

Kansas City Community College (KCKCC) Partners with Local Businesses, Funnels Skilled Grads into Workforce



About KCKCC'S Building Engineering Maintenance Program

- Offers part-time, 18-month certificate program for high school and post-secondary learners
- Includes curriculum that covers servicing of residential a/c and furnace units, repairs in electrical, maintenance, and plumbing, installing and finishing sheetrock, installing windows, doors, and stairs, and carpentry skills
- Prepares students for multiple industry certifications like EPA I II III, OSHA 10, OSHA 30, aerial lift training, and equipment operations
- Creates diverse pathways into high-demand careers via 30+ partnerships with local businesses

Challenges

- Hands-on focused curriculum missed opportunities for on-going, repetitive skills practice that catered to diverse student learning styles
- Lacked immersive training content with “visual-stay”— subject matter that students wanted to return to until skills competencies were achieved
- Time-consuming admin tasks like lesson planning, assigning coursework, grading, and tracking training adherence took time away from mentoring

Results

- The engaging VR component of labs was loved by students, where they could safely learn and troubleshoot HVAC, plumbing, and electrical skills in a collaborative, supportive environment
- An increase in 3D visual content both in the lab and for off-campus assignments improved student motivation and learning retention
- Blackboard LMS integration helped lighten instructor load by automating tasks, grading, and evaluating student progress all in one place
- Post-grad employment opportunities increased by partnering with local businesses, aligning curriculum to real-world job needs, and encouraging students to achieve multiple industry certifications

Key Successes

- Increased student engagement with VR
- Integrated training with Blackboard LMS
- Prepped grads for multiple industry certifications
- Created pathways to successful employment

By The Numbers

- **60%** of grads enter the trades workforce
- **100%** of grads leave with one industry certification
- **>300%** increase in class enrollments since 2010
- **70%** hands-on focused training program
- **30+** local business partnerships

Summary

- KCKCC's concurrent Building Engineering program prepares high school and post-secondary students for diverse entry-level trades positions
- Interplay's Virtual Reality training and simulation courses blended into the curriculum provides students of all learning styles with innovative, hands-on skills practice, keeping growing class numbers engaged in trades careers
- Training integrated with existing Blackboard LMS creates ease of admin activities like assigning courses and grading assignments in one place
- Local Kansas City business owners partnering with the program are impressed with the robust skills and certifications of graduating students, creating successful pathways to employment



Upward Trends in Trades Education

Shawn McGivern is a third-generation trades educator at KCKCC, currently serving as the Associate Professor and Adjunct Coordinator of the Building Engineering program.

With 12 years of teaching under his belt, Shawn noted a few upward trends surrounding the popularity of his trades program in recent years. Since 2010, he's seen a +300% increase in class registrations, an uptick in both high school and post-secondary female students (about 11-12% of the class) and a growing number of local Kansas City businesses (approximately 400) expressing interest in partnering with their program to recruit the next-generation trades workforce.

With a rise in class sizes and a growing need for trades employees in the Kansas City area, Shawn decided that the success of his program would hinge on two key components:

- 1. Employer evaluation:** Partnering with local trade businesses to align his curriculum with the skills employers were seeking.
- 2. Engagement:** Make learning those skills as fun and engaging as possible, so students enjoy returning to their training, get excited about trades careers, and pursue entry-level roles upon graduating.

Mirroring the Classroom to the Jobsite

Shawn understood that not all students learned the same way, so it was important for him to employ a blended learning approach where all students could safely achieve skills competencies the way they enjoy it the most. That's why when he learned about Interplay's interactive trades catalog and VR simulation training, he was intrigued.

"I always wanted more visuals, something I could go back to and watch 500 times until I got it. I wanted it embedded so I could share it. People learn so many ways, and you can never see something too many times, so the visual aid and interaction are great. Plus, I don't have to take up class time to teach something that Interplay covers. I can track their assignment

progress on Blackboard, saving me hours every week."

With Interplay's on-demand course catalog and 7 VR setups in the lab, Shawn landed on a supplemental teaching tool to help create the sanctuary of learning he had envisioned for his diverse group of students.

"We try to break the class into small groups, so some students work on HVAC refrigeration and the other on heating, and then they rotate from VR headsets to observing, while others are working in the lab on the physical equipment. This is definitely helping to keep engagement high. No matter what, they always have something in front of them."

Local business owners often drop into the classroom to meet and evaluate the students on employability. They talk to them about employability skills, what certifications they require, and provide hands-on training to reinforce the skills needed for jobs. They are continually impressed with the level of professionalism and skills possessed by Shawn's students and happily recruit those that express interest in continuing in the trades upon graduation.

Shawn's students already have over 50 hours of technical training under them upon graduating from the program. This means that most grads are capable and qualified enough to take on Apprentice or Journeyman roles, often skipping Helper positions.

- **Approximately 60% of KCKCC's Building and Engineering students enter the trades workforce upon graduation**
- **100% of high school grads leave with OSHA 10**
- **92% of post-secondary grads leave with OSHA 30**
- **72% leave with aerial lift training**
- **80% leave with equipment operations training**

For more information or help supplementing your curriculum, contact Interplay Learning today.

Contact: sales@interplaylearning.com