

CASE STUDY: CLOVIS NORTH HIGH SCHOOL



19

AP Courses Offered

64

Students enrolled in

AP CSA

86%

Passed AP CSA

Exam in 2015



AP CSA student using Edhesive to teach Java to CNHS's Robotics Team

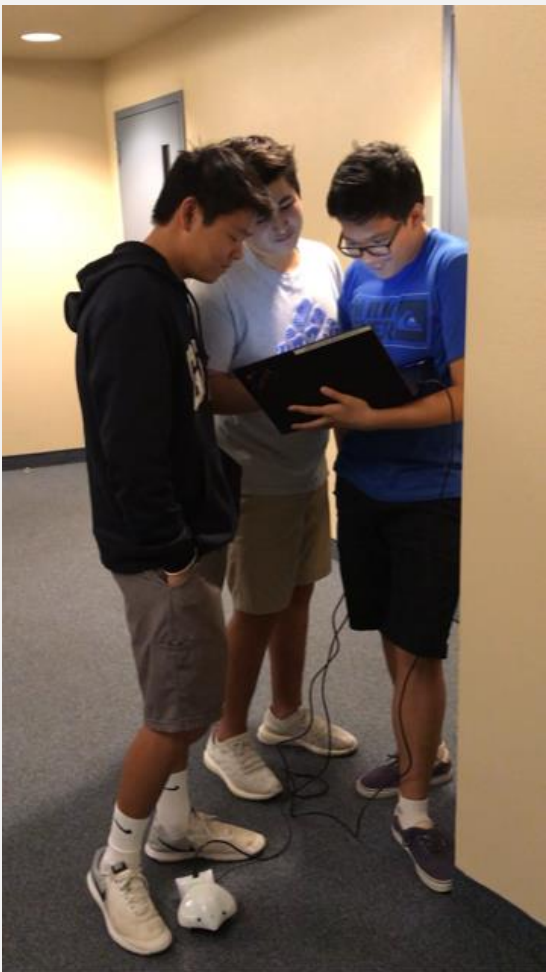
Introduction: From the Ground Up

Clovis North High School (CNHS) rests in the heart of the Central Valley in Fresno, California, boasting a student population of 2,800 and a district-wide population of 44,000. The students represent the wide range of Fresno's population through their ethnically and economically diverse student body. With an extremely high graduation rate and consistent attendance record, CNHS is ranked as the highest performing school in the Central Valley.

Three years ago, Principal Scott Dille wanted to offer more AP classes, and considered that CNHS didn't have a single computer science course offering. In the past, the high school had attempted to offer an AP CSA course, but the class didn't make it to year two. Considering the high growth rate of jobs in software development, Learning Director Katherine Faragia pushed the need to provide CS curriculum in order to heighten students' potential for success. The administration just needed a teacher, and Mary Allen came to mind. Allen always considered herself a tech person, but programming was uncharted territory. Combining her love of learning with a fearless approach to new challenges, Allen accepted the teaching position, becoming one of the first AP computer science teachers in the Central Valley.

Implementation and Success at Clovis North High School

All on her own, Allen spent a good six months trying to teach herself programming. She attempted to use posters and tried to create a method, but felt absolutely lost. Out of the blue, the CNHS principal was contacted by an Edhesive school program manager and passed the information along to Allen. "I was so excited," she described, "as soon as I was able to access the product, I immediately realized that it provided everything I needed. I was all in!" At the end of her first year, 12 out of her 14 students passed the AP CSA exam. "Other teachers were impressed with the ridiculous pass rate – it was higher than any other AP class. They called me a genius, but I told them that Edhesive was the real genius! Without Edhesive, maybe 2 students who came in with prior programming experience would have passed. There would have been no 2nd year."



Today, three years later, CNHS has built a wide-reaching STEM program surrounding Edhesive's AP CSA curriculum, with courses available from 7th grade through high school. This year, there are 64 students enrolled in AP CSA. Allen has described the year as amazing, even sharing that one student was able to finish the first term in 3 weeks. Such high-performing students often continue on to real-world applicable internships. For example, one student is currently working for a local window installation company, building trigonometry-based programs that outline the exact measurements of the glass panes they will need to install. Another student is building virtual reality environments using C++.

"Edhesive provides a broad structure for a wide-range of learners," explains Allen. "I love that the curriculum includes video instruction, pdfs, worksheets, text, and more; it truly makes the course available no matter what style the student needs to best take in the information. When you give them all that Edhesive has to offer, they get a chance to see how the course can work for them. It's fantastic."

Above all, CNHS believes that programming is an essential outlet to success for not only their students, but students across the country. They've managed to turn the initial AP CSA Edhesive course into a 500+ student pathway. "Everything that will be done in the next 20 to 50 years will involve programming," says Allen. "It's for everyone. My students are tennis players, football players, robotics nerds, and kids that didn't find a place to fit in until the district introduced programming. Those are the students that are rocking it the most! Our robotics team now has more students than the basketball, baseball, and football teams combined." When there are no limits, the students thrive."

Reflection

"I couldn't have done it without Edhesive," says Allen. "Edhesive is the best curriculum I've seen in the last 3 years in supporting teachers with little to no experience." The best aspect of the curriculum for Allen was the automatic grading feature – no matter how extensive the code, the Edhesive program can grade it for you. With this added to the cost effective and student friendly material, Allen says that "you're a fool if you don't consider Edhesive."

Outcomes at Clovis North

- 86% percent of students passed the AP CSA exam in the first year with Edhesive curriculum.
- Multiple students from CNHS have gone on to pursue engineering majors at Cal Tech, Columbia, Fresno State, and other universities.
- From the initial Edhesive course, Clovis North has worked to build a 500+ student pathway.

Highlights for Teachers

- The automatic-grading feature makes even the most in depth code accessible to teachers with little to no experience.
- Edhesive provides access to multiple types of learners, from video instruction, to pdfs, to worksheets, and more.
- The AP CSA course is user-friendly for both educators and students.

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.