

LOS ANGELES UNIFIED SCHOOL DISTRICT
BOARD OF EDUCATION

INTER-OFFICE CORRESPONDENCE
Los Angeles Unified School District

INFORMATIVE
August 10, 2016

TO: Members, Board of Education
Michelle King, Superintendent

FROM: *Cynthia*
Cynthia Lim, Executive Director
Office of Data and Accountability

SUBJECT: 2015-16 Advanced Placement (AP) Enrollment and Exams

This informative provides an update on Advanced Placement (AP) course enrollments and results from AP exams for the 2015-16 school year. The Advanced Placement (AP) program allows students to take college-level courses while still in high school. Students may earn college credit and/or advanced placement into upper-level college courses by taking AP exams. Many colleges and universities recognize AP courses when making admission decisions.

Highlights of 2015-16 results:

- AP course enrollments have climbed by 20% since 2010-11, despite a decline in overall enrollment in grades 9-12.
- The percentage of students enrolled in at least one AP course grew from 15% in 2010-11 to 23% in 2015-16, a jump of 7 percentage points.
- All subgroups increased the percentage of students enrolled in at least one AP course, although disparities remain.
- The number of students who were enrolled in an AP course and took the corresponding AP exam was 79% a significant increase from 69% in 2010-11.
- The number of students earning qualifying scores of 3 or higher on AP exams remained stable at approximately 38% over the last two years.
- History/Social Science and English were the most popular exams.
- Females continue to outperform males on all AP exams with qualifying scores, 55% and 45% respectively). However, more males earned qualifying scores of 3 or higher on STEM AP exams.

AP Course Enrollment and Access

Beginning in 2009-10, the District enacted a policy that any student willing to accept the challenge of advanced coursework should be enrolled in AP courses and provided with the requisite academic support. Since then, AP course enrollment and AP exam participation have increased steadily.

While District enrollment has declined by 20% in Grades 9-12 since 2010-11, AP course enrollment has increased by 20%, from 48,000 to 58,000 (Exhibit 1). Enrollment in AP courses includes a duplicated count, as some students take multiple AP courses during the school year.

The number of unduplicated students enrolled in at least one AP course (unique student count) increased by 17%, from 27,641 in 2010-11 to 32,382 in 2015-16. In the 2015-16 school year,

over one-in-five (23%) students were enrolled in at least one AP course, compared with 15% in 2010-11.

Exhibit 1: District Enrollment and AP Course Enrollment

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15-16
Gr. 9-12 Enrollment	178,635	171,149	161,625	153,463	149,786	142,432	-20%
AP Total Courses Enrolled	48,717	52,998	54,980	55,862	59,084	58,633	20%
AP Enrollment (Unique Student Count)	27,641	29,540	29,894	30,122	31,678	32,382	17%
% Enrolled in AP Course	15%	17%	18%	20%	21%	23%	7%

The percentage of students enrolled in at least one AP course increased for all major subgroups since 2010-11. The percentage of females increased by 9 percentage points and for males, 6 percentage points. For Latino students the percentage enrolled in at least one AP course increased by 8 percentage points, from 13% in 2010-11 to 21% in 2015-16. The percentage of African American students, enrolled in at least one AP course, increased from 11% in 2010-11 to 17% in 2015-16. The percentage rose by 7% for Asian students and for white students by 8%.

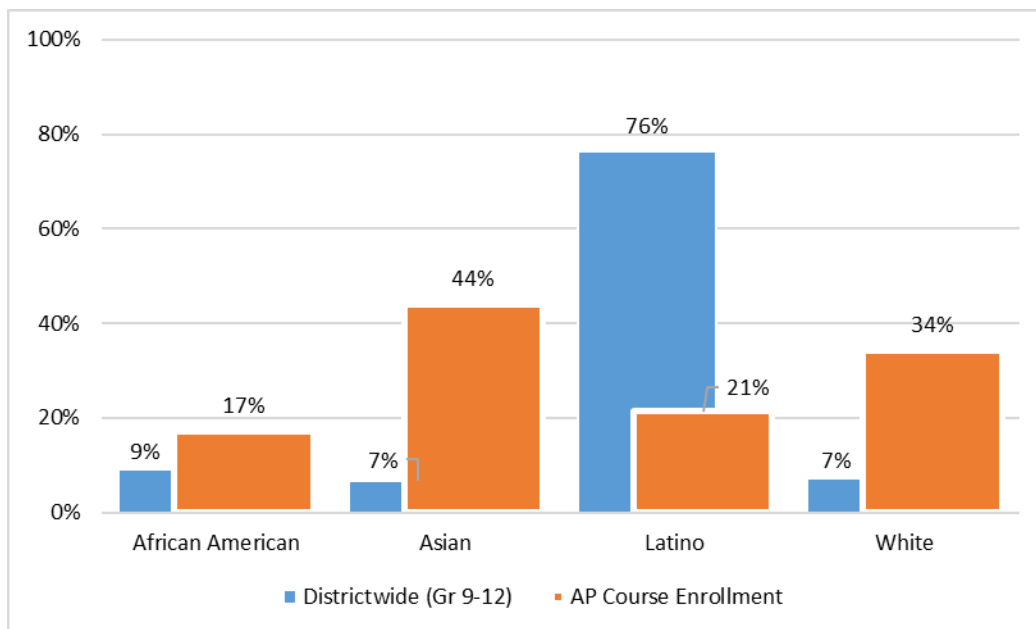
Exhibit 2: AP Course Enrollments by Subgroup

		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	% Increase/ Decrease 10-11 to 15-16
All Students		16%	17%	18%	20%	21%	23%	7%
Gender	Female	19%	20%	22%	23%	25%	28%	9%
	Male	13%	15%	15%	16%	17%	19%	6%
Ethnicity	African American	11%	12%	12%	14%	15%	17%	6%
	Asian	37%	40%	42%	43%	44%	44%	7%
	Latino	13%	15%	16%	17%	19%	21%	8%
	White	26%	28%	31%	31%	32%	34%	8%
Economically Disadvantaged		15%	17%	19%	20%	27%	23%	8%
Non-Economically Disadvantaged		16%	18%	18%	20%	13%	28%	12%
English Learner		3%	3%	3%	2%	4%	3%	0%
Reclassified English Learner		20%	22%	24%	25%	24%	25%	5%

Despite across-the-board increases, AP course enrollments display disproportionalities within subgroups. (Disproportionality occurs when there are more or fewer students from a particular group in relation to the general population.) For example, Latino students comprise 76% of the general population in grades 9-12 but 21% of Latinos enrolled in at least one AP course in 2015-

16. By comparison, Asian students represent just 7% of the general population but 44% of Asian students enrolled in at least one AP course.

Exhibit 3: 2015-16 Districtwide Enrollment vs AP Course Enrollment by Ethnicity



Students can take AP exams even if they are not enrolled in AP courses. Conversely, students can enroll in AP courses and not take the AP exams. The District goal is that all students enrolled in AP courses also take the corresponding AP exams. The percentage of students enrolled in AP courses who took the corresponding AP exam has increased every year since 2010-11 (Exhibit 4). In 2015-16, 81% of students enrolled in AP courses took the corresponding AP exam, compared with 69% in 2010-11.

Exhibit 4: Of Students Enrolled in AP Courses, How Many Take Corresponding AP Exams

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/Decrease 10-11 to 15-16
AP Enrollment	48,717	52,998	54,980	55,862	59,084	58,633	20%
Of Students Enrolled in AP Courses, # Who Take Corresponding AP Exams	33,481	36,403	36,403	43,097	45,851	46,334	38%
Of Students Enrolled in AP Courses, % Who Take Corresponding AP Exams	69%	69%	66%	77%	78%	79%	10%

Performance on AP Exams

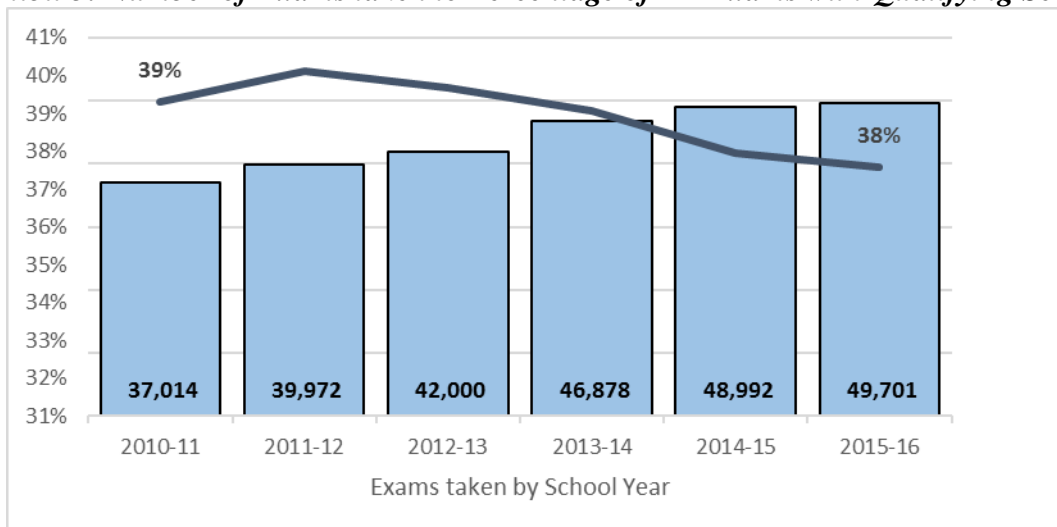
AP Exam scores are reported on a 5-point scale:

- 5** = Extremely well-qualified
- 4** = Well-qualified
- 3** = Qualified
- 2** = Possibly qualified
- 1** = No recommendation credit or advanced placement

A qualifying AP Exam score of 3 or higher indicates that a student is qualified to receive college credit or advanced placement at a college or university. Some colleges and universities use AP test scores to exempt students from introductory coursework; others use them to place students in higher designated courses; some do both. In addition, completing AP courses may help students qualify for scholarships. According to the College Board, 31% of colleges and universities look at AP experience when making scholarship decisions.

Between 2010-11 and 2015-16, the number of AP exams taken by students increased by 12,687 from 37,014 to a record-high of 49,701. Last year, 38% or 18,886 test takers earned scores of 3 or higher, meaning they qualified to receive college credit or advanced placement. While the number of students earning a qualifying score has increased from 14,435 (2010-11) to 18,886 (2015-16), the percentage of exams with a qualifying score of 3 or higher has remained between 38% to 40% over the past five years.

Exhibit 5: Number of Exams taken to Percentage of AP Exams with Qualifying Scores



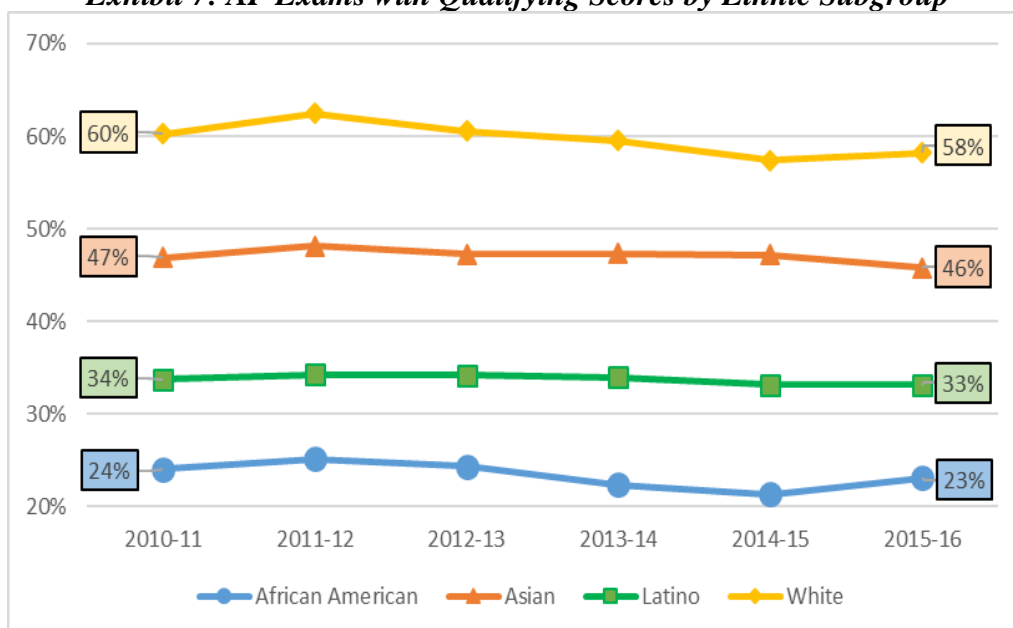
When analyzed by ethnicity, white and Asian students had a higher percentage of qualifying scores (58% and 46% respectively), compared with African American and Latino students (23% and 33% respectively). However, African American and Latino students had a greater percentage increase in the number of AP exams taken (17% and 49% respectively) from 2010-11 through 2015-16.

Exhibit 6: AP Exams Taken and Qualifying Score of 3 or Higher by Ethnicity

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15-16
All AP Exams Taken							
All Students	37,014	39,972	42,000	46,878	48,992	49,701	34%
African American	2,033	2,183	2,115	2,377	2,530	2,384	17%
Asian	7,757	8,192	8,457	8,915	8,606	7,979	3%
Latino	22,456	24,520	25,994	29,664	31,743	33,471	49%
White	4,613	4,896	5,280	5,687	5,784	5,635	22%
AP Exams with Qualifying Score of 3 or Higher							
All Students	39%	40%	40%	39%	38%	38%	1%
African American	24%	25%	24%	22%	21%	23%	-1%
Asian	47%	48%	47%	47%	47%	46%	-1%
Latino	34%	34%	34%	34%	33%	33%	-1%
White	60%	62%	61%	60%	57%	58%	-2%

Exhibit 7 displays the gap in AP exam performance by ethnic subgroup. While all ethnic subgroups show year-over-year increases in the number of AP exams taken, the percentage of AP exams with qualifying scores of 3 or higher has remained stable. In 2015-16, white and Asian students had the largest percentage of AP exams with qualifying scores (58% and 46% respectively), while African American and Latino students had the smallest percentage of AP exams with qualifying scores (23% and 33% respectively).

Exhibit 7: AP Exams with Qualifying Scores by Ethnic Subgroup



The percentage of AP exams taken by students from a socio-economically disadvantaged background has increased by 39%, from 27,663 in 2010-11 to 38,459 in 2015-16. In 2015-16, 34% of the exams taken by students with low-income backgrounds had a qualifying score of 3 or higher compared to 49% of exams taken by non-low income students.

Exhibit 8: AP Exams Taken and Qualifying Score of 3 or Higher by Income Level

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15-16
All AP Exams Taken							
All Students	37,014	39,972	42,000	46,878	48,992	49,701	34%
Economically Disadvantaged	27,663	30,149	32,133	35,777	28,146	38,459	39%
Non-Economically Disadvantaged	9,351	9,823	9,867	11,101	20,846	11,242	20%
AP Exams with Qualifying Score of 3 or Higher							
All Students	39%	40%	40%	39%	38%	38%	-1%
Economically Disadvantaged	35%	36%	37%	36%	35%	34%	-1%
Non-Economically Disadvantaged	51%	52%	48%	49%	42%	49%	-1%

Although the number of AP exams taken by English Learners has declined by 24% since 2010-11, the percentage earning qualifying scores has increased by 24% during this same period. Among Reclassified Fluent English Proficient (RFEP) students, 33% had qualifying scores of 3 or higher.

Exhibit 9: AP Exams Taken and Qualifying Score of 3 or Higher by Language Classification

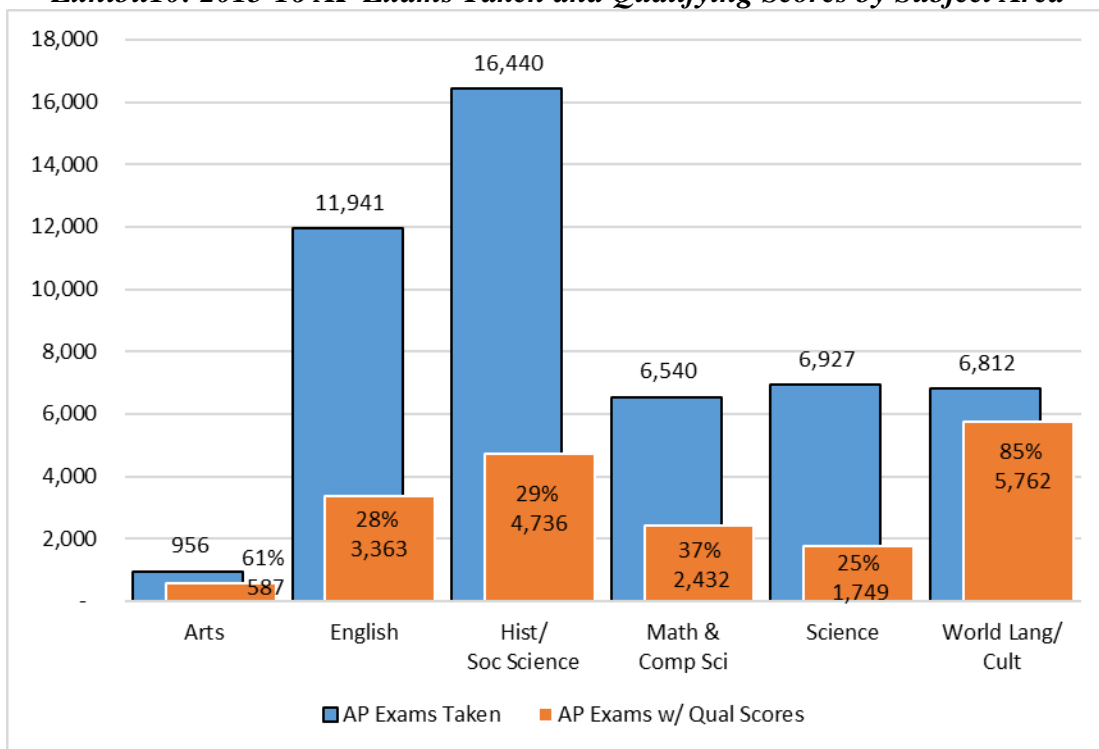
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15-16
All AP Exams Taken							
All Students	37,014	39,972	42,000	46,878	48,992	49,701	34%
English Learner	781	585	643	392	666	597	-24%
Reclassified FEP	20,938	22,294	22,713	24,782	24,093	23,785	14%
AP Exams with Qualifying Score of 3 or Higher							
All Students	39%	40%	40%	39%	38%	38%	-2%
English Learner	37%	44%	43%	57%	53%	61%	24%
Reclassified FEP	36%	36%	36%	35%	34%	33%	-2%

When examining qualifying scores by subject area for 2015-16, the greatest number of exams were taken in History/Social Science (16,440), followed by English (11,941). Math, Science and World Language/Culture exams numbered in the 6,500 range. The fewest exams were taken in Arts with 956.

When examining AP exams by qualifying scores, students had the highest success rate with World Language/Culture exams with 85% of students attaining a 3 or higher. Of the 956 exams

in Arts, 61% scored 3 or higher. In Math and Computer Science exams, 37% scored 3 or higher. Students had the most difficulty attaining a qualifying score of 3 or higher on AP Science exams, with a qualifying score rate of 25%.

Exhibit10: 2015-16 AP Exams Taken and Qualifying Scores by Subject Area



A goal of the District is to increase the number of students in Science, Technology, Engineering and Math (STEM) courses and to assist them in mastering content. AP Math, Computer Science, and Science exams measure student performance in STEM-related content. The number of students taking AP exams in STEM-related subjects has increased annually since 2010-11 with the exception of Science in 2015-16.

Exhibit 11: AP Exams Taken and Qualifying Score of 3 or Higher by STEM Area

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15-16
AP Exams Taken							
All STEM Exams	9,092	10,174	10,974	12,108	13,334	13,467	48%
Mathematics	4,072	4,697	4,689	5,673	5,956	6,184	52%
Computer Science	119	134	178	234	351	356	199%
Science	4,901	5,343	6,107	6,201	7,027	6,927	41%
AP Exams with Qualifying Score of 3 or Higher							
All STEM Exams	33%	35%	36%	35%	32%	31%	-2%
Mathematics	38%	40%	41%	40%	38%	38%	0%
Computer Science	27%	37%	43%	38%	21%	30%	3%
Science	29%	30%	32%	30%	27%	25%	-4%

When examined over time by gender, both females and males are taking more STEM-related AP exams, 51% and 46% respectively. However, the percentage of students earning qualifying scores in STEM-related subjects has declined approximately 2% for both females and males.

Exhibit 12: STEM AP Exams Taken and Qualifying Score of 3 or Higher by Gender

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Increase/ Decrease 10-11 to 15- 16
AP STEM Exams Taken							
All Students	9,092	10,174	10,974	12,108	13,334	13,467	48%
Female	4,636	5,070	5,598	6,221	6,872	6,979	51%
Male	4,446	5,087	5,363	5,872	6,445	6,478	46%
AP Exams with Qualifying Score of 3 or Higher							
All Students	33%	35%	36%	35%	32%	31%	-2%
Female	27%	29%	30%	29%	27%	25%	-2%
Male	40%	40%	43%	41%	38%	38%	-2%

Exhibit 13 shows that by gender, females consistently outperform males across all AP exams by 10% to 12% each year. However, when AP exams are limited to only include STEM related exams, males consistently outperform females by 11% to 13% each year (Exhibit 14).

Exhibit 13: All AP Exam Qualifying scores by Gender

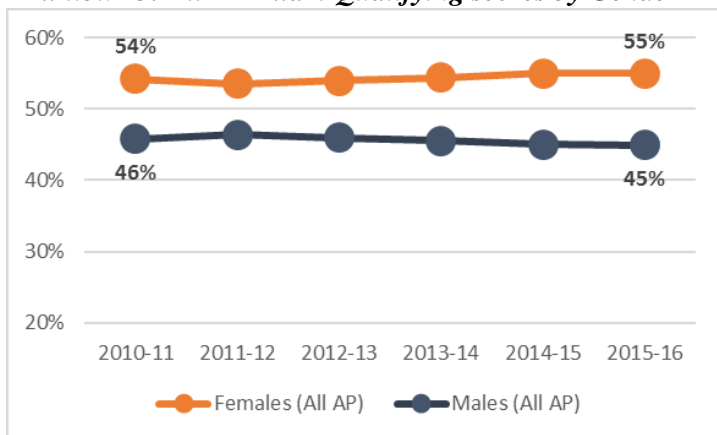
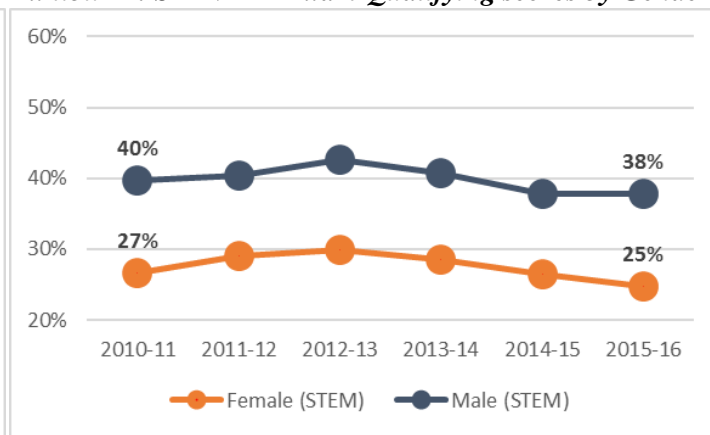


Exhibit 14: STEM AP Exam Qualifying scores by Gender



Attachment A presents a list of schools and the AP exams taken for the past three years. If there are additional questions, please contact me at (213) 241-2460.