AP STEM Access Program

FREQUENTLY ASKED QUESTIONS

PROGRAM CRITERIA

- **What are the criteria for a school to qualify for the AP STEM Access program?**

  To achieve the shared goal of increasing student participation in rigorous AP STEM coursework and to focus the funding on schools with the most unmet student potential and need, Google and DonorsChoose.org worked with the College Board to develop the following data-driven criteria. The College Board used its data to determine which schools met the criteria, all of which are being invited to participate in the program.

  1) They are **public high schools** in the United States.

  2) They have historically had a population of underrepresented students that were academically prepared for rigorous coursework in AP STEM as indicated by their high scores on the PSAT/NMSQT® (Preliminary SAT/National Merit Scholarship Qualifying Test). Specifically, in the 2010-11 academic year they had **10 or more black/African-American, American Indian/Alaska Native, Hispanic/Latino students—and/or 25 or more female students—with high potential** to be successful in one or more AP college-level STEM course(s) that were not currently offered at the high school in the 2010-11 academic year. For this criterion, high AP potential is defined as a 70 percent or higher likelihood of scoring a 3, 4, or 5 on the AP Exam;

  3) They **serve communities** with a median household income of $100,000 or less and/or 40 percent or more of their students qualifying for free or reduced-price school meals.

- **How many schools will be eligible to participate in the AP STEM Access program?**

  A: More than 800 schools meet the criteria, and we hope that they all participate in this program, starting in the fall of 2013.

- **Where are these qualifying schools located?**

  A: The schools represent a broad range of public high schools across the United States, located in urban and rural areas all across the country.

- **Are schools required to administer the PSAT/NMSQT® to qualify for this program?**

  A: Yes. Research indicates that PSAT/NMSQT scores are strong predictors of a student's likelihood of success in AP coursework and exams. When used in conjunction with other criteria such as high school GPA, grades in previous same-discipline course work, and the number of same-discipline courses a student has taken, the PSAT/NMSQT can provide high school educators with reliable guidance in identifying students who may be ready for the rigor of AP.

  This program is designed to increase access to AP STEM courses for students who have strong academic potential to be successful in AP. In order to identify schools with populations of these high-potential students,

the College Board used historical PSAT/NMSQT data from the 2010-2011 academic year to identify schools that had 10+ underrepresented minority and/or 25+ female students with 70 percent likelihood of earning a score of 3, 4, or 5 on a STEM AP Exam not already offered by their school. The PSAT/NMSQT is administered to 3.5 million students every year and is a consistent measure.

The October 2012 PSAT/NMSQT data becomes available in early December. To start their new courses, schools can use AP Potential™, a free, Web-based tool, to identify whether they have 10 or more black/African American, Hispanic/Latino, or Native American students and/or 25 or more female students who have at least a 60 percent likelihood of success in an AP STEM course not currently offered at the school.

- **What are the enrollment requirements for this program?**

  To receive the "start-up" funding, new AP STEM courses must have at least 10 students. Although funding is not tied to a specific enrollment number of traditionally underrepresented students, participating schools and the College Board agree to work together to achieve the stated objectives of this program to meet specific school circumstances. This includes supporting communications to create awareness, encouraging students to seek out additional support, ensuring that low-income students take advantage of federal funding for AP Exams, as well as increasing participation of underrepresented students in AP STEM courses.

  If a school completes the steps to start up one or more new AP STEM courses, all pre-existing AP STEM teachers in the school as well as the new AP STEM teachers are eligible to receive "Excellence Funding" if they achieve the following steps:

  - Increase course enrollment and completion, by at least five underrepresented students (African American, Hispanic/Latino, Native American, and/or female) within the AP STEM class. This will be measured through College Board data comparing the number of underrepresented students who take the May 2013 AP Exam versus those who take the May 2014 exam;

  - For every 3, 4, or 5 score any of their students achieve on the AP Exam, participating teachers will receive a $100 DonorsChoose.org gift card for use on DonorsChoose.org to acquire additional classroom resources (lab equipment; textbooks; science materials; calculators; etc.).

- **Why are females considered underrepresented in STEM?**

  Female STEM majors –Females are underrepresented among STEM undergraduate majors earning only 41 percent of science bachelor's degrees, 18 percent of computer science degrees, and 17 percent of engineering degrees in 2009-2010 according to NCES. *http://nces.ed.gov/pubs2012/2012045_4.pdf*

  In 2009, 1.7 million bachelor's degrees were earned in the United States and only 88,700 were in Engineering. NCES.

  Female majors overall–Over half of all bachelor's degrees conferred in 2009-10 were awarded to females (57 percent), similar to the percentage awarded to females in 1999–2000.

In the United States, there has historically been an underrepresentation of female students studying STEM subjects in college and pursuing STEM-related careers. Research shows that students participating in AP mathematics and science courses increase the likelihood of their taking related courses in college and pursuing related careers in the future.

In 2011, there were more male students than female students taking AP Exams in Calculus AB, Calculus BC, and Chemistry, and there was a disproportionate number of males taking AP Exams in Computer Science A, Physics B, Physics C: Electricity and Magnetism, and Physics C: Mechanics.

AP Subject	Female	Male
Biology	58%	42%
Calculus AB	48%	52%
Calculus BC	41%	59%
Chemistry	47%	53%
Computer Science A	19%	81%
Environmental Science	55%	45%
Physics B	35%	65%
Physics C: Electricity and Magnetism	23%	77%
Physics C: Mechanics	27%	73%
Statistics	50%	50%

- **What are the participation rates in AP mathematics courses for underrepresented minority students?**

  A: National analyses show that among students with comparable levels of readiness for AP STEM course work, participation rates vary significantly across race and gender. For example, participation in AP course work in mathematics varies among students who each have at least a 70 percent likelihood of succeeding on an AP mathematics exam: 6 in 10 Asian students participate, 4 in 10 white students, 3 in 10 African-American and Hispanic/Latino students, and 2 in 10 American Indian/Alaska Native students, in most AP STEM subjects.

FUNDING

- **How much funding will a typical school in this program receive?**

  A: A typical school will receive $1,200-$9,000 to start their new courses, including funding for classroom materials, textbooks, lab equipment, graphing calculators, etc.

AP Subject	Start-up Resources
Biology	**$7,840**
Calculus AB	**$3,200**
Calculus BC	**$3,200**
Chemistry	**$9,000**
Computer Science A	**$1,200**
Environmental Science	**$7,100**
Physics B	**$8,000**
Physics C: Electricity and Magnetism	**$6,100**
Physics C: Mechanics	**$6,100**
Statistics	**$3,200**

All new AP STEM teachers will receive a professional development scholarship to attend AP Summer Institutes. In addition, classroom resources, in the form of a $100 DonorsChoose.org gift card to purchase materials on DonorsChoose.org, will be given to any AP STEM teacher when their students score a 3, 4, or 5 on their AP STEM Exam. To be eligible, teachers must increase diversity in their classroom and support student success. This funding is available for all STEM teachers in participating schools (not just those teaching new courses) who add five new underrepresented students to their class. This will be measured through College Board data comparing the May 2013 exam-takers versus May 2014 exam-takers.

- **How will teachers be able to receive their funding?**

  A: Between April and August, teachers who sign up for the program will receive packets that include explicit instructions and a suggested materials checklist for their course with their DonorsChoose.org gift card. Returning and new AP STEM teachers will be asked to create projects on DonorsChoose.org, and then purchase materials through the site using their DonorsChoose.org gift cards. DonorsChoose.org will purchase the necessary textbooks and materials teachers require and deliver them to the schools directly. No money will be exchanged.

- **How will teachers be able to receive their professional development?**

  A: Teachers must register for an AP Summer Institute by March 28, 2013. Instructions will be included with their MOU, in the teachers packets, and in the resource section of *collegeboard.org/apstem*.

PROGRAM PROCESSES

- **How do schools use AP Potential?**

  A: In early December, *AP Potential*™ will launch with 2012 PSAT/NMSQT® results. Access codes will be emailed in early December to principals and AP Coordinators at 2012-13 participating AP schools, and also appear on the PSAT/NMSQT Roster of Scores. After logging in and entering your access code, you will be able to choose whether to generate reports based on the 2010, 2011, or 2012 PSAT/NMSQT administration. District AP Potential access codes will also be mailed to the attention of district officials in early December.

  For this program, it is recommended that schools use the 2012 results to identify 10 or more African American, Hispanic/Latino, or Native American students and/or 25 or more female students who have at least a 60 percent likelihood of success in an AP STEM course not currently offered at the school.

- **What documentation do participating schools need to keep and/or report?**

  A: Schools are expected to run their new courses for three years. At the end schools will be asked to provide feedback on the program by responding to a survey.