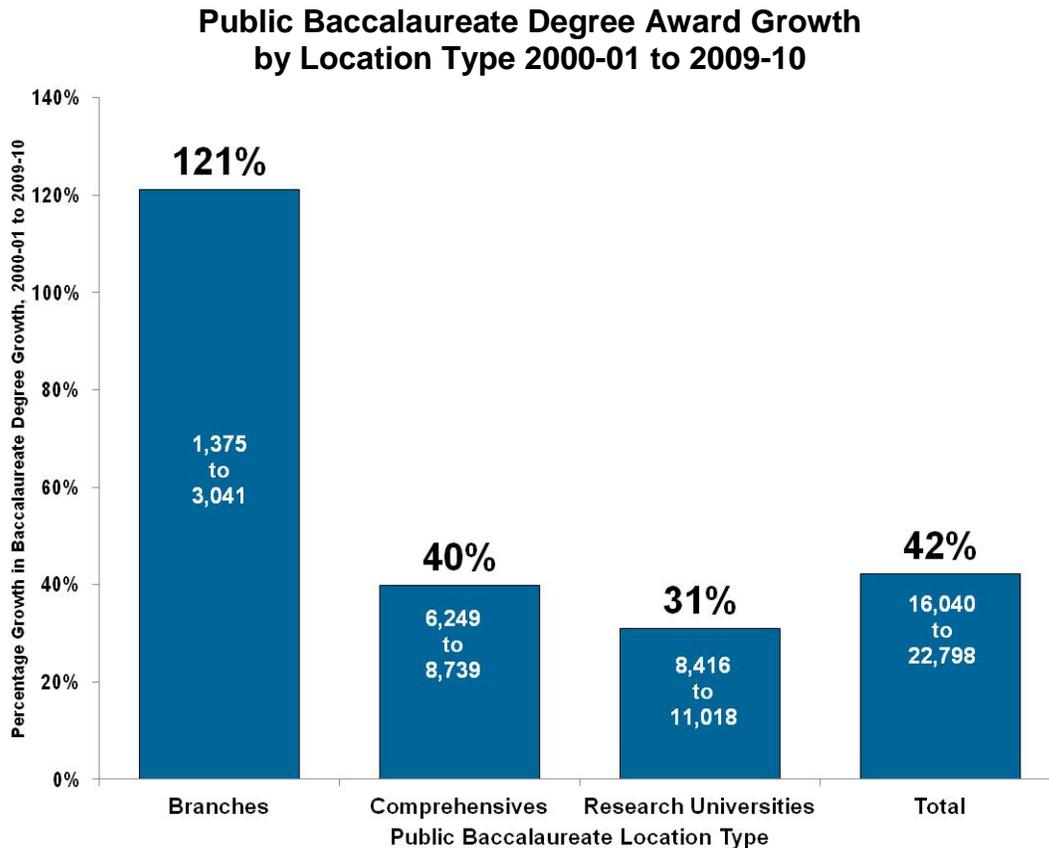
These students enroll for parent education, retirement planning, or other purposes. This category also includes students who did not specify a goal when they enrolled.

Bachelor's degree production is growing fastest at branch campuses and centers

Over the last two decades, Washington's public baccalaureate institutions have evolved from a handful of central campuses to a diverse mix of institutional types located in communities across the state. This has allowed the state to respond to growth demands and has opened new opportunities for students who are not able to pursue baccalaureate degrees on central campuses.

Five branch campuses of Washington's two research universities—the University of Washington and Washington State University—were launched beginning in the early 1990s. Branch campuses provide access to higher education in urban growth areas where there is no four-year institution. Another type of institution, the university center, houses baccalaureate programs offered by one or more baccalaureate institutions at a single location. University centers are located in Everett, Des Moines, Yakima, and other communities.

Although the research and comprehensive institutions still account for most of the baccalaureate degrees awarded in the state, branch campuses and centers have seen the most rapid percentage growth in degree production. Among other benefits, branches and centers help facilitate the student needs of working adults who wish to complete baccalaureate degree work.



Sources: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics, and Washington State University Institutional Research Office. Retrieved from <http://ir.wsu.edu/Degrees>.

Distance and eLearning are playing a larger role in higher education

Taking courses in traditional classrooms remains the way most students pursue higher education today. However, new technologies and instructional approaches are helping to serve more students whose jobs or other circumstances make it inconvenient or impossible to attend college in the traditional way.

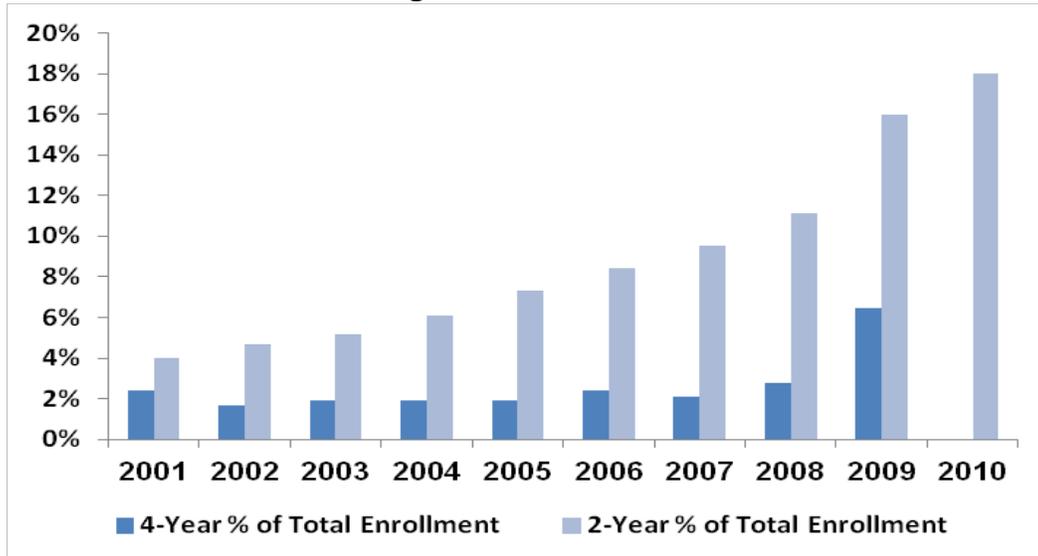
Distance learning is the general term used to describe educational activities that occur when teachers and students are physically separated for at least part of the instructional time. Distance learning includes use of the Internet, satellite transmissions, cable networks, and other technologies.

eLearning is a more specific term referring to the use of digital and online technologies to provide educational opportunities any place, any time. In the 2008-09 academic year, eLearning enrollments accounted for about 29,000 FTEs in the public two- and four-year sectors. These included both state-funded FTEs and FTEs in programs for which state funding was not provided.

In Washington, the state-funded portion of total instruction that can be characterized as distance learning has averaged about 2 percent in the public four-year institutions and 5 percent in the public two-year system since 2000.¹

Nationally, the number of students taking at least one online course grew at a compound annual rate of 19 percent between fall 2002 and fall 2009. More than 29 percent of all students enrolled nationally took at least one online course in fall 2009 compared with 24.6 percent in fall 2008.²

**Distance Learning Enrollment as Percentage of Total Enrollment
Washington Public Institutions**



Note: 2010 not available from the Public Centralized Higher Education Enrollment System (PCHEES) for the public four-years as of 1/12. Source: Office of Financial Management, "Higher Education Trends & Highlights," February 2009. Retrieved from http://www.ofm.wa.gov/hied/highlights/07_enr_char.pdf; personal communication from SBCTC staff.

¹Office of Financial Management, "Higher Education Trends and Highlights," February 2009.

²Babson Survey Research Group & The Sloan Consortium, "Class Differences: Online Education in the United States, 2010," Nov. 2010.

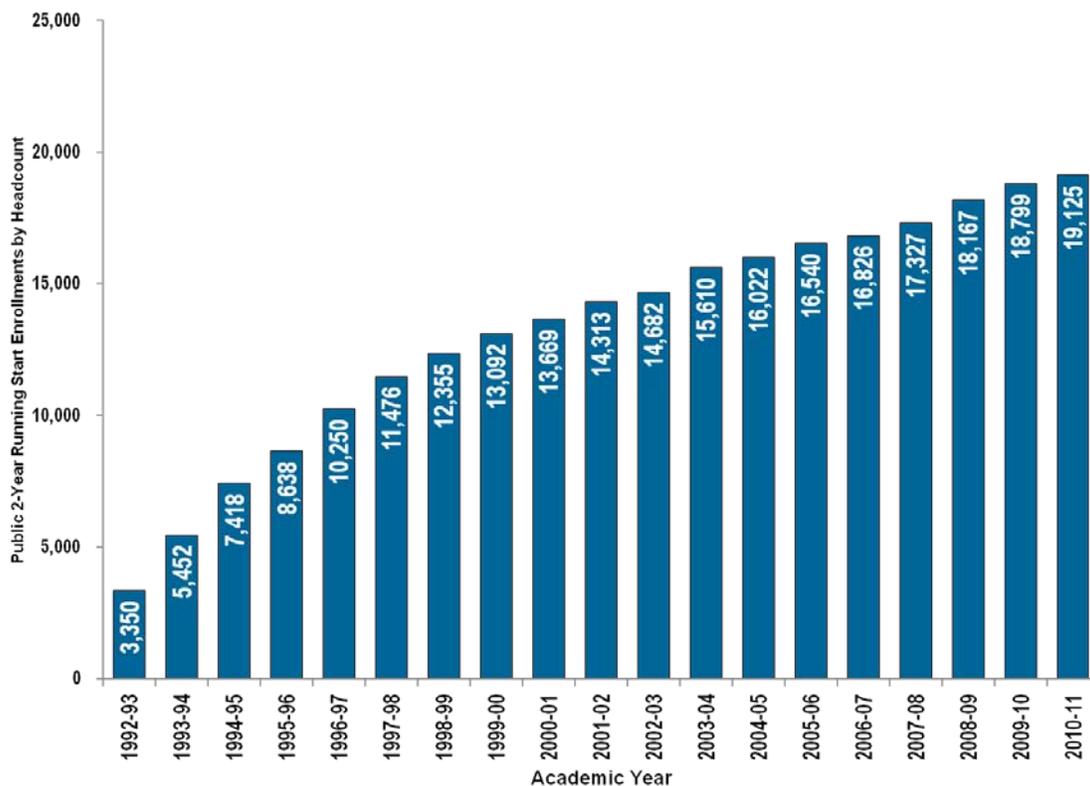
Through Running Start, many students earn college credit while still in high school

The Running Start program enables qualified high school juniors and seniors to earn college credit by taking courses without paying tuition at community and technical colleges, most baccalaureate institutions, and Northwest Indian College. About 9 percent of all high school juniors and seniors in public schools take at least one college course through Running Start. Before they can be admitted, high school students must pass a test to determine their ability to do college-level work.

The number of Running Start students has grown steadily. In 2010-11, 19,125 students participated at CTCs, resulting in 12,690 FTE enrollments—a 2 percent increase (230 FTEs) over the previous year.³ More than 1,370 additional students participated through baccalaureate institutions.

As Running Start enrollments continue to grow, funding becomes an even greater challenge for the colleges providing the instruction. The 2011 Legislature gave colleges and universities the authority to charge up to 10 percent tuition. No institution implemented this fee in 2010-11.

Headcount Enrollment in Running Start Programs at Public Two-Year Institutions, 1992–2011



Note: Does not include Running Start students at public four-year education institutions.

Source: State Board for Community and Technical Colleges, Running Start: 2009-10 Annual Progress Report.

³ State Board for Community and Technical Colleges, Annual 2010-11 Enrollment Report.

Other college-prep programs offered to high school students

Advanced Placement

The Advanced Placement Program® of the College Board is a cooperative endeavor between secondary schools and institutions of higher education. The program offers high school students college-level courses taught by specially trained teachers. The students are then given examinations to determine their level of mastery of the material on a 1-5 scale.

The American Council on Education recommends that colleges and universities grant credit and/or placement into higher-level courses to entrants with AP Exam grades of 3, 4, and 5 – with each college determining course applicability.

In 2010-11, 39,328 Washington students took 66,242 Advanced Placement Exams. Of these, 24,354 received a grade of 3 or higher on 39,935 total examinations.

More information: www.collegeboard.com/student/testing/ap/about.html.

Data source: College Board Student Achievement Report 2010-11.

International Baccalaureate and Cambridge Program

The International Baccalaureate (IB) Diploma Programme is a college prep course of study leading to examinations in core fields. Colleges and universities may award credit for International Baccalaureate work, depending on IB examination scores.

The program began as a way to establish a common curriculum and university entry credential for students moving from one country to another. Eighteen schools in Washington currently offer the IB Diploma Programme. More than 4,800 students participated in IB programs in 2010-11.

The Cambridge Program offers an international, pre-university curriculum and examination system that emphasizes the value of a broad and balanced study for academically able students. This new program to our state is offered at one high school; 74 students were enrolled in 2010-11.

More information: International Baccalaureate Organization – www.ibo.org.
Cambridge – www.cie.org.uk/countries/usa.

Data source: Office of Superintendent of Public Instruction, Comprehensive Education Data and Research System (CEDARS), 2010-11.

College Prep Programs (continued)

College in the High School

College in the High School programs provide college-level courses to 11th and 12th grade students. These courses are offered at the high schools and may be taught by high school faculty who are also adjunct faculty at a college or university. The courses use the same curriculum, assessments, and textbooks as would be used in identical courses offered on campus.

The courses must be college-level, included in the college's catalog or an appropriate supplement, and taught as part of the college curriculum. In 2010-11, 13,081 high school students participated in the program.

More information: State Board for Community and Technical Colleges – www.sbctc.ctc.edu/college/_e-wkforcecollegeinhighschool.aspx

Data source: Office of Superintendent of Public Instruction, Comprehensive Education Data and Research System (CEDARS), 2010-11.

Tech Prep

Tech Prep offers students an opportunity to earn community college credit, while still in high school, by enrolling in a “tech prep” course. These courses are aimed at preparing students for technical and professional careers by requiring that they earn a B grade. Fees vary by college and result in minimal to no cost to students.

Tech Prep credit is awarded for many types of courses: accounting, auto body repair, drafting, and Website design, to name a few. In 2010-11, 36,378 students were enrolled statewide in the program — a 6 percent decrease over the previous year.

More information: State Board for Community and Technical colleges – www.sbctc.ctc.edu/college/_e-wkforcetechprep.aspx.

Data source: State Board for Community and Technical Colleges

Majority of public college employees are engaged in teaching, research, and public service

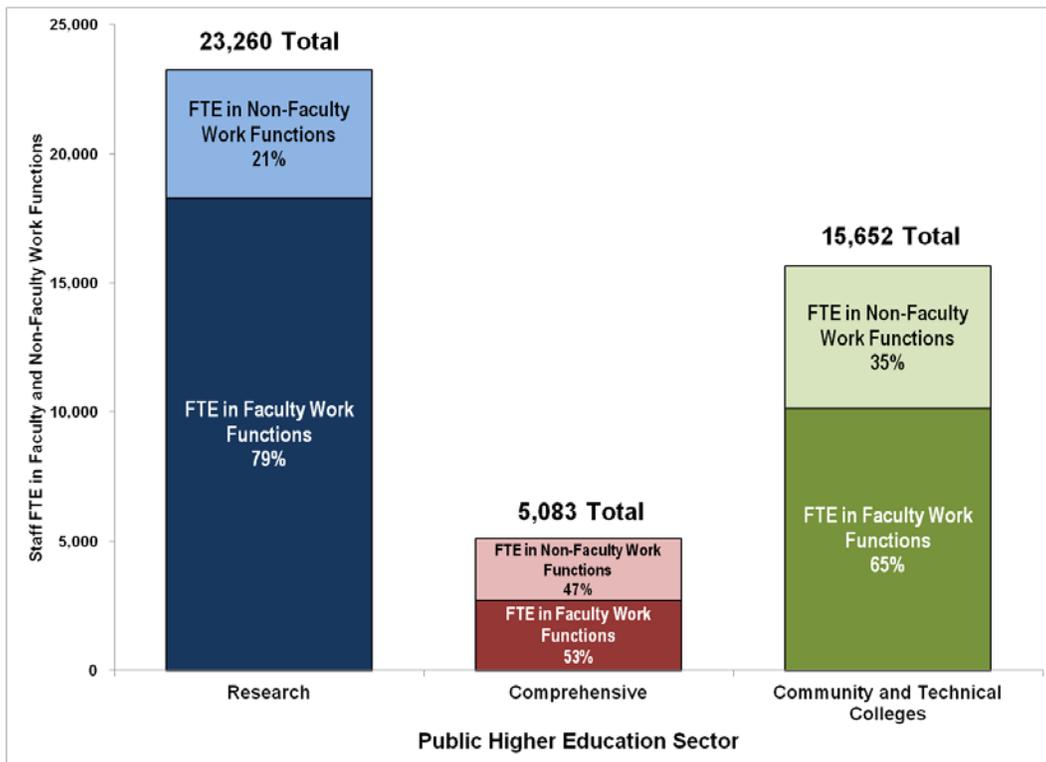
Operating a world-class educational system requires thousands of faculty and staff to educate students, conduct research, carry out essential business functions, provide student services, and preserve the state investment in higher education infrastructure.

Faculty whose main assignments are instruction, research, or public service form the core of the college or university community. Faculty members may hold various academic rank titles. Executive, administrative, managerial, technical, clerical, secretarial, skilled crafts, and service and maintenance activities are carried out by administrative and support staff.

The majority of employees at the state’s public institutions are directly engaged in instruction, research, or public service. At the research universities, more than three-fourths of the faculty and staff are engaged in these functions, and less than a quarter hold non-faculty-support positions.

Average Annual FTE in Faculty and Non-Faculty Program Areas In Washington Public Institutions of Higher Education, by Sector

Operating FTE Staff, All Fund Sources, 2009-11 Biennium Actual Data



Note: **Faculty Work Functions** are defined as including Instruction, Research, Public Service, and Sponsored Research and Programs. **Non-Faculty Work Functions** are defined as including Primary Support, Library, Student Services, Institutional Support, Plant Operations and Maintenance, and other special projects.

Source: HECB staff analysis of Legislative Evaluation and Accountability Program (LEAP) Committee data retrieved from fiscal.wa.gov, downloaded 11-14-11.

Average faculty salaries at most public four-year institutions lag behind peers

In 2009-10, average faculty salaries at all of Washington’s public four-year institutions, were below the 75th percentile of their peer groups. These averages reflect full-time faculty (for three academic ranks—full professor, associate professor, and assistant professor) whose major assignment is instruction or instruction combined with research and/or public service.

**Washington Public Higher Education Average Faculty Salary
For All Tenure-Track Faculty among Peers**

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
University of Washington									
<i>Average salary</i>	\$76,777	\$77,613	\$79,894	\$83,530	\$86,800	\$92,502	\$97,893	\$103,022	\$102,904
<i>Peer group percentile rank</i>	50 th	38 th	38 th	54 th	54 th	58 th	62 nd	67 th	63 rd
Washington State University									
<i>Average salary</i>	\$64,707	\$64,901	\$65,974	\$68,365	\$72,702	\$75,491	\$78,566	\$82,966	\$83,604
<i>Peer group percentile rank</i>	18 th	14 th	14 th	14 th	18 th				
Central Washington University									
<i>Average salary</i>	\$52,828	\$52,832	\$54,607	\$56,583	\$58,435	\$62,933	\$63,287	\$65,698	\$66,408
<i>Peer group percentile rank</i>	28 th	23 rd	29 th	31 st	35 th	43 rd	34 th	36 th	38 th
Eastern Washington University									
<i>Average salary</i>	\$55,340	\$55,333	\$54,745	\$56,029	\$57,550	\$61,050	\$61,194	\$65,780	\$65,622
<i>Peer group percentile rank</i>	46 th	35 th	31 st	29 th	29 th	35 th	27 th	37 th	34 th
The Evergreen State College									
<i>Average salary</i>	\$53,548	\$54,014	\$54,995	\$54,879	\$56,805	\$58,073	\$58,144	\$62,299	\$64,048
<i>Peer group percentile rank</i>	32 nd	29 th	32 nd	23 rd	24 th	22 nd	11 th	23 rd	28 th
Western Washington University									
<i>Average salary</i>	\$57,017	\$57,448	\$57,224	\$58,433	\$60,673	\$63,354	\$63,305	\$69,036	\$68,620
<i>Peer group percentile rank</i>	54 th	50 th	42 nd	42 nd	45 th	46 th	35 th	51 st	49 th
Community / Technical Colleges									
<i>Average salary</i>	\$46,247	\$47,916	\$48,303	\$48,240	\$49,518	\$50,766	\$52,520	\$55,320	\$55,982
<i>Peer group percentile rank</i>	n/a								

Notes: Average salary refers to the arithmetic mean of faculty salaries. A percentile rank represents the salary at which that percentage of institutions' salaries falls at or below. For example, in the table above, in 2009-10, the UW's average faculty salary of \$102,904 was at the 63rd percentile. This means that in 2009-10, 63 percent of the UW's peer institutions' salaries fell at or below \$102,904, and 37 percent were above that amount. Peer group comparisons for community and technical colleges were discontinued in 1997-98.

Sources: HECB staff analysis of data from Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics; HECB, Faculty Salary Survey; American Association of University Professors, Report on the Economic Status of the Profession; State Board for Community and Technical Colleges, Academic Year Reports.

Part-time faculty play an important role at public two-year and private institutions

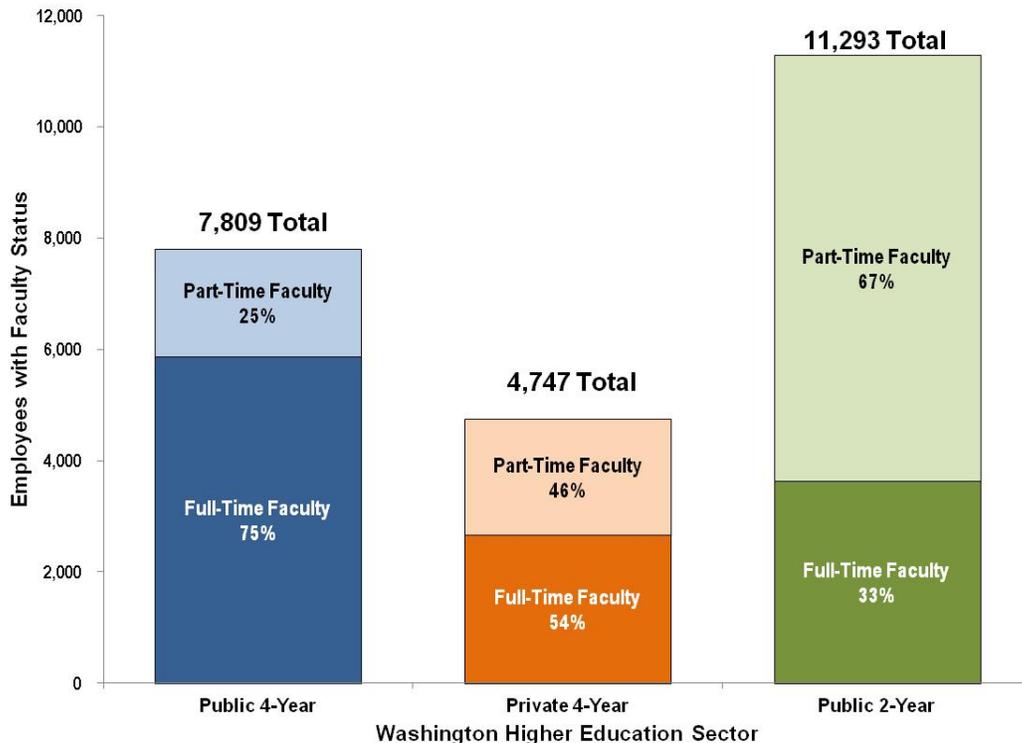
Part-time (or adjunct) faculty members make up a significant component of the instructional workforce at the two- and four-year colleges and universities.

While part-time faculty members outnumber full-time faculty at two-year institutions, full-time faculty spend more hours in the classroom. Each part-time faculty member teaches about five credits, while full-time faculty members teach about 15 credits. In 2009-10, about 56 percent of state-supported credit hours at two-year institutions were taught by full-time faculty.

While nearly half the faculty members at private four-year institutions are part-time, only one-fourth of those at the Independent Colleges of Washington (ICW)⁴ are part-time. Regarding full-time faculty, ICW institutions more closely resemble public baccalaureates than do the remaining private institutions—many of which are extensions of out-of-state universities.

Part-time faculty members give colleges the flexibility to offer courses outside the fields of expertise of full-time faculty, to offer more evening and off-campus courses, and to quickly adjust course offerings in response to changes in student demand or funding.⁵

Faculty Full- and Part-Time Status, by Sector
(Excludes Medical School Employees)



Source: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics, fall 2010.

⁴ ICW institutions include: Gonzaga University, Heritage University, Pacific Lutheran University, Saint Martin's University, Seattle Pacific University, Seattle University, University of Puget Sound, Walla Walla University, Whitman College, and Whitworth University.

⁵ State Board for Community and Technical Colleges, 2009-10 Academic Year Report.

Do students find jobs and continue with further education after completing a baccalaureate degree?

Within their first year of graduation, nearly two-thirds of bachelor’s degree graduates worked at least one quarter in Washington. At least 6 percent more re-enrolled in postsecondary education and at least 13 percent more both worked in the state and re-enrolled. The remaining 18 percent were not found in the Washington workforce data⁶ and were not enrolled in postsecondary education.

In the second and third years following graduation, the percentage working declined while the percentage that may have left the state to enroll or find other jobs increased—possibly due to the onset of the state’s recession. It also is possible that more students move out of state for various reasons by the second or third year after graduation, or they find work with non-profit organizations in Washington. Employment data from other states, however, were not available at the time the analysis was conducted.

Because of the long-term nature of this analysis, tracking students multiple years after graduation, results are several years old. It will be interesting to see if the trends continue in subsequent years when the study is repeated.

Post-Graduation Work and Further Education of 2005-06 and 2006-07 Baccalaureate Degree Recipients, One, Two, and Three Years after Graduation

Degree Recipients	2005-06 (N=19,983)			2006-07 (N=20,457)	
	Year 1 (2006-07)	Year 2 (2007-08)	Year 3 (2008-09)	Year 1 (2007-08)	Year 2 (2008-09)
Worked in WA at least one quarter – not enrolled in college	64%	57%	54%	61%	55%
Worked in WA at least one quarter and enrolled in college	13%	14%	13%	12%	12%
Enrolled in college but did not work in WA⁶	6%	8%	9%	7%	9%
Did not work in WA⁶ – not enrolled in college	18%	21%	25%	20%	24%

Note: Analysis includes only degree recipients for whom data was available and does not include every degree recipient.

Sources: HECB staff analysis of data from Public Centralized Higher Education Enrollment System (PCHEES), Employment Security Department data, and National Student Clearinghouse data provided by the Education Research & Data Center (ERDC).

⁶ Graduates may have worked in other states, were self-employed in Washington, or were employed by a Washington non-profit organization.

In what industries do baccalaureate degree recipients obtain employment?

Baccalaureate degree recipients who were employed in Washington within one year of graduation were most likely to be employed in the following industries: educational services (15 percent); health care and social assistance (11 percent); professional, scientific, and technical services (13 percent); or retail trade (10 percent).

This trend continues into the second year following graduation for both groups and into the third year following graduation for the 2005-06 degree recipients. Results from this longitudinal study will need to be repeated to determine whether these results held during the state's Great Recession of 2009-2011.

Top Employing Industries by Discipline, Number, and Percentage of Graduates Working in Washington One Year After Graduation, 2005-06 Graduates

Major Discipline	Industry Where Employed
Agriculture & Conservation (N=366)	
13%	Professional, Scientific, & Technical Services
13%	Public Administration
12%	Retail Trade
Arts & Letters (N=3,469)	
14%	Retail Trade
12%	Accommodation & Food Service
10%	Educational Services
Business (N=2,009)	
17%	Professional, Scientific, & Technical Services
17%	Finance & Insurance
Computer Science (N=270)	
30%	Professional, Scientific, & Technical Services
25%	Information
Education (N=971)	
80%	Educational Services
Engineering & Related Technologies (N=666)	
38%	Manufacturing
27%	Professional, Scientific, & Technical Services
Health (N=668)	
71%	Health Care & Social Assistance
11%	Educational Services
Sciences (N=1,058)	
19%	Health Care & Social Assistance
16%	Professional, Scientific, & Technical Services
16%	Educational Services
Social Sciences (N=3,216)	
15%	Health Care & Social Assistance
12%	Educational Services
12%	Retail Trade

Note: Analysis includes only degree recipients for whom data was available and does not include every degree recipient.

Sources: HECB staff analysis of data from Public Centralized Higher Education Enrollment System (PCHEES) & Employment Security Department data provided by the Education Research & Data Center.

How much do baccalaureate degree recipients earn?

Graduates who were working full-time in Washington and were not enrolled in postsecondary education earned an average of \$36,800 in the first year following graduation. Over time, the median annual income increased by 21 percent, to \$44,600, in the second year following graduation.

Graduates who secured full-time jobs in construction, manufacturing, management, and information industries earned the most. Graduates who worked full-time in Leisure and Hospitality industries earned the least. An analysis of the 2006-07 graduates shows similar trends.

Median Annual Income⁸ – 2005-06 Baccalaureate Degree Recipients (Working full-time in Washington⁹ and not enrolled in a postsecondary institution – one, two and three years after graduation)

Industries Where Graduates Employed	Year 1	Year 2	Year 3
Administrative & Support Services	\$32,400	\$39,600	\$43,600
Construction	\$50,000	\$49,600	\$55,200
Educational Services	\$34,400	\$37,200	\$40,000
Finance, Insurance, & Real Estate	\$34,800	\$39,200	\$41,600
Health Care & Social Assistance	\$35,200	\$37,600	\$39,200
Information	\$42,000	\$46,000	\$54,000
Leisure & Hospitality	\$28,000	\$31,600	\$33,600
Management of Companies & Enterprises	\$49,600	\$50,000	*
Manufacturing	\$49,200	\$52,800	\$56,000
Natural Resources & Mining	*	*	*
Other Services (except Public Administration)	\$31,200	\$34,400	\$37,600
Professional, Scientific, & Technical Services	\$40,000	\$44,800	\$48,000
Public Administration	\$39,600	\$43,600	\$47,200
Trade & Transportation	\$32,000	\$37,600	\$40,000
Utilities	*	*	*
Total	\$ 36,800	\$41,200	\$44,600

*Number of employees is insufficient for the purposes of reporting income.

Note: Analysis includes only degree recipients for whom data was available and does not include every degree recipient.

Source: HECB staff analysis of Employment Security Department data provided by the Education Research & Data Center (ERDC).

⁸Annualized quarterly median income based on income reported for the third quarter of each year following graduation, adjusted for inflation.

⁹Employment status in the third quarter of the year following graduation. Graduates who worked in Washington in some other quarter, worked in other states, were self-employed in Washington, or were employed by a Washington non-profit organization are not included.

