

CASE STUDY

From Coding to Robotics, Mr. Barnett Opens Doors For Students

Introduction

After graduating with a degree in computer science, Spencer Barnett decided to use his programming skills to teach at Denison High School in Texas.

Located in a rural area with many manufacturing companies, Denison High School focuses on giving students a variety of opportunities to build a successful career and impact the future, whether that includes college or another career route. 85% of their students come from low income households with little or no access to a computer at home.

Spencer understood that outside the walls of his classroom, students have little opportunity to learn programming. With this, he was determined to build a strong learning environment that engages students and shows them that they can use coding across a variety of industries including those in their hometown.

Like any new teacher with zero experience, Spencer was initially overwhelmed with how to build the right curriculum. This would be the first programming course at Denison High School and expectations were high. Also, he was unable to install or download any programs on the school computers... How would his students learn to code if there wasn't a way to run Java during class?





CodeHS was the utopia of my teaching career.

- Spencer Barnett

Case Study Fast Facts

TeacherSpencer Barnett

School

Denison High School,

Texas

Students Taking CS 45+

12/12 students
passed the AP CSP
exam in the first two
years it was offered!

While planning for his first programming class, Spencer discovered CodeHS, an all web-based platform for computer science. It provided high-end curriculum that was fun and easy to grasp, along with everything you needed to write, run, and grade code in one location.

The first year of teaching was the most challenging. At the time, Spencer was learning alongside his students and struggled to pace the class. But, by year two, he had it down and was ready to teach AP Computer Science Principles with the new curriculum and software provided by CodeHS.

To his surprise, the first year 5 students enrolled in the AP CSP course and all 5 students passed the AP exam. By year two, 12 out of 12 students who took AP CSP class passed the AP exam! Spencer was blown away with how CodeHS prepared them for the exam.



Coding has given my students a platform to see opportunity. A way to succeed in life.

- Spencer Barnett

Now, Spencer has been teaching with CodeHS for three years. He teaches two full year long programming courses and runs a highly successful robotics team!

Each year new students enter Spencer's classroom with no knowledge of programming and they finish the class with a fearless mindset that is valuable to their future. Spencer teachers them that it's important to not run from challenges, but face them head on fearlessly, because 'with coding and sound learning tools you can solve anything.'





I don't want to say it was all programming, however, these students now have the ability to overcome adversity and accept challenges. All of this started with CodeHS.

- Spencer Barnett

