GOAL 2: Increase the Academic Achievement of All High School Students

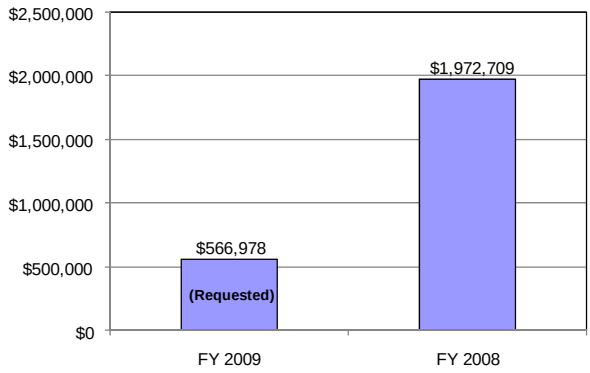
Overview

Strategic Objectives:

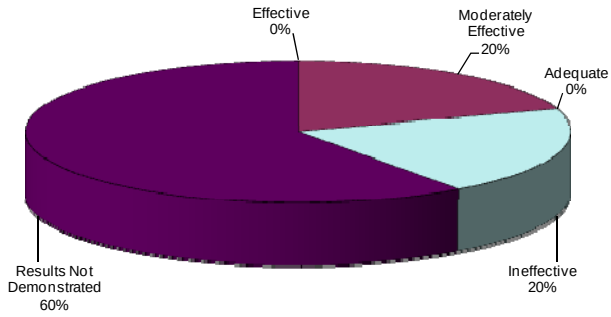
- Increase the proportion of high school students taking a rigorous curriculum
- Promote advanced proficiency in mathematics and science for all students
- Increase proficiency in critical foreign languages

Note: The apparent drop in resources from FY 2007 to FY 2008, as shown by the Goal 2 resources chart, reflects the fact that program participation in the ACG/SMART grant program during the first 2 years has been significantly below initial estimates, resulting in large funding balances brought forward for possible use in future years. As part of the FY 2008 appropriation, Congress rescinded $525 million of this unused balance. Estimates indicate future funding will substantially exceed the amounts needed to support anticipated grant awards. Accordingly, as part of the FY 2009 budget the Administration proposed to permanently cancel $652 million in unneeded ACG/SMART grant balances in FY 2009. This would not affect the amount of grants awarded, but would eliminate funding that current estimates indicate will not be needed.

Goal 2 Resources
($ in thousands)

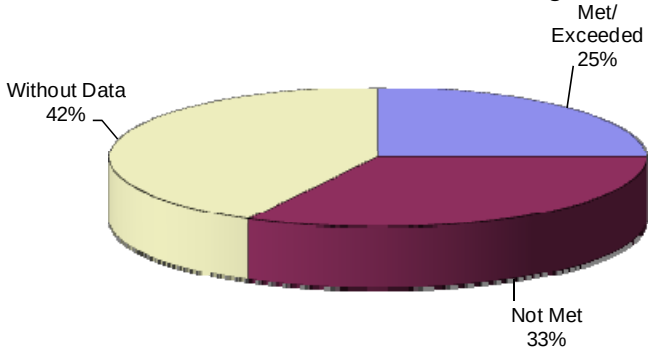


Goal 2 PART Ratings by Program



Note: Each year the Department analyzes the percentage of program performance targets that were met or exceeded, not met but improved over time, not met, or for which data are not yet available. Since the Department has a lag in the time data are received for the established targets, the FY 2007 target results are presented here. For more information on *PART Ratings by Programs* and *Percent of Targets Met and Not Met,* see *Program Performance Summary* at the end of this goal.

Goal 2 FY 2007 Percent of Targets

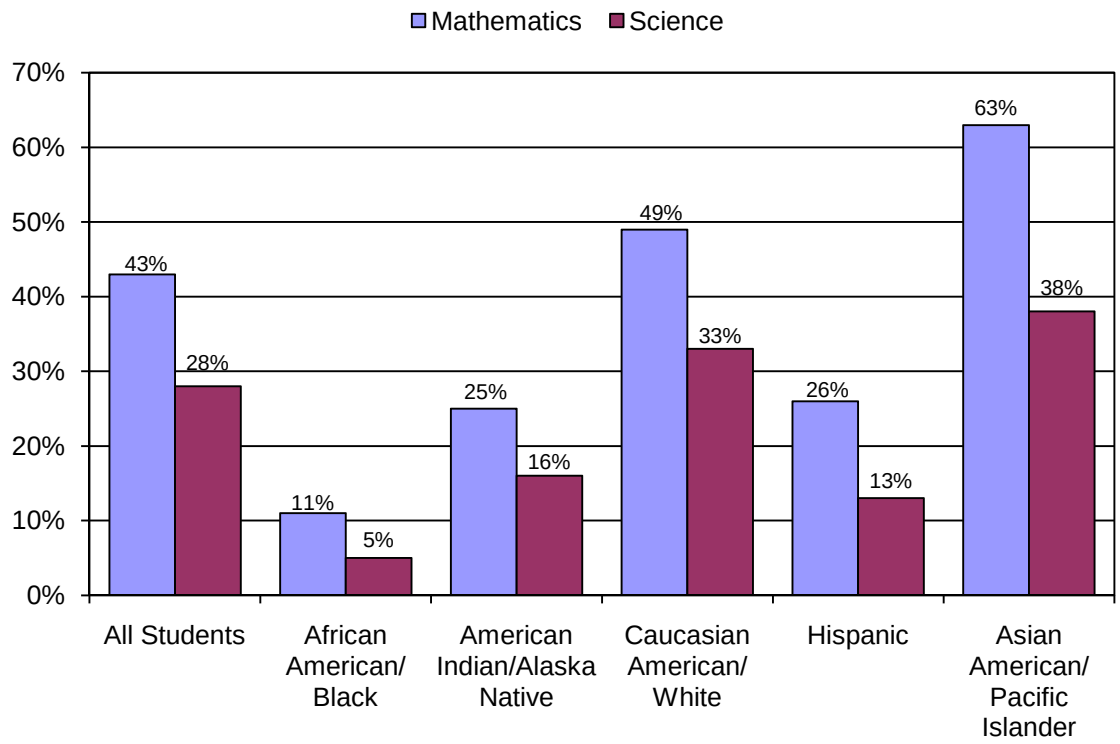


Key Measures

To better equip our students to compete in the global economy, the Department encourages states to adopt high school course work and programs of study that prepare all students for a postsecondary credential and facilitate a seamless transition from high school to college or the workforce.

The *2008 ACT College Readiness Report* presented results of the 2008 ACT scores. The Department uses ACT data to measure students' readiness for postsecondary education. The ACT is a national college admission and placement examination that assesses high school students' general educational development and their ability to complete college-level work. The ACT score results demonstrate the importance of taking challenging courses in preparation for success after high school. For the high school graduating class of 2008, in mathematics only about 43 percent of tested students overall were identified as ready for college level work and in science only 28 percent were ready for college-level work. According to the 2008 ACT report, only 1 percent of graduating seniors were planning to take a major college course of study in mathematics and only 5 percent were planning to major in biological and physical sciences.

Figure 10. Percentage of 2008 High School Graduating Class Meeting ACT College Readiness Benchmark Scores*



* Benchmark scores for mathematics and science were 22 and 24, respectively. A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a grade of B or higher or about a 75% chance of obtaining a C or higher in the college course.

SOURCE: ACT, 2008 (http://www.act.org/news/data/08/benchmarks.html)

The Department funds the training of additional instructors of Advanced Placement (AP) and International Baccalaureate (IB) classes in mathematics, science, and critical-need foreign languages. The Department continues to support achievement in mathematics,

science, and critical-need foreign languages through incentives for teachers to teach advanced courses. Currently, 25 percent of first-time, full-time Pell Grant recipients nationally receive an Academic Competitiveness Grant. The Department has set a goal to double the number of students receiving Academic Competitiveness and National Science and Mathematics Access to Retain Talent (SMART) Grants by 2010-11.

With a strong emphasis on preparing high school students for success in postsecondary education and in the global economy, the Department has selected this goal to emphasize in its *Strategic Plan.* Goal 2 encompasses 11 key performance measures and includes programs in academic competitiveness and innovation and improvement through Advanced Placement and International Baccalaureate programs. Other programs represented under this goal include Mathematics and Science Partnerships and the Adjunct Teacher Corps. See page 46 for an explanation of the documentation fields for the key measures.

Strategic Goal 2, Objective 1: Increase the proportion of high school students taking a rigorous curriculum

The American Competitiveness Initiative is a comprehensive strategy to keep our nation the most innovative in the world. Its goal is to strengthen high schools and prepare students for college or the workforce. The Department is committed to expanding Advanced Placement (AP) and International Baccalaureate (IB) programs to increase teacher training in mathematics, science, and critical foreign languages; to increase the number of students taking AP and IB mathematics, science, and critical foreign language exams; and to triple the number of students passing AP-IB tests. Academic Competitiveness grants continue to provide financial incentives for students to take a rigorous course of study in high school and college. To qualify for Academic Competitiveness grants, students must complete rigorous coursework, maintain good grades, be U.S. citizens, be full time students, and be eligible for Federal Pell Grants.

Measures for Objective 1	**2005**		**2006**		**2007**		**2008**	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.1.A. Percentage of low-income students who qualify for Academic Competitiveness Grants (89a0r6)					*	35	42	April 2009

* New measure in 2007. The 2007 actual serves as the baseline.

Source: National Student Loan Data System via Common Origination and Disbursement system data.

Data Quality and Timeliness. Data for 2008 are expected in April 2009.

Target Context. We met our FY 2007 target of setting the baseline. FY 2007 was the first year of the Academic Competitiveness Grants (ACG) program. Targets were developed as follows: the numerator was determined through a review of Financial Student Aid records; the denominator was developed from high school graduation records for the 2004-05 and 2005-06 school years, with the estimates narrowed for low-income students by use of the 2003-04 National Postsecondary Student Aid Study (NPSAS) and state estimates of the proportion of students taking rigorous curricula. The target is a challenging goal for the program – a 20 percent increase in the proportion of qualified students given ACG grants.

Report Explanation. The definition of low income is the definition that has been established for Pell Grant recipients. Eligibility for ACG was limited to 2 high school graduating classes. This permitted the Department to isolate the eligible group against which to calculate the actual. However, going forward, the number of eligible high school graduating classes increases by 1 each year making a valid analysis impossible to calculate without data that will permit a more elaborate analysis of program data or from a survey such as NPSAS. NPSAS data will be available in early 2009 with program data available soon after. The target was set last year and again this year on a path to double recipients of ACG by 2011.

Additional Information. Academic Competitiveness Grants were funded through FY 2011.

Measures for Objective 1	**2005**		**2006**		**2007**		**2008**	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.1.B. Number of Advanced Placement classes available nationwide (89a0r7)					*	Not collected	BL +10%	Not collected

* New measure in 2007, so no target. The 2007 actual will serve as the baseline.

BL = Baseline

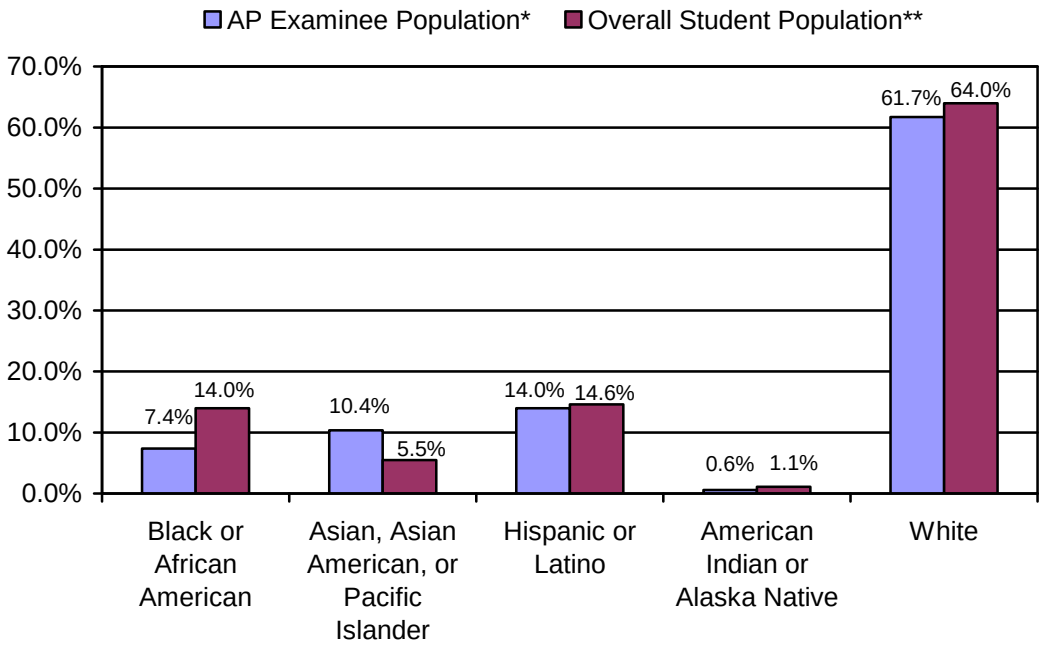
Source: The College Board, Ledger of Authorized Advanced Placement Courses

Data Quality and Timeliness. Data for 2007 were not collected on this measure. The Ledger of Authorized Advanced Placement Courses was only initiated in 2007 and no data base has been developed from which to extract the data.

For the public school graduating class of 2007, there were approximately 2.8 million high school graduates. Those graduates who took an AP exam at some point in high school numbered 698,182 or 24.9 percent – up 18.1 percent from 2002. The total number of AP exams taken by the class of 2007 across their entire high school years numbered 1,957,424. In 2007, 15,505 secondary schools located in the 50 states and the District of Columbia participated in the AP program. Of those, 12,241 were public schools, an increase of 204 schools over the previous year. See more detail at: (http://professionals.collegeboard.com/data-reports-research/ap/nation)

High schools serving students from low-income families tend to offer few, if any, Advanced Placement courses. The Department continues to support efforts to make AP courses available to students who now have limited access to these courses. Because low-income and minority students are underrepresented in AP classrooms, the Department targets Advanced Placement Incentive (API) grants to high-poverty high schools and works with states to promote the use of federal aid for AP exam fees by low-income and minority students. The Department is working to identify and disseminate information on promising practices for expanding the successful participation of low-income and minority students in AP courses.

Figure 11. The Class of 2007: Race/Ethnicity of AP Examinees vs. Graduating Seniors in U.S. Public Schools



* These examinees include all public school students in the class of 2007 who took an AP Exam at any point in high school. Note: Because some AP Exam takers identify themselves as "Other" for ethnicity or do not provide ethnicity, the "AP Examinee Population" in this figure only represents 94.1 percent of the AP population.

** *Knocking at the College Door* (2003), Western Interstate Commission for Higher Education

Source: The College Board, 2008

Measures for Objective 1 Number of Advanced Placement tests taken by public school students:	**2005**		**2006**		**2007**		**2008**	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.1.C. Total (89a0r8)	*	1,759,299	N/A	1,943,565	1,953,000	2,133,594	2,168,000	Jan 2009
2.1.D. Low-income (1149)	*	223,263	209,411	267,286	230,352	286,028	253,387	Jan 2009
2.1.E. Minorities (Black, Hispanic, Native American) (1150)	*	315,203	336,000	359,372	376,000	413,847	421,000	Jan 2009

* New measure in 2005, so no target. The 2005 actual serves as the baseline.

N/A = Not Available

Source: The College Board, Freeze File Report

Analysis of Progress. No target was established in FY 2006 for the total number of Advanced Placement tests taken by public school students as this was a new measure under the Department's new Strategic Plan. Targets for low-income and minority students were previously established by the program office. We exceeded our targets for FY 2007 for all three measures. The Department

continues to see growth in the overall numbers of Advanced Placement courses and tests taken by public school students.

Data Quality and Timeliness. Data are reported annually. Data are analyzed by the College Board and by the U.S. Department of Education.

Target Context.

2.1.C: This measure was not in place as a key strategic measure prior to 2005. We met our 2005 target of setting the baseline. Baseline data were used to set future targets. We exceeded our 2007 target. Data for 2008 are expected in January 2009. No target was set for 2006 as the Department's new *Strategic Plan* was only in force beginning in FY 2007.

2.1.D: This measure was not in place as a key strategic measure prior to 2005. We used the 2005 data to establish the baseline on which to base future targets. We exceeded both our 2006 and 2007 targets.

2.1.E: This measure was not in place as a key strategic measure prior to 2005. We used the 2005 actual data to establish the baseline on which to base future targets. We exceeded both our 2006 and 2007 targets.

To expand access to advanced course work for low-income and minority students, the Department is promoting efforts to increase the number of teachers qualified to teach AP and IB classes in high-need schools. Working with Congress, the Department will seek to expand support for API grants to provide assistance to state educational agencies and local educational agencies to prepare additional teachers to deliver instruction in AP and IB courses.

Based on a proven model of results backed by credible data, the Advanced Placement Incentive Program provides grants to increase the participation of low-income students in AP courses and tests. Grants provide support for the development or expansion of AP courses, professional development for teachers, curriculum development, the purchase of books and supplies, and pre-Advanced Placement courses to prepare students for academic achievement in Advanced Placement classes. For more detail, see:
(http://www.ed.gov/programs/apincent/index.html)
(http://www.ed.gov/programs/apfee/index.html)

Measures for Objective 1	**2005**		**2006**		**2007**		**2008**	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.1.F. Number of teachers trained through Advanced Placement Incentive grants to teach Advanced Placement classes (89a0r9)					*	Not collected	BL +5%	Not collected

* New key measure in 2007, so no target. The 2007 actual will serve as the baseline.

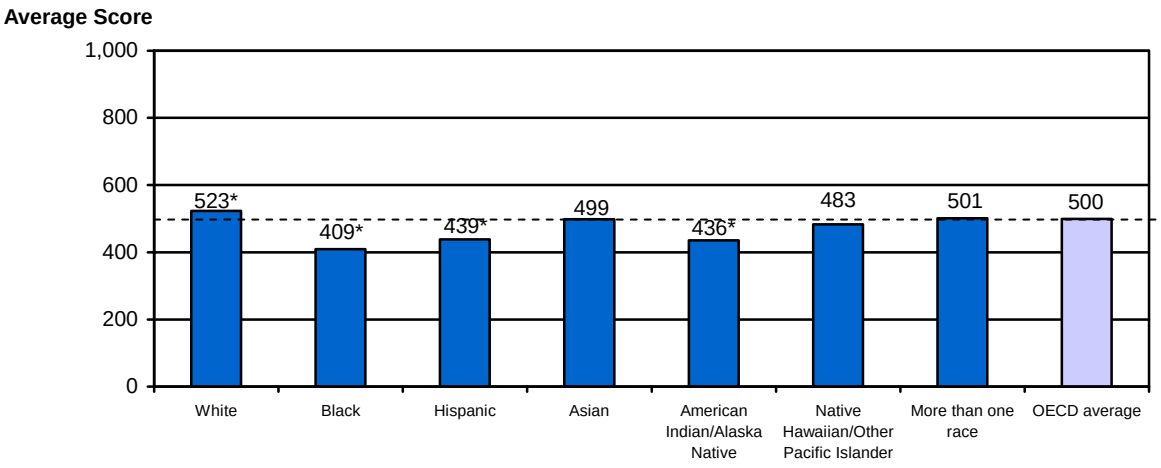
Source: U.S. Department of Education, Advanced Placement Incentive Program, *Annual Performance Reports*

Data Quality and Timeliness. These data were not collected because of a delay in proposed rulemaking. Funds were not appropriated for the Advanced Placement Incentive program as authorized by the *America COMPETES Act.*

Strategic Goal 2, Objective 2: Promote advanced proficiency in mathematics and science for all students

Strengthening mathematics and science achievement is an economic imperative for the nation. As prospective employers increase their reliance on advanced mathematics and science skills, high schools must provide more rigorous instruction in these subjects. According to the Program for International Student Assessment (PISA), a system of international assessments that measures the performance of 15-year-olds in reading literacy, mathematics literacy, and science literacy every three years against the 30 member countries of the Organization for Economic Cooperation and Development (OECD), fifteen-year-old students in the United States had an average score of 489 on the combined science literacy scale in 2006, lower than the OECD average score of 500. U.S. students scored lower on science literacy than their peers in 16 of the other 29 OECD countries. In 2006, the average score in mathematics literacy was 474, lower than the OECD average of 498. Twenty-three OECD jurisdictions scored higher than the United States in mathematics literacy in 2006. For more detail, see: (http://nces.ed.gov//pubs2008/2008016.pdf).

Figure 12. Average Scores of U.S. 15-year-old Students on Combined Science Literacy Scale, by Race/Ethnicity, 2006



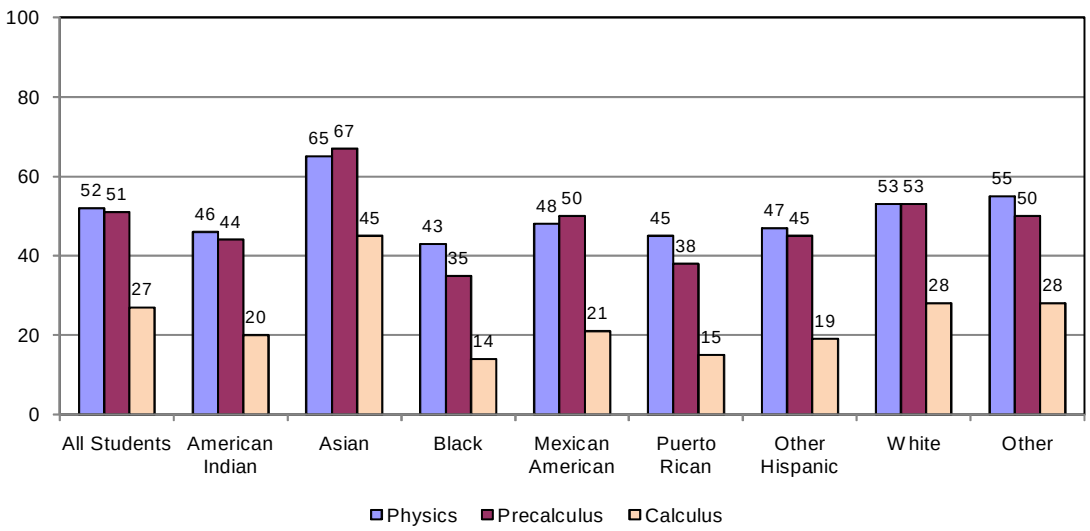
* *p< .05*. Significantly different from the OECD average at the .05 level of statistical significance.

NOTE: Black includes African-American, and Hispanic includes Latino. Students who identified themselves as being of Hispanic origin were classified as Hispanic, regardless of their race. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member jurisdictions. Because of an error in printing the test booklets, the United States mean performance may be wrongly estimated by approximately 1 score point. The impact is below one standard error.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2006

According to the latest Scholastic Achievement Test (SAT) data from the College Board, between 1998 and 2008, the percentage of college-bound seniors taking precalculus increased from 42 percent to 51 percent. Over the same ten-year period, the percentage of college bound seniors taking calculus increased from only 25 percent to 27 percent, and the percentage taking physics increased from 50 to 52 percent. For more detail, see: http://professionals.collegeboard.com/profdownload/cbs-08-Page-1-Table-1.pdf

Figure 13. Percentage of 2008 College-Bound Seniors Taking Physics, Precalculus, and Calculus, by Race/Ethnicity



Source: The College Board, 2008 http://professionals.collegeboard.com/profdownload/cbs-08-Page-9-Graph-8.pdf

The Department encourages increased access to and participation in Advanced Placement or International Baccalaureate classes by low-income and minority students. To offer challenging courses, schools must have qualified teachers. The Department promotes efforts to increase the number of teachers who have the academic content knowledge needed to teach advanced classes in mathematics and science, especially in schools where access to rigorous course work is limited. The Department encourages state educational agencies and local educational agencies to offer incentives, such as salary increments or bonuses, to teachers to become qualified to teach AP and IB courses.

Measures for Objective 2	**2005**		**2006**		**2007**		**2008**	
Number of Advanced Placement tests in mathematics and science taken nationwide by public school students:	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.2.A. Total			*	589,701	631,000	644,550	681,000	Jan 2009
2.2.B. Low-income			*	60,692	65,000	66,337	70,000	Jan 2009
2.2.C. Minorities (Black, Hispanic, Native American)			*	74,762	80,000	86,061	86,000	Jan 2009

* New measure in 2006. The 2006 actual served as the baseline.

Source. The College Board, Freeze File Report

Analysis of Progress. We exceeded our 2007 targets for all three measures. The number of advanced placement tests in mathematics and science taken nationwide continues to increase.

Data Quality and Timeliness. Data are reported annually. Data for 2008 are expected in January 2009.

Target Context. We met our 2006 target of setting the baseline. We established future targets based on the 2006 actual data.

Measures for Objective 2	2005		2006		2007		2008	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.2.D. Number of teachers trained through Advanced Placement Incentive grants to teach advanced placement classes in mathematics and science (89a0rc)					*	Not collected	BL+ 5%	Not collected

* New measure in 2007, so no target. The 2007 actual serves as the baseline.

Source: U.S. Department of Education, Advanced Placement Incentive Program, *Annual Performance Reports*

Data Quality and Timeliness. These data were not collected because of a delay in proposed rulemaking. Data for this measure were not collected because there were no appropriated funds for the Advanced Placement Incentive program authorized under the *America COMPETES Act.*

Strategic Goal 2, Objective 3: Increase proficiency in critical foreign languages

American students must master critical need foreign language skills for our nation to remain globally competitive and to ensure national security. These languages include Arabic, Farsi, Chinese, Japanese, Korean, and Russian. According to the Center for Applied Linguistics, in 1997, only about 24 percent of public elementary schools reported teaching foreign languages, and most of those schools focus on giving students introductory exposure to a language rather than achieving overall proficiency. For additional information, go to http://www.cal.org/resources/pubs/flinstruct.html. According to the 2002 *Digest of Education Statistics,* only about 44 percent of American high school students are enrolled in foreign language classes. Of those, most were enrolled in Spanish or French.

The President's National Security Language Initiative will increase the number of Americans mastering critical need languages and at a younger age; increase the number of advanced-level speakers of critical-need foreign languages; and increase the number of teachers of critical need languages. The Department will focus resources toward educating students and teachers in critical-need foreign languages and increasing the number of advanced-level speakers in those languages.

The Department of Education has set a goal to double the number of the number of students receiving American Competitiveness and SMART grants by 2010-11.

Measures for Objective 3	2005		2006		2007		2008	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2.3.A. Combined total of Advanced Placement and International Baccalaureate tests in critical foreign languages passed by public school students (89a0re)					*	3,557	4,093	Jan 2009

*New measure in 2007. The 2007 actual served as the baseline.

Source: The College Board Freeze File Report and International Baccalaureate North America, *Examination Review and Data Summary.*

Analysis of Progress. In 2007 and 2008, the College Board tested in AP for critical languages for Chinese and Japanese. Results for 2008 are not yet available. In 2007 and 2008, International Baccalaureate of North America tested the critical languages of Arabic, Chinese, Japanese, Korean, and Russian.

Data Quality and Timeliness. Data are reported annually by the International Baccalaureate of North America and the College Board.

Target Context. We met our FY 2007 target to establish a baseline. Targets are based on a total of all tests passed, regardless of score received.

Report Explanation. The total number of exams in critical foreign languages for the College Board in 2007 was 3,253. In 2007, the total number of exams in the IB program in critical foreign languages was 304. For the College Board, in 2007, the total number of exams taken in critical foreign languages receiving a score of "3" or above was 2,810. For the International Baccalaureate tests, the total number of tests for 2007 receiving a score of "4" and above was 247. For 2008, the total number of IB tests receiving a score of "4" and above was 225.

Goal 2: Increase the Academic Achievement of All High School Students

Program Performance Summary: Nine of our grant programs most directly support Goal 2. These programs are listed below. In the table, an overview is provided for the results of each program on its program performance measures. (See page 46 for the methodology of calculating the percentage of targets met, not met, and without data.) Appropriation and expenditure data for FY 2008 are included for each of these programs. Individual program performance reports are available at http://www.ed.gov/about/reports/annual/2008report/program.html. Appropriation and expenditure data for FY 2008 are included for each of these programs.

Program Name	PART Rating	Appro-pria-tions†	Expen-ditures‡	Program Performance Results: Percent of Targets Met/Exceeded, *Not Met But Improved Over Prior Years, Not Met, Without Data													
				FY 2008				FY 2007			FY 2006			FY 2005			
		FY 2008 ($ in mil.)	FY 2008 ($ in mil.)	% Met/ Exc.	% Not Met But Impro-ved	% Not Met	% No Data	% Met/ Exc.	% Not Met	% No Data	% Met/ Exc.	% Not Met	% No Data	% Met/ Exc.	% Not Met	% No Data
Academic Competitiveness and SMART Grants (HEA)	NA	395	515					New Program									
Advanced Placement (ESEA)	ME	44	36	0	0	0	100	33	33	34	80	20	0				
Career and Technical Education National Programs (CTEA)	NA	8	10	0	0	0	100	0	100	0	0	100	0	0	100	0	
Career and Technical Education State Grants (CTEA)	I	1,161	1,121	0	0	0	100	33	67	0	44	56	0	44	56	0	
Close Up Fellowships (ESEA)	NA	2	1	0	0	0	100	0	0	100	100	0	0				
Excellence in Economic Education (ESEA)	NA	1	1	0	0	0	100	0	0	100	0	0	100	0	0	100	
Mathematics and Science Partnerships (ESEA)	RND	179	188	0	0	0	100	100	0	0	100	0	0	0	0	100	
Smaller Learning Communities (ESEA)	A	80	99	0	0	0	100	0	0	100	56	44	0	67	33	0	
Tech Prep State Grants (CTEA)	RND	103	102	0	0	0	100	33	67	0	67	33	0	33	67	0	
TOTAL		1,973	^2,073														

† Budget for each program represents program budget authority.

‡ Expenditures occur when recipients draw down funds to cover actual outlays. FY 2008 expenditures may include funds from prior years' appropriations.

* The "Not Met But Improved Over Prior Years" column is new for FY 2008.

A shaded cell denotes that the program did not have targets for the specified year.

^Estimated accruals in the amount of $39 million are excluded from the FY 2008 expenditure.

CTEA: *Carl D. Perkins Career and Technical Education Act*
ESEA: *Elementary and Secondary Education Act of 1965*
HEA: *Higher Education Act of 1965*

PART Rating
ME = Moderately Effective
I = Ineffective
RND = Results Not Demonstrated
NA = Program has not been assessed