

THE 10TH ANNUAL

# AP® Report to the Nation

STATE SUPPLEMENT FEBRUARY 11, 2014



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- A Closer Look at Equity Gaps in AP Participation and Success

## **About This Report**

This report provides educators and policymakers with information they can use to celebrate their successes, understand their unique challenges, and set meaningful goals to increase opportunity for all students. It's important to note that while AP® Exams are valid measures of students' content mastery of college-level studies in specific academic disciplines, AP results should never be used as the sole measure for gauging educational excellence and equity.

Because reliable demographic data for nonpublic schools are not available for all states, this report represents public school students only. Additionally, this report looks at students' entire experience with AP—tracking exams taken by graduates throughout their high school careers—as opposed to reporting exam results from a particular calendar year.

Additional data are available at apreport.collegeboard.org.

Note: Throughout this report, public high school graduates represent projections supplied in *Knocking at the College Door* (Western Interstate Commission for Higher Education, 2012).

The redesigned courses, Biology, Latin, and Spanish Literature and Culture, began in fall 2012, and the first AP Exam based on those redesigned courses was administered in May 2013. As a result, the data in this report reflect a blend of the old and redesigned exam results.

THE 10TH ANNUAL AP REPORT TO THE NATION  $\cdot$  MASSACHUSETTS SUPPLEMENT STATE STRATEGIES

Massachusetts has made progress in recent years in improving student access and supporting student performance in AP®. Just as we do in the national report, we wanted to take an opportunity to applaud your efforts and offer additional strategies for your consideration.



#### **Current Picture**

Congratulations. You are already using these strategies to build a robust AP Program. You:

- Celebrate the 33 districts that have earned a spot on the AP Honor Roll through their hard work and dedication to increasing participation and success in AP, particularly for underrepresented students. See page 5 for more details.
- Encourage your educators to participate in the development of the AP Program, such as by becoming AP Exam Readers or participating in course and exam development committees. See page 5 for more details.



## Opportunities

The following strategies have been proven effective. To build an even stronger AP program, you could:

Include AP in the state accountability system. • Establish AP participation and performance indicators. • Set clear, measurable statewide goals toward improvement. ☐ Provide funding for professional development for teachers in underserved areas of the state. ☐ Ensure that public colleges and universities develop AP Exam credit and placement policies based on institutional goals, alignment with corresponding courses, and objective outcomes research. Create opportunities for other schools and districts to learn from your AP Honor Roll winners. Provide targeted assistance and resources to schools serving traditionally underserved populations. For example, funding for materials, supplies, outreach efforts, and tutoring programs. ☐ Clearly communicate how AP fits into state graduation requirements, and share information about funding opportunities that enable students to participate and succeed in AP. Develop policies that allow AP course work and exam scores for sophomores and juniors to substitute for statewide graduation requirements and/or end-of-course assessments.

☐ Provide resources to schools and districts to support

research-based programs that build content knowledge and skills—particularly in literacy and math—to prepare students for

success in AP course work, and in college and careers.



## Highlights

The following information dives a little deeper into the details of your efforts.

#### Participation in the Development of AP

2013 Reading participants — Total: 252

Massachusetts represents 2.2% of all Readers

• AP High School Teachers: 159

• College and University Faculty: 93

2013 AP Professional Development Leaders - Total: 49

#### 2013 AP Development Committee Members - Total: 13

English Literature and Composition Bentley University Music Theory Berklee College of Music World History Boston Latin School Boston Latin School Latin AP Capstone™ Seminar Deerfield Academy Physics 1, Physics C Fitchburg State University Italian Language and Culture Harvard University Italian Language and Culture Newton North High School

Northeastern University Calculus

Italian Language and Culture Tufts University,

United States History University of Massachusetts, Weston High School World History

Chinese Language and Culture Williams College

#### The AP Honor Roll

The AP Honor Roll recognizes and honors those outstanding school districts that simultaneously increase access to Advanced Placement® course work while increasing the percentage of students earning scores of 3 or higher on AP Exams. Achieving both of these goals is the ideal scenario for a district's AP program because it indicates that the district is successfully identifying motivated, academically prepared students who are likely to benefit most from rigorous AP course work.



## Highlights (continued)

#### 4th Annual Honor Roll Districts in Massachusetts: 33

Arlington Public Schools\*

Bridgewater-Raynham Regional School District

Dighton Rehoboth Regional School District\*

Diocese of Fall River

Dudley-Charlton Regional School District

Franklin Public School District\*

Freetown-Lakeville Regional School District

Hamilton-Wenham Regional School District\*

Hampden-Wilbraham Regional School District\*

Hampshire Regional School Districts

Hanover School District

Hingham Public School District

Hopedale Public School District

King Philip Regional School District\*

Leominster School District

Ludlow Public Schools

Medfield Public School District\*

Medway Public Schools\*

Monomoy Regional School District

Needham Public Schools\*

Newton Public Schools

North Attleboro Public Schools\*

North Middlesex Regional School District\*

Northbridge School District

Norwood School District

Plymouth Public Schools

Swampscott School District

Triton Regional School District

Wachusett Regional School District

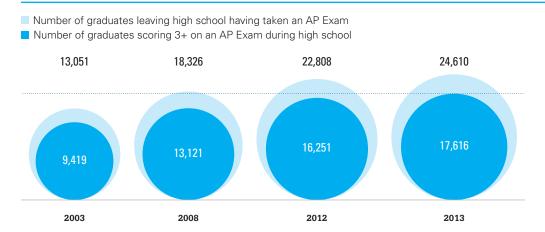
Waltham Public Schools\*

Webster Public Schools

Westford Public Schools

Whitman-Hanson Regional School District

## FIGURE 1 Growth in AP® Participation and Success



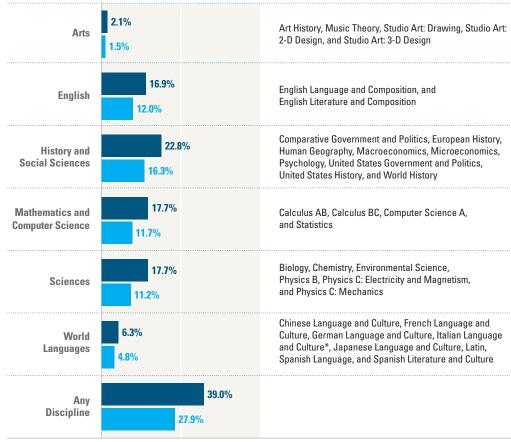
# **More graduates**

are succeeding on AP Exams today than took them in 2003

## FIGURE 2 Participation in and Success on AP Exams in the Class of 2013

- Percentage of graduates leaving high school having taken an AP Exam
- Percentage of graduates scoring 3+ on an AP Exam during high school

# Percentage of Massachusetts Graduating Class 0% 30% 60%



#### Total Number of Graduates: 63,166

# History and Social Sciences

had the greatest number of students achieving a score of 3 or higher

<sup>\*</sup> AP Italian Language and Culture was discontinued after the 2008-09 school year, and was reinstated in 2011-12.

# FIGURE 3 Score Distributions of AP Exams Taken by the Class of 2013 During High School

Rank	Subject	No. of Exams	-					Exam So					
		I	100%	80%	<b>60</b> %	40%	20%	0%		40%	60%	80%	100%
	Chinese Language and Culture	192						.6 5.7	24.5 9	_		58.3	- 1
	German Language and Culture	76					1 1	3 6.6	15.8		43.4	32.9	
	French Language and Culture	900						10.6	28.9		33.3	25.1	:
	Calculus BC	1,972		:	:	:		0.2 3.7	16.2 16.4			53.4	:
	Studio Art: Drawing	403					1.7	14.4		49.6	19.6	14.6	
	Physics C: Mechanics	1,307			:		9.6	10.9	17.7	26.9		34.8	
	Physics C: Electricity and Magnetism	512					7.4	14.1	16.8	25.0		36.7	
	Studio Art: 2-D Design	365					1.6	20.8	32.1		29.3	16.2	
	Human Geography	260					12.7	10.4	20.0	26.9	3	0.0	
	Comparative Government and Politics	159					3.8	19.5	17.6	34.0	2	25.2	
6	Psychology	5,523					14.2	11.0	17.7	28.6	28	.4	
	World History	1,154					8.5	17.1	31.4	22.1	21	.0	
2	United States History	7,826			:		7.1	18.8	22.2	28.7	23.	.2	
	Spanish Literature and Culture	140	:	:	:	:	3.6	23.6	30	6.4	<b>23.6</b> 12.9	9	:
9	Spanish Language	2,338					10.9	16.7	22.1	26.9	23.3	3	
	Japanese Language and Culture	25					16.0	12.0 8.	0 4.0		60.0	1	:
	European History	2,180	:	:	:	:	19.0	9.3	35	5.6 2	2.1 14.0		:
	Italian Language and Culture*	128					8.6	21.1	3!	5.9	<b>24.2</b> 10.2		
	Music Theory	351		:	:		8.8	21.1	23.6	19.7	26.8		
1	English Literature and Composition	7,916					5.3	25.2	32.6	2	4.4 12.6		
	Studio Art: 3-D Design	45						31.1	35	5.6	<b>26.7</b> 6.7		
3	English Language and Composition	6,602					8.2	23.2	29.7	24.	4 14.6		
	Microeconomics	1,187					14.1	17.3	22.4	29.3	16.9	:	
8	Chemistry	3,458					19.5	13.2	18.4	23.1	25.7		
5	Biology	5,967					12.3	20.8	25.3	21.9	19.6		
	Latin	387	:	:	:		13.2	20.2	30.0	18.1	18.6	:	:
4	Calculus AB	6,426					23.8	9.6	17.4	20.1	29.1		
	Physics B	2,125					17.8	16.2	28.3	20.6	17.0		
	Macroeconomics	875	:	:	:		16.0	18.4	19.3	26.9	19.4	:	:
10	United States Government and Politics	2,279			:		15.4	19.7	26.9	18.2	19.8		
	Computer Science A	741							14.2	1.5	25.9		:
7	Statistics	4,781					20.6	17.9	25.6	_	14.2	:	
	Art History	214		:	:	:	21.5	22.0	28.5	17.8 10		:	:
	Environmental Science	2,198		:	:		24.7			24.2 11.4		:	:
		1 ' ' ' '	1 1					النتاح				1	

<sup>+</sup> Due to rounding, percentages do not always add up to 100.0.

Subjects with fewer than five AP Exam takers were omitted from this figure.

<sup>\*</sup> AP Italian Language and Culture was discontinued after the 2008-09 school year, and was reinstated in 2011-12.

# Low Income

## FIGURE 4 Trends in AP Exam Participation and Success

#### The percentage or number of ...

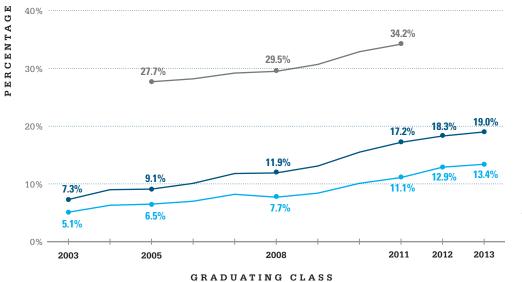
- K-12 students eligible for free or reduced-price lunch\*
- graduates leaving high school having taken an AP Exam who are from low-income backgrounds
- graduates scoring 3+ on an AP Exam during high school who are from low-income backgrounds

# 12,193

AP Exams were taken by low-income graduates in the class of 2013







34.2%

OF

40%

<sup>\*</sup>Estimates reflect the percentage of K-12 public school students eligible for free or reduced-price lunch. SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics: 2008 (Table 42), 2009 (Table 42), 2010 (Table 44), 2011 (Table 45), and 2012 (Table 46).

<sup>\*\*</sup>The numbers of students in the graduating classes who are eligible for free or reduced-price lunch are not available.

# Black/African American

## FIGURE 5 Trends in AP Exam Participation and Success

#### The percentage or number of ...

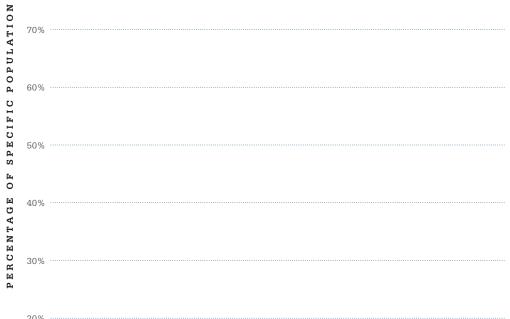
- students in the graduating class
- graduates leaving high school having taken an AP Exam
- graduates scoring 3+ on an AP Exam during high school
- ... who are black/African American

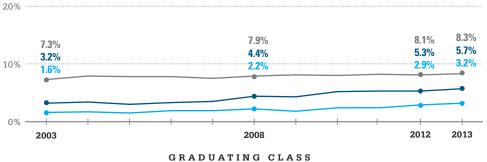
1,393

black/African American graduates in the class of 2013 took an AP Exam during high school



	2003	2008	2012	2013
•	4,089	5,161	5,186	5,222
•	423	800	1,200	1,393
•	147	285	466	555





# Hispanic/Latino

## FIGURE 6 Trends in AP Exam Participation and Success

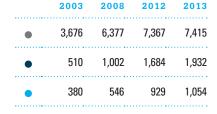
The percentage or number of ...

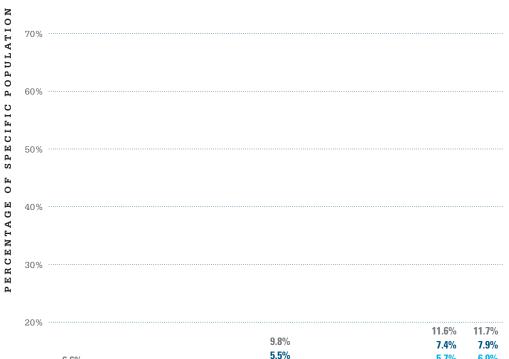
- students in the graduating class
- graduates leaving high school having taken an AP Exam
- graduates scoring 3+ on an AP Exam during high school
- ... who are Hispanic/Latino

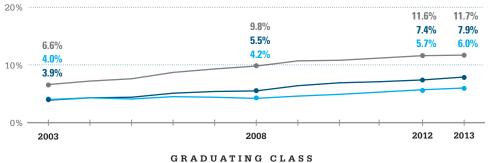
1,932

Hispanic/Latino graduates in the class of 2013 took an AP Exam during high school









# American Indian/ Alaska Native

FIGURE 7 Trends in AP Exam Participation and Success

#### The percentage or number of ...

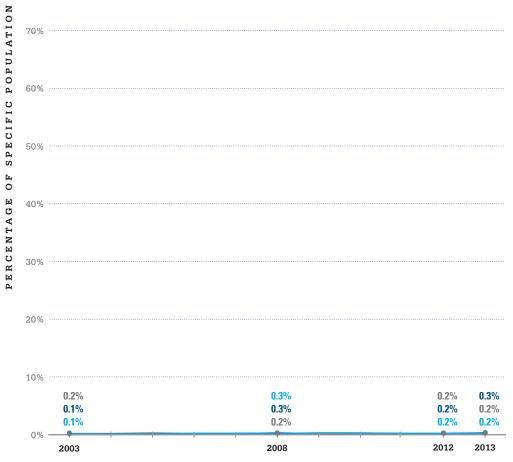
- students in the graduating class
- graduates leaving high school having taken an AP Exam
- graduates scoring 3+ on an AP Exam during high school
- ... who are American Indian/Alaska Native

79

American Indian/Alaska Native graduates in the class of 2013 took an AP Exam during high school



	2003	2008	2012	2013
•	137	161	149	153
•	19	55	46	79
•	7	35	31	43



# Asian/Asian American/ Pacific Islander

FIGURE 8 Trends in AP Exam Participation and Success The percentage or number of ... 2,471 • students in the graduating class Asian/Asian American/Pacific Islander • graduates leaving high school having taken an AP Exam • graduates scoring 3+ on an AP Exam during high school graduates in the class of 2013 took an ... who are Asian/Asian American/Pacific Islander AP Exam during high school 2003 2008 90% 2,712 3,072 1,139 1,664 80% 834 1,270 SPECIFIC POPULATION 70% 60% OF PERCENTAGE 40% 30% 20% 11.1% 10.5% 9.7% 8.9% 10.0% 9.7% 9.1%

2008

GRADUATING CLASS

5.8%

2013

5.5%

2012

2012

1,712

2013

3,695

2,471

1,958

10%

2003

# White

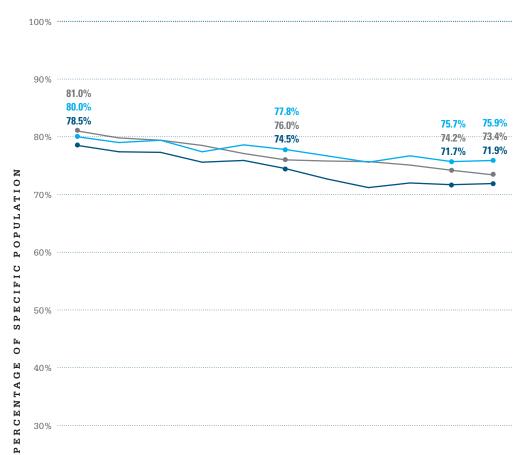
## FIGURE 9 Trends in AP Exam Participation and Success

The percentage or number of ...

- students in the graduating class
- graduates leaving high school having taken an AP Exam
- graduates scoring 3+ on an AP Exam during high school
- ... who are white

17,699

white graduates in the class of 2013 took an AP Exam during high school



2008

GRADUATING CLASS

2012

2013



30%

20%

10%

2003



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