CASE STUDY:
MOUNTAIN HEIGHTS ACADEMY

Edhesive Courses Offered
63

Students enrolled in Edhesive Courses
91%

Pass Rate

Introduction: Beyond the Baseline of CS Requirements

“We saw the writing on the wall: integrated computer science is the future of STEM curriculum,” says Sarah Weston, Technology & OER Director at Mountain Heights Academy, an online public charter school based in Salt Lake City, Utah, offering tuition-free accredited online courses to 7-12 graders throughout the state. “Everyone who comes to Mountain Heights has a reason,” explains Weston. Suddenly, the online world is open to a wide range of students: athletes, dancers, actors, students who work during the day, students with health issues, students with anxiety, students who want more extracurriculars. The online school has always had a push for computer science courses.

Weston came from a background of mathematics, ascertaining that computer science will undoubtedly be integrated into mathematics curriculum over the next decade or so. She spent quite a bit of time collaborating about direction with an equally ambitious group of women from the math department. When the state of Utah launched an initiative adding a baseline computer science course to high school graduation requirements, the school was closer to their goal, but still they wanted more for their students. Knowing that they were just beginning to build their computer science program, Weston began to search for curriculum with well-structured accessibility, easy-to-follow lesson guides, and growth potential. She found Edhesive.
Mountain Heights Academy began to build a computer science pathway, structured around Edhesive’s curricula, giving students the opportunity to explore what programming could offer them. Edhesive could provide where other curricula fell short. The Introduction to Computer Science and Explorations in Coding courses had not only the coding platforms Weston was looking for, but lesson plans, teaching tools, and personalized support. The Edhesive structure allowed the new CS teachers to learn as their students were learning, requiring no prior knowledge. Today, four math teachers at Mountain Heights Academy are working towards their computer science endorsements. In the next few years, Weston plans to offer four total computer science courses, unheard of thus far in Utah.

When Becky Ball heard that Mountain Heights would be offering Explorations in Coding (EIC) to 7th and 8th grade students, she was eager to get involved. EIC provides a project-based introduction to computer science with a focus on creative coding assignments, perfect for garnering programming interest in a novice environment. When Ball was chosen to teach the course, she couldn’t have been more excited. “It’s such a crucial thing for students to learn and be excited about,” remarked Ball. From the beginning of the course, Ball noted how user friendly everything was, reporting that she “never felt lost or alone while going through the material”. Ball especially appreciated the Teacher Resources, including the pre-planned lesson guides, slideshow presentations, and step-by-step guides.

Most importantly, Ball’s students are loving the course. They take the projects very seriously and still have fun. “The biggest success is that I don’t have to motivate them in any way - they are independently inspired by the curriculum itself. Especially in an online school, that’s huge! We spend a lot of time prompting them, keeping them stimulated. But with this course, I don’t have to work hard to motivate them at all! The pass rate for our first quarter was awesome.” In a video study session with her students, Ball asked if they were planning to take more classes in computer science. The answer? A resounding yes. They learned a new language in Python and couldn’t wait to delve further.
Reflection

To other schools considering Edhesive, Becky Ball says, “do it!” She believes that computer science is for everyone, pointing out to her students that the problem solving skills they learn writing algorithms and debugging code in Explorations in Coding can translate into all aspects of their lives, no matter what professions they decide to pursue. The students agreed that Explorations in Coding taught them widely applicable problem solving techniques that could help in a multitude of situations. “Just knowing what goes into programming can help them learn what’s possible.”

Outcomes at Mountain Heights

- By the end of the first quarter, 91% of students passed the course.
- Students’ enjoyment of EIC has propelled them to go above and beyond in creating their projects.
- Edhesive’s lesson structure allows for classroom-to-classroom flexibility and personalization.

Highlights for Teachers

- The user-friendly Edhesive lesson plans and materials make the course easily accessible to a beginner.
- Working alongside your students can be fun and informative.
- The curriculum itself motivates students to create their best work.

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.