Introduction: Peaked Interest in Programming

Alexander Hamilton High School (AHHS) is part of LAUSD, the second largest school district in the country. Because AHHS is located between Santa Monica and downtown LA, it attracts an economically and ethnically diverse student population from every area code. The Title 1 School has a student population of 3,300. Three years ago, AHHS’s robotics team won rookie robot of the year at the National Robotics League Competition, peaking the students’ interest in programming. They went to AP teacher Dina Kraemer, telling her that they wanted to learn to program and asking for a class at the high school. “I told the kids that they could start it if they went to their counselors and asked for it,” explained Kramer. “In June of that year, 15 kids had signed up. By August, there were 50.”

With 50 students excited to take AP CSA, Kraemer took on the challenge of teaching the course. “I always believe in starting new things,” noted Kraemer. She started a school on the campus that focuses on business and interactive technology, effectively making AHHS 1 of only 8 1:1 schools in LAUSD. Though she had studied chemistry and physics with a master’s degree in business, the teacher had yet to learn
programming. She began to do some research about available curricula, remembering two other teachers in the area who were teaching AP CSA. She contacted them, learning that both were using Edhesive. After a call with the Edhesive school program management team, Kraemer was convinced that the AP CSA course could most effectively be taught with Edhesive’s curriculum. With a pacing guide and easily accessible teacher forum, Kraemer felt comfortable coaching the difficult course. Though funding was difficult to allocate, parents in the district passionately supported the addition of computer science curriculum. The following year, AHHS added AP CSP to their course offerings, as well. Meanwhile, Kraemer was busy enhancing her knowledge with multiple trainings, including Uteach, the College Board Summer Institute, and Code.org’s summer conference.

Implementation and Success at Alexander Hamilton High School

This year, Kraemer is teaching both AP CSA and AP CSP from Edhesive, with 78 total students enrolled. “I enjoy the class because of the kids,” she expressed. “They’re so good at what they do, and they get so excited when they create something.” When her students were asked about the course, they reported that they found it very informative. “What’s nice is that you can read articles and watch videos after taking quizzes. It helps us to better understand what we’re learning. We also have the opportunity to go back and do projects on scratch.” Though the students prefer to use each other in class rather than the online student forum, they were pleased with the short turnaround time of only 15 minutes when they last posted a question. The students continued to say that with technology changing so fast, it’s essential to know how to code and program, especially as time progresses. One student offered that programming knowledge will be comparable to literacy in the future.

Kraemer is sure to relay to her students the benefits and opportunities presented when CS is offered at the high school level. First of all, Kraemer mentioned that colleges in California, including the UC system and the California State system, are already planning to incorporate at least one year of CS into their entrance requirements. Secondly, Kraemer points out that no matter what career students choose to pursue, basic knowledge of CS will be required. Additionally, the teacher demonstrates the process of job searching with her students to show the ample amount of available programming jobs. “I have the students go to a job search website and first type in a profession like marine biologist in the United States. If they’re lucky, 5 results will come up. Then, I have them put in computer programmer. They have to limit it to not just the state, but LA. Over 1,000 jobs show up in Los Angeles alone. When students start learning CS in high school, they are given great opportunity. No matter what you do, you have to be able to program. It’s a logic class for today’s world.
Reflection

“Everyone can benefit from Edhesive. Every educator needs it,” imagines Kraemer. “You have to have it. It’s an absolute must! There’s no way you could teach AP Computer Science without it.” Kraemer suggested that even professional programmers who eventually went into education could benefit from Edhesive’s curriculum, as teaching is a different skill than knowledge of programming itself. “Edhesive is comprehensive. It was developed by the CS department of a University. It includes everything, all the components required by the College Board.” From a few robotics students with peaked interest in programming, AHHS now offers both AP CSP and AP CSA through Edhesive. Several students at AHHS are interested in potential future careers in programming. One senior student said that she has applied to be a computer science major in college. “I started this year in AP CSP with no prior experience at all. I had no interest before this. Edhesive really opened up my eyes! I wouldn’t have found my passion without Edhesive.”

Outcomes at Alexander Hamilton

- AHHS now offers both AP CSA and AP CSA through Edhesive.
- AHHS students are becoming aware of the multitude of job opportunities in computer science.
- One senior student with no prior interest has found her passion in programming, and is now applying to major in CS in college.

Highlights for Teachers

- Edhesive is a useful teaching tool for any experience level, with comprehensive, and thorough College Board components built in to the curriculum.
- The online course allows students to get the most out of the course with videos, quizzes, and articles that speak to any type of learner.
- Colleges in California are already beginning to add CS coursework to their entrance requirements.

Edhesive makes online learning accessible, personal, and meaningful. We combine online instruction from nationally recognized experts with the personal support of local teachers, who offer students face-to-face guidance and support.

Ready to find out what’s possible for your school? Email us at info@edhesive.com today.