

District AP Enrollment Report: Five-Year Trend (2003-07)

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Executive Summary

APS has kept detailed records of AP enrollment for the last five years. This allows APS as a district to get a perspective of how far AP enrollment has come and where it is headed. For the past few years the district has offered a core of 21 courses from the 35 the College Board offers.

A primary goal of the district is to increase the diversity in AP courses by having the ethnic and gender representation in the AP courses more closely approach the ethnic and gender representation of the high schools as a whole. Much of this report deals with those aspects of AP enrollment.

Shorter, four-page, individual school reports, produced along with this district report, are also available.

- AP enrollment has grown over 2 ½ times from 2002-03 to 2006-07.
- Enrollment for all ethnicities has increased over the past five years.
- Based on district demographics, the enrollment of Whites and Hispanics far exceeds the enrollment of Asians, Native American, and Blacks in AP courses.
- The growth of Hispanics has generally paralleled that of Whites over the five years.
- The percentage of Whites has shrunk from 67% to 57% of total enrollment during the past five years, while the percentage of Hispanics has increased from 23% to 33% during the same time.
- From 2005-06 to 2006-07, the enrollment of Hispanics increased 28% (1369 to 1754), while the enrollment of Whites increased just 8% (2766 to 3014).
- Asians are the highest overrepresented group in AP courses in relation to their population in the high schools.
- In 2006-07, females represented 55% of the AP enrollment, while they only represented 49% of the population in the 11 high schools.
- English Literature, English Language, U.S. History and World History, and Calculus I represent 71% of AP enrollment, up from 68% in 2005-06.

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District

The data in the following figures and tables mostly illustrate district results although there are a few tables that disaggregate data by school. Separate reports for each of the eleven high schools are available from Research Development, and Accountability (RDA) or its website www.rda.aps.edu.

The following data look at trends for ethnic and gender participation in AP courses for the past five years. For the 2006-07 school year, this report also shows enrollment in AP courses, an index of ethnic representation, percent of students taking exams, and percent of qualifying scores.

Figure 1

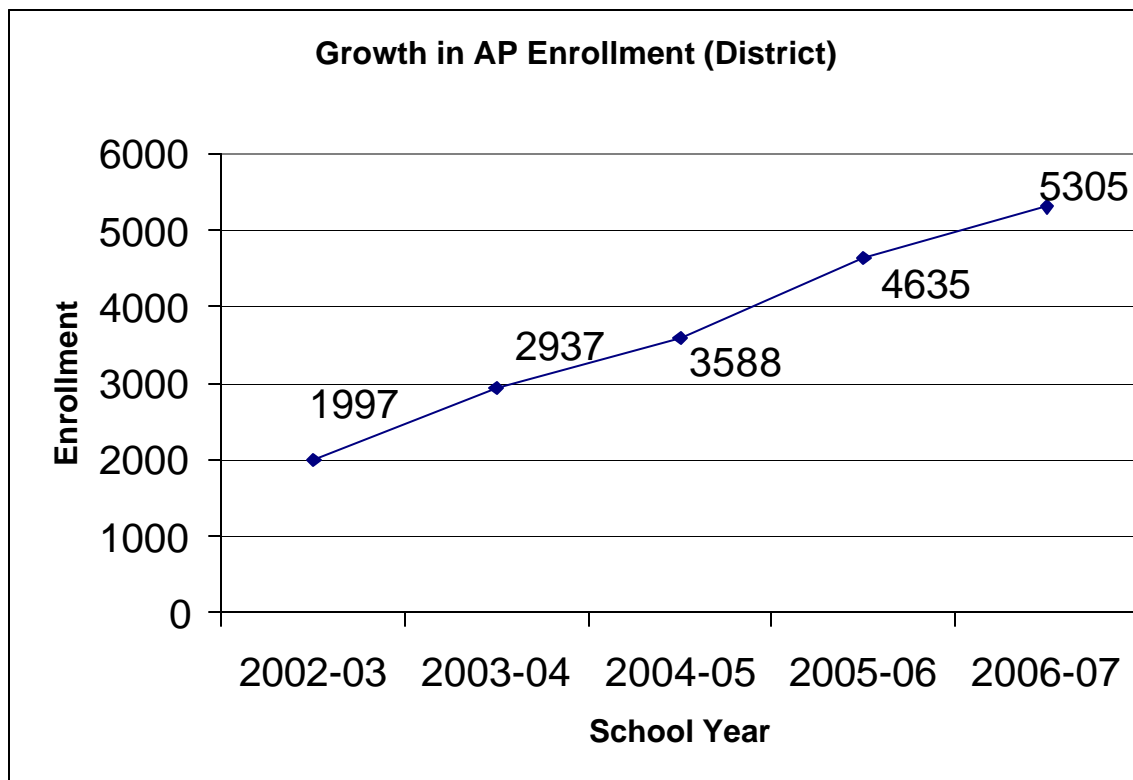


Figure 2 shows the trends in enrollment for each ethnic group over the past five years.

Figure2

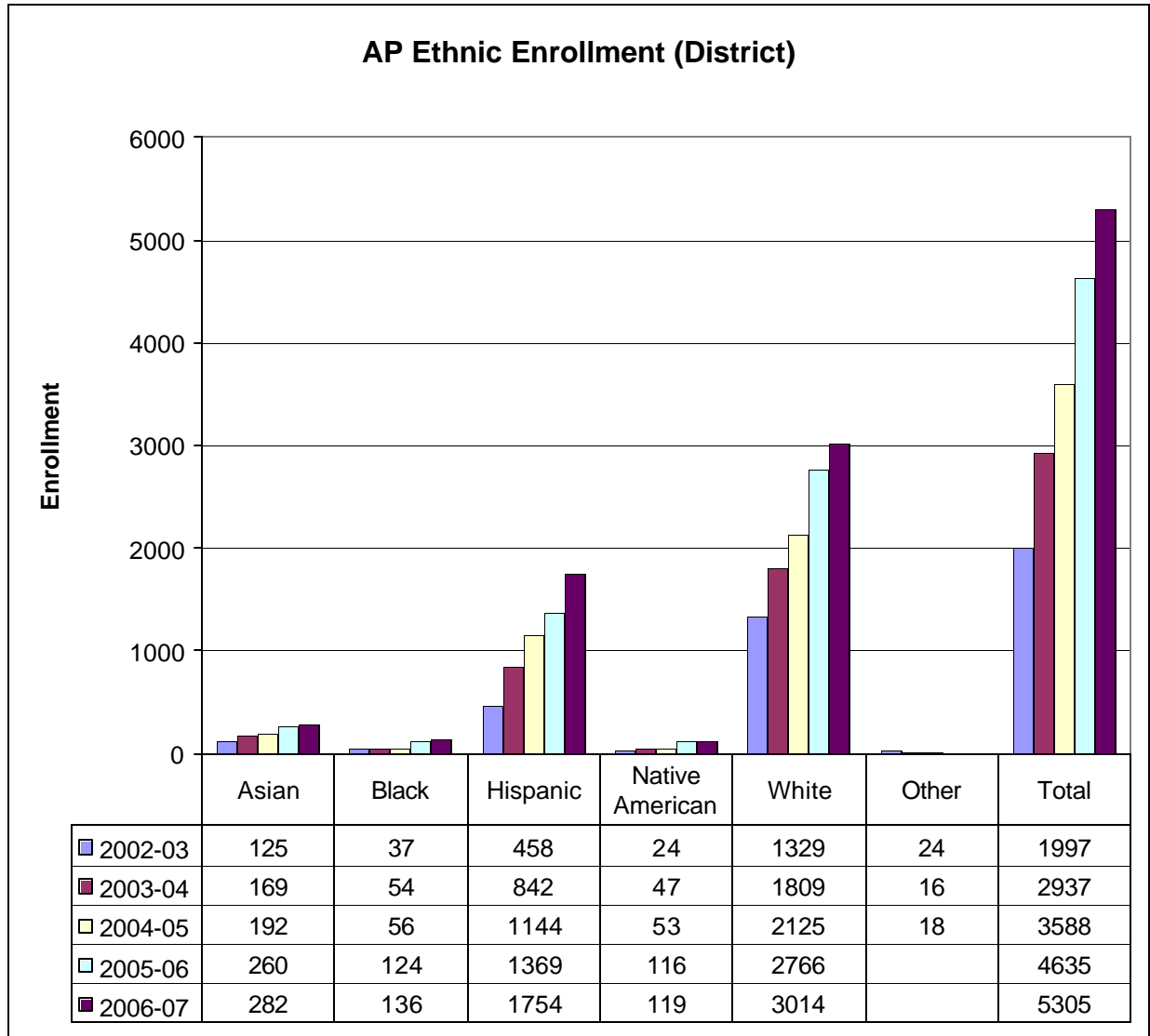


Figure 3 uses a different way than Figure 2 of illustrating ethnic group enrollment over the past five years. This graph makes it easier to detect slightly faster growth among Hispanics than Whites in 2006-07, in comparison to 2005-06 where the growth of Whites slightly outpaced the growth of Hispanics. The growth can be determined by the steepness of the ascending line.

Despite a slightly larger increase in Hispanic enrollment compared to White enrollment in 2006-07, the enrollment of Hispanics and Whites has generally paralleled each other over the past five years.

According to Table 1, which follows Figure 3, Asian, Native American, and Black enrollments in the district represented approximately 3%, 5%, and 4%, respectively, in 2006-07. Figure 3 shows definite growth in AP enrollment for each of these groups over the past five years though not as sharply as White and Hispanic growth.

Figure 3

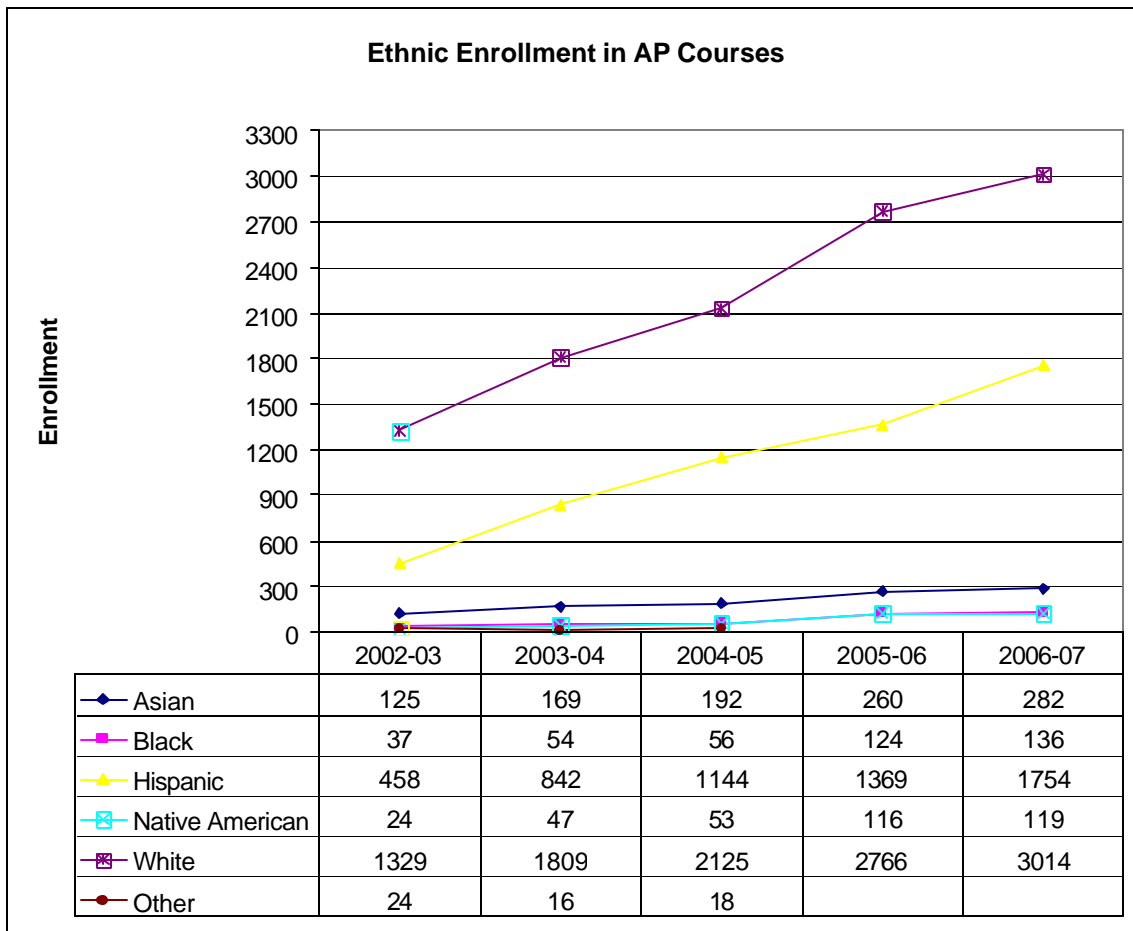


Table 1 gives the percentage of the representation of each ethnic group in AP courses over the past five years. The highlighted row at the bottom of the district or each school shows the 40-day enrollment for each ethnic group for the most recent school year, 2006-07. This table differs from the previous two figures because they report the number of enrolled students and this table reports the percentage of enrolled students.

Table 1

	AP Enrollment Year	Percentage of Ethnic Enrollment					
		% White	% Black	% Hispanic	% Nat. Am.	% Asian	% Other
District	2002-03	67	2	23	1	6	1
	2003-04	62	2	29	2	6	<1
	2004-05	59	2	32	1	5	<1
	2005-06	60	3	30	3	6	
	2006-07	57	3	33	2	5	
	*Total District	37.7	4.1	50.4	5.1	2.7	
Albuquerque	2002-03	73	<1	21	2	4	
	2003-04	66	<1	26	1	7	
	2004-05	65	2	30	1	2	
	2005-06	64	4	30	<1	2	
	2006-07	49	2	46	1	3	
	Total School	19.1	5.5	69.3	4.5	1.6	
Cibola	2002-03	71	2	21	1	4	1
	2003-04	68	3	24	1	3	1
	2004-05	69	1	25	2	3	1
	2005-06	69	2	24	2	3	
	2006-07	65	4	24	2	5	
	Total School	47.7	5.0	40.8	3.7	2.8	
Del Norte	2002-03	65	3	21	1	6	4
	2003-04	68	5	14	6	3	4
	2004-05	58	4	19	9	5	6
	2005-06	56	7	22	7	8	
	2006-07	53	5	31	3	8	
	Total School	33.0	5.1	46.5	12.6	2.8	
Eldorado	2002-03	78	2	9	<1	8	2
	2003-04	84	<1	10	0	6	
	2004-05	82	1	12	1	5	
	2005-06	85	<1	9	1	5	
	2006-07	85	1	10	2	3	

	Total School	71.4	3.2	19.8	2.6	3.0	
School	AP Enrollment Year	% White	% Black	% Hispanic	% Nat. Am.	% Asian	% Other
Highland	2002-03	32	0	18	0	50	
	2003-04	62	2	23	2	10	
	2004-05	52	3	36	1	8	1
	2005-06	46	4	38	4	8	
	2006-07	36	2	49	5	8	
	Total School	21.2	8.5	55.0	11.4	3.9	
La Cueva	2002-03	79	1	8	<1	10	2
	2003-04	80	1	4	<1	15	
	2004-05	75	1	11	1	12	
	2005-06	74	2	9	1	14	
	2006-07	73	2	12	<1	12	
	Total School	71.0	2.1	18.8	1.5	6.6	
Manzano	2002-03	80	3	14	<1	3	
	2003-04	73	2	21	3	2	
	2004-05	68	1	25	<1	5	
	2005-06	68	4	19	3	6	
	2006-07	74	2	16	1	7	
	Total School	51.0	5.6	34.1	5.2	4.1	
Rio Grande	2002-03	8	<1	87	2	2	
	2003-04	12	2	85	<1	1	
	2004-05	10	3	87	1	<1	
	2005-06	11	2	83	3	<1	
	2006-07	12	2	85	2	<1	
	Total School	7.7	1.8	86.9	3.3	<1	
Sandia	2002-03	80	1	12	0	6	1
	2003-04	81	<1	12	<1	4	
	2004-05	72	2	12	3	10	2
	2005-06	77	2	15	1	6	
	2006-07	71	4	21	2	2	
	Total School	57.7	4.0	31.1	3.6	3.6	
Valley	2002-03	52	3	41	0	4	
	2003-04	61	2	34	1	2	
	2004-05	55	1	39	2	3	
	2005-06	53	2	41	3	<1	
	2006-07	48	2	47	2	1	
	Total School	19.3	1.8	75.2	3.4	<1	
West Mesa	2002-03	15	5	58	17	2	3
	2003-04	19	3	70	3	6	
	2004-05	12	2	82	3	2	
	2005-06	16	3	72	7	3	
	2006-07	14	4	72	7	3	

	Total School	9.1	2.9	80.9	6.1	1	
School	AP Enrollment Year	% White	% Black	% Hispanic	% Nat. Am.	% Asian	% Other
CEC	2004-05	79		18		3	
	2005-06	86		3		10	
	2006-07	85		12		4	
	Total School	NA	NA	NA	NA	NA	NA

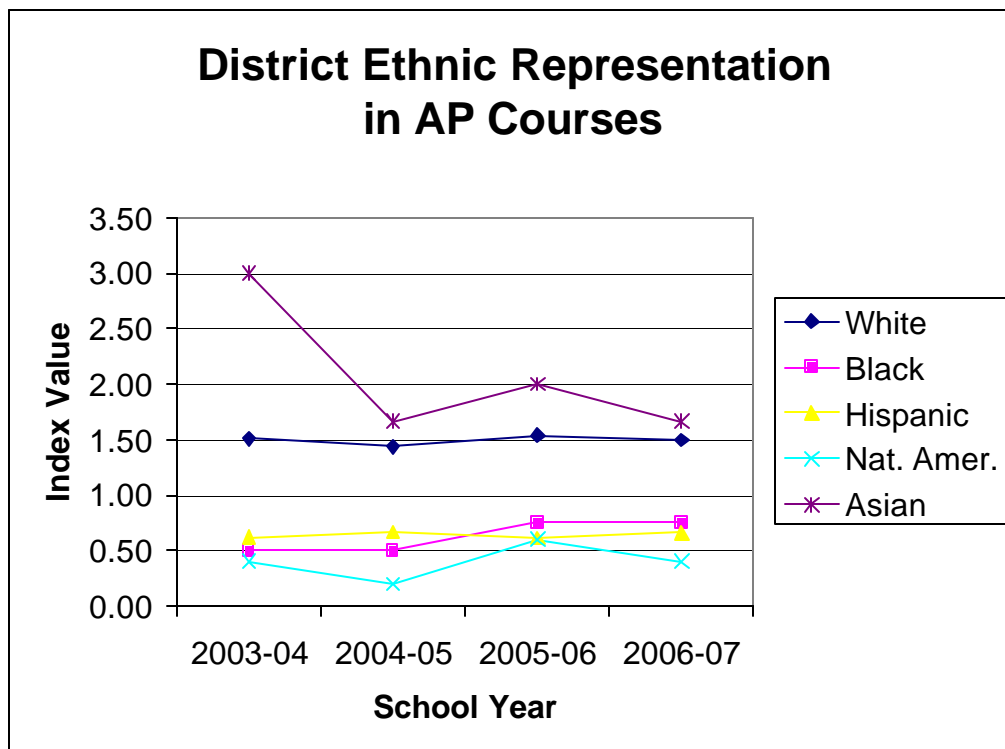
Index for AP Ethnic Enrollment

In 2003, Broward County Public Schools in South Florida created an index (Leonard, et al, 2003) to track AP participation across ethnic groups. The intent was to measure whether the achievement gap in AP enrollment was closing. In the graph below, the same index is illustrated with APS data for the past four years.

It is ideal for each ethnic group to have an index number of 1.0, which would mean that the ethnic characteristics of the AP population match those of the district high school population. Below 1.0 indicates under representation and over 1.0 indicates overrepresentation in AP courses. The index is simply the percentage of that ethnic group in our eleven high school divided by the representation of that ethnic group in AP courses. This index is a gross measure of ethnic representation in AP courses.

In APS, Whites and Asians, are overrepresented while Blacks, Hispanics, and Native Americans are about equally underrepresented.

Figure 4



Leonard, T., Blasik, K., Dilgen, A., & Till, F (2003). Advanced placement programs as a means of narrowing the achievement gap. *ERS Spectrum*, Spring, 4-14.

Figure 5 shows the trend of the growth for males and females in AP course for the past five years. Across the district, as well as in each school, appreciably more females than males have been enrolled in AP courses over each of the past five years. In 2005-06, females comprised 49% of the high school student population, yet they represented 55% of AP enrollment.

Figure 5

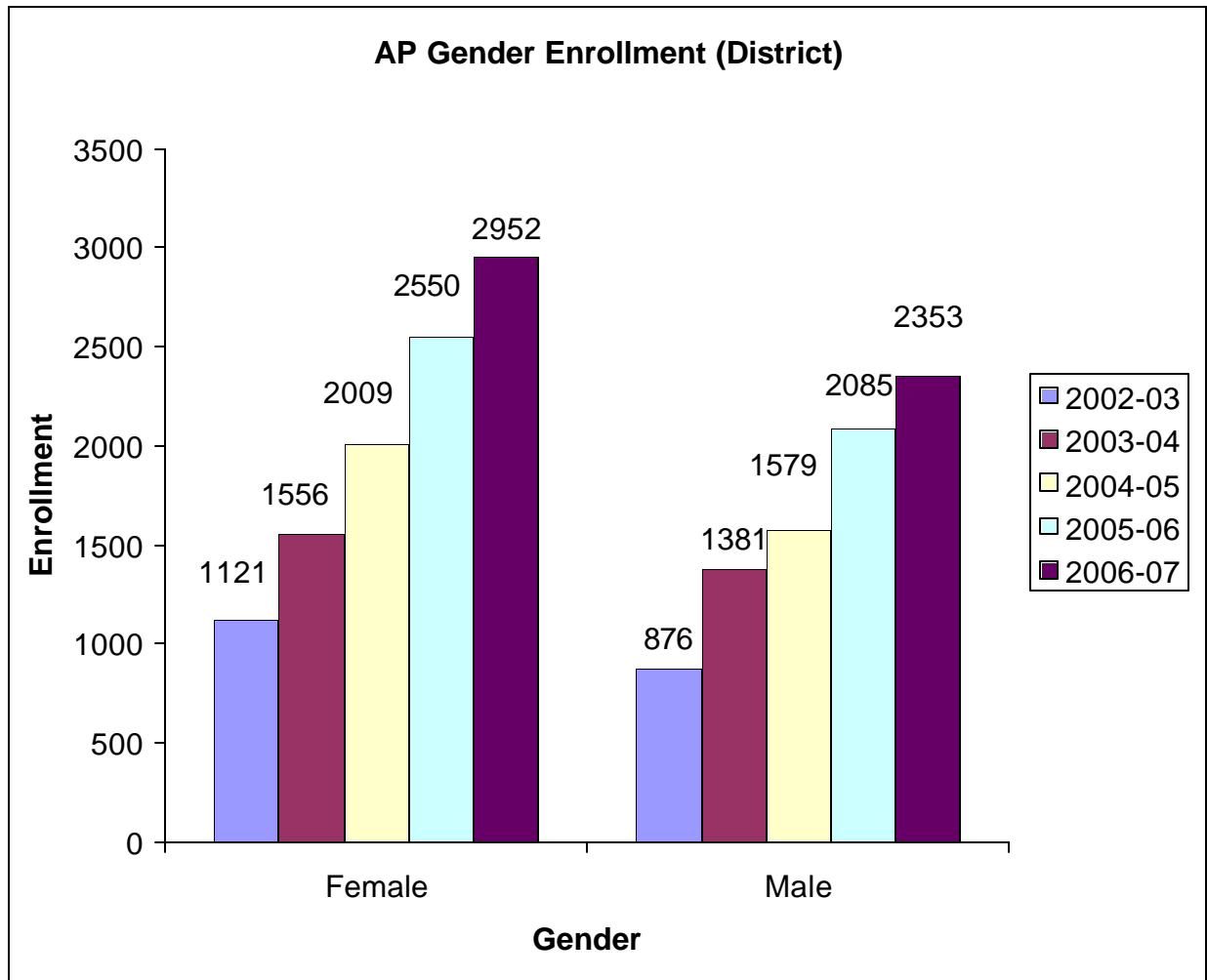


Table 2 shows the enrollment of each of the 21 AP course offered across the district in both 2005-06 and 2006-07. Each enrollment column is accompanied by the percent of total AP enrollment each course represents.

The table is ordered by the highest course enrollment to the lowest for 2006-07. As was the case in 2005-06, World History, U.S. History, English Literature, English Language, and Calculus I have the highest enrollments. Together they comprise 71% of the enrollment for 2006-07. In 2005-06, they represented 68% of the enrollment.

In 2006-07, the sciences (Biology, Chemistry, Physics B, Physics C, and Environmental Science) made up 11% of the enrollment with Physics B (3.3%) having the largest enrollment. The previous year those same courses represented 12% of the enrollment.

English Language & Composition increased as a percent of the enrollment from 5.2% in 2005-06 to 13.3% in 2006-07. Physics B increased from 2.4% to 3.3% and Spanish Language increased from 2.7% to 3.3% during that same time.

Statistics decreased as a percent of the enrollment from 3.5% in 2005-06 to 2.3% in 2006-07. Biology decreased from 3.9% to 2.2%, Psychology from 3.0% to 1.4%, and Studio Art from 1.8% to 1.2% between the same two years.

Table 2 AP Courses at District Level

AP Courses	2005-06		2006-07	
	Enrollment	Percent	Enrollment	Percent
World History & Geog	1050	22.7	1119	21.1
English Lit & Comp	704	15.2	824	15.5
English Lang & Comp	243	5.2	705	13.3
US History & Geog	712	15.4	648	12.2
Calculus I	437	9.4	491	9.3
US Govt & Politics	156	3.4	183	3.4
Physics B	113	2.4	177	3.3
Spanish V Lang	123	2.7	175	3.3
Statistics	163	3.5	123	2.3
Biology	179	3.9	115	2.2
Chemistry	109	2.4	109	2.1
Spanish V Lit	102	2.2	104	2.0
Environmental Science	72	1.6	104	2.0
Calculus II	91	2.0	101	1.9
Economics-Macro	61	1.3	85	1.6
Physics C	84	1.8	72	1.4
Psychology	139	3.0	76	1.4
Studio Art	82	1.8	62	1.2
Human Geography			23	.4
German V	10	.2	5	.1
French V	5	.1	4	.1
Total	4635	100.0	5305	100.0

For both the district and each school, Table 3 lists the percent of the total exams taken based on AP enrollment.

Table 3

Percent of Students Taking AP Exams (2006-07)

School	Total Exams	School AP Enrollment	Percent of Test Takers
Albuquerque	369	564	65.4
Cibola	416	584	71.2
Del Norte	146	251	58.2
Eldorado	266	539	49.4
Highland	84	212	39.6
La Cueva	603	1038	58.1
Manzano	238	431	55.2
Rio Grande	227	385	59.0
Sandia	335	516	64.9
Valley	147	216	68.1
West Mesa	225	543	41.4
District	3056	5279*	57.9

* Data did not include the 26 Physics C students at CEC.

Table 4 reports the percent of AP exam scores of 3 or above for the district and schools.

Table 4.

Percent of Qualifying Scores (2006-07)

2006-07 School Year			
School	Total Exams	Scores 3, 4, or 5	Percent of Exams w/ Scores 3, 4, or 5
Albuquerque	369	200	54.2
Cibola	416	193	46.4
Del Norte	146	72	49.3
Eldorado	266	192	72.2
Highland	84	40	47.6
La Cueva	603	414	68.7
Manzano	238	116	48.7
Rio Grande	227	79	34.8
Sandia	335	213	63.6
Valley	147	67	45.6
West Mesa	225	41	18.2
District	3056	1627	53.2

Conclusion

Undoubtedly, there have been appreciable increases in AP enrollment over the past five years. It is probably fair to say the increase in ethnic diversity in AP courses over the past five years has more than kept pace with the enrollment increase. The greatest share of that improvement has happened in the past couple of years. Nonetheless, there is still room for much more improvement. There has not, however, been as much change in the increase of males represented in AP courses.

A way to accelerate closing the gap of disparate ethnic and gender representation in AP courses is for schools to disseminate successful strategies they have used to find those students who will be successful in an AP course, but might not otherwise feel confident enough or interested enough to enroll.