

## Overview

### Advanced Placement Science Support Program

The Boston Science Partnership has created a comprehensive program to support the success of teachers and students in AP science. By utilizing the resources of our partner universities and building the capacity of instructors, we have tripled the number of students taking and passing AP courses in biology, chemistry and physics. The program has five mutually supportive, but independent components.

**APSI** - - Advanced Placement Summer Institutes are week-long courses that prepare teachers to teach AP successfully and which are endorsed by the College Board. APSIs helps current and future AP teachers to become more familiar with structuring a productive classroom, teaching the AP curriculum and advanced science content and preparing students for the exam. The Boston Science Partnership has created and hosted *urban focused* APSIs in Boston in order to directly address challenges urban teachers may face with implementing AP in their school. All APSI courses are beneficial to teachers who want to support advanced work by their students.

**Summer Bridge** - - The AP Summer Bridge Program allows students and their teachers to begin instruction prior to the official start of the school year, adding nearly a half semester onto the year. Students and their teachers participate in eight days of summer study at one of three host universities: Northeastern University, Harvard Medical School or UMASS Boston. Meeting at a university impresses upon students the advanced content they will be mastering, while bringing the resources of the university to the high school audience.

Typically, the class of students has access to a discussion room and lab space. With meals, a binder of materials and transportation tickets provided, the students feel well supported as they begin the challenging work of college level science. The rigorous schedule includes daily labs with graduate students who help prep and lead, and classroom content time to review, discuss, do problem sets and facilitate the group cohesion.



**University Lab Sessions** - - Students with their teachers continue to use university lab space throughout the school year by participating in the University Lab Sessions. Once a month, teachers and students assemble at the university labs either after school or on Saturdays to carry out experiments that require more sophisticated lab equipment than what is available at most high schools. The Lab Sessions are beneficial for students because they get to learn on a university campus, become comfortable in a laboratory setting, and support their learning. The labs are also supported by graduate students who help find materials, communicate with the university lab support staff, and help to assist the teachers during the actual lab time.



To quote an administrator: *“The Saturday AP labs have been very valuable. Our AP Chemistry teacher wouldn’t have been able to get through those labs on her own because of our schedule at the school. She has been able to do more comprehensive labs with students. Getting the students in a college setting and having them see that they belong there and can do college-level labs is very valuable.”*

**Practice exam** - - Each April nearly 500 students have an opportunity to take an AP practice exam under authentic testing conditions. Students, teachers and graduate students gather at UMass Boston to take and proctor the exam. Teachers then stay late to grade the exams. Teachers receive detailed student results within two days in order to focus their final preparation before the AP exam in May.

**Teacher Callbacks** - - Teacher Callbacks are content-specific, peer-driven meetings that happen monthly. At these meetings, teachers can discuss the curriculum, challenges with teaching or implementing the curriculum, pedagogy, planning, resources and materials. These callbacks provide an opportunity for teachers in different buildings to connect and to discuss amongst each other what is currently happening in their common discipline. They can provide opportunities for teachers to share best practices and motivate each other to improve their teaching and help their students succeed.