Frequently Asked Questions

What is the Advanced STEM Access Program?

The Advanced STEM Access Program, now in its seventh year, is a nationally recognized initiative to provide promising high school students in rural Mississippi communities access to advanced STEM courses they need to achieve their full potential, but which their schools otherwise may not be able to offer, due to limited resources and a chronic, and worsening, shortage of qualified teachers.

Advanced Placement (AP)® courses prepare students for college rigor, enhance admission prospects, and can reduce tuition costs by enabling students to earn college credit prior to enrollment. However, university and government studies have found that, while 95% of suburban school districts offer APs, most remote rural districts, and most high-poverty schools with substantial Black or Hispanic majorities, do not.

That disparate access to AP courses has highly adverse consequences.

The Equity and Excellence Commission, an advisory committee chartered by Congress, concluded in its report to the U.S. Secretary of Education that "inequities are perpetuated [through] coursework that is low in academic rigor" and the lack of AP courses for underserved rural, low-income, and minority students "aggravate the achievement gaps" and "impair our ability as a nation to raise student achievement."

College Board, which created and administers the AP Program worldwide, recently reported to the U.S. Secretary of Education that "The Advanced STEM Access Program has proven uniquely successful in addressing disparate access to AP STEM courses."

The Global Teaching Project implements the Advanced STEM Access Program in conjunction with the Mississippi Public School Consortium for Educational Access (Consortium), which is composed of rural school districts from various parts of Mississippi. The Program offers four Advanced Placement courses—AP Physics 1, AP Computer Science Principles, AP Biology, and AP Statistics—to several hundred students at 38 high schools, and continues to seek to add schools, courses, and students.

What Does the Program Cost?

There is **no charge** to school districts, schools, students, or students' families to participate in the Advanced STEM Access Program, which is funded by private grants and donations.

What Does the Program Provide?

The Advanced STEM Access Program works with faculty and students from **Yale, the University of Virginia, Harvard, MIT, Princeton, Notre Dame, Columbia, Vanderbilt, the University of Pennsylvania, Stanford, Delta State, Jackson State, Ole Miss, Mississippi State**, and other prominent universities to offer classes in a blended format, which utilizes multiple means to engage and teach students:

- A **Mississippi-based, AP-certified supervisory teacher** creates the curriculum, maintains an online course platform, provides certain direct instruction, and supports in-class instructors with detailed lesson plans and pedagogical guidance.
- **In-class teachers implement lesson plans** and provide additional instruction.
- **Substantial professional development and curriculum support** is provided to in-class teachers, including university-based residential training and instructional programs, as well as conferences with supervisory instructors to review material, share classroom experiences, and go over future lesson plans. Teachers are compensated for participating in supplemental sessions and residential programs, for which all expenses are covered. Also, funding is available to obtain applicable certifications.
- **Students are provided extensive instructional materials**, including textbooks, workbooks, instructional videos, and substantial online resources. Computer Science students are provided Chromebooks, as needed, for their exclusive use during the school year; thereafter, the Chromebooks, which are Consortium property, are retained by the schools.
- **STEM majors from many of the nation's leading universities** are assigned to each class at each school and provide regular **video conference tutoring sessions**, typically twice each week.
- Students receive additional support through a series of immersive, university-based instructional programs at Ole Miss, Mississippi State, Delta State, and Jackson State, which in-class teachers and college STEM major tutors also attend.
- **Funding is available** to participating schools to pay for some or all of the cost of needed technology and upgrades, such as monitors, cameras, and speakers.
- To supplement instruction, the Program also conducts ancillary activities, such as:
  - Workshops to learn about the college admissions and financial aid process and prepare college applications.
  - A **Dinner Discussion Series** in which students and their families are provided meals, and meet with renowned scientists and other prominent leaders such as Professor Meg Urry, Director of the Yale Center for Astronomy and Astrophysics, Dr. Ed Ryan, Global Infectious Diseases expert at Harvard Medical School, and entrepreneur Mark Cuban.
  - A virtual **Senior Day program** with guest speaker MIT Professor Rainer Weiss, winner of the Nobel Prize in Physics.
  - **Student Recognition Events** in which outstanding students are recognized for their achievements. Past honorees were presented with flags flown over the U.S. Capitol and addressed by U.S. Senator Roger Wicker.
  - Activities contemplated for 2023-2024 include talks by Pulitzer Prize-winning historian and Yale professor **David Blight**, and textbook author and Physics professor **Douglas Giancoli**, and a trip to the **LIGO Physics facility** in Louisiana, where Dr. Weiss did his Nobel Prize-winning research.

What Has the Program Achieved?

- College Board, which created and administers the AP Program worldwide, reported to the U.S. Secretary of Education in 2023 that the Program "is a national leader in providing promising high school students in rural, high-poverty, and predominantly minority communities access to AP STEM courses."
- ·In 2022-2023, over half of Mississippi public schools offering AP Physics 1 did so through the Program, as did the only schools serving Mississippi's 20 most impoverished districts that offered AP Physics or Computer Science Principles.
- The Advanced STEM Access Program also stands out nationally. In 2022-2023, College Board authorized over 20,000 classes in AP Physics, Biology, and Computer Science. However, in the 50 rural school districts with the nation's highest poverty rates, the only schools in any state that offered AP Physics, and most that offered AP Biology or Computer Science, did so through the Program.
- Students in the Advanced STEM Access Program quantifiably benefit. Mississippi State University reported that students at the summer program "achieved dramatic gains in substantive understanding of course content."
- Individual students in the Advanced STEM Access Program also have done extremely well on AP exams, in some cases earning some of the state's top scores. Numerous students have earned the first qualifying scores in their STEM subjects in the history of their schools.Almost all students go on to college, and have been admitted to schools including MIT, Virginia, and Vanderbilt.
- Articles about the Program also have appeared in publications associated with the University of Mississippi, Mississippi State, Yale, Columbia, the University of Virginia, the Walton Family Foundation, and PBS, as well as in the Clarion Ledger and Daily Journal, and on national and local TV news.
- The Program has earned bipartisan praise. Then-U.S. Secretary of Education Betsy DeVos visited the program in 2018 and stated in 2019 Senate testimony that the Program is "a Win-Win for everyone." Former U.S. Education Secretary Richard Riley stated, "The Global Teaching Project seeks to provide access to quality educational content to all students, regardless of their circumstances."
- In 2019, an independent review panel convened by the U.S. Department of Education validated the Program's design and efficacy.

What Do Schools Need to Provide?

- **The Advanced STEM Access Program is provided free of charge.** Neither schools, school districts, students, nor students' families pay the Global Teaching Project to participate in the Advanced STEM Access Program.
- Schools select students to participate in the Program. There is no set limit on the size of a class, though all students are expected to have the aptitude and work ethic needed to succeed. Class sizes at participating schools have ranged from 1 to over 20 students; a typical class may have 6-8 students.
- AP courses offered through the Advanced STEM Access Program are to be part of the school's regular class schedule.
- The blended format of the courses requires an in-class teacher from the school to preside over the classroom and implement the lesson plans. The Program provides extensive supports to the in-class teacher, but the courses are most effective when implemented by an experienced educator with very good classroom management skills. In addition, for Physics, a teacher with solid skills in Algebra and Trigonometry is strongly preferred.
- Schools determine grades according to their own policies, though they are encouraged to reward, rather than penalize, students for taking on the challenge of AP STEM courses, and award grades based on effort and progress made rather than rigid adherence to scores on assignments and tests that are meant largely to illuminate where additional instruction is needed.
- Schools register their students for their respective AP exams, pay College Board exam fees, and administer those exams.
- Schools assist with various administrative tasks, such as collecting forms.
- Schools provide transportation to Advanced STEM Access Program activities, including the university-based instructional programs.

For further information, please contact
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