CASE STUDY:
NEW YORK CITY CHARTER HIGH SCHOOL
FOR ARCHITECTURE, ENGINEERING, AND
CONSTRUCTION INDUSTRIES (AECI)

Introduction: A Growing STEM Program

New York City Charter High School for Architecture, Engineering, and Construction Industries (AECI), is a charter school located in the south Bronx. The school has approximately 125 students per grade level, with extremely high graduation rates at 96% while the borough-wide rate remains at 65%. AECI was recently named best Charter High School by the US News and World Report for the second straight year. As such a high performing school, the administration began to recognize a need for implementation of STEM curriculum. Assistant Principal Colin Healy discovered Edhesive last year while searching for online blended learning curriculum. After working with the Edhesive school partnership team, AECI began to offer our Introduction to Computer Science course last year. This year, they’ve added
AP Computer Science Principles and AP Statistics, as well, utilizing our Professional Development course for adequate teacher preparation. With a master’s degree in math, ten years of Statistics teaching experience at the collegiate level, and a few computer science courses under his belt, Teacher Brian Egan was chosen as instructor of all three courses.

Implementation and Success at AECI

When Egan began to work within the Introduction to Computer Science course last year, he found that he was able to jump in easily. “The operation was pretty intuitive. I had no issues getting started,” Egan stated. The addition of the AP Statistics course this year was no different. “I taught Statistics at the collegiate level for ten years. It's set up very well. The videos are a great tool for students who need to catch up on instruction they've missed, whether from illness or other absence from class. The pre-made quizzes are a great help, as well. It's great that the materials already align with College Board standards,” Egan offered. The teacher mentioned that the students have been successful in the course so far, appreciating the ability to rewatch videos and digest content within the online structure.

Egan also noted that students benefit greatly from taking AP Statistics courses in high school. “It’s a great opportunity to get college credit for a math course, especially in a course that is not heavily involved in algebra. Students find that it’s easier to be successful. They start to experience real world connections that they hear about all the time in a new way. For example, during elections or in news reporting, they begin to understand how the percentage of a candidate’s approval rating is calculated, or how a margin of error is established. It's important for students to be able to make these relations in their outside lives.” Egan added that STEM curriculum overall, including computer science, is highly beneficial to high school students.”

AP Statistics class at AECI, with teacher Brian Egan
Reflection

Today, AECI is offering three of Edhesive’s STEM courses to their students, including Introduction to Computer Science, AP Computer Science Principles, and AP Statistics. Students are being exposed to STEM curriculum before graduating high school, giving them more opportunity for career success down the line. To other schools considering Edhesive’s AP Statistics course, Egan says “I highly recommend this course. The ease of use and flexible platform have been lucrative for AECI.”

Outcomes at AECI

- AECI is now offering Intro CS, AP CSP, and AP Statistics through Edhesive.
- 12 students are working within AP Statistics this year.
- Students can receive a college math credit for their work in AP Statistics.

Highlights for Teachers

- Even for a teacher with experience in Statistics, the Edhesive course is a useful tool that aligns to College Board standards.
- Video instruction allows absent students to remain caught up.
- Pre-made tests and quizzes are an indispensable resource.

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.