



STEM Education Works®

CTE AND STEM

HOW CAREER AND TECHNICAL EDUCATION LEADERS CAN LEVERAGE STEM EDUCATION WORKS TO CONNECT CURRICULUM TO CAREERS

When students reach high school, they're often not prepared to enter a STEM career or pursue a college degree in a STEM field. **According to the [Walton Family Foundation](#), 75% of Gen Z students are interested in a STEM career, but only 29% listed a STEM career as their first choice.** Even though students are interested in STEM, without introducing students to possible STEM careers and building foundational STEM skills, many students will choose to pursue other fields.

Preparing students for future STEM careers starts with early STEM education that introduces students to possible careers, builds foundational technical skills, and connects learning to local industries. When these experiences are supported by industry-relevant technology, career-connected curriculum, and ongoing educator support, schools can create a pipeline that helps students make informed decisions about their future.

"I think if we want students to see their future and the possibility of careers, it shouldn't be a one-time thing. They should continue building those experiences every year."

— LaChandra Cobb-Eaglin, STEM Coordinator, [Beaumont Independent School District](#)

THREE WAYS TO PREPARE STUDENTS FOR THE FUTURE WITH STEM

A successful CTE strategy is built on early STEM education, career-connected learning, and strong industry partnerships. Together, these components build technical skills and help students understand how classroom learning connects to the real world.

That journey begins in elementary school. Early exposure to STEM encourages young students to stay curious and explore new interests before making decisions about middle and high school coursework. As students continue through school, those early experiences become the foundation for more advanced technical skills.

Standards-aligned curriculum with built-in career connections helps students understand how classroom concepts apply to real careers. Exposing students to a wide variety of careers beyond the basics (computer science, engineering, etc.) increases student awareness about available opportunities, including careers that don't require



STEM Education Works®

higher education. By integrating careers into everyday instruction, students gain a better understanding of opportunities available in technology, manufacturing, healthcare, and other high-demand fields.

Lastly, partnering with local industries can help students understand the relevance of what they're learning. Industry partnerships reinforce those classroom experiences by showing students STEM in action. These partnerships provide students with authentic learning experiences through guest speakers, facility tours, mentorships, internships, and project-based learning.

At STEM Education Works, we help schools build career-connected STEM programs that prepare students for future opportunities. We provide industry-relevant technology and standards-aligned curriculum with built-in career connections to ensure that your students graduate with the skills and experiences they need to succeed. By introducing STEM concepts early and connecting STEM learning to real-world careers and local industries, we help schools prepare students for college, technical training, and the workforce.