The Cavalier Daily

TUESDAY, FEBRUARY 21, 2006

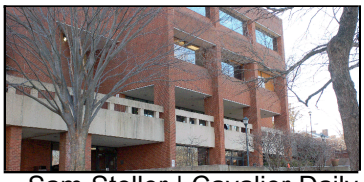
Study suggests AP courses do not fully prepare students for college

University Prof. finds that AP students do not get markedly higher grades in courses

Andy Mullan

Cavalier Daily Associate Editor

Advanced Placement courses in biology, physics and chemistry do not prepare students for the rigors of introductory college courses, according to a survey conducted by Education Prof. Robert Tai and Harvard Prof. Philip Sadler.



Sam Stoller | Cavalier Daily
Robert Tai, a professor at the University Education School, worked with Phillip Sacler of Harvard University to develop the survey, the largest of it's type.

"We have found that the AP isn't helping as much as people say it should," Tai said.

The study collected grades from over 8,000 students and 128 different introductory science courses from universities across the nation and compared those grades to the scores students received on applicable AP tests, he said.

"If a student gets a five on an AP test, the expectation is that that student should receive an 'A' in that intro class," he said.

The study has found that approximately 20 percent of students who receive a five on an AP test fail to receive an 'A' in the appropriate introductory class, Tai said.

The study found that on average students who took AP courses only scored about three points higher in their courses than their non-AP counterparts.

"AP courses can provide students with a false sense of security concerning their ability to perform in a class," Chemistry Prof. W. Dean Harman said.

The goal of an AP class is to get as many students to pass the AP test as possible, forcing teachers to focus on the test rather than chemistry as a discipline, Harman said.

There is a huge level of memorization in high school preparation for AP tests, according to Harmon.

"The AP courses are structured to achieve a breadth of the subject rather than a depth, and that breadth can be a very superficial one," he said.

Each high school teaches their AP courses differently and so it is very difficult to gauge what students know, Harman said.

According to Harman, the University has a series of chemistry classes for students that took AP Chemistry in high school targetted at students with an increased interest in chemistry. But students need to develop the critical thinking skills that were never covered in high school and are necessary for success in upper-level chemistry classes, he said.

AP courses serve an important purpose in high school, said Albemarle High School guidance counselor Dan Monahan.

Students that take AP courses are better able to get into competitive colleges, and high schools are ranked based on the number of AP courses they provide, Monahan said.

"Students that bust their butts in high school will continue to bust their butts in college," he said.

In regards to the quality of the courses, the nature of the tests requires students to be able to analyze material and synthesize their answers, he said.

Because AP courses encourage math and science education, the Siemens Foundation offers scholarships to students who perform

exceptionally on AP tests, said Jim Miller, spokesperson for the Siemens Foundation.

In his State of the Union speech, President Bush specifically mentioned increasing the number of AP courses, Miller said, in order to promote math and science education, this is in line with the Siemens Foundation's goal.

Harman said AP courses do encourage students to go beyond basic high school science courses, but they could be improved by going into fewer subjects in more depth, and leave the bulk of the discipline to college professors.