

Online Homeschoolers Score High on AP Exams

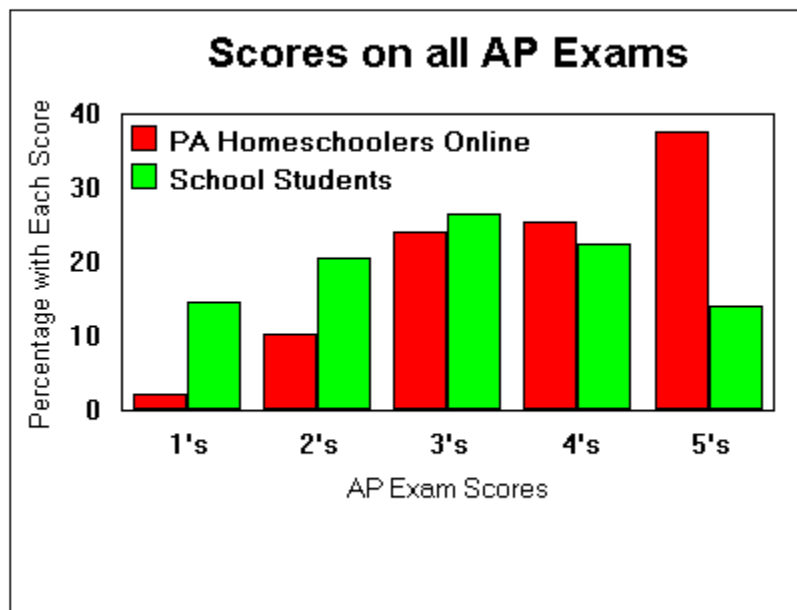
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Could homeschooled students, working with teachers and fellow students via the Internet, be a match for public and private school classrooms. With many new online test preparation classes for public, private and homeschooled students, the College Board has begun to report the results.

According to statistics provided by the College Board, the answer can be an enthusiastic "yes." Homeschooled students from across the country participating in PA Homeschoolers online test preparation classes did super on their 2004 Advanced Placement* (AP*) examinations according to statistics provided by the College Board. The following chart shows their success. It shows that the scores of school students describe a bell shaped curve with "3" being the most common score while the scores of the online homeschooled students trend upwards with "5" being the most common score.

The mean score of the 133 homeschooled students on Advanced Placement exams taken in May 2004 was 3.86 while the mean score of school students was 2.97.



What are Advanced Placement Exams?

Advanced high school students (usually juniors or seniors) often do college-level classes at their high schools in preparation for Advanced Placement exams in May. There are five possible scores on AP exams:

- “1” means “no recommendation”,
- “2” means “possibly qualified”,
- “3” means “qualified”,
- “4” means “well qualified”,
- “5” means “extremely well qualified”

When students pass Advanced Placement exams, given each May, with a score of “3” or higher, they can earn college credit or advanced standing at many colleges, and opt out of intro classes. Some colleges require scores higher than a “3” and some colleges do not give college credit for AP exams. Many homeschool students seeking academic scholarships also find that AP exams give a concrete way for others to gauge their strong academic preparation. AP classes are all designed to be much tougher than typical high school classes- more reading, more study time, and more dedication are usually required.

The Community of Scholars Model of Online Learning

In many ways, homeschoolers provide a ready laboratory where innovative Internet teaching methods can be tried and tested. There are at least three formats for online classes, the school model, the distance learning model, and the community of scholars model. In the school model a simultaneous classroom is created. In the distance learning model, students work on their own through a set curriculum with supervision from a teacher.

The PA Homeschoolers online test preparation classes (www.pahomeschoolers.com then click on “Online Classes.”) use the community of scholars model in which students respond to each other’s work under the leadership of an involved teacher who has designed his or her own curriculum. In addition to doing work in college-level textbooks, students would interact with each other using e-mail and the class webboards. Students would:

- Engage in lively discussion and debate using web boards,
- Respond to each others’ essays online,
- Take quizzes online,
- Share independent research and creative projects,
- Learn active Internet research skills,
- Ask questions of the teacher and see teachers’ responses to other students’ questions.
- Follow a rigorous study schedule so that they will be ready to take the exam in the May.
- Develop friendships which often carry into future classes.

As part of the calculus class students would give detailed explanations of the solutions to a particular subset of problems from a college calculus textbook and also comment upon the other students’ solutions.

As part of the French class, students would chat online using microphones, send recordings to the teacher of themselves speaking French, take oral dictation from voice files on the website, write essays in French, and respond to each others’ essays.

As part of the Biology class, students would analyze biology labs on line using commercial materials available from their college textbook’s publisher.

As part of the Macroeconomics class, students would get practice running a business or an economy by playing economics simulation games with their fellow students.

Students clearly appreciated their interactions with their teacher and fellow students. For example, here are a selection of student comments publicly posted by the 2003-2004 students in the AP Macroeconomics class:

- The classmates were great and I came to know many of them; and if I had a question, I didn't have to wait for [the teacher] to answer them, at least one of my classmates knew what was going on and could answer it for me. -- Andrew Shrontz
- I've become good friends over AIM with a couple [of fellow students], and the discussions on the www board were always lively and interesting -- Arielle Gorin
- Many times I would go to other students, and now friends, asking them if they could help me figure out one of the concepts, and a few times I've been asked for help by other students. I've had economic discussion[s] with a few student that have been quite fascinating. -- Josh Kitamura

Summary

The community of scholars model of Internet education is a special help to homeschooled high school students, who otherwise might feel a lack of socialization -- especially a lack of socialization with others who are as interested as they in academic pursuits. Their interactions with a real teacher and with fellow students contribute strongly to the quality of the learning experience.

Homeschoolers are reaching out to technology, perhaps a bit more than any other group. At the high school level homeschooling parents often lack the expertise, so they find experts through books, video classes, taped lectures, computer assisted instruction, and Internet classes.

But even with the advent of new technology, some things have not changed. In these Internet classes, the teacher and the class are still central. Textbooks are still used. Examinations still measure whether learning has taken place, and education is still a social experience.

These results do not indicate that an Internet community of scholars is superior to a physical classroom. Homeschooled students, in general, have been outperforming their school-educated counterparts on tests and exams. In fact, some homeschoolers choose to homeschool because their children are gifted, so it should not be surprising that some classes of online homeschoolers outscored their school-educated counterparts.

What these scores do indicate, however, is that Internet education can be a highly successful form of education. According to these scores, the homeschooled students in these online test-preparation classes were far outperforming their school-educated counterparts on the 2004 Advanced Placement examinations.

A Note about the Accuracy of These Results

When the homeschooled students took the AP exam at a local school, the answer sheet included a box for them to check in order to indicate that they had prepared for the tests using online classes from PA Homeschoolers. Unfortunately, some students who were not part of the PA Homeschoolers online classes also checked this box and some students who were in the PA Homeschoolers online classes failed to check this box.

The 153 score reports provided to PA Homeschoolers by the College Board included the scores of 20 students who were not participants in PA Homeschoolers online classes including 10 who took exams (chemistry, physics, Spanish) that did not correspond to the classes taught by PA Homeschoolers. The mean score of these 20 students was 2.55, quite a bit lower than the 3.86 mean for students in PA Homeschoolers online classes.

The College Board did not provide score reports for 65 of the students who were participants in PA Homeschoolers online classes. Some of these students did not take the AP exam while others did not check the box for PA Homeschoolers when they took the exam. Some of our teachers surveyed their students in order to get exam scores. In no cases were the scores reported by the students different from the scores reported by the College Board, suggesting that the students were accurate in their voluntary score reports.

According to the data collected by these teachers, the average scores for the students who did not check off the PA Homeschoolers box were just a bit lower than those of the students who did. The 89 students in these classes for whom the College Board reported scores averaged 4.04, but the additional 30 students brought the average down to 3.92. (The teachers were unable to obtain scores from 4 students, and 7 students reported that they did not take the AP exam.)

There are several possible explanations of why students who did not score as well also failed to check off the PA Homeschoolers box. Perhaps the type of student who would misread the directions would be the same type who would tend to score lower on the exam. Whatever the reason, it is apparent that the homeschoolers average score would be about .12 lower, if all of the students were concluded. Thus, 3.74 would be better than 3.86 as an estimate of the average score of the PA Homeschoolers online class students. This adjusted average for the online homeschooled students (3.74) is still quite a bit higher than the school student average of 2.97. It is clear that the students in the PA Homeschoolers online test preparation classes did very well, on average, on the 2004 Advanced Placement exams.

*Note: AP and Advanced Placement Program are registered trademarks of the College Entrance Examination Board, which was not involved in any way with Pennsylvania Homeschoolers online test preparation classes.