

Advanced Placement and College Credit

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Summary

Advanced Placement provides students with a head start on college coursework. Students who enroll in AP courses and take exams are more likely to enter and complete college. AP test takers in Washington receive credit for the equivalent of more than 5,000 annual FTEs. As a group, test takers are becoming increasingly diverse, and within all racial and ethnic groups the number of AP test takers is growing faster than the population.

Despite this progress, there are still many more students who are ready for the challenge of AP than participate. If all students were given the opportunity to reach their potential we could double the impact of AP testing in Washington.

Background

Washington's 2008 Strategic Master Plan for Higher Education called for creating "multiple pathways from high school to college or workforce training" – through greater use of dual credit and concurrent high school and college enrollment options¹. The most prevalent of these in Washington are Running Start, which accounts for 12,500 FTE²; Tech prep (4,233 FTE)³; College in the High School⁴; and Advanced Placement (AP).

Recently, following Governor Gregoire's proposal that the 12th grade become the "launch year" for college, the Legislature passed HB 1808, which requires the state's high schools to work toward the goal of giving students the opportunity to earn the equivalent of a year of postsecondary credit prior to graduating.

To support this effort, the state's colleges and universities have been directed to provide a list of postsecondary courses that can be fulfilled by taking the AP, IB, or other college-level proficiency examination. This policy brief takes a more in depth look at the use of AP in Washington, and the impact of AP credits on the higher education system.

¹ 2008 Strategic Master Plan for Higher Education in Washington. Moving the Blue Arrow: Pathways to Educational Opportunity. Washington Higher Education Coordinating Board.

www.hecb.wa.gov/research/masterplans/documents/2008MasterPlan-fromPRT.pdf.

² 2009-10 FTE estimate, source: Running Start Annual Progress Report 2009-10.

www.sbctc.ctc.edu/college/studentvcs/0910_annual_rsreport.pdf.

³ 2008-09 FTE estimate, source: Tech prep briefing: www.sbctc.ctc.edu/college/workforce/TechPrepbriefingApr2010.pdf.

⁴ 2,887 enrolled students in 2009-10, FTE estimate is not available, Source: 2011 Key Facts about Higher Education in Washington.

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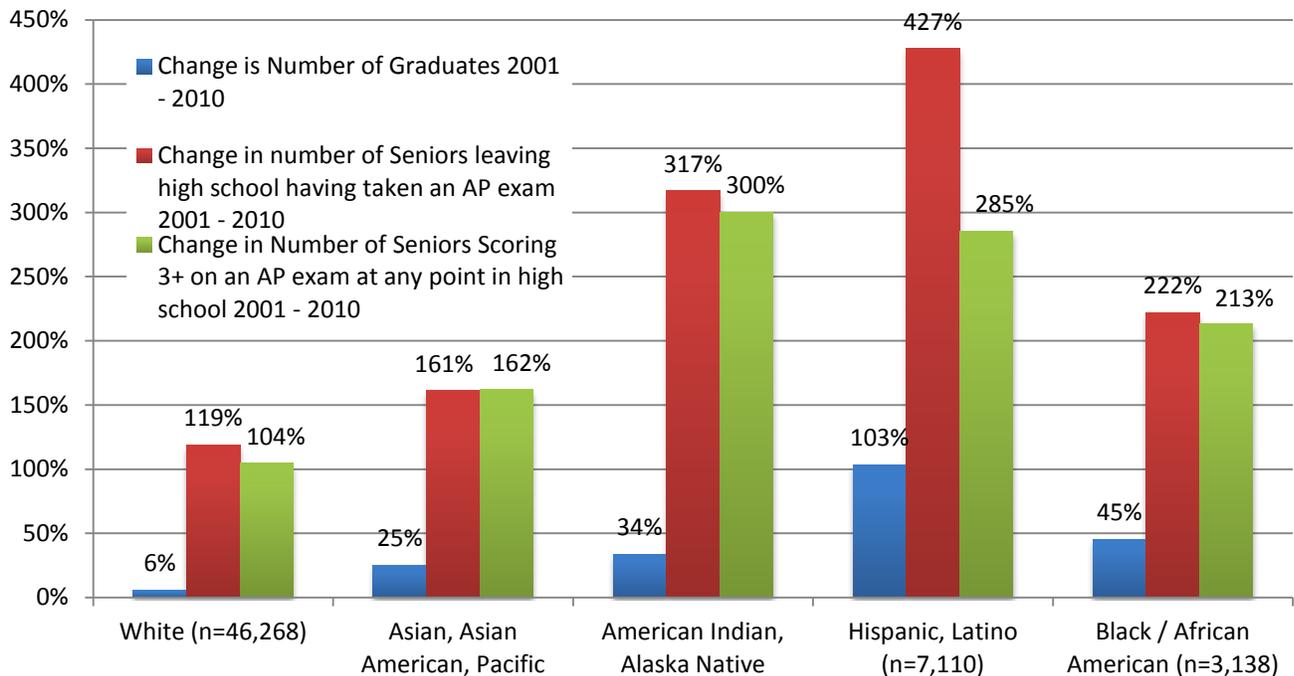
Advanced Placement combines a rigorous standardized curriculum with competency testing. Students who take the exams are awarded a score of 1-5 and in general can expect to receive college credit for scores of three or higher.

In addition, College Board research finds that “Students who took AP courses and exams significantly outperformed students who took AP courses only and other courses only . . . they also graduated from college within four years at consistently higher rates.”⁵

In 2010-11, just over 39,000 students took more than 66,000 advanced placement exams in Washington. Of these, nearly 40,000 exams received a score of 3 or higher⁶. Over the last decade we have seen a marked increase in the number and diversity of students in Washington who participate in AP. Figure 1 shows changes in the number of AP test takers over the past 10 years, by race/ethnicity.

The number of test takers increased much faster than the overall number of graduates. Also, the number of test takers who scored 3 or better on exams kept pace with the increase in the number of test takers for most groups. Latino students appear to have been an exception to this. However, they achieved both the greatest increase in graduates and the greatest increase in the number of test takers.

Figure 1 Change in AP Test Taking 2001 - 2010
By Race / Ethnicity



("n" = 2010 Graduating Class)

Source: HECB Analysis of 2010 AP Report to the Nation Washington Supplement, College Board.

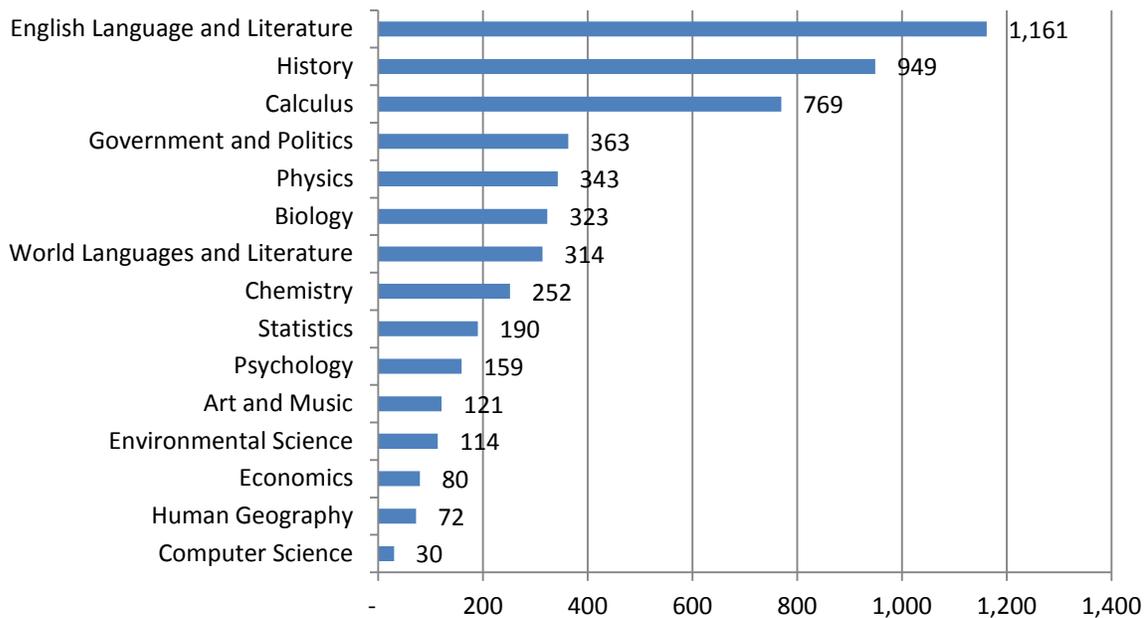
⁵ Source: Linda Hargrove, Donn Godin, and Barbara Dodd, "College Outcomes Comparisons by AP and Non-AP High School Experiences. http://professionals.collegeboard.com/profdownload/pdf/08-1574_CollegeOutcomes.pdf.

⁶ Source: 2010-2011 Washington State Integrated Summary, College Board.

Translating testing activity and scores into college credits can be complicated because the amount of college credit students earn for taking some tests can vary depending on the scores they receive. Although students generally receive college credit for a score of three or more, the amount of credit granted can vary by school and by test scores (generally based on the credits associated with the equivalent courses)⁷. For example, a student who gets a 3 on the Spanish Language exam can expect to receive 5 credits of college level Spanish while a student with a score of 5 would receive 15 credits of college level Spanish.

Figure 2 provides an estimate of the number of credits, by broad subject area, that would be associated with the scores reported for Washington students for tests taken in the 2010-11 school year. A more detailed table is provided in Appendix A. The credits are calculated based on two assumptions: 1) 5 quarter credits are granted for any score of 3 or higher⁸ 2) higher number of credits is based on the University of Washington AP credit policy⁹. We see from the analysis in Figure 2 that AP exams taken by Washington students in 2010-11 translate to more than 235,000 quarter credits, or 5,200 annual FTE. This is nearly equivalent to the average enrollment at a state community college¹⁰.

Figure 2 Estimated FTE associated with 2010-11 Washington A.P Test Scores



Source: HECB Analysis of College Board 2010-2011 State Integrated Summary Report for Washington - All Schools

⁷ In Washington the public baccalaureate institutions have all signed on to a 1999 ICAO agreement to ensure that credit is awarded for scores of 3 or higher, www.hecb.wa.gov/sites/default/files/ICAOAdvancedPlacementCreditTransferAgreement-2007.pdf.

⁸ With the exception of Computer Science A because only 4 credits are awarded for scores of 4 or 5 at UW.

⁹ University of Washington Advanced Placement Credit Policy, <http://admit.washington.edu/Requirements/Freshman/AP>.

¹⁰ 159,939 Total FTE/34 CTC's = 4,704 Mean FTE. Annual 2009-10 Enrollment Report, State Board for Community and Technical Colleges, - www.sbctc.edu/college/education/annual_200910_enrollment_rpt_001.pdf.

Room for Improvement

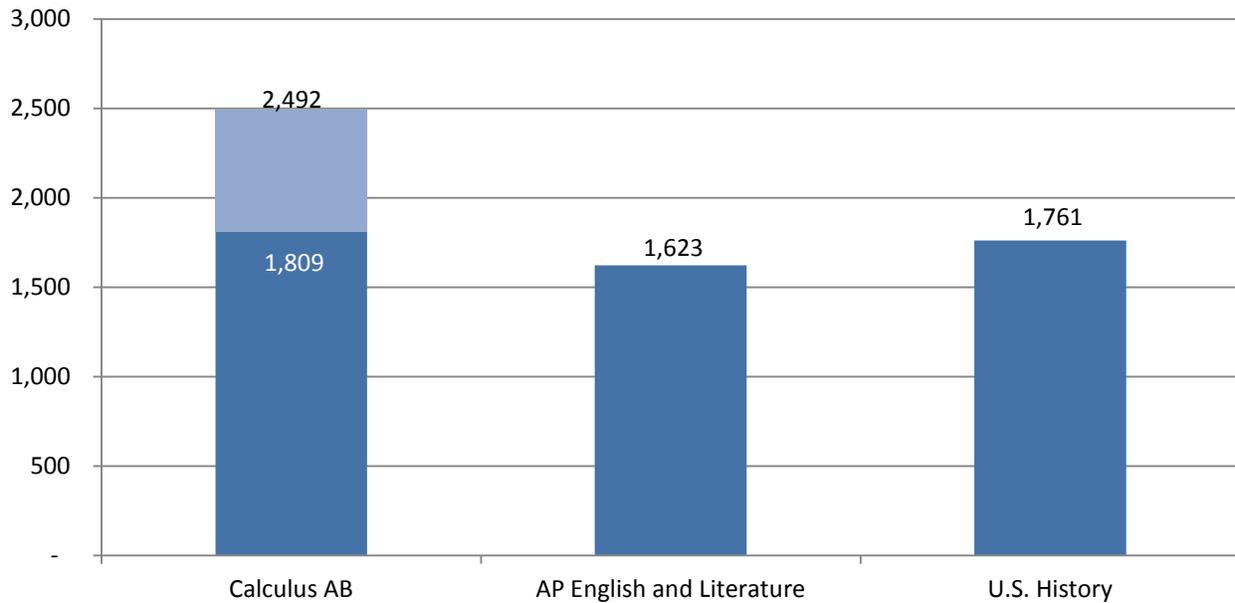
While the impact of AP on the system is impressive, Washington has only scratched the surface. The “launch year” legislation will certainly encourage greater use of AP and other dual credit options.

The College Board provides some insight into the possible impact with their “Advanced Placement Possibilities” analysis. That report, provided to states on an annual basis, shows the number of students who would likely score 3 or higher on the English Language and Literature, U.S. History, and Calculus AP exams if the courses and exams were made available to them. The estimate is based on scores on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT).

Figure 3 shows the additional FTE that might be generated if all students who took the PSAT/NMQT had access to AP courses and exams¹¹. Overall, the analysis indicates that we could double the number of FTE credits earned through AP courses and exams if courses and exams were more broadly available¹². As more students are challenged to enroll in AP or other rigorous college level courses during their high school years we can only expect these numbers to increase.

Figure 3

Estimate of potential additional FTE savings if more students had access to AP.



Source: HECB Analysis of College Board 2010-11 Integrated State Summary Supplement: Advanced Placement Possibilities. Washington: All Schools.

¹¹ The analysis takes the total number of students who would likely score 3 or higher on an AP exam based on 2010-11 PSAT/NMQT exam scores minus the number of AP test takers who scored 3 or higher on exams taken in 2010-11. Source: HECB Analysis of College Board 2010-11 Integrated State Summary Supplement: Advanced Placement Possibilities. Washington: All Schools.

¹² The analysis indicates an additional 233,695 – 264,421 credits or 5,193 to 5,876 additional FTE. A range is provided because Calculus AB is often associated with more than 5 credits, depending on the score. The high end of the range is based on the average number of credits per Calculus AB exam based on the analysis used in Figure 2 (6.9 credits per exam with a score of 3 or higher).

Implications

Students enrolling in AP courses and taking the exams have a head start on college. Regardless of their score they are more likely to succeed in college, and those with a score of 3 or higher will be ahead in credits, allowing them to graduate sooner and/or giving them greater flexibility in their course selections – particularly in the freshmen year.

AP and other dual credit programs are intentionally designed to push students to challenge themselves and achieve at higher levels. Once viewed as an exclusive program for the “best and brightest,” AP is fast becoming a tool to get students motivated to achieve at higher levels and kick start college aspirations and success.

Many school districts in Washington are now challenging all their students to take at least one AP course. HB 1808 sets the bar higher by requiring districts to offer up to a year of college-level work to every student. It also requires institutions to provide students with clear information about how those courses will apply to a degree.

The analysis of AP possibilities supports the claim that our students are capable of doing much more, and reinforces the direction outlined in the Master Plan and the “launch year” bill. If the state is serious about meeting the goals of the Master Plan and the intent of HB 1808, then it is critical we give students access to the resources they need and they will rise to the challenge.

2010-11 AP Scores and Estimated Credits

Broad Subject	AP Subject	2011 consistent with college Credit	Credits	Annual FTE
Art and Music	Art: History of Art	165	1,305	29
	Art: Studio Art 2D-Design	576	2,880	64
	Art: Studio Art 3D-Design	20	100	2
	Art: Studio Art Drawing	147	735	16
	Music Theory	86	430	10
Biology	Biology	1,724	14,515	323
Calculus	Calculus AB	3,527	24,290	540
	Calculus BC ¹³	1,220	10,325	229
Chemistry	Chemistry	1,271	11,320	252
Computer Science	Computer Science A	338	1,352	30
Economics	Economics: Macro	386	1,930	43
	Economics: Micro	331	1,655	37
English Language and Literature	English Language & Composition	6,012	30,060	668
	English Literature & Composition	4,440	22,200	493
Environmental Science	Environmental Science	1,023	5,115	114
Government and Politics	Government and Politics: American	2,892	14,460	321
	Government and Politics: Comparative	375	1,875	42
History	European History	1,110	5,550	123
	U.S. History	4,560	22,800	507
	World History	2,869	14,345	319
Human Geography	Human Geography	651	3,255	72
Physics	Physics B	1,202	12,800	284
	Physics C: Electricity and Magnetism	121	605	13
	Physics C: Mechanics	402	2,010	45
Psychology	Psychology	1,434	7,170	159
Statistics	Statistics	1,711	8,555	190
World Languages and Literature	Chinese Language	148	1,965	44
	French Language	173	1,425	32
	German Language	53	590	13
	Italian Language & Culture ¹⁴	-	-	-
	Japanese Language	87	885	20
	Latin: Virgil	34	285	6
	Spanish Language	867	8,170	182
Spanish Literature	84	790	18	
Grand Total		40,039¹⁵	235,747	5,239

¹³ Includes 104 test scores of 2 for which, based on UW policy, would be consistent with college credit.

¹⁴ The Italian Language & Culture exam was not offered in 2010-11.

¹⁵ Total includes 104 scores of 2 in Calculus BC. 39,935 exams had a score of 3 or higher.

Analysis of “AP Possibilities” 2010-11

Exam	Estimated # of PSAT/ NMQT test takers likely to score 3 or higher on AP	Actual # of AP test takers 2010-11	Less actual 2010-11 AP exam scores of 3 or higher	Net additional AP exams with scores of 3 or higher	Estimated additional credits (low-end estimate)	Estimated additional credits (high-end estimate)	Estimated additional FTE (low-end estimate)	Estimated additional FTE (high-end estimate)
Calculus AB	19,811	6,172	3,527	16,284	81,420	112,146	1,809	2,492
AP English and Literature	19,048	7,467	4,440	14,608	73,040	73,040	1,623	1,623
U.S. History	20,407	8,177	4,560	15,847	79,235	79,235	1,761	1,761
Total			12,527	46,739	233,695	264,421	5,193	5,876