

# **Advanced Placement and College Credit: Policy Brief**

Randy Spaulding, Director of Academic Affairs and Policy  
Anne Messerly, Policy Associate

**July 2014**

## SUMMARY

Advanced Placement (AP) 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<sup>1</sup>. AP test takers in Washington earned and estimated 270,000 credits in 2013 (equivalent to more than 6,000 annual full-time students). 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 still remains a large gap between the number of students who participate in AP courses versus the number of students who have the potential to be successful. If all students were given the opportunity to reach their potential we could increase the impact of AP testing in Washington.

## BACKGROUND

AP test taking has tremendous benefits. In addition to earning college credit and saving money while in high school, “AP students are more likely to enroll in a four-year college. Once in college...AP students outperform their non-AP peers<sup>1</sup>”. AP 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<sup>a</sup>.

Washington’s 2013 Roadmap proposes strategies to increase educational attainment in Washington. A key strategy identified in the plan is to streamline and expand dual-credit and dual-enrollment programs<sup>2</sup>. The most prevalent of these in Washington are Running Start, Advanced Placement, College in the High School, and Tech Prep.

### Student and Course Enrollments by Dual-credit Program for 2012-13<sup>3</sup>

Dual-credit program	Student Enrollment Grades 9-12	Course Enrollments
Running Start	17,704	121,014
Advanced Placement	52,217	153,045
College in the High School	18,118	39,466
Tech Prep eligible	119,930	203,446

---

<sup>a</sup> 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 (Council of Presidents, 2007) . According to the State Board for Community and Technical Colleges’ policy manual, “community and technical colleges must award unrestricted elective credit for an AP score of three or higher.”

In 2011 the Legislature passed the Launch Year Act, which required 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 all postsecondary courses that can be fulfilled by taking the AP, IB, or other college-level proficiency examination<sup>4</sup>.

## METHODOLOGY

Every year, the College Board releases data on AP test taking, participation and performance for the nation and by individual state. Some of these state reports include the *Annual AP Report to the Nation State Supplemental*, “*State Integrated Summary Report*” and “*A Right to Rigor: Fulfilling Student Potential*”.

The *Annual AP Report to the Nation State Supplemental* reports trends over ten years by race/ethnicity in AP participation and achievement<sup>5</sup>. We used this data to determine the percentage increase in AP participation over ten years, as well as percent increase in student achieving a score of three or higher.

Although AP participation has increased, a unique analysis done by College Board suggests that there is much unfulfilled potential. *A Right to Rigor: Fulfilling Student Potential in Washington* shows the number of students from the graduating class of 2013 who had a 60 percent chance of scoring three or higher on one or more of the 21 different AP exams in English, Math, Science, and History & Social Sciences<sup>b6</sup>. The estimate of fulfilled and unfulfilled potential is based on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) scores.

The *State Integrated Summary Report* breaks down student scores by AP exam<sup>7</sup>, which allowed us to calculate the number of credits and FTE that AP scores generated in 2013.

The College Board reports provided data on participation, achievement, and estimated fulfilled and unfulfilled potential. However, still missing from our analysis was the amount of college credits earned. Translating testing activity and scores into college credits can be complicated because the amount of college credit a student earns can vary depending on the scores she receives and the postsecondary institution she attends. The variance is generally based on the credits associated with the equivalent courses. For example, a student who gets a three on the Spanish Language exam can expect to receive five credits of college level Spanish while a student with a score of five may receive fifteen credits of college level Spanish. For the purposes of this analysis, estimated credits are based on the University of Washington’s (UW) AP Policy because it provided the most comprehensive policy. Credits and FTEs are calculated based on two assumptions: first, five quarter credits are granted for any score of three or higher<sup>c</sup>; and second, a higher number of credits is based on the University of Washington AP credit policy<sup>8</sup>. To calculate total credits, the

---

<sup>b</sup> See Appendix B- Students with AP Potential, Graduating Class of 2013

<sup>c</sup> With the exception of Computer Science A because only 4 credits are awarded for scores of 4 or 5 at UW.

number of AP exams that received a particular score is multiplied by the number of credits that would be awarded at a postsecondary institution. To translate credits into annual FTE, total credits are divided by 45 (equivalent of three quarters full time study).

## ADVANCED PLACEMENT AND COLLEGE CREDIT

AP test-taking is growing rapidly. Table 2 indicates that although the number of graduates in Washington state has remained consistent over the past ten years, the number of those students who participate in AP exams and score a three or higher on AP exams is increasing. The number of total graduates who have taken an exam and received a three or higher has more than doubled from 10 percent in 2003 to almost 22 percent in 2013<sup>d</sup>.

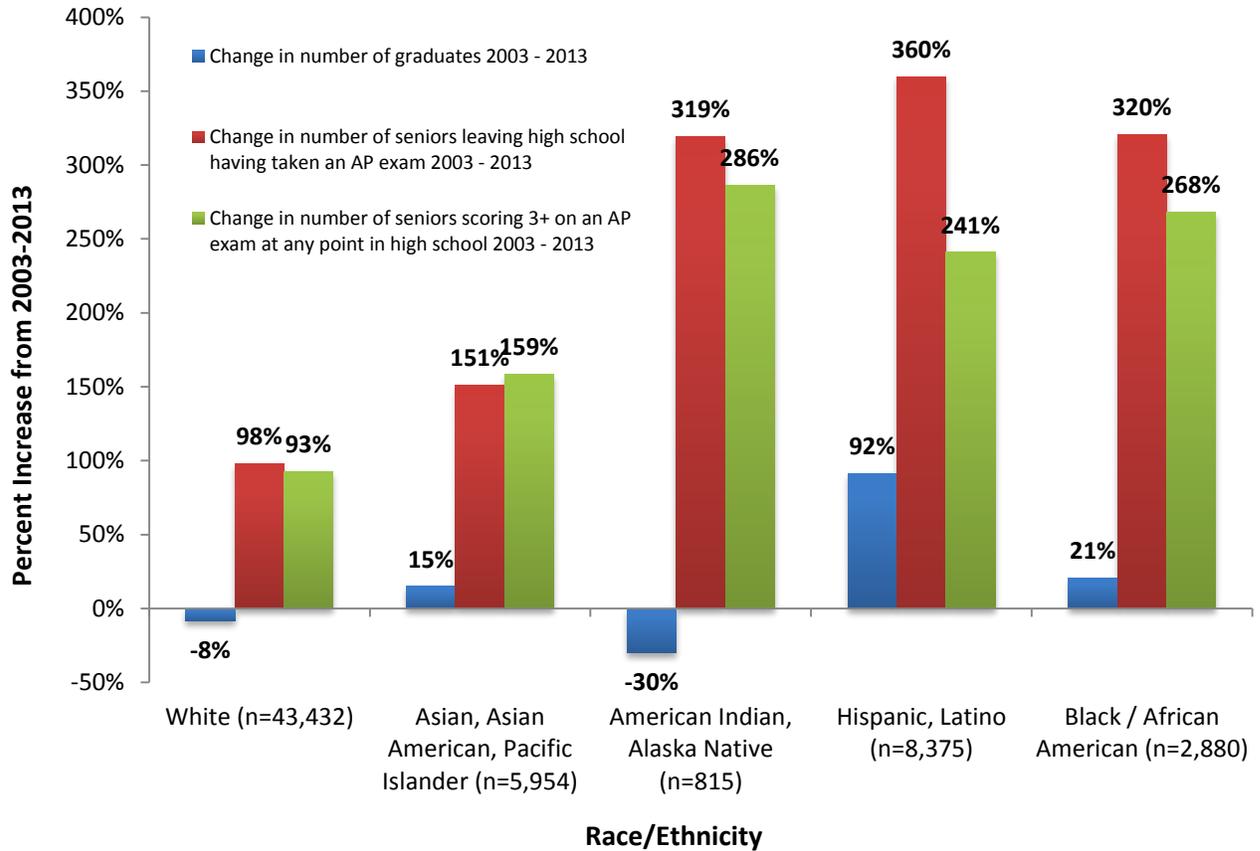
Year	Number of Students in Graduating Class <sup>3</sup>	Number of Graduates who Participated in an AP Exam <sup>5</sup>	Number of Graduates who Scored a 3 or Higher <sup>5</sup>	Percentage of Graduating Class that Scored a 3+ on an AP Exam
2003	60,525	9,688	6,306	10.42%
2008	58,005	16,268	10,073	17.37%
2012	60,552	20,581	12,542	20.71%
2013	60,475	21,583	13,214	21.85%

Over the last decade we have also seen a marked increase in the diversity of students in Washington who participate in AP. Figure 1 shows changes in the number of AP test takers over the past ten years, by race/ethnicity. The number of graduates in some cases declined, seen in the White and American Indian/Alaskan Native populations. The American Indian/Alaskan Native population is the smallest student population (815 students), which is why the percent change in number of graduates seems dramatic.

More importantly, the number of test takers increased much faster across groups than the overall number of graduates for every racial group. Also, the number of test takers who scored three or higher on exams kept a similar pace with the increase in the number of test takers for most groups. The largest discrepancy between the two is with Latino students. However, they achieved both the greatest increase in graduates and the greatest increase in the number of test takers.

<sup>d</sup> Table shows an “on-time graduation”, which is a four-year cohort rate; “Graduates” include students who received a high school diploma or an associate’s degree.

**Figure 1** Changes in AP Test Taking and Achievement by Race/Ethnicity 2003-2013



n is 2013 graduating class size

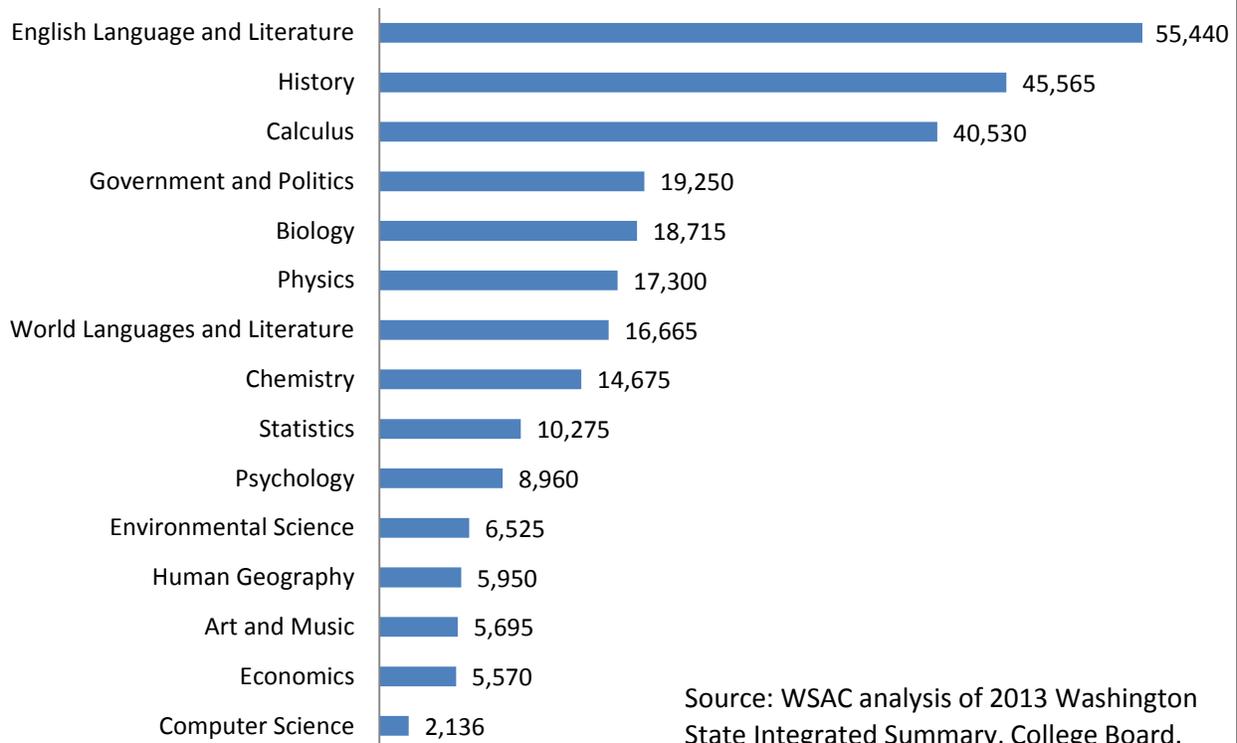
Source: WSAC analysis of 2014 AP Report to the Nation Washington Supplement, College Board.

Figure 2 provides an estimate of the number of credits would be associated with the scores reported for AP tests taken by Washington students in the 2013 school year<sup>e</sup>. We see from the analysis in Figure 2 that AP exams taken by Washington students in 2013 translate to more than 273,000 quarter credits, or 6,000 annual FTE.

<sup>e</sup> A more detailed table is provided in Appendix A.

Figure 2

## Estimated Credits associated with 2013 Washington AP Test Scores



## ROOM FOR IMPROVEMENT

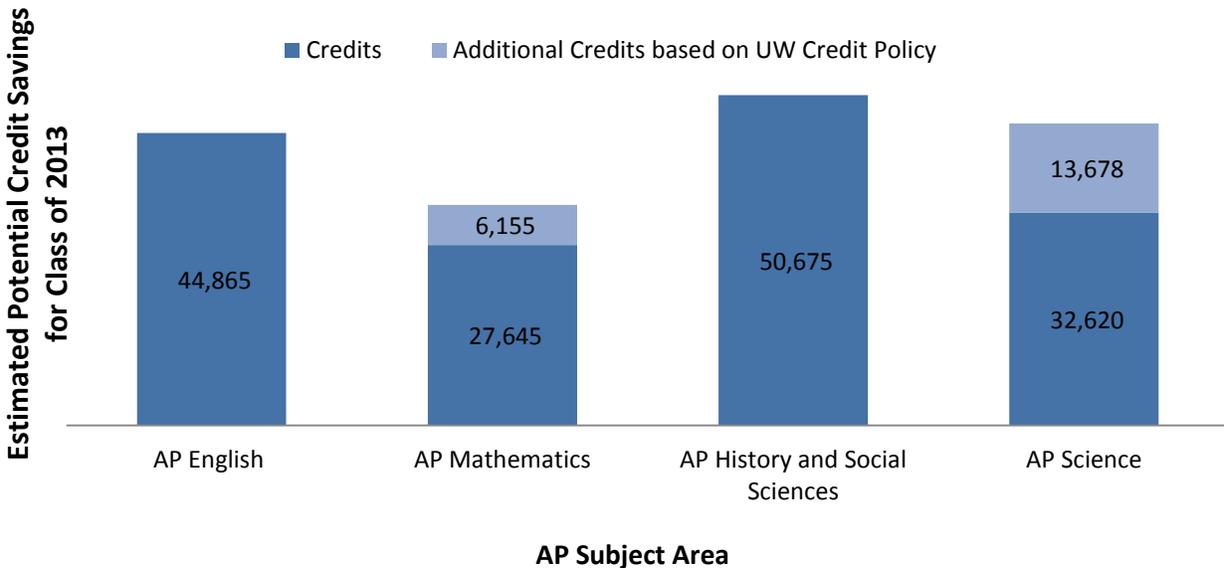
While the impact of AP on the system is impressive, Washington can better. Washington is currently in the process of developing legislation that will encourage greater use of AP and other dual-credit options.

Figure 3 shows that Washington students could earn nearly 176,000 more credits (4,000 FTE) through AP courses and exams if courses and exams were more broadly available<sup>f</sup>. 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.

<sup>f</sup> The analysis indicates an additional 155,805 – 175,637 credits or 3,462 to 3,903 additional FTE. A range is provided because courses in the categories of AP Science and AP Math are often associated with more credits

Figure 3

## Unfulfilled AP Potential for Graduating Class of 2013



Source: WSAC analysis of 2013 Right to Rigor: Fulfilling Student Potential in Washington, College Board.

## 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 attend and succeed in college. Those with a score of three 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 freshman 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 motivational tool, resulting in higher levels of student achievement and postsecondary aspiration.

As outlined in Washington’s Roadmap, we know students are capable of doing much more with supports in place and easier access to the resources they need to be successful<sup>2</sup>. The analysis of College Board’s *A Right to Rigor* strengthens this claim. In order for more students to rise to the challenge, we must continue to ensure all students have equitable opportunities in education.

## APPENDIX A

Broad Subject	AP Subject	2013 consistent with college Credit	Credits	Annual FTE
<b>Art and Music</b>	Art: History of Art	165	965	21
	Art: Studio Art 2D-Design	687	3435	76
	Art: Studio Art 3D-Design	32	160	4
	Art: Studio Art Drawing	142	710	16
	Music Theory	85	425	9
<b>Biology</b>	Biology	2,603	18,715	416
<b>Calculus</b>	Calculus AB	3,956	27,975	622
	Calculus BC <sup>g</sup>	1,498	12,555	279
<b>Chemistry</b>	Chemistry	1,513	14,675	326
<b>Computer Science</b>	Computer Science A	534	2,136	47
<b>Economics</b>	Economics: Macro	582	2,910	65
	Economics: Micro	532	2,660	59
<b>English Language and Literature</b>	English Language & Composition	6,353	31,765	706
	English Literature & Composition	4,735	23,675	526
<b>Environmental Science</b>	Environmental Science	1,305	6,525	145
<b>Government and Politics</b>	Government and Politics: American	3,430	17,150	381
	Government and Politics: Comparative	420	2,100	47
<b>History</b>	European History	1,090	5,450	121
	U.S. History	4,711	23,555	523
	World History	3,312	16,560	368
<b>Human Geography</b>	Human Geography	1,190	5,950	132
<b>Physics</b>	Physics B	1,355	14,485	322
	Physics C: Electricity and Magnetism	102	510	11
	Physics C: Mechanics	461	2305	51
<b>Psychology</b>	Psychology	1,792	8,960	199
<b>Statistics</b>	Statistics	2,055	10,275	228
<b>World Languages and Literature</b>	Chinese Language	188	2,445	54
	French Language	286	2,545	57
	German Language	55	630	14
	Italian Language & Culture <sup>h</sup>	-	-	-
	Japanese Language	96	950	21
	Latin: Virgil	40	340	8
	Spanish Language	984	9,255	206
	Spanish Literature	64	500	11
<b>Grand Total</b>		<b>46,353</b>	<b>273,251</b>	<b>6,072</b>

<sup>g</sup> Includes test scores of 2 for which, based on UW policy, would be consistent with college credit.

<sup>h</sup> The Italian Language & Culture exam was offered in 2013, but had less than 5 test takers

## APPENDIX B

### Students with AP Potential, Graduating Class of 2013

Exam	Estimated # of PSAT/ NMQT test takers likely to score 3 or higher on AP	Students with Potential who did participate in at least 1 AP exam	Students with Potential who did not participate in 1 AP exam	Estimated additional credits (low-end estimate)	Estimated additional credits (high-end estimate)	Estimated additional FTE (low-end estimate)	Estimated additional FTE (high-end estimate)
AP English <sup>i</sup>	15,124	6,151	8,973	44,865	44,865	997	997
AP Math <sup>j</sup>	9,305	3,776	5,529	27,465	33,800	614	751
AP History and Social Sciences <sup>k</sup>	16,651	6,516	10,135	50,675	50,675	1,126	1,126
AP Science <sup>l</sup>	9,776	3,252	6,524	32,620	46,298	725	1,029
<b>Total</b>	<b>50,856</b>	<b>19,695</b>	<b>31,161</b>	<b>155,805</b>	<b>175,637</b>	<b>3,462</b>	<b>3,903</b>

## AUTHOR CONTACT INFORMATION

Randy Spaulding  
Director of Academic Affairs and Policy  
Policy, Planning & Research Division  
360.753.7823  
[randys@wsac.wa.gov](mailto:randys@wsac.wa.gov)

Anne Messerly  
Policy Associate  
Policy, Planning & Research Division  
360.753.7855  
[annem@wsac.wa.gov](mailto:annem@wsac.wa.gov)

<sup>i</sup> AP English includes 'English Language' and 'English Literature'

<sup>j</sup> AP Mathematics includes 'Calculus AB', 'Calculus BC', 'Computer Science A', and 'Statistics'

<sup>k</sup> AP History and Social Sciences include 'Comparative Government and Politics', 'US Government and Politics', 'US History', 'World History', 'European History', 'Human Geography', 'Macroeconomics', 'Microeconomics', and 'Psychology'

<sup>l</sup> AP Science includes 'Biology', 'Chemistry', 'Environmental Science', 'Physics B', 'Physics C: Mechanics', and 'Physics C: Electricity & Magnetism'

## REFERENCES

- 
- <sup>1</sup> Mattern, K., Marini, J., & Shaw, E. (2013). *Are AP students more likely to graduate on time?* Retrieved from <http://research.collegeboard.org/sites/default/files/publications/2014/1/research-report-2013-5-are-ap-students-more-likely-graduate-college.pdf>
- <sup>2</sup> 2013 The Roadmap: A Plan to Increase Educational Attainment in Washington. Washington Student Achievement Council. Retrieved from <http://www.wsac.wa.gov/sites/default/files/2013RoadmapWeb.pdf>
- <sup>3</sup> Office of Superintendent for Public Instruction (2012-13). *Washington State Report Card*. Retrieved from <http://reportcard.ospi.k12.wa.us/DualCredit.aspx?year=2012-13>
- <sup>4</sup> Washington State Legislature. (2011). *HB 1808 bill summary*. Retrieved from <http://apps.leg.wa.gov/billinfo/summary.aspx?bill=1808&year=2011>
- <sup>5</sup> College Board (2013 c). *The 10th annual AP report to the nation state supplement: Washington*. (2013, February 11). Retrieved from <http://media.collegeboard.com/digitalServices/pdf/ap/rtn/10th-annual/10th-annual-ap-report-state-supplement-washington.pdf>
- <sup>6</sup> College Board (2013 b). *A right to rigor: fulfilling student potential in Washington*.
- <sup>7</sup> College Board (2013 a). *State integrated summary 2012-13: Washington all schools*.
- <sup>8</sup> University of Washington Undergraduate Admissions. (n.d.). *Advanced Placement (AP) Policies*. Retrieved from <http://admit.washington.edu/Admission/Freshmen/College/AP>