



Mid-Valley STEM-CTE Hub

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Organization

Backbone Organization: Linn Benton Community College
Counties in Region: Linn and Benton
Sq. Miles in Region: 2,971
STEM Hub Director: Sarah Whiteside
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By the Numbers

School Districts: 11
Students: 30,892
Educators participated in Professional Development: 446
Students participated in STEM Hub Programs: 6,459
Student hours in STEM Hub Supported Programs: 12,900

The Mill: Empowering Learners and Makers of All Ages

MVSCH opened the the Maker and Innovation Learning Lab, better known as The MILL, in January 2023 on the Albany campus of LBCC. The MILL provides a safe, creative, equitable, and resource-rich space to support collaboration and hands-on experiential learning. It is home to a large selection of tools and implements for creating and tinkering. Some of the tools include sewing machines, 3D printers, woodworking equipment, laser cutters, large format printers, a podcasting studio, video production and photography gear, design and editing software, and art and craftmaking equipment.

In its first six months, the MILL served more than 1,250 patrons, including community groups, K-12 classroom visits, LBCC classes and student clubs, summer camps for middle schoolers, and more! The MILL boasts a large, interactive workspace that can be custom-arranged to best suit a variety of projects. MILL staff are on hand to assist students via open pedagogy techniques to learn how to use the tools and equipment safely. The MILL provides a variety of STEAM and CTE applications with an emphasis on meeting the needs of underserved, priority populations and external partners in the Linn and Benton County region.

Computer Science

Children love the colorful, little robots known as BeeBots and show a high level of perseverance in solving problems with them. MVSCH developed a number of grade appropriate BeeBot lessons, seamlessly integrating math and science with coding. Students learn computational thinking skills such as logical reasoning, abstraction, patterning, algorithms, and decomposition. BeeBot lessons also emphasize important social emotional skill-building. In creating programs and challenges for their BeeBots, students work with their classmates and practice collaboration, patience, problem solving, and learning from their mistakes.

Over the course of this initiative, MVSCH visited 50 classrooms for a two-lesson series in which staff demonstrated how to use BeeBots with students. Participating teachers received a classroom set of BeeBots, a charging station, hands-on support, and access to instructional resources and lesson planning materials. In total, 290 BeeBots were distributed to 50 classrooms across six of our 11 regional school districts!



Career Connected Learning

MVSCH is in its second year of partnering with Casa Latinos Unidos of Linn and Benton counties to offer career-connected learning to Latinx middle school students in Linn County. The Nuestro Futuro program seeks to empower Latinx-identifying middle school students with culturally-relevant mentorships to enable them to explore postsecondary pathways. Students are paired with Latinx-identifying mentors to guide them in discovering their strengths and help give their potential a platform.

Students are provided access to resources to help them learn about the rich opportunities in their own zip codes and beyond. Together with their families, students participate in workshops focused on navigating academic pathways, career planning, and support for transitions to high school, college, and other postsecondary programs.

Nuestro Futuro students build confidence in their academic aptitudes and are supported to make the most of their middle and high school years and achieve their goals.