MEMORANDUM November 10, 2017

TO: Board Members

FROM: Richard A. Carranza

Superintendent of Schools

SUBJECT: 2017 ADVANCED PLACEMENT (AP) RESULTS

CONTACT: Carla Stevens, 713-556-6700

The results from the Advanced Placement (AP) examinations have been released by the College Board. The Advanced Placement Program provides high school students with the opportunity to take college-level courses and earn college credit. There are a total of 38 AP exams offered in 7 subject categories. HISD schools administered all 38 AP exams in 2017. The AP grade scale ranges from 1 to 5, and a score of 3 or higher qualifies a student to earn advanced placement, college credit, or both.

The number of HISD students participating in AP exams at the high school level in 2017 was 15,018 reflecting an increase of 602 students from the 14,416 students who took AP exams in 2016. The total number of exams taken by HISD high school students in 2017 was 28,236, a five percent **increase** (or 1,368 exams) from 26,868 exams taken in 2016. The percentage of these exams scored at a 3 or higher in 2017 **increased** from 33 percent in 2016 to 34 percent in 2017. **Figure 1** presents the eight-year trend for the number of AP exams taken by HISD high school students and the number scored 3 or higher.

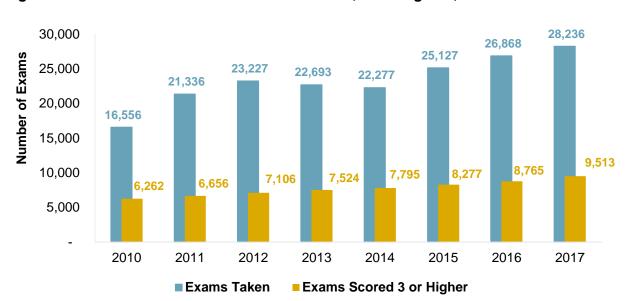


Figure 1. AP Exams Taken and Number Scored 3+, 9th-12th grade, 2010-2017

Source: 2017 College Board AP data file, retrieved August 14, 2017; HISD Research and Accountability Department, Advanced Placement Report, 2015–2016, 2014–2015 and 2013–2014.

Notes: This graph displays a duplicated count of exams taken by students enrolled in grades 9-12.

Administrative Response

The Advanced Academics Department will implement the following actions to continue to provide support to all campuses in an effort to increase equity of, and access to Advanced Placement programming:

- 1) A weekly content specific email for AP teachers, the opportunity to observe an AP master teacher followed by an afternoon debrief session, and access to 45-minute digital office-hours with the AP master teacher once every six weeks to teachers of the following courses: AP English Literature and Composition, AP Calculus AB, AP Biology, AP United States Government and Politics, AP Macroeconomics, AP World History, AP United States History, AP Statistics, AP Human Geography, and AP Capstone.
- 2) Support campuses with AP Potential data that allows them to identify historically underserved students who would otherwise be overlooked to participate in AP courses and also those courses that individual campuses should consider offering.
- 3) Provide AP and Pre-AP teachers with access to a College Board approved AP or Pre-AP Summer Institute for supported courses at no cost to the campuses.
- 4) Refine district-level curricular resources for all supported courses and add new resources for AP World Language courses including Chinese, Spanish, and French.
- 5) Promote opportunities for heritage speakers of world languages to "challenge the exam" in middle school for high school and college credit.
- 6) Promote opportunities for all AP teachers to become AP Readers (College Board AP examination scorers).
- 7) Empower families to make AP courses a priority for their students by providing them with information and resources to make informed decisions.
- 8) Collaborate with Schools Offices to provide opportunities for campus-specific differentiated supports designed to strengthen AP and Pre-AP programs.
- 9) Develop coaching resources for Schools Offices designed to demystify the AP classroom experiences by demonstrating universal best practices that should be evident in all classrooms.
- 10) Partner with the National Math and Science Initiative (NMSI) to provide comprehensive mentoring opportunities and campus-based supports at targeted campuses for NMSI-supported subjects.

Should you have further questions, please contact Carla Stevens in the Department of Research and Accountability at 713-556-6700.

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Attachment

cc: Superintendent's Direct Reports

Area Superintendents School Support Officers

Annie Wolfe

Gracie Guerrero

Rick Cruz Joan Anderson Adam Stephens



RESEARCH

Educational Program Report

ADVANCED PLACEMENT REPORT 2016-2017





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ADVANCED PLACEMENT 2017

Executive Summary

The Advanced Placement (AP) program represents a critical element in HISD's efforts to inject rigor into the high school classrooms. Since 2009, the AP course offerings in HISD have been vastly expanded, with more campuses offering a wider selection of AP courses that exposes a larger percentage of the high school population to academic rigor. Significantly more HISD students are taking and completing AP courses, taking and passing AP Exams, and earning AP Awards now than before 2009.

Highlights of AP in 2017

- The number of high school students taking at least one AP Exam **increased** by 4 percent to 15,018 in 2017 from 14,416 in 2016.
- The number of AP Exams taken by high school students **increased** by 5 percent to 28,236 in 2017 from 26,868 in 2016.
- The number of AP Exams scored 3 or higher **increased** by 9 percent to 9,513 in 2017 from 8,765 in 2016; moreover, the proportion of exams scored 3 or higher increased from 33 percent in 2016 to 34 percent in 2017.
- History and Social Sciences represented the largest category among the seven AP categories with 46 percent of all AP Exams taken by high school students, followed by 19 percent in English.
- Enrollment in AP courses **decreased** to 34 percent in 2016–2017 compared to 37 percent in the previous year for students enrolled in grades 10–12.
- The number of AP Awards presented to HISD students **increased** by 165 to 2,083 in 2016–2017 reflecting a nine percent **increase** compared to 2015–2016.
- Seventeen campuses earned more AP Awards in 2016–2017 than in 2015–2016 including eight campuses that **increased** the number of AP Awards earned by double-digits.

Introduction

The College Board's Advanced Placement (AP) Program provides participating high school students with the opportunity to take college-level courses and earn college credit, advanced placement, or both. A possible 38 examinations in Arts, AP Capstone, English, History and Social Science, Mathematics and Computer Science, Sciences, and World Languages and Cultures are administered in May at participating schools (for a complete list of examinations in each category, see **Appendix A)**. As reported by the College Board, 90 percent of colleges and universities grant credit, placement, or both to students receiving a qualifying score (i.e. 3 or higher on a scale of 1 to 5) on an AP Exam.¹

Studies show that students who take AP courses and exams are more likely to succeed in college.² Families may also experience tangential financial benefits if students receive advanced placement, college credit, or both. Other benefits afforded to students include opportunities that lead to scholarships or recognition. The AP Program recognizes high school students who have demonstrated outstanding college-level achievement through AP courses and exams with the AP Scholar Awards (**Appendix G-1**). Although there is no monetary award, each award-winning student receives a certificate, and the award is acknowledged on any AP score report that is sent to colleges after the award has been conferred.

For the 2016–2017 school year, all courses labeled as "AP" by HISD were authorized through the College Board AP course Audit process. This audit process ensures that courses meet "AP" requirements and that colleges and universities have a venue to review authorized courses offered by secondary schools.³

Administration

The AP Exams are administered each year in May over a two-week period. Once testing has completed, all AP Exams are returned to the Educational Testing Service (ETS) and scores are reported to the College Board. Students who take AP Exams are not required to be enrolled in an AP course.

Scoring

The AP score in each exam is a weighted combination of scores on the multiple-choice section and on the free-response section. The final score is reported on a 5-point scale as follows:

- 5 = extremely well qualified
- 4 = well qualified
- 3 = qualified
- 2 = possibly qualified
- 1 = no recommendation

"Qualified" means that the student has demonstrated the capability of doing introductory-level coursework in a particular subject at college. Many colleges and universities grant credit and placement for scores of 3, 4 or 5; however, each college decides which scores it will accept.

The multiple-choice section is scored by computer. Each answer sheet is scanned and the total number of correct responses equals the multiple-choice score. The free-response section (essays and open-ended questions) is scored at the annual AP Reading held during the first two weeks in June. Specially appointed

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¹ College Board. (2006). Frequently Asked Questions about the AP Program. Retrieved from http://www.collegeboard.com/prod_downloads/prof/advance-placement-qa.pdf.

² College Board. (2014). The 10th Annual AP Report to the Nation.

³ College Board - AP course Audit. Retrieved from http://www.collegeboard.com/html/apcourseaudit/.

college professors and experienced AP teachers score this section of the exam. The total scores from the free-response section and the multiple-choice section are combined to form a composite score. These composite scores are then translated into the 5-point scale using statistical processes designed to ensure that a score of 3 this year reflects the same level of achievement as a score of 3 last year.

Results

Exam Participation and Performance

The total number of exams taken by HISD high school students **increased** by 5 percent (or 1,368 exams) to 28,236 in 2017 from 26,868 in 2016. The number of AP Exams taken at district high schools and the number and percent scored 3 or higher are shown in **Figure 1**.

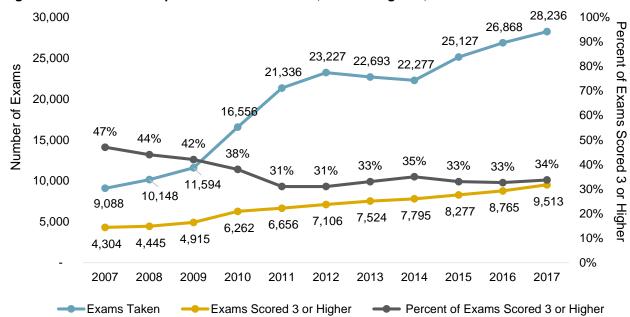


Figure 1. AP Exam Participation and Performance, 9th - 12th grade, 2007 to 2017

Sources: HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results and 2017 College Board AP data file, retrieved August 14, 2017

2007 to 2014: HISD Research and Accountability Department, Advanced Placement Report 2013–2014 Note: This graph displays a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level unknown (N=749).

Figure 1 indicates the following:

- The number of AP Exams taken by high school students increased by 211 percent to 28,236 in 2017 from 9,088 in 2007.
- The number of AP Exams scored 3 or higher in 2017 (9,513) is **more than double** the number scored 3 or higher in 2007 (4,304).
- Based on students' opportunity to earn at least 3 college credits for each AP Exam score of 3 or higher, 9,513 AP exams meeting the criteria at the high school level represents 28,539 estimated college credits. College Board calculates an average rate of \$327.88 per credit hour, indicating a total potential savings for the district's students and families of \$9,357,395.68.4

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⁴ The estimates are based on Table 5 of the 2017 College Board report, *Trends in College Pricing*.

Comparison with State and Nation

The College Board provides AP data for the state of Texas and the nation. Between 2007 and 2017, the number of AP Exams taken by all students in Texas and the United States increased by 139 percent and 96 percent, respectively. As mentioned above, HISD experienced a sharper increase in the number of AP Exams taken by high school students, 211 percent for high school students and 216 percent when middle school students are included.

Figure 2 presents the proportion of all AP Exams scored 3 or higher for HISD, Texas, and the Nation from 2011 through 2017. **Figure 2** indicates the following:

- While the proportion of AP Exams scored 3 or higher has stayed relatively flat for all three groups since 2011, the district has shown a slow but steady increase from 31 percent in 2013 to 35 percent in 2017.
- In 2017, the proportion of AP Exams scored at 3 or higher in HISD is lower than that of Texas and the Nation by 11 and 23 percentage points, respectively.

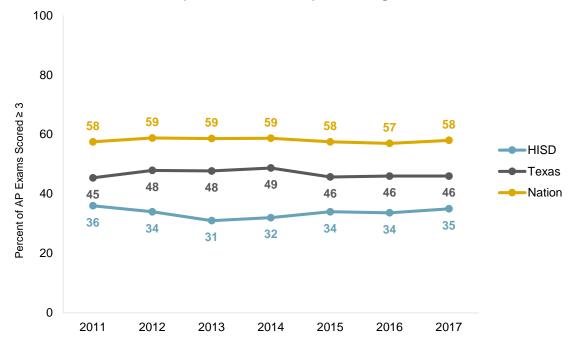


Figure 2. AP Exam Performance (HISD, Texas, Nation), 8th - 12th grade, 2011-2017

Sources: Texas and Nation Source–College Board AP Program Research "School Report of AP Exams 2011 through 2016 (By State and Nation)."Retrieved from http://research.collegeboard.org/programs/ap/data;

2017 Texas and Nation Source: *College Board, District Summary with Comparable Groups.* Retrieved from the College Board online score report tool, downloaded on August 23, 2017; 2017 HISD Source: 2017 College Board AP data file, retrieved August 14, 2017;

HISD 2011 to 2016 Source: HISD Research and Accountability Department, *Advanced Placement Report* 2015–2016, 2014–2015, 2013–2014, 2012–2013, 2011–2012, and 2010–2011

Note: Figures for Nation include data for all 50 states and the District of Columbia.

While the *proportion* of exams scored 3 or higher in any given year is lower for HISD than it is for Texas and the nation, HISD has dramatically increased the *number* of exams scored 3 or higher. For example, between 2007 and 2017, the number of exams scored 3 or higher **increased** by 131 percent from 4,323

(includes eighth grade students) to 9,974 (includes eighth grade students) at HISD compared to increases of 90 percent in the U.S.⁵

By Exam Category

Table 1 shows the number of AP Exams taken by HISD high school students by the seven AP Exam subject categories outlined in **Appendix A** (p. 25) and the percent of exams scored 3 or higher.

Table 1. AP Exam Participation and Performance by Exam Category, 9th - 12th grade, 2017

AD Every Cote years	AP Exams Taken,	AP Exams Taken,	AP Scores ≥ 3,	AP Scores ≥ 3,
AP Exam Category	N	% of Total	N	% of Exams
History & Social Science	12,878	46%	3,368	26%
English	5,352	19%	1,382	26%
Sciences	4,022	14%	1,253	31%
Math & Computer Science	2,886	10%	1,237	43%
World Languages & Culture	2,145	8%	1,722	80%
Arts	396	1%	196	49%
AP Capstone	557	2%	355	64%
HISD Totals	28,236	100%	9,513	34%

Source: 2017 College Board AP data file, retrieved August 14, 2017

Notes: This table displays a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level unknown (N=749) who tested at a high school campus. Figures may not sum to 100 due to rounding.

Table 1 indicates the following:

- AP Exams taken in the History & Social Science category represented the largest category (46 percent) followed by English (19 percent).
- Success rates ranged from 80 percent (World Languages & Culture) to 26 percent (History & Social Science and English).
- While two percent of exams were in the newest AP category, AP Capstone, the success rate was among the highest (64 percent).

By Student Group

Both the number of HISD high school students who took AP Exams and the number of AP Exams taken by HISD high school students increased in 2017 compared to the year before. The number of high school students who took AP Exams **increased** by 4 percent to 15,018 in 2017 from 14,416 in 2016 (**Table 2**, p. 6).

Table 2 presents the number of HISD students in grades 9 through 12 in 2016 and 2017 who took an AP Exam, the number of exams taken, and the number of exams scored 3 or higher by race/ethnicity, gender, economic status, English Language Learner (ELL) status, special education status, immigrant status, and gifted and talented (G/T) status. The number of students tested reflects an *unduplicated* count of students who took an AP Exam, and the number of exams taken is a *duplicated* count of exams. In other words, a given student is counted once and all the exams that student has taken are counted as well.

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⁵Figures include exams taken by all students, including those in 8th grade.

Table 2. AP Exam Participation and Performance by Student Group, 9th - 12th grade, 2016 and 2017

and 2017							15.0		
	Students	s Tested,	AP Exam	ns Taken,	AP Score	s ≥ 3,	AP Scores ≥ 3,		
Student Group		V		N		N	% of E	xams	
	2016	2017	2016	2017	2016	2017	2016	2017	
African American	2,691	2,613	4,375	4,275	612	627	14%	15%	
American Indian	29	12	42	18	7	1	17%	6%	
Asian/Pacific Islander	1,036	1,155	2,853	3,208	2,076	2,334	73%	73%	
Hispanic	8,342	8,673	15,004	15,764	3,631	3,904	24%	25%	
White	1,712	1,841	3,540	3,743	2,062	2,218	58%	59%	
Two or more races	284	328	578	678	291	345	50%	51%	
Other	9	3	18	4	1	1	6%	25%	
No Response	313	393	458	546	85	83	19%	15%	
Econ. Disadv.	9,461	9,642	16,709	17,252	3,633	3,876	22%	22%	
Non-Econ. Disadv.	4,917	5,329	10,104	10,926	5,108	5,627	51%	52%	
ELL	544	704	705	931	240	293	34%	31%	
Non-ELL	13,834	14,267	26,108	27,247	8,501	9,210	33%	34%	
Special Ed	144	150	214	215	39	38	18%	18%	
Non-Special Ed	14,232	14,821	26,599	27,963	8,702	9,465	33%	34%	
Immigrant	4	10	5	11	2	6	40%	55%	
Non-Immigrant	14,372	14,961	26,808	28,167	8,739	9,497	33%	34%	
G/T	5,143	5,466	11,637	12,274	5,980	6,446	51%	53%	
Non-G/T	9,235	9,505	15,176	15,904	2,761	3,057	18%	19%	
Female	7,947	8,342	14,740	15,515	4,602	4,602	31%	30%	
Male	6,469	6,676	12,138	12,721	4,163	4,163	34%	33%	
HISD Totals	14,416	15,018	26,868	28,236	8,765	9,513	33%	34%	

Sources: HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results;

2017 College Board AP electronic data file, retrieved August 14, 2017;

2016 ELL, G/T, Immigrant, special education, and economic status source: Chancery, May 2, 2016; 2017 ELL, G/T, Immigrant, special education, and economic status source: Chancery, May 1, 2017;

Notes: This table displays an unduplicated count of students tested and a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level unknown (N=749). For 2016, economic status, ELL, and G/T status could not be determined for 38 students; special education and immigrant status could not be determined for 40 students. For 2017, economic status, ELL, G/T status, special education, and immigrant status could not be determined for 47 students. Race/ethnicity, grade level, and gender were self-reported in 2016 and 2017.

The data in **Table 2** show the following:

- Almost six out of ten (58 percent) HISD high school students who took an AP Exam in both 2016 and 2017 were Hispanic. The number of Hispanic students who took AP Exams increased by 4 percent and the number of exams taken by Hispanic students increased by 5 percent compared to last year. The proportion of exams scored 3 or higher increased slightly from the previous year (25 percent in 2017 compared to 24 percent in 2016), meaning that one out of four exams taken by Hispanic students received a score of three or higher.
- African-American students represented the second largest racial/ethnic group of students who took an AP Exam, accounting for 17 percent of all AP test takers in 2017. When compared to last year, the

number of African-American students who took AP Exams **decreased** by 3 percent and the number of exams taken by African-American students **decreased** by 2 percent. The overall number of exams scored 3 or higher taken by African-American students **increased** as well as the *proportion* of exams scored at 3 or higher (14 percent in 2016 and 15 percent in 2017). Less than two out of ten African-American students who took an AP exam passed.

- White students accounted for 12 percent of AP test takers in 2017. From 2016 to 2017, the number of
 White students who took AP Exams and the number of exams taken increased by 8 percent and 6
 percent, respectively. The proportion of exams scored 3 or higher increased from the previous year
 (59 percent in 2017 compared to 58 percent in 2016). White students are four times as likely as AfricanAmerican students and about 2.5 times as likely as Hispanic students to pass an AP Exam.
- Asian students accounted for 8 percent of AP test takers in 2017. When compared to last year, the number of Asian students who took AP Exams increased by 11 percent and the number of exams taken by Asian students increased by 12 percent. While the overall number of exams scored 3 or higher taken by Asian students increased, the proportion of exams scored 3 or higher remained the same compared to the previous year (73 percent in both 2016 and 2017).
- Economically disadvantaged students accounted for 64 percent of AP test takers in 2017. When compared to last year, the number of economically disadvantaged students who took AP Exams increased by 2 percent and the number of exams taken by economically disadvantaged students increased by 3 percent. While the overall number of exams taken by economically disadvantaged students scored 3 or higher increased, the proportion of exams scored 3 or higher remained the same compared to the previous year (22 percent in 2016 and 2017). Non-economically-disadvantaged students are more than twice as likely to pass an AP Exam as economically-disadvantaged students (52 percent vs. 22 percent).

The College Board provides a measure to assess both equity and excellence for the district. The calculation shows the proportion of a district's senior class who scored a 3, 4 or 5 on an AP exam at any point during high school. Students who met the standard (scores of 3, 4, or 5) are counted only once. Seventeen percent of HISD seniors in 2017 scored a 3, 4, or 5 during their high school tenure.

Table 3. Equity and Excellence for Seniors and by Student Group, 2016 and 2017

1 1						
		2016			2017	
	District	AP Scores		District	AP Scores	
Race/Ethnicity	N	3+	%	N	3+	%
HISD Seniors	11,237	1,932	17.2	11,338	1,965	17.3
African American	2,842	169	5.9	2,752	161	5.9
American Indian	28	-	-	24	2	8.3
Asian	441	261	59.2	465	262	56.3
Hispanic	6,672	1,107	16.6	6,843	1,133	16.6
Pacific Islander	15	4	26.7	16	4	25.0
White	1,147	369	32.2	1,139	372	32.7
Two or more races	92	22	23.9	99	31	31.3
Econ. Dis.	7,847	1,107	14.1	7,948	1,127	14.2
ELL	1,172	54	4.6	1,307	69	5.3
Special Ed.	1,043	13	1.2	1,017	5	0.5
G/T	1,784	1,023	57.3	1,910	1,037	54.3

Sources: 2017 College Board AP electronic data file, retrieved August 14, 2017; 2016 College Board AP electronic data file retrieved October 5, 2016

By Subject

Appendix B (p. 26) compares the mean scores by subject for HISD students with the mean scores of global test-takers. The global data reflect totals for both public and private school students. The subject examinations for HISD are reported only in areas where five or more students were tested. As a result, the number of students taking the examination may appear different from the overall total and/or from the school total. For 2017, HISD participated in all 38 examinations.

For 2017, students in HISD scored a mean of 3 or higher on a five-point scale on 8 of the 38 AP subject examinations where fiver or more students were tested. Typically, a score of 3 qualifies a student to receive advanced placement and/or college credit. HISD students exceeded the global mean score for 4 out of 38 subject examinations in French, German, Italian, and Japanese Language and Culture. Mean scores ranged from 1.40 in Comparative Government and Politics to 3.93 in Italian Language and Culture. World History represented the subject test taken by the highest number of students (N=3,519); however, mean scores for these exams were lower than the global mean scores by 0.76. Advanced Placement tests with fewer than 10 participants included: Japanese Language and Culture and Latin.

By Campus

Figure 3, p.10 shows the number of AP Exams taken by HISD students in grades 9 through 12 and the percent of exams scored 3 or higher for each campus in 2016 and 2017. All AP Exams are represented in this figure, regardless of whether the student was enrolled in the AP course. **Appendix C-1** (p. 27) provides additional details for the number of AP Exams taken and the corresponding performance by campus, and **Appendix C-2** (p. 28) provides the information by HISD Board Member District.

Figure 3 indicates the following:

• Students at Bellaire High School took the largest number of AP Exams in 2017 (2,727) while five exams were taken at Beechnut Academy (an alternative school). A median of 415 AP Exams was taken across 46 high school campuses.

- In 2017, exams taken at Bellaire HS, Carnegie Vanguard HS, and DeBakey HS accounted for 22
 percent of all AP Exams taken in HISD but made up more than half (51 percent) of all exams that were
 scored 3 or higher.
- For the 45 campuses with two years of participation data and five or more testers, 29 campuses increased the number of AP Exams taken, 15 campuses decreased the number of AP Exams taken, and there was no change in the number of AP Exams taken in 2016 compared to 2017 at one campus.
- For the 45 campuses with two years of performance data and five or more testers, the number of AP
 Exams scored 3 or higher increased at 27 campuses, remained the same at two campuses, and
 declined at 16 campuses in 2017 compared to 2016.

Figure 3. AP Exam Participation and Performance by Campus, 9th-12th grade, 2016 and 2017

Ranked by the number of AP Exams taken in 2017

		016		017	Cha	Change, 2016 to 2017			
Campus	Exams Taken	Exams ≥3	Exams Taken	Exams ≥3		Taken	Exams ≥3		
	N	N	N	N		N	N		
Bellaire HS	2,814	2,159	2,727	2,136	+	-87	-2		
Carnegie HS	1,856	1,338	2,034	1,444		178			
Lamar HS	1,842	188	2,033	263		191	7		
Westside HS	1,607	781	1,943	881		336	10		
Heights HS	1,734	214	1,562	266		-172	5		
Chavez HS	1,247	251	1,520	308	+	273	5		
DeBakey HS	1,222	1,110	1,381	1,249		159	13		
Northside HS	784	112	939	102	2	155	-1		
Westbury HS	892	97	892	154		0	5		
Eastwood Acad	675	244	796	246	i	121			
E-STEM West HS	639	34	793	17	'	154	-1		
HS Perf. Vis. Arts	688	507	787	637	'	99	13		
Energy Inst HS	390	102	784	163		394	6		
Challenge ECHS	829	239	770	206	i	-59	-3		
N. Houston ECHS	572	73	710	114		138	4		
Houston MSTC HS	821	104	683	124		-138	2		
Hou Acad. Intl.	504	72	532	80		28			
Waltrip HS	859	106	530	117	,	-329	1		
Sharpstown Intl	439	168	513	185		74	1		
HS for Law & Justice	765	68	449	33	3	-316	-3		
Wisdom HS	356	28	447	24		91	-4		
Austin HS	389	45	430	81		41	3(
Madison HS	439	29	427	30		-12			
Sharpstown HS	575	181	403	178		-172	-:		
Milby HS	494	102	396	53		-98	-49		
Sterling HS	404	29	391	26		-13	-		
YWCPA	352	18	376	42		24	2		
Washington HS	363	30	321		- i	-42	-2		
Yates HS	182	6	246			64	-		
Leland YMCPA	213	38	243	43		30			
Tx Conn. Acad.	153	81	241	121		88	4		
East ECHS	279	124	233	50		-46	-7		
Furr HS	155	7	223	26		68	1		
Mount Carmel Acad.	154	21	195	20		41	-		
E-STEM Central HS	121	1	192			71	-		
Scarborough HS	187	18	177	28		-10	1		
South ECHS	95	19	175	26		80			
Worthing HS	132	-	157	6	_	25			
Jordan HS	278	1	132			-146			
North Forest HS	74		111		' -	-146			
Jones HS		10	111	16					
	103					8			
Kashmere HS	78	1	109	1		31	-		
Wheatley HS	69	1	103			34			
Long Acad	39	7	7	3		-32			
Liberty HS	5	1	7	3)	2			
Beechnut Acad	-	-	5				7.60		
HISD Totals	26,868	8,765	28,236	9,513		1,368	748		

Sources: 2017 College Board AP electronic data file, retrieved August 14, 2017;

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results;

Notes: *Masked # tested < 5. - - indicates no data for the current/past year. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate (IB) Program in addition to Advanced Placement (AP). This table displays a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level unknown (N=749).

By Exam and by Campus

Appendix D (pp. 29–32) presents the results of students who took each AP exam and the number and percent of exams scored 3 or higher for each exam type by campus and district total.

Course Participation and Performance: AP Course Offerings

Figure 4, p. 12 shows the number of AP courses offered in HISD schools in 2015–2016 and 2016–2017, and the change in the number of courses from 2015–2016 to 2016–2017.

Figure 4 indicates the following:

- In 2017, 45 out of 55 HISD schools offered at least one AP course—this reflects an **increase** of two schools that offered AP courses compared to 2015–2016.⁶
- Of the 43 schools that offered AP courses in both 2016–2017 and 2015–2016, 13 schools **increased** the number of AP courses offered from 2015–2016;19 schools **decreased** AP course offerings; and 11 schools had no change.
- The largest **increase** in AP courses offered in 2016–2017 compared to 2015–2016 occurred at Energy Institute HS (8 courses).
- The largest **decrease** in AP courses offered in 2016–2017 compared to 2015–2016 occurred at the High School for Law and Justice and Sharpstown High School, both with a reduction of four courses.

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⁶ This includes HISD campuses that serve students enrolled in grades 9, 10, 11, or 12 only.

Figure 4. Distinct AP Courses Offered* by Campus, 2015–16 and 2016–17

Ranked by the number of courses in 2016-17

Campus	2015–2016		2016–2017
Carnegie HS		30	29
Westside HS		28	26
Bellaire HS		23	22
Houston MSTC HS		22	22
Northside HS		21	22
Chavez HS		20	21
DeBakey HS		21	21
Eastwood Acad		19	19
Energy Inst HS		11	19
Heights HS		21	19
Sharpstown Intl		18	19
Westbury HS		14	18
Milby HS		15	16
Waltrip HS		16	16
Austin HS		15	15
Leland YMCPA		15	15
Wisdom HS		13	15
YWCPA		13	15
HS Perf. Vis. Arts		13	14
HS for Law & Justice		18	14
Madison HS		15	14
Scarborough HS		15	14
Challenge ECHS		12	13
N. Houston ECHS		11	13
Sharpstown HS		17	13
Sterling HS		13	12
Washington HS		14	12
E-STEM Central HS		11	11
E-STEM West HS		11	11
Furr HS		12	11
Yates HS		11	11
Kashmere HS		9	9
Mount Carmel Acad.		8	9
Hou Acad. Intl.		11	8
North Forest HS		8	7
East ECHS		9	6
South ECHS		4	6
Wheatley HS		8	6
Jordan HS		7	
Lamar HS		5	- 5
Worthing HS		7	5 5 5
Jones HS		6	4
Community Services		3	2
Liberty HS	_	0	1
Long Acad	_	-	1
HISD		36	36

Source: End of Year Chancery Grades data files, June 6, 2017

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Note: *Courses displayed had at least one student enrolled within the respective academic year. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate (IB) Program in addition to Advanced Placement (AP).

-No data was available based on the June 6, 2016 extract.

By Student Group

AP course completion is defined as students enrolled in an AP course who earn a passing grade at the end of the course (70 or higher) for each semester that is required (most AP courses require two semesters to qualify for completion). Very few AP courses are available for students in grade 9, but ninth grade usually has the largest enrollment in high schools. Thus, basing percentages of AP courses on enrollment that includes 9th graders does not accurately reflect the rates of participation. **Table 4** presents the number and percent of HISD students in grades 10 – 12 who completed AP courses by student group including race/ethnicity, economic status, English Language Learner status, special education status, G/T status, Immigrant status, and gender. This table reflects an *unduplicated* count of students for courses.

Table 4. AP Course Enrollment and Completion by Student Group, 10th -12th grade, 2015-2016 and 2016-2017

	Grade	es 10-1	2 Enrollment		AP C	ourse	Enrollment		AP Course Completion			
Student Groun	2015-20	16	2016-2017		2015-20	2015-2016		2016-2017		016	2016-20	17
Student Group	N	%	N	%	N	%	N	%	N	%	N	%
African American	8,694	25	9,351	24	2,716	31	2,615	28	2,338	86	2,334	89
American Indian/Alaskan Native	73	<1	90	<1	21	29	24	27	19	90	23	96
Asian/Pacific Islander	1,451	4	1,606	4	945	65	1,005	63	919	97	988	98
Hispanic	20,758	60	23,093	60	7,556	36	7,789	34	6,625	88	6,928	89
White	3,603	10	4,215	11	1,479	41	1,485	35	1,407	95	1,421	96
Two or More	298	1	362	1	129	43	141	39	123	95	134	95
Econ. Disadv.	24,486	70	27,171	70	8,677	35	8,720	32	7,591	87	7,777	89
Non-Econ. Disadv.	10,391	30	11,545	30	4,169	40	4,339	38	3,840	92	4,051	93
ELL	3,740	11	4,903	13	458	12	542	11	367	80	460	85
Non-ELL	31,137	89	33,814	87	12,388	40	12,517	37	11,064	89	11,368	91
Female	17,631	51	19,618	51	7,033	40	7,260	37	6,387	91	6,654	92
Male	17,246	49	19,099	49	5,813	34	5,799	30	5,044	87	5,174	89
Special Education	2,857	8	3,136	8	138	5	150	5	119	86	126	84
Non-Special Education	32,020	92	35,581	92	12,708	40	12,909	36	11,312	89	11,702	91
G/T	5,616	16	6,033	16	4,233	75	4,407	73	4,033	95	4,257	97
Non-G/T	29,261	84	32,684	84	8,613	29	8,652	26	7,398	86	7,571	88
Immigrant	7	<1	14	<1	3	43	7	50	3	100	7	100
Non-Immigrant	34,870	100	38,703	100	12,843	37	13,052	34	11,428	89	11,821	91
HISD Totals	34,877	100	38,717	100	12,846	37	13,059	34	11,431	89	11,828	91

Sources: End of Year Chancery Grades data files, June 6, 2017;

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Notes: Table displays an unduplicated count of HISD students enrolled in grades 10-12. AP course completion is defined as enrolled in an AP course and earning a passing grade at the end of the course (70 or higher) for each semester that is required. Special education, G/T, and Immigrant data for 2016 reflect updates extracted on September 8, 2017 and added to the data from the previous years' AP report.

Table 4 indicates the following:

- In 2016–17, the *number* of 10th–12th graders enrolled in an AP course **increased** for the district. In 2016–2017, 13,059 students were enrolled in an AP course, which represents a 2 percent **increase** from the previous year. However, the proportion of 10th–12th graders enrolled in an AP course **decreased** compared to the previous year.
- The *number* of 10th–12th graders enrolled in an AP course **increased** for all racial/ethnic groups in 2016–2017 except for African American students where the number declined by 101 students. The *proportion* of African American, Hispanic, and White students enrolled in AP courses **decreased** by three, two, and six percentage points, respectively, when comparing 2015–2016 to 2016–2017.
- The *number* of 10th–12th graders enrolled in an AP course **increased** for economically disadvantaged students in 2016–2017 compared to the previous year. However, the *proportion* of economically disadvantaged students enrolled in an AP course **declined** by three percentage points from the previous year, but the course completion rate **increased** by two percentage points when comparing 2015–2016 to 2016–2017.
- Hispanic and African-American students are less likely to enroll in AP courses compared to their Asian and White counterparts. Only 34 percent and 28 percent of Hispanic and African-American students, respectively, were enrolled in AP courses in 2016–2017 compared to 35 percent and 63 percent of White and Asian students, respectively.
- Among students enrolled in AP courses in 2016–2017, 91 percent completed at least one, reflecting an increase in the completion rate compared to the previous year by two percentage points. AP course completion rates increased between 2015–2016 and 2016–2017 for all racial/ethnic groups with the exception of Two or More where the completion rate remained the same.

By Campus

Figure 5, p. 15 shows the percent of students in grades 10–12 who completed at least one AP course in 2015–2016 and 2016–2017 by campus. Data for **Figure 5** is *unduplicated*—a student in grades 10–12 is counted only once if the student took and completed one or more AP courses. Percentages are based on AP courses taken by students in grades 10–12.

Figure 5. AP Course Completion by Campus, 10th - 12th grade, 2015-2016 and 2016-2017

Ranked by number of course completers in 2017

Campus		2015-16			2016-17		Change 2	2015–16 to 2016–17		
	Total Enrolled 10-		leted ≥ 1 AP Course	Total Enrolled 10-		leted ≥ 1 AP Course	Total Enrolled 10-	•	eted ≥ 1 AP Course	
	12	N	%	12	N	%	12	N	%	
Westside HS	2.023	881	44	2.184	929	43	161	48	1	
Bellaire HS	2,507	877	35	2.484	878	35	-23	1		
Lamar HS	2,327	668	29	2,502	792	32	175	124		
Chavez HS	2,088	594	28	2,200	721	33	112	127		
Heights HS	1,600	666	42	1,680	653	39	80	-13		
DeBakey HS	577	432	75	567	468	83	-10	36		
Carnegie HS	435	433	100	446	442	99	11	9	-	
Houston MST	1,671	404	24	2,058	439	21	387	35	<u> </u>	
Westbury HS	1,332	470	35	1,617	426	26	285	-44	-9	
Waltrip HS	1,123	432	38	1,205	368	31	82	-64		
Northside HS	1,121	338	30	1,208	348	29	87	10		
Challenge HS	350	309	88	342	314	92	-8	5	4	
Energy Inst HS	317	177	56	495	312	63	178	135		
HS Perf. Vis. Arts	532	283	53	549	312	56	170	27		
			24			23	41		-	
Madison HS	1,146	274		1,187	277			3		
Austin HS	1,157	239	21	1,286	264	21	129	25		
N. Houston ECHS	324	224	69	338	250	74	14	26		
Hou Acad. Intl.	310	257	83	333	243	73	23	-14	-10	
Sharpstown HS	958	297	31	1,133	237	21	175	-60	-10	
Wisdom HS	1,052	223	21	1,272	235	18	220	12		
Eastwood Academy	302	225	75	320	224	70	18	-1	-4	
Sharpstown International	399	212	53	432	223	52	33	11	-	
Furr HS	703	206	29	765	223	29	62	17	(
HS for Law & Justice	305	258	85	265	217	82	-40	-41	- 4	
E-STEM West HS	233	231	99	222	217	98	-11	-14		
Sterling HS	633	210	33	747	195	26	114	-15	-	
Milby HS	1,055	251	24	969	178	18	-86	-73	-(
Yates HS	586	112	19	578	138	24	-8	26		
Washington HS	464	134	29	588	133	23	124	-1	-(
Scarborough HS	471	106	23	555	130	23	84	24		
YWCPA	125	122	98	134	122	91	9	0	-	
Jordan HS	496	176	35	319	117	37	-177	-59	7	
Mount Carmel Acad.	260	70	27	267	96	36	7	26		
East ECHS	320	120	38	343	92	27	23	-28		
Leland YMCPA	77	65	84	93	90	97	16	25	1:	
	474	99	21	518	89	17	44	-10	-4	
Wheatley HS						95				
Energized STEM HS SE	42	39	93	84	80		42	41		
North Forest HS	658	50	8	694	77	11	36	27		
Jones HS	140	73	52	230	76	33	90	3	-19	
South ECHS	101	44	44	154	71	46	53	27		
Worthing HS	468	69	15	522	70	. 13	54	1	-2	
Kashmere HS	347	34	10	412	51	12	65	17		
Long Acad.	175	27	1 5	156	7	l 4	-19	-20	-11	
Liberty HS	393			482	5					
Community Services	23	*	*	71	*	*	48	*		
Texas Connections Acad.	1,643			2,770						
AVA	359									
JJAEP	5									
Beechnut Academy	116			76						
Middle College HS-Gulfton				137						
Middle College HS-Fraga				106						
Victory Prep South				129						
				88						
Victory Prep North										

Sources: End of Year Chancery Grades data files, June 6, 2017;

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Notes: Table displays an unduplicated count of HISD students enrolled in grades 10-12. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate (IB) Program in addition to Advanced Placement (AP).

*Masked # students < 5. District totals include 19 students who completed an AP course at more than one campus.

Figure 5 indicates the following:

HISD students were less likely to complete an AP course this year compared to last year. In 2016–2017, 31 percent of students enrolled in grades 10–12 in the district completed at least one AP course, reflecting a two percentage point decrease from the previous year.

- In 2016–2017, the proportion of students enrolled in grades 10–12 who completed at least one AP course ranged from four percent at Long Academy to 99 percent at Carnegie HS.
- Among the 43 HISD campuses with two years of data, the proportion of students who completed at least one AP course increased in 2016–2017 from the previous year at 14 campuses, declined at 21 campuses, and remained the same at 8 campuses.

Course and Exam Participation and Performance

Figure 6 shows the number of students enrolled in grades 10–12 who completed at least one AP course, the number who took at least one AP Exam, and the number who received a score of 3 or higher on at least one AP Exam from 2012–2013 to 2016–2017. Figures for each series reflect an *unduplicated* count of students.

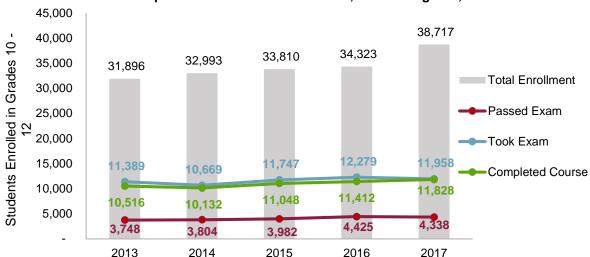


Figure 6. AP Course Completion and Exam Performance, 10th - 12th grade, 2013 to 2017

Sources: End of Year Chancery Grades data files, June 6, 2017;

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results;

College Board AP data files for respective year

Note: This graph displays an unduplicated count of students enrolled in grades 10-12. AP course completion is defined as receiving a passing grade at the end of the course (70 or higher) for each semester that is required. Students could take the AP exam without completing the AP course or could have taken the AP course outside of HISD.

Figure 6 indicates:

- The number of students enrolled in grades 10 through 12 who took at least one AP Exam **increased** by five percent to 11,958 in 2016–2017 from 11,389 in 2012–2013.
- The number of students enrolled in grades 10 through 12 who completed at least one AP course increased by twelve percent to 11,828 in 2016–2017 from 10,516 in 2012–2013.
- The number of students enrolled in grades 10 through 12 who passed at least one AP Exam **increased** by 16 percent to 4,338 in 2016–2017 from 3,748 in 2012–2013.
- Among students enrolled in grades 10 through 12 in 2016–2017, 31 percent had taken at least one AP Exam, 31 percent had completed an AP course, and 11 percent had passed an AP Exam.

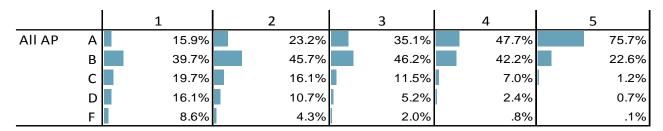
By Exam Category

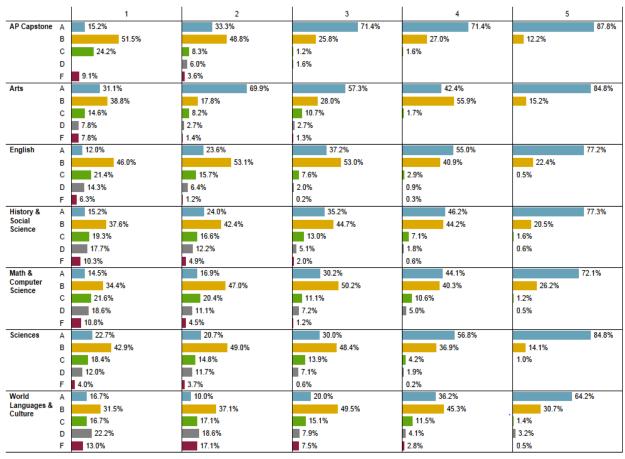
Figure 7A (p. 18) shows the distribution of the grades in AP courses disaggregated by AP exam scores, and **Figure 7B** (p. 19) shows the distribution of AP exam scores by the grades in AP courses categorized by the seven AP subject areas. These figures show all AP exams that were taken only by students who received a grade in the AP course.

Figures 7A and 7B indicate the following:

- Seventy-five percent of all AP exams taken by students with a score of 1 have an associated course grade of C or higher, and 85 percent of all AP exams taken by students with a score of 2 have a course grade of C or higher.
- Forty-four percent of the students who earned an A in an AP course also earned an AP exam score of 1 or 2, 68 percent of the students who earned a B in an AP course also earned a 1 or 2 on the associated AP exam, and 83 percent of the students who earned an AP course grade of C also earned a 1 or 2 in the associated AP exam.
- Fifty-five percent of students who failed their World Languages & Culture AP course also scored 3 or higher on the corresponding AP Exam.
- At least fifty-three percent of students who earned an A in AP Arts and English courses scored 3 or higher on the corresponding AP Exam.

Figure 7A. Distribution of Course Grades by AP Scores, Percent of Students with Stated AP Score, 9th - 12th grade, 2017





Course Grade

A B

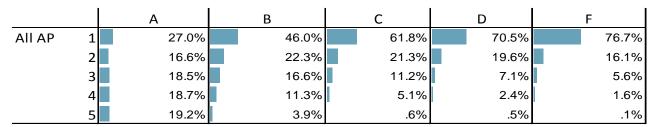
С

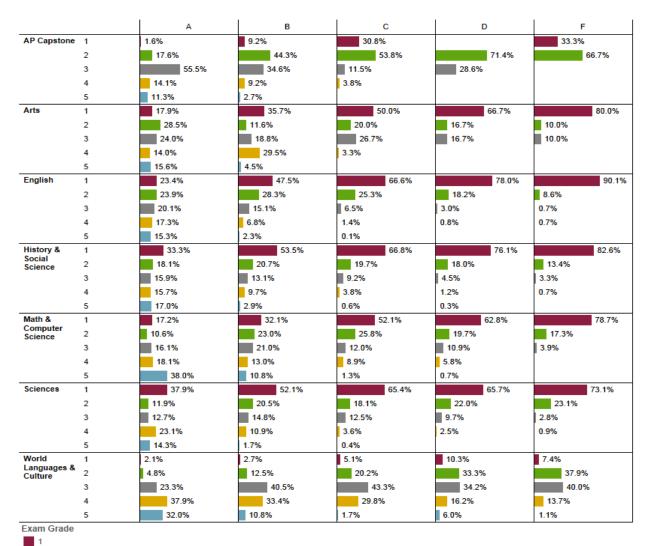
D F

Sources: End of Year Chancery Grades data files, June 6, 2017; 2017 College Board AP data file; retrieved August 14, 2017

Notes: AP courses and AP Exams are linked--these graphs display AP Exams for which a corresponding AP course grade exists. Graph displays a duplicated count of AP courses/Exams taken by students enrolled in grades 9–12.

Figure 7B. Distribution of AP Scores by Course Grades, Percent of Students with Stated Course Grade, 9th - 12th grade, 2017





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Source: End of Year Chancery Grades data files, June 6, 2017;

2017 College Board AP data file; retrieved August 14, 2017

Notes: AP courses and AP Exams are linked--these graphs display AP Exams for which a corresponding AP course grade exists. Graph displays a duplicated count of AP courses/Exams taken by students enrolled in grades 9–12.

By Campus

Corresponding AP course enrollment and exam data are presented by campus in **Appendix E** (p. 33). Data analyzed include students enrolled in grades 9–12, the number of AP courses taken, the number and percent of AP courses completed (passed), and the number and percent of AP Exams taken and scored 3 or higher by campus.

"Emerging Scholars" 8th and 9th Grade

Though AP courses and exams are usually taken by students in grades 10–12, increasingly, students in middle school and ninth grade are taking advantage of the opportunity to earn college credits early in their academic careers. The most common courses and exams taken by middle school students and ninth graders are Human Geography and Spanish language courses and exams. **Table 5** presents AP course and exam participation and performance for students in grades 8 and 9.

Table 5. AP Course and Exam Participation and Performance, 8th - 9th grade, 2015–2016 and 2016–2017

2010 2011						
	2015-	2016–	2015–	2016–	2015-	2016-
	2016	2017	2016	2017	2016	2017
					Grades	Grades
	Grade 8	Grade 8	Grade 9	Grade 9	8 & 9	8 & 9
AP Course Enrollment	534	510	2,216	2,460	2,750	2,970
AP Course Completion (N)	490	472	1,789	1,911	2,279	2,383
AP Course Completion (%)	92	93	81	78	83	80
AP Exams Taken (N)	480	460	1,708	1,818	2,188	2,278
AP Scores > 3 (N)	427	407	396	509	823	916
AP Scores > 3 (%)	89	88	23	28	38	40

Source: End of Year Chancery Grades data files, June 6, 2017;

2017 College Board AP data file; retrieved August 14, 2017

End of Year Chancery Grades data files, June 6, 2016;

2016 AP Exam Source: 2016 College Board AP data file, retrieved October 5, 2016

Notes: Table displays a duplicated count of exams taken by students enrolled in grades 8 and 9 only. AP course completion is defined as enrolled in an AP course and earning a passing grade at the end of the course (70 or higher) for each semester that is required. The End of Year Chancery Grades data files were matched to the AP data file.

Table 5 indicates the following:

- In 2016–2017, 2,970 district eighth and ninth graders enrolled in an AP Course, compared to 2,750 district eighth and ninth graders in 2015–2016. In 2016–2017, 2,383 (80 percent) of those students completed the course, compared to 2,279 (83 percent) in 2015–2016.
- In 2016–2017, 40 percent of AP Exams were scored 3 or higher, reflecting an **increase** of two percentage points from 2015–2016.

Table 6, p. 21 presents the type of AP Exams taken by 8th graders only. AP Exam participation and performance for 8th graders by exam and campus are presented in **Appendix F** (p. 34) for the past two years.

Table 6. AP Exam Participation and Performance by Exam, 8th grade, 2017

	# of AP Exams	% of AP	# of AP	% of AP
AP Exam Category	Taken	Exams Taken	Scores_>3	Scores ≥ 3
Spanish Language & Culture	542	100%	458	85%
Total	542	100%	458	85%

Source: 2017 College Board AP electronic data file; retrieved August 14, 2017

Note: This table displays a duplicated count of exams taken by students enrolled in 8th grade and grade unknown (N=5).

Table 6 indicates the following:

• All eighth grade students for 2017 took the AP Spanish Language & Culture exams and 85 percent earned a score of 3, 4, or 5.

AP Scholar Awards

The AP Program offers several AP Scholar Awards to recognize high school students who have demonstrated college-level achievement through AP courses and exams. This achievement is acknowledged on any score report that is sent to colleges the following fall. Notifications about AP Scholar Awards are sent to students and schools in October of each year. The following AP Awards are offered by the College Board: AP Scholar, AP Scholar with Honor, AP Scholar with Distinction, State AP Scholar, National AP Scholar, AP International Diploma, AP Capstone Diploma, and AP Seminar and Research Certificate. The criteria for receiving these awards are shown in **Appendix G-1** (p. 35).

Appendix G-2 (p. 36) shows the number and category of AP Awards earned by campus in 2016 and 2017. Key findings include:

- The number of AP Scholar Awards earned by HISD students **increased** by nine percent, or 165 Awards, to 2,083 in 2017 from 1,918 in 2016.
- Almost two-thirds of all AP Awards were earned by students at three campuses: Bellaire HS (25 percent), Carnegie Vanguard HS (22 percent), and DeBakey HS (15 percent).

Conclusion

The purpose of this report was to examine the participation and performance of HISD students on Advanced Placement exams and courses. The investigation was also designed to supply a comparison of current year AP results with those from the previous year.

The results from this report indicate that the number of HISD middle and high school students taking AP Exams and earning a score of 3 or higher is increasing, and, the proportion of students who earn a score of 3 or higher has **increased** from the previous year. Relatedly, the success rate on the exams students are most likely to take, History & Social Sciences and English, is lower than that of other exams. While the number of students from historically underrepresented groups (such as African Americans, Hispanics, and those who are economically disadvantaged) who take AP Exams is increasing, they typically are less likely to pass AP Exams compared to their White and Asian counterparts. Additionally, the majority of AP Exams are taken by students from concentrated high schools in the district.

AP course participation has remained constant. Approximately 31 percent of students enrolled in grades 10–12 took at least one AP course—reflecting a **decrease** of two percentage-points from last year. African American and American Indian students experienced the greatest percentage-point increases in AP course completion. An analysis of how AP course performance compares with AP Exam performance showed that students who earned an A in AP Sciences courses were only about half as likely to pass the corresponding AP Exam. Meanwhile, the majority of students who failed an AP World Languages & Culture course were still likely to pass the corresponding AP Exam.

The number of AP Awards presented to HISD students increased again this year. Many more HISD students are being exposed to Advanced Placement courses and to the opportunity to earn college credits while still enrolled in high school.

Methods

Data Limitations

The College Board receives Advanced Placement (AP) data from the Educational Testing Service (ETS). It is important to understand that the extracts are made from a dynamic database that changes from one day to the next as scoring and adjustments to individual student records progresses in the months following the examination administration. Therefore, discrepancies may exist between the three sources of data that are used for AP Exam reporting purposes, namely the College Board Reports (hard copy), the AP Online Score Reports, and the College Board (electronic) data file based on the time of the data extract. AP data for prior years were copied from HISD's previous AP report (2015–2016, Superintendent memo dated January 13, 2017). AP data for the previous year were extracted on October 5, 2016. AP data for the current school year (2016–2017) were extracted from the College Board on August 14, 2017 in the form of electronic files.

To provide disaggregated student level demographic information, the College Board AP electronic databases were matched on economic status, special education status, gifted and talented status, immigrant status, and English Language Learner (ELL) status to the Chancery data file (date of extraction: May 1, 2017). Self-reported data were used for race/ethnicity, gender, grade level, and campus. Students who were identified as enrolled in AP courses were required to be active students as of the end-of-year (EOY) database and to have completed the course with a final semester grade or final grade in both the fall and spring semesters of a full-year course. The number of AP courses offered by campus included all AP courses in which at least one student was enrolled. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate (IB) Program in addition to Advanced Placement (AP). As such, it is possible for students at these campuses to take an IB course in one subject—instead of the AP course—and to also take the AP Exam in the same subject.

Participants

AP course enrollment data from Chancery and AP Exam data from the College Board were analyzed. Stateand national-level data, including the number of AP subject tests taken along with the percentage of exams with scores 3 or higher, were extracted from the College Board AP Program Research "School Report of AP Exams 2010–11 through 2015–16 (By State)." For 2017, state and national results were extracted from "District Summary with Comparable Groups," on July 25, 2017.

AP course participation rates for sophomores, juniors and seniors were calculated by dividing the number of students enrolling in at least one AP course by the Chancery EOY snapshot of enrollment for the same group. Participation rates for sophomores, juniors and seniors were calculated across the district, by campus, and by student group.

The number of students eligible to complete AP courses consists of those enrolled in both semesters of a two-semester course as per the Chancery EOY database and/or those enrolled in a one-semester course. Completion percentages are based on the number of students eligible to complete and the number completing an AP course.

Course completion was determined by counting those students who received a semester average grade of 70 or higher for the final grade. Once this number was computed, it was divided by the total number of students who were eligible to complete an AP course.

To determine the percentage of AP Exams scored 3 or higher by race/ethnicity, the total number of tests scoring a 3 or higher was divided by the total number of tests taken (for which a score was received) for each racial/ethnic category.

AP Exams were counted if they had received a score at the time of data retrieval. Any AP Exam without a corresponding score was excluded from analysis.

The District Scholar Summary Report downloaded from the College Board online score report tool on October 6, 2017 was used to report the total number of students who earned an AP Scholar Award.

Data Collection and Analysis

The College Board reported test performance, along with demographic information supplied by the students to HISD. These data included results for all HISD schools that had participating students. These data, together with enrollment data from the Chancery database, were analyzed. Analyses were conducted using the aggregated data by grade, race/ethnicity, and gender. Results were also analyzed by campus and district-wide. The analysis used self-reported demographic data, with the exception of ELL, special education, immigrant, gifted and talented, and economic status, for which data were extracted from Chancery on May 1, 2017. Only exams that had received a score by the time the data was extracted on August 14, 2017 were included in this analysis as well as campuses that had not provided semester grades by June 6, 2017.

Appendix A

2016–17 Advanced Placement Exams by Category

Arts (5)

- Art History
- Music Theory
- Studio Art: 2-D Design
- Studio Art: 3-D Design
- Studio Art: Drawing

AP Capstone (2)

- Seminar
- Research

English (2)

- English Language and Composition
- English Literature and Composition

History & Social Science (9)

- Comparative Government and Politics
- European History
- Human Geography
- Macroeconomics
- Microeconomics
- Psychology
- United States Government and Politics
- United States History
- World History

Math & Computer Science (5)

- Calculus AB
 - Calculus BC
 - Computer Science A
 - Computer Science Principles
- Statistics

Sciences (7)

- Biology
- Chemistry
- Environmental Science
- Physics 1
- Physics 2
- Physics C: Electricity and Magnetism
- Physics C: Mechanics

World Languages & Cultures (8)

- Chinese Language and Culture
 - French Language and Culture
 - German Language and Culture
 - Italian Language and Culture
- Japanese Language and Culture
- Latin
- Spanish Language and Culture
- Spanish Literature and Culture

 $Source: College\ Board,\ AP\ Central,\ Retrieved\ from\ \underline{https://apstudent.collegeboard.org/apcourse}$

Appendix B

2017 Mean Scores							
Subject	N	HISD	Texas	Global			
Research	215	2.71	2.77	3.18			
Seminar	342	2.92	3.10	3.13			
Art History	117	2.12	2.85	2.94			
Music Theory	87	2.60	2.94	3.02			
Studio Art: 2-D Drawing Portfolio	119	3.03	3.42	3.53			
Studio Art: 3-D Drawing Portfolio	23	2.22	2.99	3.14			
Studio Art: Drawing Portfolio	50	2.88	3.52	3.55			
Eng Language & Composition	3,403	1.92	2.40	2.77			
Eng Literature & Composition	1,949	1.97	2.43	2.69			
Comparative Government & Politics	96	1.40	2.48	3.25			
European History	89	2.69	2.98	2.81			
Human Geography	2,094	1.72	2.24	2.54			
Macroeconomics	1,578	1.81	2.27	2.89			
Microeconomics	197	1.82	2.36	3.26			
Psychology	709	2.46	2.67	3.06			
US Government & Politics	1,824	1.82	2.18	2.58			
US History	2,772	1.93	2.28	2.65			
World History	3,519	2.01	2.50	2.77			
Calculus AB	1,266	2.13	2.57	2.93			
Calculus BC	311	3.59	3.61	3.79			
Comp Sci A	188	2.68	3.06	3.15			
Comp Sci Principles	413	2.26	3.05	3.09			
Statistics	708	2.59	2.57	2.72			
Biology	823	2.70	2.61	2.89			
Chemistry	441	2.08	2.35	2.67			
Environmental Science	1,076	2.06	2.48	2.67			
Physics 1	1,281	1.51	1.87	2.40			
Physics 2	89	2.71	2.67	2.97			
Physics C: Electricity & Magnetism	124	1.72	3.14	3.49			
Physics C: Mechanics	188	2.27	3.51	3.71			
Chinese Language & Culture	56	3.43	4.26	4.35			
French Language & Culture	56	3.34	2.84	3.28			
German Language & Culture	18	3.67	3.00	3.38			
Italian Language & Culture	42	3.93	3.94	3.19			
Japanese Language & Culture	9	3.89	3.01	3.61			
Latin	7	2.71	2.64	2.94			
Spanish Language & Culture	1,583	3.45	3.44	3.59			
Spanish Literature & Culture	374	2.89	2.88	3.12			
Total Exams	28,236	2.13	2.51	2.86			

Sources: 2017 College Board AP electronic data file; retrieved August 14, 2017; 2017 Global mean scores: College Board, District Summary with Comparable Groups. Retrieved from the College Board online score report tool, August 23, 2017

Appendix C-1

AP Exam Participation and Performance by Campus, 9th - 12th grade, 2016 and 2017

Ranked by number of exams taken in 2017

		2	2016				2017	
	# Students	# Exams	# Exams	% Exams	# Students	# Exams	# Exams	% Exams
Campus	Tested	Taken	Scoring ≥3	Scoring ≥3	Tested	Taken	Scoring ≥3	Scoring ≥3
Bellaire HS	977	2,814	2,159	77	947	2,727	2,136	78
Carnegie HS	604	1,856	1,338	72	620	2,034	1,444	71
Lamar HS	1,767	1,842	188	10	1,905	2,033	263	13
Westside HS	986	1,607	781	49	1,159	1,943	881	45
Heights HS	800	1,734	214	12	802	1,562	266	17
Chavez HS	629	1,247	251	20	772	1,520	308	20
DeBakey HS	439	1,222	1,110	91	510	1,381	1,249	90
Northside HS	397	784	112	14	430	939	102	11
Westbury HS	505	892	97	11	518	892	154	17
Eastwood Acad	333	675	244	36	330	796	246	31
E-STEM West HS	299	639	34	5	305	793	17	2
HS Perf. Vis. Arts	281	688	507	74	307	787	637	81
Energy Inst HS	202	390	102	26	329	784	163	21
Challenge ECHS	422	829	239	29	444	770	206	27
N. Houston ECHS	351	572	73	13	371	710	114	16
Houston MSTC HS	483	821	104	13	426	683	124	18
Hou Acad. Intl.	392	504	72	14	407	532	80	15
Waltrip HS	434	859	106	12	312	530	117	22
Sharpstown Intl	253	439	168	38	276	513	185	36
HS for Law & Justice	306	765	68	9	223	449	33	7
Wisdom HS	233	356	28	8	242	447	24	5
Austin HS	281	389	45	12	314	430	81	19
Madison HS	277	439	29	7	233	427	30	7
Sharpstown HS	336	575	181	31	292	403	178	44
Milby HS	272	494	102	21	233	396	53	13
Sterling HS	272	404	29	7	259	391	26	7
YWCPA	123	352	18	5	138	376	42	11
Washington HS	200	363	30	8	174	321	5	2
Yates HS	123	182	6	3	137	246	0	0
Leland YMCPA	93	213	38	18	95	243	43	18
Tx Conn. Acad.	81	153	81	53	122	241	121	50
East ECHS	226	279	124	44	186	233	50	21
Furr HS	130	155	7	5	182	223	26	12
Mount Carmel Acad.	70	154	21	14	99	195	20	10
E-STEM Central HS	95	121	1	1	124	192	0	0
Scarborough HS	135	187	18	10	128	177	28	16
South ECHS	73	95	19	20	140	175	26	15
Worthing HS	83	132	0	0	104	157	6	4
Jordan HS	189	278	1	0	98	132	6	5
Jones HS	74	103	10	10	99	111	16	14
North Forest HS	50	74	0	0	72	111	0	0
Kashmere HS	33	78	1	1	54	109	1	1
Wheatley HS	66	69	1	1	85	103	0	0
Liberty HS	5	5	1	20	7	7	3	43
Long Acad	36	39	7	18	7	7	3	43
Bechnut Acad.	30		-	10	1	5	*	*
HISD Totals	14,416	26,868	8,765	33	15,018	28,236	9,513	34
THOD TOtals	14,410	20,000	0,700	00	10,010	20,200	3,010	54

Sources: 2017 College Board AP Electronic data file, retrieved August 14, 2017;

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Notes: *Masked # tested < 5. - - denotes no data available. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate Program in addition to Advanced Placement. This table displays an unduplicated count of students tested and a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level not indicated (N=749).

Appendix C-2

AP Exam Participation and Performance by Campus and 2017 Board Member District, 9th - 12th grade, 2016 and 2017

District Heights HS				20	16	2017					
District Heights HS			# Students	# Exams	# AP	% AP	# Students	# Exams	# AP	% AP	
District Heights HS 800 1,734 214 12 802 1,562 266 1											
District Houston MSTC HS 483 821 104 13 426 683 124 1											
District N. Houston ECHS 351 572 73 13 371 710 1144 110										17	
District Northside HS 397 784 112 14 430 939 102 1										18	
District Scarborough HS										16	
District Waltrip HS										11	
District										16	
District II										22	
District II						_				5	
District North Forest HS 200 363 30 8 174 321 5										1	
District Washington HS										18	
District Wheatley HS	District II									0	
District III		Washington HS			30	8				2	
District III		Wheatley HS				-			_	0	
District III	District III									20	
District IV DeBakey HS 439 1,222 1,110 91 510 1,381 1,249 99 10 1,510 1,381 1,249 99 10 1,510 1,381 1,249 99 10 1,510 1,381 1,249 99 10 1,510 1,381 1,249 99 1,510 1,381 1,249 99 1,510	District III	Milby HS								13	
District IV	District III	Mount Carmel Acad.								10	
District IV Jones HS 74 103 10 10 99 111 16 15	District IV	DeBakey HS			1,110		510	1,381	1,249	90	
District IV Sterling HS 272 404 29 7 259 391 26	District IV	Hou Acad. Intl.	392	504	72	14	407	532	80	15	
District IV Yates HS 123 182 6 3 137 246 0	District IV	Jones HS	74	103	10	10	99	111	16	14	
District IV YWCPA 123 352 18 5 138 376 42 17 1842 18 18 18 18 18 18 18 1	District IV	Sterling HS	272	404	29	7	259	391	26	7	
District V Beechnut Acad. 1 5 *	District IV	Yates HS	123	182	6	3	137	246	0	0	
District V Bellaire HS 977 2,814 2,159 77 947 2,727 2,136 77 70 70 70 70 70 70 7	District IV	YWCPA	123	352	18	5	138	376	42	11	
District V Challenge ECHS 422 829 239 29 444 770 206 22	District V	Beechnut Acad.					1	5	*	*	
District V E-STEM Central HS 95 121 1 1 124 192 0	District V	Bellaire HS	977	2,814	2,159	77	947	2,727	2,136	78	
District V E-STEM West HS 299 639 34 5 305 793 17	District V	Challenge ECHS	422	829	239	29	444	770	206	27	
District V	District V	E-STEM Central HS	95	121	1	1	124	192	0	0	
District V Long Acad 36 39 7 18 7 7 3 4	District V	E-STEM West HS	299	639	34	5	305	793	17	2	
District VI	District V	HS Perf. Vis. Arts	281	688	507	74	307	787	637	81	
District VI	District V	Long Acad	36	39	7	18	7	7	3	43	
District VI	District VI	Sharpstown HS	336	575	181	31	292	403	178	44	
District VII	District VI	Sharpstown Intl	253	439	168	38	276	513	185	36	
District VII	District VI	Westside HS	986	1,607	781	49	1,159	1,943	881	45	
District VII Wisdom HS 233 356 28 8 242 447 24	District VII	Lamar HS	1767	1842	188	10	1905	2033	263	13	
District VIII Austin HS 281 389 45 12 314 430 81 14	District VII	Liberty HS	5	5	1	20	7	7	3	43	
District VIII Carnegie HS 604 1856 1338 72 620 2034 1444 77	District VII		233	356	28	8	242	447	24	5	
District VIII East ECHS 226 279 124 44 186 233 · 50 2 District VIII Eastwood Acad 333 675 244 36 330 796 246 3 District VIII Energy Inst HS 202 390 102 26 329 784 163 2 District VIII Furr HS 130 155 7 5 182 223 26 1 District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII	Austin HS	281	389	45	12	314	430	81	19	
District VIII Eastwood Acad 333 675 244 36 330 796 246 3 District VIII Energy Inst HS 202 390 102 26 329 784 163 2 District VIII Furr HS 130 155 7 5 182 223 26 1 District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII	Carnegie HS	604	1856	1338	72	620	2034	1444	71	
District VIII Energy Inst HS 202 390 102 26 329 784 163 2 District VIII Furr HS 130 155 7 5 182 223 26 1 District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII	•	226	279	124	44	186	233 .	50	21	
District VIII Furr HS 130 155 7 5 182 223 26 1 District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII	Eastwood Acad	333	675	244	36	330	796	246	31	
District VIII Furr HS 130 155 7 5 182 223 26 1 District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII	Energy Inst HS							163	21	
District VIII HS for Law & Justice 306 765 68 9 223 449 33	District VIII							223	26	12	
										7	
DIOLIDE VIII I LOUGH FIO	District VIII	Reach HS									
										50	
										7	
										15	
										17	
·										4	
										34	

Sources: 2017 College Board AP Electronic data file, retrieved August 14, 2017.

HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Notes: *Masked # tested < 5. - - denotes no data available. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate Program in addition to Advanced Placement. This table displays an unduplicated count of students tested and a duplicated count of exams taken by students enrolled in grades 9-12 and by students with grade level not indicated (N=749).

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Appendix D

AP Exam Participation and Performance by Exam and Campus, 9th - 12th grade, 2017

			Houston ISD	Austin HS	Bellaire HS	Carnegie HS	Challenge ECHS	DeBakey HS	East ECHS	Energy Inst HS	E-STEM Central HS	E-STEM West HS	Heights HS	Hou Acad. Intl.	Houston MSTC HS	HS for Law & Justice	HS Perf. Vis. Arts	Jordan HS Jones HS	Kashmere HS	Lamar HS	Leland YMCPA	Long Acad	Madison HS	Mount Carmel Acad.	N. Houston ECHS	North Forest HS	Northside HS	Scarborough HS	Sharpstown HS	South ECHS	Sterling HS	Tx Conn. Acad.	wasnington HS	Westbury HS	Westside HS	Wheatley HS	Wisdom HS	Worthing HS	YWCPA
	Art History	#Exams>=3	42		1-	4 21														0							0			0		*	6						
		# of Exams	117		2	2 22														20							22			17		1	13						
		% Exams>=3	36		6	4 95														0							0			0		* .	46						
	Music Theory	# Exams>=3	37			7			0								26		Т				0				0			*	*					4			
		# of Exams	87		13	2			8								26						12				17			2	1					9			
		% Exams>=3	43		5	3			0								100						0				0			±	*				4	14			
	Studio Art: 2-D Design Portfolio	# Exams>=3	82			7 *		6	6				3		20	2			Τ			Т		*	Т		*						4	1	0 2	7		\top	\Box
Arts		# of Exams	119			7 3		6	6				5		33	9								1			1						12	1	3 2	9			+
		% Exams>=3	69		10	*		100)				60		61	22								±			*						33	7	7 9	3			
	Studio Art: 3-D Design Portfolio	# Exams>=3	6												3	,			Τ						Т					Т			*	Т		*		\top	\Box
		# of Exams	23												18	3																	2			3			
		% Exams>=3	26												17																		*			*			
	Studio Art: Drawing Portfolio	#Exams>=3	29	5		s *		,		*		Т	*						Т					*	Т			*	Т	Т			1	Т	*	9	0	\top	\Box
		# of Exams	50	8		6 1		1		3			4											3				2					5		3	9	5		
		% Exams>=3	58	63	10	*		,		*			*											*				*					20		* 10	0	0		
	Research	# Exams>=3	108			84		5 16	3	2																			*									\top	1
		# of Exams	215			119		24 16	5	16																			1										39
Capstone		% Exams>=3	50			71		21 100)	13																			±										3
tone	Seminar	# Exams>=3	247			125		22 62	2	9										*														1	0	7		\top	11
		# of Exams	342			150		38 62	2	9										1														2	20	9			53
		% Exams>=3	72			83		58 100)	100										*														5	0 7	8			21
	English Language & Composition	# Exams>=3	873	2	* 19	124	47	40 94	1	3 12	0	0	1	7 1	1	1	74		4	0 64	5		0	1	6 16	0	2	1	2	9 1	0	31		1	8 11	4 0	0	0	0 1
		# of Exams	3,403	64	1 21	4 148	136 2	32 101	(E	5 89	19	80	42 15	0 22	105	39	83	5	2 1	3 516	34		50	35 4	0 133	3 21	115	12	25 (3 20	35	57	2	8 10	8 28	1 24	59	29 4	2 21
Eng		% Exams>=3	26	3	* 8	9 84	35	17 93	3 2	0 13	0	0	2	5 5	1	3	89		8	12	15		0	3 1	5 12	2 0	2	8	8	14 5	0	54		4	7 4	1 0	0	0 (0 5
English	English Literature & Composition	# Exams>=3	509	3	14	86	17	9 15	5 1	3 7	*	1	0	6 0	2	3	92		0	٠ .	0		0	3	0	0	2	0	5	4	0	15	18	1	3 5	7 0	0	1 (0
		# of Exams	1,949	30	18	1 127	23 1	00 15	5 4	0 58	3	71	20 18	1 13	56	25	100	3	8 1	1 1	11		45	47 1	7	20	94	9	23	33	46	30	92 5	0 4	5 18	8 22	13	29 4	2
		% Exams>=3	26	10	8	1 68	74	9 100) 3	3 12	*	1	0	3 0	4	12	92		0	0 *	0		0	6	0	0	2	0	22	12	0	50	20	2	7 3	0 0	0	3 (0

Source: 2017 College Board AP data file; retrieved August 14, 2017

Notes: Table displays duplicated count of exams taken by students enrolled in grades 9--12 and by students with grade level not indicated (N=749). *Masked for # tested < 5.

Appendix D (Continued)

AP Exam Participation and Performance by Exam and Campus, 9th - 12th grade, 2017

			Houston ISD	Austin HS	Bellaire HS	Camegie HS	Challenge ECHS	Chavez HS	DeBakey HS	East ECHS	Eastwood Acad	Energy Inst HS	E-STEM Central HS	FurrHS	Heights HS	Hou Acad. Intl.	Houston MSTC HS	HS for Law & Justice	HS Perf. Vis. Arts	Jones HS	Kashmere HS	Lamar HS	Leland YMCPA	Long Acad	Madison HS	Milby HS	N. Houston ECHS	North Forest HS	Northside HS	Scarborough HS	Sharpstown HS	Shametown Int	Sterling HS	Tx Conn. Acad.	Waltrip HS	Washington HS	Westside HS	Wheatley HS	Wisdom HS	Worthing HS	Vator HS
1	Comparative Government and Politics	# Exams>=3	11			* ;	5							0																		5			\top	T					T
		# of Exams	96			1 9	9						4 6	9																		13									
		% Exams>=3	11			* 56	6						*	0																	;	38									
	European History	#Exams>=3	42		1	7 1	7	4			2						0		Т	Т	T						Т	Т			2		Π		\top	Т	\top	\Box	\Box	\top	٦
		# of Exams	89		1	8 19	9	19			11						12														10										
		% Exams>=3	47		9	4 8	9	21			18						0														20										
	Human Geography	#Exams>=3	454	0	2	9 12	9 23		36	6	10	12	0	0	21	11	1			0		82				0	;	3	1	0	-	27 3	0	8	Т	0	1 51	1		\top	П
		# of Exams	2,094	23	3	4 17	8 125		38	54	107	17	54 7	7	75	127	7 21			16		604				19	13	5	29	15		51 19	54	13	- 4	46 4	40 123	3			
		% Exams>=3	22	0	8	5 7	2 18		95	11	9	71	0	0	28	9	5			0		14				0	:	2	3	0		53 16	0	62		0	3 41	1			
	Macroeconomics	#Exams>=3	384		14	6 3	9 1	1	69		7	4		(0 4		6	3	60	0	0		0		0	1	3		1	1	9	1	0	3	3	1	1 19	9 0	0	\top	0
		# of Exams	1,578		22	7 9	9 29	35	82		30	59			6 138		27	65	78	7	11		11		40	69 2	7		61	10	31	10	44	14	47 4	44 5	59 99	9 6	54		30
		% Exams>=3	24		6	4 3	9 3	3	84		23	7		(0 3		22	5	77	0	0		0		0	1 1	1		2	10	29	10	0	21	6	2	2 19	9 0	0		0
	Microeconomics	# Exams>=3	50		4	5	5															*							0						\top	Τ					Ī
		# of Exams	197		5	6	5						3 7	2								1							60						\top						
		% Exams>=3	25		8	0 10	0						±	0								±							0												
	Psychology	# Exams>=3	312	*	_* 9	6 1	5	2	124		5				0 4	,		1	46		*								2	0				8	Т	Т	ŧ	8	1		Ī
		# of Exams	709	1	1 11	2 2	1	47	134	18	36			4	1 26	3	3 26	28	50		1		15						39	13				21	17		23	3	36		
		% Exams>=3		*	* 8	6 7	1	4	93	0	14			(0 15	,	* 0	4	92		*		0						5	0				38	0		35	5	3		
	United States Government and Politics	# Exams>=3	446		13	6 8	5 4	0	69		4	6			5		2	5	58	0		4	0		1	1	2	0	1	2	1	5 ,	. 0	5	2	1	4 43	3	0		0
		# of Exams	1,824		24	1 12	8 9	54	82		27	65			143		28	66	80	11	12	140	11		41	69 2	6	16	45	12	27	31 2	42	13	47 4	15	71 136	6	45		30
		% Exams>=3	24		5	6 6	6 44	0	84		15	9			3		7	8	73	0	0	3	0		2	1	8	0	2	17	4	16	0	38	4	2	6 32	2	0		0
	United States History	#Exams>=3	736	0	<u>,</u> 21	8 10	3 27	24	98	3	18	13	0	0	6	5	2	1	61	3	1 0		5		0	1	0 1	2 0	0	0	3	9 (0	19	1	0 1	11 88	8 0	2	0	0
		# of Exams	2,772	21	1 30	3 14	7 122	211	131	7	55	85	20 8	33	96	113	57	42	74	64 3	2 8		34		47	17 1	9 11	1 38	77	6	46	38 17	39	52	40 3	32 !	99 186	6 23	77	27 2	29
		% Exams>=3	27	0	* 7	2 7	0 22	11	75	43	33	15	0	0	6	4	4	2	82	5	3 0		15		0	6	0 1	1 0	0	0	7 :	24 (0	37	3	0 1	11 47	7 0	3	0	0
	World History	# Exams>=3	933	0	17	6 13	3 22	29	120		14	35	0	0	1 17	8	3 0	4	49		0	108	14		1	4	3 2	0	1	1	3 :	26 3	1		1	0	4 129	9 0	2	0	0
		# of Exams	3,519	71	20	3 16	4 112	275	131		60	104	44 6	34 2	9 91	123	70	78	49		19	551	46		63	41 2	1 5	4	83	21	39	57 76	58		37 :	38 12	22 356	6 28	39	25 2	23
		% Exams>=3	27	0	8	7 8	1 20	11	92		23	34	0	0 :	3 19	7	7 0	5	100		0	20	30		2	10 1	4 3	7	1	5	8 4	46 4	2		3	0	3 36	6 0	5	0	0

Source: 2017 College Board AP data file; retrieved August 14, 2017

Notes: Table displays duplicated count of exams taken by students enrolled in grades 9--12 and by students with grade level not indicated (N=749). *Masked for # tested < 5.

Appendix D (Continued)

AP Exam Participation and Performance by Exam and Campus, 9th - 12th grade, 2017

			Houston ISD	Austin HS	Bellaire HS	Carnegie HS	Challenge ECHS	Chavez HS	DeBakey HS	East ECHS	Energy Inst HS	E-STEM Central HS	E-STEM West HS	FurrHS	Heights HS	Hou Acad. Intl.	HS for Law & Justice	HS Perf. Vis. Arts	Jones HS	Jordan HS	Kashmere HS	Lamar HS	Leland YMCPA	Liberty HS	Long Acad	MIDY ITS	Mount Carmel Acad.	N. Houston ECHS	North Forest HS	Northside HS	Scarborough HS	Sharpstown HS	Sharpstown Intl	Sterling HS	Tx Conn. Acad.	Waltrip HS	Washington HS	Westbury HS	Westside HS	Wheatley HS	Wisdom HS	Worthing HS	YWCPA
	Calculus AB	# Exams>=3	418	2	74	44	16	11	110	5 1	3	0 ,	0	2	3	0	0 (37	,	1	*	2	0	3	3	0	2 (3 3		13	ż	3	6	Ť	0 1	0 13	3 0	0	35		0		0 0
	Ab	# of Exams	1,266	12	82	48	39	94	125	15 3	3 4	4 3	72	18	23	8	9 2	6 41	1	8	3	175	6	7	7 1		9 15	5 34		20	3	9	32	2	6 1	2 2	16	21	92		14		8 13
		% Exams>=3	33	17	90	92	41	12	88	33 3	19	0 *	0	11	13	0	0 (90)	13	*	1	0	43	43	0 2	22 40	9		65	*	33	19		0 8	3 48	3 0	0	38		0		0 0
	Calculus BC	# Exams>=3	230	Т	102	22		8	69		5	2			*				Т			1		Т		Т		1		4			4	Т	Т	*	,		7		Т		Т
	ВС	# of Exams	311		113	22		20	69		9	8			3							22						13	1	11			8			2	1		10				
Mart		% Exams>=3	74		90	100		40	100	5	6 2	5			*							5						8	3	36			50			*	,		70				
Math & Computer Science	Computer Science A	# Exams>=3	103		29	14	Т	*	10		7 1	2			23	Т	0		Т	Т			Т	Т	\top	Т			Т				Т	Т	T	2	,		6		Т		Т
를	Science A	# of Exams	188		37	21		4	11	1	8 2	6			34	2	20									t										6	1		10				
or Sc		% Exams>=3	55		78	67		*	91	3	9 4	6			68		0																		3	3	,		60				
ience	Computer	# Exams>=3	148	0	49			2		1	9				27		6		Т				6	Т	Т	Т	*	12		2	5	*	Т	Т	0	Т	Т	6	4		8	Т	0 0
	Science Principles	# of Exams	413	7	54			11		9	16				57	3	32						16				4	18		28	15	2		1	2			16	5		18	1	5 7
		% Exams>=3	36	0	91			18		2	20				47	1	9						38				*	67	,	7	33	*			0			38	80		44		0 0
	Statistics	# Exams>=3	338	2	106	90	2		50	1 1	2	1				0	1	1 1					4	Т		0	0	5	*	1		Т	13	Т	Т	* 23	3	Т	22		Т		0
		# of Exams	708	15	132	142	34		51	25 2	16	9				14 1	3 10	5 1	1				9		1	1 1	11	26	2	27			46			4 6			25				8
		% Exams>=3	48	13	80	63	6		98	4 4	6 1	1				0	8 (5 100)				44			0	0	19	*	4			28			* 34	3		88				0
	Biology	# Exams>=3	450	2	116	36	10	0	140		7	9			18	1	0 (0 40					1	Т		Т	1 (0 0	0	2	0	*	11	Т		7 1:	3 0		33		0		3
		# of Exams	823	11	124	45	20	28	157	1	0 2	6			58	14	9 13	3 46	3				14				6 13	3 12	14	17	33	1	18			8 37	7 17		45		12		15
		% Exams>=3	55	18	94	80	50	0	89	7	0 3	5			31	7	0 (0 87	7				7			1	17 (0	0	12	0	*	61		8	8 35	5 0		73		0		20
	Chemistry	# Exams>=3	150	0	33	28	1	1	41		0	1			1		0	20					*	Т		0	* () 1		0	0	Т		0	Т	*	,	1	20		0		0
		# of Exams	441	14	39	52	19	17	41		8	8			31	2	24	28	3	1		1	4		1	5	1 17	7 9		19	8	+		7		1	3	15	28		24		7
		% Exams>=3	34	0	85	54	5	6	100		0 1	3			3		0	71		*		*	ź			0	* (11		0	0			0		×	,	7	71		0		0
	Environme ntal	# Exams>=3	325	0	* 117	49		12	30	2	2	8		Т	8		7 :	2	Т		0			Т		0				1		0	1	Т	Т	1	,	1	59		Т	Т	0 1
	Science	# of Exams	1,076	14	1 176	68		72	31	47	14	0 21	98	16	40	2	23 13	3			15				2	2				22		11	24			36	6	41	98			2	27 20
		% Exams>=3	30	0	* 66	72		17	97	4	2	0 0	0	0	20	3	80 1	5			0					0				5		0	4			19)	2	60				0 5
တ္ဆ	Physics 1	# Exams>=3	183	0	* 24	63	2	2	47	0	0	0 0	0	0	6	0	1	35			0		1	Т		0	0	0		0			\top	Т	Т	* (1			0	0	0
Sciences		# of Exams	1,281	43	1 42	143	68	63	55	16 5	0	6 21	87	6	150	5 1	4 19	9 86	3		16		25		3	1 1	17	109		36						2 20)	74			35	27	14
8		% Exams>=3	14	0	* 57	44	3	3	85	0	0	0 0	0	0	4	0	7 (0 41			0		4			0	0	0		0						* ()	1			0	0	0
	Physics 2	# Exams>=3	44						24			Т						18	3	Т			Т	Т				2		0		Т	Т	Т	Т	Т	Т				Т		Т
		# of Exams	89						24									24	1							1		14		26													+
		% Exams>=3	49						100									75	5							*		14		0													
	Physics C	# Exams>=3	27		12	8								T	1		T								T	T							T	T	Т	*	П		5				
	Electricity &	# of Exams	124		21	24									65				\vdash							$^{+}$						+				1			13				+
	Magnetis m	% Exams>=3	22		57	33									2																					*			38				
	Physics C	# Exams>=3	74	1	44	15								T	3		*		П						T	T							T	T	T	*	П	0	9			T	Т
	Mechanics	# of Exams	188		60										65		1		H							$^{+}$						+				1			15				+
		% Exams>=3	39	11	73	60									5		*																			*		0	60				

Source: 2017 College Board AP data file; retrieved August 14, 2017; Notes: Table displays duplicated count of exams taken by students enrolled in grades 9--12 and by students with grade level not indicated (N=749).
*Masked for # tested < 5.

Appendix D (Continued)

AP Exam Participation and Performance by Exam and Campus, 9th - 12th grade, 2017

			Houston ISD	Austin HS	Bellaire HS	Camegie HS	Challenge ECHS	Chavez HS	DeBakey HS	East ECHS	Energy Inst HS	E-STEM Central HS	E-STEM West HS	FurrHS	Heights HS	Hou Acad. Intl.	HS for Law & Justice	HS Perf. Vis. Arts	Jones HS	Jordan HS	Lamar HS Kashmere HS	Leland YMCPA	Liberty HS	Madison HS Long Acad	Milby HS	Mount Carmel Acad.	N. Houston ECHS	North Forest HS	Scarborough HS	Sharpstown HS	Sharpstown Inti	South ECHS	Sterling HS	Ty Conn Acad	Washington HS	Westbury HS	Westside HS	Wheatley HS	Wisdom HS	Worthing HS	YWCPA
	Chinese Language and Culture	# Exams>=3	37		30	,			ź					*		0						±									*						*				1
		# of Exams	56		35	2	2		1					1		10						1									2						3				1
		% Exams>=3	66		86		t		ż					±		0						±									*						*				1
	French Language and Culture	#Exams>=3	41		18	17	7	0	1																												5	Т	Т	Т	Т
		# of Exams	56		20	18	3	6	1																												11			_	
		% Exams>=3	73		90	94	4	0	100																												45				
	German Language and Culture	# Exams>=3	17		17																				Т													Т	Т	\top	Т
		# of Exams	18		18																																		\top		
		% Exams>=3	94		94																																				
₩or	Italian Language and Culture	# Exams>=3	42		42																				Т													\top	Т	Т	Т
<u> </u>		# of Exams	42		42																																		\top		
World Languages		% Exams>=3	100		100																																				
ges &	Japanese Language and Culture	# Exams>=3	8		5																				Т										*		*	\top	\top	Т	Т
& Culture		# of Exams	9		5																														1		3		\top		
E.		% Exams>=3	89		100																														*		*				
	Latin	# Exams>=3	4				t																															\top		\top	Т
		# of Exams	7		4	3	3																																		
		% Exams>=3	57		*	,	*																																		
	Spanish Language and Culture	# Exams>=3	1329	61	69	47	7 34	114	16	33	71	7	16	16	97	54	61 1	0 20	13		*			2	8 30)	39		51 1	5 12	43	19	25	3 2	4	61	93		10	5	17
		# of Exams	1,583	64	72	47	7 34	138	16	43	78 9	9	20	35	104	80	66 1	0 21	1 13		1			3	2 35	5	42	(35 1	8 15	45	34	34	3 3	6	71	114		11	20	20
		% Exams>=3	84	95	96	100	100	83	100	77 9	91 78	В	80	46	93	68	92 10	0 95	5 100		*			8	8 86	6	93	7	78 8	3 8	96	56	74 1	00 6	7	86	82		91	25	85
	Spanish Literature and Culture	# Exams>=3	244	3	14	32	2	22		:	25	3			7		10					-	7		(3			18	2	21					32	19		1		
		# of Exams	374	23	14	34	4	32		:	34 (6			32		19					1	7		12	2		- 2	25	2	23					62	20		5		
		% Exams>=3	65	13	100	94	4	69		1	74 50	0			22		53					100	0		50)		1	72	9	91					52	95		20		
			-	_	* 2,136			308	,	50 24								3 637		-	-	63 43		3 3			114	0 10		-	185	26	26 1			154	881	-	24		0 42
	1	otal # Exams	28,236	430	5 2,727	2,034	770	1,520	1,381	233 79	96 784	192	793	223 1	,562	532 6	83 44	9 787	7 111	132	09 2,0	33 24	3 7	7 42	7 396	195	710	111 9:	39 17	7 40	513	175	391 2	41 53	0 321	892	1,943	103 4	147 1	57 24	6 376

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Notes: Table displays duplicated count of exams taken by students enrolled in grades 9--12 and by students with grade level not indicated (N=749). *Masked for # tested < 5.

Appendix E

AP Course and Exam Performance by Campus, 9th - 12th grade, 2016–2017

Long Acad 7 HSPVA 799 DeBakey HS 1,399 East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,566 Worthing HS 1,769 Northside HS 1,769 Northside HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856	7 790 1,360 162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	% Pass 100 99 97 97 97 92 93 85 96 99 94 84 97 86 90	# Take 7 786 1,374 164 794 718 2,001 679 102 193 439 422 2,163 358	% T	ake 100 98 98 98 98 98 98 97 96 96 96 95	# AP Exam Scores > 3	% AP Ex	am Pass 43 81 90 9 31 23 71 16 9
Long Acad 7 HSPVA 799 DeBakey HS 1,399 East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,566 Worthing HS 1,769 Northside HS 1,769 Northside HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856	7 790 1,360 162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	100 99 97 97 97 92 93 85 96 99 94 84 97 86 90 91	7 786 1,374 164 794 718 2,001 679 102 193 439 422 2,163	% T	100 98 98 98 98 98 97 96 96 96	Scores ≥ 3 3 636 1,243 14 246 167 1,428 106 9 20 31	% AP Ex	43 81 90 9 31 23 71 16 9
Long Acad 7 HSPVA 799 DeBakey HS 1,399 East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,566 Worthing HS 1,769 Northside HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Aus	7 790 1,360 162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	100 99 97 97 97 92 93 85 96 99 94 84 97 86 90 91	7 786 1,374 164 794 718 2,001 679 102 193 439 422 2,163		100 98 98 98 98 98 97 96 96 96	3 636 1,243 14 246 167 1,428 106 9 20 31		43 81 90 9 31 23 71 16 9
HSPVA 799 DeBakey HS 1,399 East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	790 1,360 162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	99 97 97 97 92 93 85 96 99 94 84 97 86 90	786 1,374 164 794 718 2,001 679 102 193 439 422 2,163		98 98 98 98 97 96 96 96	636 1,243 14 246 167 1,428 106 9 20 31		81 90 9 31 23 71 16 9
DeBakey HS 1,399 East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,23 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521	1,360 162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	97 97 97 92 93 85 96 99 94 84 97 86 90	1,374 164 794 718 2,001 679 102 193 439 422 2,163		98 98 98 98 97 96 96 96	1,243 14 246 167 1,428 106 9 20 31		90 9 31 23 71 16 9
East EC HS 167 Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,23 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 <	162 784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	97 97 92 93 85 96 99 94 84 97 86 90	164 794 718 2,001 679 102 193 439 422 2,163		98 98 98 97 96 96 96	14 246 167 1,428 106 9 20 31		9 31 23 71 16 9
Eastwood Acad HS 809 Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 <td< td=""><td>784 679 1,914 599 102 199 434 375 2,239 330 308 755 518</td><td>97 92 93 85 96 99 94 84 97 86 90</td><td>794 718 2,001 679 102 193 439 422 2,163</td><td></td><td>98 98 97 96 96 96</td><td>246 167 1,428 106 9 20 31</td><td></td><td>31 23 71 16 9</td></td<>	784 679 1,914 599 102 199 434 375 2,239 330 308 755 518	97 92 93 85 96 99 94 84 97 86 90	794 718 2,001 679 102 193 439 422 2,163		98 98 97 96 96 96	246 167 1,428 106 9 20 31		31 23 71 16 9
Challenge EC HS 735 Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madis	679 1,914 599 102 199 434 375 2,239 330 308 755 518	92 93 85 96 99 94 84 97 86 90	718 2,001 679 102 193 439 422 2,163		98 97 96 96 96 95	167 1,428 106 9 20 31		23 71 16 9
Carnegie HS 2,063 North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 1,23 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM We	1,914 599 102 199 434 375 2,239 330 308 755 518	93 85 96 99 94 84 97 86 90	2,001 679 102 193 439 422 2,163		97 96 96 96 95	1,428 106 9 20 31		71 16 9
North Houston EC HS 704 Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	599 102 199 434 375 2,239 330 308 755 518	85 96 99 94 84 97 86 90	679 102 193 439 422 2,163		96 96 96 95	106 9 20 31		16 9
Jones HS 106 Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	102 199 434 375 2,239 330 308 755 518	96 99 94 84 97 86 90	102 193 439 422 2,163		96 96 95	9 20 31		9
Mount Carmel Acad HS 202 LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	199 434 375 2,239 330 308 755 518	99 94 84 97 86 90	193 439 422 2,163		96 95	20 31		
LECJ HS 460 HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	434 375 2,239 330 308 755 518	94 84 97 86 90	439 422 2,163		95	31		
HAIS HS 444 Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	375 2,239 330 308 755 518	84 97 86 90 91	422 2,163				<u> </u>	7
Bellaire HS 2,308 YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	2,239 330 308 755 518	97 86 90 91	2,163			26		6
YWCPA 382 Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	330 308 755 518	86 90 91			94	1,636		76
Washington HS 341 Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	308 755 518	90 91	550		94	32		9
Energy Inst HS 827 Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	755 518	91	319		94	5	_	2
Sharpstown Intl 563 South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	518		773		93	160		21
South EC HS 148 Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929		92	523		93	188		36
Westside HS 1,980 Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	90	61	137		93	7		5
Leland YMCPA 269 Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	1,838	93	1,815		92	790		44
Westbury HS 964 Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	246	91	243		90	43		18
Milby HS 419 Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	845	88	860		89	142		17
Kashmere HS 123 Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	364	87	369		88	35		9
Heights HS 1,566 Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	109	89	107		87	0	_	0
Worthing HS 149 Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	1,393	89	1,346		86	193		14
Chavez HS 1,769 Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	116	78	128		86	1	_	1
Northside HS 941 Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	1,479	84	1,502		85	299		20
Liberty HS 6 Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	782	83	793		84	52		7
Sharpstown HS 457 Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	5	83	5		83	2	_	40
Sterling HS 460 Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	379	83	378		83	166		44
Austin HS 521 Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	375	82	373		81	19		5
Houston MSTC HS 856 Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	439	84	411		79	74		18
Wisdom HS 511 Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	730	85	672		79	120		18
Lamar HS 1,869 Madison HS 553 E-STEM West HS 929	446	87	397		78	20		5
Madison HS 553 E-STEM West HS 929	1,540	82	1,439		77	189		13
E-STEM West HS 929	482	87	415		75	28		7
	843	91	694		75	17		2
Waltrip HS 692	649	94	505		73	109		22
North Forest HS 148	136	92	106		72	0		0
Scarborough HS 237	186	78	168		71	27		16
Jordan HS 184		95	128		70	6		5
Yates HS 344		94	239		69	0		0
E-STEM Central HS 301	175	94	203		67	0		0
Wheatley HS 168	175 323	92	100		60	0		0
Furr HS 337	175 323 282	90	154		46	7		5
Community Services 2	175 323 282 154		0					
HISD 29,219	175 323 282	50	25,502	87	87	8,296	33	33

Sources: End of Year Chancery Grades data files, June 6, 2017; AP Exam Score Source: 2017 College Board AP data file; retrieved August 14, 2017 Notes: AP courses and exams are linked--these graphs display a duplicated count of AP Exams taken by students enrolled in grades 9-12 for which a corresponding AP course grade exists. *Masked # students < 5. Bellaire, Heights, and Lamar High Schools offer the International Baccalaureate (IB) Program in addition to Advanced Placement (AP). - - denotes no data available.

Appendix F

AP Exam Participation and Performance by Exam and Campus, 8th grade, 2017

	Chine	ese l	_angı	ıage & (Cultu	ire	Span	ish L	.angı	ıage & C	ultu	re			То	tal		
Campus	20	016		2	017		20	16		20	017		20	016		20	017	
	# Exams	#3+	% 3+	#Exams	#3+	% 3+	# Exams	#3+	% 3+	#Exams	#3+	% 3+	# Exams	# 3+	% 3+	# Exams	#3+	% 3+
Burbank MS							127	116	91	136	113	83	127	116	91	136	113	83
Clifton MS							25	18	72	14	14	100	25	18	72	14	14	100
Hamilton MS							35	23	66	52	35	67	35	23	66	52	35	67
Hartman MS										7	6	86				7	6	86
Henry MS										13	7	54				13	7	54
Hogg MS							24	17	71	28	24	86	24	17	71	28	24	86
Lanier MS	10	10	100				25	25	100	23	23	100	35	35	100	23	23	100
Long Academy							38	29	76	31	30	97	38	29	76	31	30	97
Meyerland MS							96	82	85	69	68	99	96	82	85	69	68	99
Ortiz MS										32	15	47				32	15	47
Pershing MS							19	19	100	23	22	96	19	19	100	23	22	96
Pin Oak MS							34	34	100	29	27	93	34	34	100	29	27	93
Revere MS							10	9	90	3	3	100	10	9	90	3	3	100
Rusk School							31	27	87	25	23	92	31	27	87	25	23	92
Tanglewood MS										17	10	59				17	10	59
Westbriar MS							25	25	100	22	21	95	25	25	100	22	21	95
Wharton Dual Lang.							18	18	100	18	17	94	18	18	100	18	17	94
HISD Totals	10	10	100				507	442	87	542	458	85	517	452	87	542	458	85

Sources: 2017 College Board AP data file; retrieved August 14, 2017; HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results

Notes: Table displays a duplicated count of exams taken by students enrolled in 8th grade and grade unknown for middle schools. *Masked # tested < 5.

Appendix G-1

Advanced Placement Award Levels Available to HISD Students

Award	Criteria
AP Scholar	Granted to students who receive scores of 3 or higher on three or more AP Exams.
AP Scholar with Honor	Granted to students who receive an average score of at least 3.25 on all AP Exams taken, and scores of 3 or higher on four or more of these exams.
AP Scholar with Distinction	Granted to students who receive an average score of at least 3.5 on all AP Exams taken, <u>and</u> scores of 3 or higher on five or more of these exams.
State AP Scholar *	Granted to the one male and one female student in each U.S. state and the District of Columbia with scores of 3 or higher on the greatest number of AP Exams, and then the highest average score (at least 3.5) on all AP Exams taken.
National AP Scholar	Granted to students in the United States who receive an average score of at least 4 on all AP Exams taken, <u>and</u> scores of 4 or higher on eight or more of these exams.
AP International Diploma	Granted to students who receive a 3 or higher on five or more exams. Exams taken multiple times only count once. The highest score will be used for award calculation. Students attending a school within the U.S. must indicate on their AP exam answer sheet that their scores will be sent to a university outside the U.S. Exams must fulfill the following content areas: 1). Two AP exams from two world languages and culture courses. The language must be different in each course; or 2). Two AP exams from one world language and culture course and one English course.
AP Seminar and Research Certificate	Granted to students who earn scores of 3 or higher in both AP Seminar and AP Research.
AP Capstone Diploma	Granted to students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP exams of their choosing.

Source: College Board. AP Scholar Awards. Retrieved from http://professionals.collegeboard.com/k-12/awards/ap-scholar; AP International Diploma, College Board. AP Awards. Retrieved from http://apcentral.collegeboard.com/apc/public/score reports data/awards/232781.html

Note: * State AP Scholar Awards were not available at the time of publication

Appendix G-2

AP Scholar Awards Earned by Campus, 2016 and 2017

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												P	Α		Α		Scho	ol %		
School	All Av	vards	Sch	olar	Ho	nor	Distir	nction	Natio	onal		ational	Caps		Sem	ninar	of To			
Concor												oma	Dipl		ar				Chang	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	Total	
Austin HS	3	4	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0		1
Bellaire HS	515	512	160	161	75	70	199	208	79	72	2	1	0	0	0	0	27	25		-3
Carnegie HS	391	466	166	175	53	64	117	114	36	36	1	2	18	68	0	7	20	22		75
Challenge ECHS	57	66	43	47	10	11	4	8	0		0	0	0		0	0	3	3		9
Chavez HS	45	53	39	35	2	10	4	3	0	1	0	0	0	2	0	2	2	3		8
DeBakey HS	319	306	70	63	42	55	129	120	47	49	0	0	29	16	2	3	17	15		-13
East ECHS	15	7	10	6	4	1	1	0	0	0	0	0	0	0	0	0	1	0		-8
Eastwood Acad	56	51	34	39	12	4	8	7	2	1	0	0	0	0	0	0	3	2		-5
Energy Inst HS	18	37	15	28	0	1	3	5	0	1	0	1	0	1	0	0	1	2		19
Furr HS	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-1
Heights HS	40	30	33	23	2	3	5	3		1	0	0	0	0	0	0	2	1		-10
Hou Acad. Intl.	5	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-2
Houston MSTC HS	8	6	8	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0		-2
HS for Law & Justice	4	8	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0		4
HS Perf. Vis. Arts	129	159	46	50	25	23	44	69	14	17	0	0	0	0	0	0	7	8		30
Jones HS	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-1
Lamar HS	25	34	16	29	5	4	4	1	0	0	0	0	0	0	0	0	1	2		9
Leland YMCPA	3	10	2	8	1	1	0	1	0	0	0	0	0	0	0	0	0	0		7
Long Acad.	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-1
Madison HS	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-1
Milby HS	7	3	5	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0		-4
Mount Carmel Acad.	4	3	3	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0		-1
N. Houston ECHS	12	23	9	18	2	4	1	1	0	0	0	0	0	0	0	0	1	1		11
Northside HS	9	8	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-1
Scarborough HS	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2
Sharpstown HS	14	8	12	7	1	1	1	0	0	0	0	0	0	0	0	0	1	0		-6
Sharpstown Intl	23	36	20	30	2	4	1	2	0	0	0	0	0	0	0	0	1	2		13
Tx Conn. Acad.	14	26	11	15	1	4	2	6	0	1	0	0	0	0	0	0	1	1		12
Waltrip HS	16	24	13	18	3	2	0	4	0	0	0	0	0	0	0	0	1	1		8
Washington HS	4	1	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0		-3
Westbury HS	5	16	4	13	1	2	0	1	0	0	0	0	0	0	0	0	0	1		11
Westside HS	165	175	93	97	21	26	42	44	5	8	0	0	4	0	0	0	9	8		10
Wisdom HS	6	2	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-4
YWCPA	2	4	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2
HISD Totals	1,918	2,083	847	902	264	292	568	599	183	187	3	4	51	87	2	12				165

Sources: Online College-Board Report, *District Scholar Summary Report*, Downloaded October 6, 2017
HISD Research and Accountability Department, 2016 Advanced Placement (AP) Results
Note: State AP Scholar Awards were not available at the time of publication. Qualifying AP Exams are a cumulative count - not an annual count.