

STEM BEST® Programs of the Iowa Governor's STEM Advisory Council

The STEM BEST (Businesses Engaging Students and Teachers) Program focuses on teachers and industry professionals working side-by-side to craft curriculum and projects that prepare students for exciting STEM careers local to their community in manufacturing, information technology, bioscience (agriculture and medicine), finance and more.

Programs on this document are linked by Geographical STEM Regions. <u>North Central Region</u>, <u>Northeast Region</u>, <u>Northwest Region</u>, <u>South Central Region</u>, <u>Southwest </u>

North Central STEM Region

Awarded	Year(s)	Contact(a)	Description
School	Awarded	Contact(s)	Description
BCLUW Community School District	2022 and 2019	Roberta Vanderah rvanderah@bcluw.org Matt Price mprice@bcluw.org	The district provides service-learning through hands-on academic projects within the community to prepare 11-12 grade students for future careers. Students identify and creatively solve a problem. They reach beyond the regular classroom experience through building community, business and higher education partnerships to assist the transition from school to careers. BCLUW provides students with opportunities to explore healthcare careers and makes connections to jobs and training opportunities.
Boone EDGE	2022 and 2016	jianes@boone.k12.ia.us Lindsey Hyman Ihyman@boone.k12.ia.us	EDGE stands for Empowering Desire. Guiding Experience. Boone EDGE is a work-based learning continuum of awareness, exploration, training and preparation. Students engage in multiple ways through partnerships with a variety of community partners for grades PK-12. At the high school level, project-based courses, internships, and apprenticeship-based courses are offered, in addition to awareness activities through partner tours, speakers, mentors, and authentic projects in core classes. Our mission is to empower students to reach their goals, help students discover their desire, guide students toward what they want to do and give them the experience needed to continue on their path to success.
CAL Community School District	2023	Kelsey Enslin enslink@cal.k12.ia.us Jill Craighton craightonj@cal.k12.ia.us	CAL Elementary is using the STEM BEST award to expand on current Agricultural and STEM related learning initiatives. We will make improvements, updates, and expansions to our school greenhouse and gardens. We will connect with industry professionals to provide real-world contacts, experiences and information so that they can make connections between what they are learning and how it is involved in career pathways in Agriculture and Technology. Students will focus on learning how their interests can be pursued as part of career pathways.

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Clear Lake Community School District	2020 and 2019	Emily Hill ehill@clearlakeschools.org	Clear Lake Community School District exposes students to STEM careers with local employers by bringing in business partners to interact with elementary students. Secondary students
			participate in internships and apprenticeships with business partners, specifically utilizing the Project Lead the Way curriculum.
Marshalltown Learning Academy	2017	Eric Goslinga egoslinga@marshalltown.k12.ia.us	The Marshalltown Learning Academy provides a personalized learning environment for students. Apprenticeship programs were added with area businesses that are often already in partnership with the school district.
North Iowa Community School District	2017	Joe Erickson erickson@northiowa.org	The district partnered with Next Generation Technology (NGT) to develop Next Generation Kits (NGK's). This is used in the Solution Center and provides hands-on student-led learning opportunities that engages students while aligning to NGSS and other CORE standards. NGK fosters creativity, innovation and problem-solving skills.
St. Mary School (Humboldt)	2018	Ashlyn Clark aclark@stmaryhumboldt.org	K-6 large and small group STEM classes
Ogden Community School District	2023	Reed Smith reed.smith@ogden.k12.ia.us	Create authentic learning opportunities for students through community projects with the goal of engaging students in classes and extending that learning into a real-world setting
Osage Community School District (Heavy Equipment)	2023	Brent Jennings bjennings@osage.k12.ia.us Craig Christensen (St Ansgar) cchristensen@stacsd.org	Osage and St. Ansgar Community School Districts are collaborating with local businesses to create a pathway to introduce students to careers in operating large equipment. Two CAT simulators, a small wheeled loader, and an excavator simulator, are housed in an enclosed trailer that can easily travel between the two districts. These simulators are part of the Industrial Technology Departments at each school. Each school will have the trailer for two of the four quarters of each school year.
Osage Community School District (CNA)	2022	Kelley Molitor kmolitor@osage.k12.ia.us	A CNA program was developed for junior and senior students then a health care career pathway for students. The model will be started with Osage Community Schools students and then offered to students in St. Ansgar and Riceville, creating a county wide academy.
West Marshall Community School District	2022	Mari Haley mhaley@wmcsd.org Amy McKibben amckibben@wmcsd.org	The major aim of West Marshall's STEM BEST HD program is to start students younger and to take them farther along the computer science path before graduating from high school. The district works to accomplish this through four different strategies. These include developing a comprehensive K-12 computer science curriculum, building a K-5 STEM lending library, leading STEM teacher academies and hosting an annual K-8 family STEM night.

Northeast STEM Region

Awarded School	Year(s) Awarded	Contact(s)	Description
Allamakee Community School District	2023 and 2018	Ben Rausch brausch@allamakee.k12.ia.us Kelli Olson kolson@allamakee.k12.ia.us	Waukon High School (WHS) implemented an Allamakee Regional Welding Academy to serve the local community. By partnering with Northeast Iowa Community College (NICC), WHS and Allamakee County Economic Development (ACED), this helps create a talent pipeline to fill current and future welding vacancies within the region. The district also offers a STEM course to expand this CTE program to middle school to begin career exploration at an earlier age. Students will be able to explore physical computing, 3-D printing and design, microbiomes and engineering.
Cedar Falls Community School District	2020, 2018, and 2017	Ethan Wiechman Ethan.Wiechmann@cfschools.org	Cedar Falls Community School District offers Center for Advanced Professional Studies (CAPS) programming through strands that explore business solutions, careers, CAN, education, industries and medical pathways. New strands represent community demand for talent pipeline into critical industries.
Central Community School District - Secondary	2022 and 2021	Leah Imoehl limoehl@central.k12.ia.us Ryan Bergan rbergan@central.k12.ia.us	The goal of its Clayton County BEST Program will be to offer unique learning opportunities that connect individual students to authentic workplace experiences and provide a strong focus on career and college readiness as a key outcome. Students will be paired with community organizations and businesses to address real-life concerns using 21st century skills and knowledge to provide solutions and products.
Central Community School District - Elementary	2018	Leah Imoehl limoehl@central.k12.ia.us Nick Trenkamp ntrenkamp@central.k12.ia.us	The goal of the Central Elementary Makerspace is to equip students with skills to explore, create and discover how things work in the world around them! Students are introduced to computational making activities that promote crosscutting concepts across science, technology, engineering and math. We provide scaffold learning experiences so elementary students in Kindergarten through 6th grade become self-determined learners. In addition, the Makerspace utilizes community support volunteers for time, expertise and donation of supplies.
Dike-New Hartford Community School District	2022	Lane Stahlberg lane.stahlberg@dnhcsd.org	At Dike-New Hartford, a more relevant and vibrant industrial technology curriculum will be developed. Specifically, improvements will be made to facility and equipment to offer courses in advanced welding, CNC machining, product development and enterprise, and laser fabrication.
Dubuque Community School District	2023	David Moeller dmoeller@dbqschools.org	Hempstead High school will purchase a CNC machine to increase student awareness and experience of quality careers available in manufacturing.

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Easton Valley Community School District	2024	Steven Eskildsen steven.eskildsen@eastonvalleycsd.com	The Agricultural Greenhouse Learning Center to enhance access to healthy food options for Easton Valley CSD students and Little River Hawks Daycare Center attendees by contributing fresh produce to the lunch program. The greenhouse will offer hands-on experiences for junior, senior high and elementary students.
Edgewood- Colesburg Community School District	2024	Melissa Meyer mmeyer@edge-cole.k12.ia.us	Program will utilize a GlowForge laser printer to provide exposure to digital fabrication and prototyping, entrepreneurship and small business ventures, visual arts and multimedia production, and STEM-infused projects with the support of community partners.
Holy Family System (Dubuque)	2023	Sarah Martineau smartineau@holyfamilydbq.org Korrin Schriver, kschriver@holyfamilydbq.org	A community supported Agriculture (CSA) business will be created and run by students who can enroll in one of three course pathways, including Agriculture Research, Construction, and Business and Marketing. Students enrolled in Agriculture Research will plan for a successful growing season as well as plant, care for, and harvest produce. In the Business and Marketing course, students will manage branding and promotion, as well as pricing and inventory. In the construction pathway, students will plan for and build the
Howard- Winneshiek Community School District	2021	Luke Jansen ljansen@howard-winn.k12.ia.us	The "Cadet Zone" project enhances job readiness skills for students by partnering with area businesses to promote creativity and 21st century skills. "Cadet Zone Cafe", "Cadet Zone Merchandise Store", and "Cadet Zone Media Productions" are the three branches that offer students opportunities to work alongside businesses, obtaining a unique set of skills for the workforce. opportunities to work alongside businesses, obtaining a unique set of skills for the workforce.
Iowa Big North	2017, 2015 and 2014	Mike Kuennen m_kuennen@new-hampton.k12.ia.us Krissy Anderson k_anderson@new-hampton.k12.ia.us	lowa BIG North offers students the opportunity to experience in-depth and more sustained projects in professional business, community, and/or government settings. Students will engage in pursuing answers to professional problems and projects while being immersed in a professional work environment. Development of 21st century and employability skills (Universal Constructs) will be a strong focus of this program. IBN is competency-based, so students will be expected to demonstrate their understanding of the standards and content of the course in contextual performances for authentic audiences.

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Jesup Community School District	2019	Paul Rea prea@jesup.k12.ia.us	Jesup Community School District expands work-based learning through partnership and collaboration with Cedar Falls' STEM BEST Program (called CAPS). Students are provided opportunities for their knowledge and skills to intersect in real-world learning opportunities. They are able to explore careers, make connections to businesses and understand how the concepts and information they are learning in the classroom translate into real life.
MFL MarMac Community School District	2021	Melissa Haberichter melissa.haberichter@mflmm.k12.ia.us	MFL MarMac MORE is an authentic learning program that empowers high school students to explore their skills and interests and engage with business and community professionals to complete projects that add value to the real world.
MFL MarMac Community School District	2022	Sarah Plaht sarah.plaht@mflmm.k12.ia.us	Drone Applications is a class where students learn how to fly drones as well as different uses for them. Skills like photography, videography, crop scouting, and ethical flying are highlighted in this course.
New Hampton Community School District	2019	Rachel Bauler r_bauler@new-hampton.k12.ia.us	The New Hampton Agricultural Education Program has set goals to make some adjustments to the program when it comes to updating, repairing, and starting new traditions while keeping some old ones going! Through the utilization of our facilities and the professionals and industry leaders in the area, we look to start and continue projects by sparking student interests. This takes time and effort in educating the students on the base knowledge needed to responsibly manage resources and learn new skills.
Oelwein Community School District	2017	Tim Hadley thadley@oelwein.k12.ia.us	PROJECT ONE was created by the district in conjunction with the Oelwein Economic and Area Development to create opportunities for students to flourish in robust work-based learning environments. With support from local businesses, authentic learning opportunities will provide students with a rich opportunity to explore interests, learn in cross-curricular classrooms and develop skills of the universal constructs.
Starmont Community School District	2022	Cassie Gruman <u>cassiegruman@starmont.k12.ia.us</u> Payton Rundle <u>prundle@starmont.k12.ia.us</u>	Our program is a pull-out program where students K-12th grade have the option to explore a Makerspace. Sometimes small groups come or whole classrooms. The elementary classes have an eight-day rotation and the opportunity to come twice in that rotation to the Makerspace. The secondary come to the Makerspace on their own time when they have STAR(Intervention) or study hall. Our Makerspace teachers also co teach with teachers if requested. The goal is for all K-12th grade to have access and explore the Makerspace throughout the year.

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Turkey Valley Community School District	2022	Steve Pfaffle spfaffle@turkey-v.k12.ia.us Michelle Hoy mhoy@turkey-v.k12.ia.us	We have constructed a Greenhouse. Students have been actively working on several projects within the greenhouse. FarmBot, a computerized farming system, hydroponic tower system in which we will be having lettuce grown in the system and students and staff will be able to choose for a lunch item. Students will be planting vegetables and flowers for our spring open house. Then STEM BEST Funds have allowed us to start a student manager program in which a student manages the greenhouse after school hours.
Wapsie Valley Community School District	2021	Jordan Cusick jcusick@wapsievalleyschools.org TJ Murphy tmurphy@wapsievalleyschools.org	CAPS is a Future ready program designed to promote students in the work-based learning areas related to STEM fields.
Waterloo Community School District	2023, 2022 and 2019	Amy Miehe miehea2@waterlooschools.org Jeff Frost frostj@waterlooschools.org	A Biomedical Lab Technician program will be added as part of the Health Sciences pathways in their career center. The partnership will utilize skills learned through classroom instruction to navigate scenarios in health professions. The Computer Science/IT pathway will be expanded to offer a Cyber Security Pathway. Students will be able to obtain certifications, including Security Pro, COMP TIA and other ethical hacking certifications. The district will enhance the Electrical Career Pathway with the purchase of a Switch Vehicle. This will provide students the challenge of building a full size, road-worthy electric vehicle.
Waverly- Shell Rock Community School District	2024	Bryan Benham bryan.benham@wsr.k12.ia.us	Gohawk Manufacturing to help teach technical and soft skills for industry partners. Students will work at company sites and the school shop to build customer parts and projects working alongside industry professionals as they learn the trade.

Northwest STEM Region

Awarded School	Year(s) Awarded	Contact(s)	Description
Boyden-Hull Community School District	2023	Dan Pottebaum dan.pottebaum@boyden-hull.org	Students will be immersed in the Center for Advanced Professional Studies (CAPS) for career exploration and professional training with local businesses. Students will participate in mock interviews, career discovery meetings and authentic learning.
Carroll Community School District	2023	Kourtney Abbotts kabbotts@carrolltigers.org Nicole Mccarville nmccarville@carrolltigers.org	The district will implement a new freshman pathways course, Introduction to Pathways, while also assisting in providing staff with Project Lead the Way certification to provide students Introduction to Engineering, Cybersecurity, Biomedical Science and Environmental Sustainability.

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Central Lyon Community School District	2024	Sarah de Vries sdevries@centrallyon.org	Creation and implementation of career- linked opportunities for students to actively engage with community employers through the CAPS program. Students will be more empowered to develop essential career readiness skills and establish meaningful connections with the professional world.
Cherokee Community School District	2022	Tim Stoneking tstoneking@ccsd.k12.ia.us	The Cherokee CAPS Program represents the collaboration of education, business and community and provides students with a unique, immersive experience, resulting in highly skilled, adaptable, global innovators and leaders. Our apprenticeship program connects students with local industry partners targeting the areas of health care.
Emmetsburg Community School District	2020	Tracie Christensen tchristensen@e-hawks.org Darca Saxon dSaxton@e-hawks.org	Emmetsburg STEM Program: Increases opportunities for our students to explore career opportunities available that will help to make our students future ready. Incorporate STEM through various implementation steps throughout the District. Create a pathway using the Stem Innovator program from Kindergarten through 12th grade to engage students in learning and motivate them to complete their education. Expand this program to allow our students to collaborate with area partners and help them realize that they can stay or return to our community. Establish key partners within our community to develop real-world projects for students to help them develop real-world skills.
Lawton- Bronson Comm School District	2022	Kayla Lundt lundtk@lb-eagles.org	The goal Lawton-Bronson would like to accomplish through the purchase and use of the zSpace is to increase interest in the healthcare field as well as prepare those interested for collegiate and workplace use of simulations.
Maple Valley- Anthon Oto Community School District	2022	Bill Collins bcollins@mvaoschool.org	The Maple Valley-Anthon Oto Community School District will partner with Maple Heights Nursing Home in Mapleton, IA, to provide opportunities for students to explore opportunities in Health Careers. The funds would be used to implement a Project Lead the Way Biomedical Sciences curriculum while also renovating my classroom to model a patient room.
MMCRU Community School District	2023 and 2019	Matthew Hansen matt.hansen@mmcruroyals.org	New manufacturing equipment was purchased including a CNC machining center, advanced millwork processing technologies and welding robotic cells to provide industry grade technology to 9th-12th grade students. This will help prepare students for local careers with the tools, equipment and technology used by local tradesmen for metal fabrication and general machining sectors in an economic development effort in northwest lowa.

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MOC-Floyd Valley Community School District - High School	2023, 2022, 2021 and 2020	Grant Hegstead ghegstad@mocfv.org Michael Mulder mmulder@mocfv.org	Students at MOC-Floyd Valley High School are provided with a range of opportunities along a continuum of authentic learning experiences, including our Dutch Designs Program, Extended Career Experiences Program, and Registered Apprenticeship opportunities. We also have CAPS Solutions, CAPS Education, and CAPS Medical pathways. The foundation of each of these programs is the relationship that exists between students, teachers, and community partners, allowing for value-added benefits for all.
MOC-Floyd Valley Community School District - Elementary	2022	Sandy Groom-Meeks groommeeks@mocfv.org Grant Hegstead ghegstad@mocfv.org	Working with community computer science education consultants, on-site professional development opportunities are available to prepare K-5 grade teachers to teach customized integrated lessons and integrate computer science into daily classroom activities.
No Boundaries and No Boundaries Middle School	2023 and 2018	Becky Rients brients@okobojischools.org	A consortium of schools, including the Okoboji, Graettinger-Terril, Ruthven-Ayrshire, and Spencer Community School Districts, developed No Boundaries for high school students and No Boundaries Middle School for 8th graders at Okoboji Middle School. The vision of this project is to provide real-world and relevant opportunities that don't exist in the traditional school setting and to expand this model to students across the region.
Odebolt Arthur Battle Creek Ida Grove Community School District	2024	Travis Chizek tchizek@oabcig.org	Program will provide industry relevant workshops that allow students to get hands-on experience with the latest machinery and tools used in manufacturing to develop skills in CNC machining, production planning and lean manufacturing principles.
Okoboji Community School District	2023	Alex Spooner aspooner@okobojischools.org Ryan Cunningham rcunningham@okobojischools.org	The Curious Minds program immerses students in the world of virtual reality, 3-D design, and game development, fostering collaboration with experts across various fields. Through cutting-edge software and tools like VR goggles and 3-D printers, middle schoolers actively engage with designers, building their portfolios and honing the skills needed to excel in STEM.
Rock Valley Community School District - Rocket Manufacturing	2014	Micah Weber mweber@rvclass.org Eric Van Veldhuizen evanveld@rvcsd.org Nancy Dickmann ndickman@rvcsd.org	Rocket Manufacturing is a student-run manufacturing business that works with local businesses by crafting metal machined parts and tools and fabricating items requested by businesses or individuals. Students carry out the marketing, accounting, ordering, design, production and customer communications.
Sergeant Bluff-Luton Community School District	2023	Chad Janzen janzecha@sblschools.com	An expansion of healthcare pathways and biology courses to work with community partners and expose students to the breadth of healthcare careers with use of Anatomage Table.

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Sheldon Community School District	2022	Cindy Prewitt cindy.prewitt@sheldonschools.com Amanda De Groot amanda.degroot@sheldonschools.com	Sheldon CAPS is a project-based work experience class where students are paired with organizations in their community as clients. The CAPS associates complete projects for their clients, learning about leadership, communication, purpose, innovation, and professionalism along the way. The innovative program has spurred many other tangent work-based learning classes including internships and preapprenticeships in Sheldon. The work-based learning coordinator meets with students and business partners to place students in workplaces that include banking, healthcare, manufacturing, and more.
Sioux Center Christian School	2023	Paul Brenner pbrenner@siouxcenterchristian.com	A new space will be created where students can practice STEM future-ready skills while being led by industry experts. This strategy will help develop leaders for tomorrow, increase classroom engagement and help students discover careers in STEM fields.
Sioux Center Community School District	2022 and 2021	Jill Harskamp jill.harskamp@scwarriors.org	Our STEM BEST program is focused on authentic learning experiences and career exploration. Self-discovery and understanding are central to our program. Students explore their gifts, talents, and career interests. They complete real-world projects and simulations that allow them to experience a variety of careers. Our program includes a Career Explorations class for 9-12 grade students. This class connects students with businesses in our community to introduce them to the opportunities right in their backyard as well as give them meaningful connections to local business leaders.
Sioux Central Community School District	2023	Melanie Bloom mbloom@siouxcentral.org	Educational greenhouse, plant science, food security, work-based learning. Few opportunities to purchase food produced locally exist. Our agriculture education program is working to improve this through work-based learning projects and improving production practices through the application of STEM practices.
Sioux City Community School District	2024, 2022 and 2018	MacKenzie Hiserote hiserom@live.siouxcityschools.com Eric Kilburn kilbure@live.siouxcityschools.com	The inspiration for enhancing our health science pathways tied to the business community and addressing real-life scenarios, comes from student interest and industry needs. The STEM Best funding helped support the purchase of the Anatomage Table. Students can interact with well-preserved digital cadavers instead of aged and degenerated bodies. The accurate details and rich content draw students' interest leading to more effective education outcomes. The table is also made available to our business partners for their own training purposes creating a stronger partnership between education and industry.

Awarded School	Year(s) Awarded	Contact(s)	Description
Spencer High School	2016	Nathan Wendt nwendt@spencerschools.org Ayn Thoreson athoreson@spencerschools.org Kiersten Doebel kdoebel@spencerschools.org	Students have multiple career pathways to choose from. No Boundaries is a passion-driven, project-based learning experience where students tackle real world issues for community organizations, and develop professional skills along the way. Students can also take extended career experience classes focusing on agriculture, manufacturing, health sciences, entrepreneurship, construction, or even a custom-made experience to fit the interests of the students. Each program allows students the opportunity to make connections with professionals in the area and gain necessary employability skills.
Spirit Lake Middle School	2017	Beau Dielschneider <u>bdielschneider@spirit-lake.k12.ia.us</u> Kyle Zankowski <u>kzankowski@spirit-lake.k12.ia.us</u>	A multipurpose educational makerspace was created to connect the school with the community and provide hands-on, creative ways for students to innovate while engaging in all academic disciplines.
Storm Lake Community School District- Elementary	2022	Jacquie Drey jdrey@slcsd.org	Storm Lake Early Elementary School, aims to link early learners with agriculture through community partnerships. In our county, fewer farms with higher yields result in diminished generational agricultural knowledge. To enlighten our students about our nation's reliance on a thriving agricultural system driven by science and technology, the EES offers hands-on activities in the regular classroom as well as in an outdoor learning space. These educational opportunities and connecting with our community foster appreciation for the vital role farming plays in our lives.
Storm Lake Community School District - Secondary	2022	Stacey Cole scole@slcsd.org	The Ascend Program at our high school was created to open up time in kids schedules so that they could get out into the workplace and have opportunities not available in a traditional classroom. Ascend is competency based allowing us to both accelerate and remediate within the same program.
Unity Christian High School	2024	Kevin Haan khaan@unitychristian.net	Utilize Aquaponics in Biology to offer a hands-on, non-traditional approach to learning and provide authentic opportunities for students to practice being community citizens.
West Lyon Community School District	2022	Shane Peterson speterson@wlwildcats.org Nate Sievers nsievers@wlwildcats.org	Day-long field trips will take place to tour businesses in the advanced manufacturing sector. Students will be connected with businesses to meet employers, have the students witness what is happening in those facilities and come back to our program and practice skills that relate to those careers.

Awarded School	Year(s) Awarded	Contact(s)	Description
Western Christian High School	2024	Shawn De Stinger shawn.destigter@westernchristianhs.com	Enhance and grow the JumpSTART Pathway and CTE Program, which are non- traditional educational programs that train and equip selected students to enter the trades workforce sector upon graduation. Programs teach students to become career- ready and servant-hearted individuals through unique "hands-on" course offerings and through a variety of authentic field experiences within the local community.

South Central STEM Region

Awarded School	Year(s) Awarded	Contact(s)	Description
Ankeny Community School District	2023 and 2017	Joel Fox joel.fox@ankenyschools.org Jessica Dirks jessica.dirks@ankenyschools.org	In 2017 the Ankeny Community School District created a college and career readiness program called Orbis. Students engage in authentic projects submitted by our business and community members and use the Design Thinking process to create solutions to these challenges. Orbis focuses on developing leadership, problem-solving, and collaboration. Currently, ACSD is in the research phase to design and expand similar programming in the district through the creation of an innovative hub.
Bondurant- Farrar Community School District	2022 and 2019	Donovan Hill hilld@bfschools.org	The current form of the program centers around engaging businesses and other stakeholders in the community to help students learn more about careers in the area. This has been achieved through working with partners from the original writing of the grant as well as expanding upon the partnership list. That growth has been possible due to the fact that with the program award the school district has added a dedicated person to oversee these partnerships with businesses. This has allowed for greater coordination between the school and businesses.
Chariton Community School District	2017	Tracy Hall tracy.hall@chariton.k12.ia.us	Through a partnership with the Lucas County Development Corporation, the REAL (Relevant, Engaged, Applied, Learning) program was created to engage high school students in on- site, work-based projects. Students are exposed to high-demand fields such as design/engineering, diesel mechanics, IT, nursing, coding, finance and supply chain. The program will also include a welding and advanced manufacturing lab area to increase student capacity with updated equipment and allow the use of industry standard equipment for more professional level projects.
Johnston Community School District	2022	Jyll Johnson-Miner jjminer@johnston.k12.ia.us	The Johnston Community School District will provide students an opportunity to explore, develop skills and receive EMS certification in emergency medical care and transportation for critical and noncritical patients who access the emergency medical system.

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Newton Community School District	2017	Bill Peters petersb@newtoncsd.org	Fledge Innovator, a partnership between the high school, businesses and the community, provides authentic projects for students to work collaboratively on site or at the new NHS STEM Innovation Center called "The Incubator." The course supports STEM initiatives and follows the University of Iowa's STEM Engineering or Biz Innovator Curriculums.
North Polk Community School District	2024	Hunter Fleshner hunter.fleshner@northpolk.org	By incorporating upgrades in CAD software will allow for the opportunity to intentionally collaborate with career-connected learning, project-based learning and work-based learning experiences with businesses.
Pella Community School District	2023, 2022, 2021 and 2020	Lowell Ernst lowell.ernst@pellaschools.org Teri Vos vost@central.edu	WorkSMART Connector guides K-12 students from career awareness through career experiences and into local careers. Modules were identified based on in-demand careers in Marion County, including technology, hospitality, patient care and early childhood education. A new automation cell in advanced manufacturing will provide opportunities to work in teams to understand the inputs and outputs of an automated system. The automation cell provides learning competencies which are key to the Industrial Technology program and Engineering Assistant Apprenticeship.
Southeast Warren Community School District	2024	Alex Rodgers alex.rodgers@se-warren.k12.ia.us	The Animal Learning Center will focus on advanced cattle production, specifically feed efficiency and record keeping by upgrading a cattle barn. Additional space will provide the potential to partner with local 4-H clubs and students outside of the program
Waukee APEX	2022 and 2016	Michelle Hill mhill@waukeeschools.org	Waukee Aspiring Professional Experience (APEX) develops highly skilled, adaptable global innovators and leaders. Waukee APEX draws on the expertise of area business partners to bring passion-based learning and authentic experience to high school. Students add value to partners while exploring career possibilities identified by economic trends within the metro area and state. Students gain valuable experience, earn credentials and college credits, and connect to community business partners.
West Des Moines Community School District	2022 and 2019	Jim Martin martinja@wdmcs.org	Equipment was added to the manufacturing lab, including the HAAS Lathe and Wireless Probe. These additions will help build classroom hours and skill development towards apprenticeship agreements with partners for welding, computer integrated manufacturing, and beyond.

Awarded School	Year(s) Awarded	Contact(s)	Description
Winterset Community School District	2024	Cam Smith csmith@winterset.k12.ia.us	Create pathways for students within the healthcare field and to expose students to the variety of healthcare careers with the addition of an Anatomage Table to be used in Health Science Program, Biology, Human Body, College Biology and Genetics, and College Anatomy and Physiology classes.

Southeast STEM Region

Awarded School	Year(s) Awarded	Contact(s)	Description
Anamosa Community School District	2023	Darren Hanna dhanna@anamosa.k12.ia.us	Teachers will engage in quality professional development in conjunction with community partners to offer authentic learning experiences in existing classrooms like geometry in Construction and AMPED, Algebra, Manufacturing, Processes and Entrepreneurship and Design.
Assumption High School (Davenport)	2016	Andrew Craig andy.craig@assumptionhigh.org	The school works with Victory Enterprises to develop a Virtual Reality STEM Career Exploration program for students that introduces them to STEM careers in Iowa and across the U.S.
Belle Plaine Community School District	2018	Frank Jowitt fjowitt@belle-plaine.k12.ia.us	A comprehensive (non-profit) manufacturing/production or "makerspace" facility in the STEM Lab is offered for students to create projects and artifacts. The formation of "BP - R.O.C.K.S." (Recognizing Opportunity from Commercial Knowledge and Skills) program provides an enhanced and more in- depth after-school option focused primarily on local business and industry needs. Students are engaged in training and education with local businesses, community partners and post- secondary institutions.
Bettendorf Community School District	2022 and 2014	Haleigh Hoyt hhoyt@bettendorf.k12.ia.us	With Eastern Iowa Community College and local health care providers, students will be placed in actual field experiences that will hone their skills in working with patients while working towards required hours for their CNA certificate.
Burlington Community School District	2022	Brian Johnson brian.johnson@bcsds.org	Burlington Community High School has partnered with Southeastern Community College, along with area health care providers such as Great River Health to expand workbased learning opportunities for BHS Health Occupation students. This includes updating and expanding the health occupation lab for a real "on the job experience" for students. This has also better prepared our students for when they participate in WBL programs, so that they have a better understanding of the experience.
Cedar Rapids Community School District Iowa BIG	2014	Megan Swanson mswanson@iowabig.org	Iowa BIG is a high school program that allows students to earn core academic credit through project-based learning. Students experience the community and learn in real-time by working with a variety of partners from business, nonprofit and government agencies.

Awarded	Year(s)	Contact(s)	Description
School Cedar Rapids Community School District (Metro High School)	Awarded 2023, 2022 and 2021	Chuck Tonelli mtonelli@crschools.us Shannon Ellis sellis@crschools.us Matt Secl msecl@crschools.us	METRO STEAM academy is a cross-curricular, project based, community centered, employability focused, personalized learning program within METRO High School. Students have several project options they can work on to earn credits towards graduation. Past projects have varied greatly and have included small business projects, museum exhibits, pure science investigations, community events planning, networking, marketing, outreach, and many others. The STEAM Academy works with organizations and community members to provide projects, mentorship, and learning experiences for our students. The crosscurricular learning space offers a farm-to-table nutrition/health program, an entrepreneurship outlet and a culinary arts workforce development.
Cedar Rapids Community School District (Thomas Jefferson H.S.)	2021	Charlie Goetzinger cgoetzinger@crschools.us	BlendED Academy is a 9th/10th grade school within a school program that aims to provide relevant experiences through community-based initiatives once students demonstrate proficiency. The program teaches core classes in a cohort-style seminar schedule which allows the students to demonstrate proficiency on content standards, provide targeted intervention for those not proficient, and authentic enrichment for those who are. This enrichment consists of partnerships with community members to engage our students in experiences that align with their passions.
Center Point- Urbana School District	2024	Andrew Kringle akringle@cpuschools.org Jen Vance at	Program will procure cutting-edge CNC machinery to empower students to delve into precision manufacturing techniques. Students will gain proficiency in programming, operating and troubleshooting CNC systems, preparing them for high-demand careers in manufacturing and engineering Community partners work in collaboration with
Community School District		jen.vance@cd-csd.org	staff to create a food truck with student opportunities for learning about food production, food preparation, delivery, budgeting and marketing for a small business.
Central Lee Community School District	2023	Angie Fransk <u>afransk@centrallee.org</u>	A science lab will incorporate industry grade chemical and biology vent hoods to replicate industry grade laboratories. Community partners will provide job shadow opportunities and hands-on experience.
Clinton Community School District	2021	Matthew Tobin matt.tobin@csdkq.org	A partnership with Keep Iowa Beautiful and Downtown Clinton Alliance to rebuild mural programs and provide professional development for staff to further develop project-based learning experiences.

Awarded School	Year(s) Awarded	Contact(s)	Description
College Community School District	2023	Amber Osterkamp aosterkamp@crprairie.org Douglas Wheeler dwheeler@crprairie.org	An Anatomage Table has been added to the District's career and readiness program. The table offers a technologically advanced 3D anatomy visualization and virtual dissection tool. The table is currently being used by students in our Biology courses, Anatomy and Physiology, and Animal Science. We will be working with community partners to provide feedback to students through the use of the table to help them explore different career areas that are of interest to them.
Davenport Community Schools	2022	Alene Vandermyde vandermydea@davenport.k12.ia.us	Central, North and West High Schools will expand access to the Information Solutions/Computer Science pathway with improving technology and equipment required to expand programming as well as increase course and co-curricular offerings for robotics, software development and hardware maintenance. The district will work with our industry partners and advisory council to provide the professional development and support required to implement the programming.
Davenport West High School	2023, 2017 and 2015	Greg Smith smithgr@davenportschools.org Alene Vandermyde vandermydea@davenport.k12.ia.us	The Advanced Manufacturing program partners with local businesses such as MA Ford, Arconic, John Deere, McLaughlin Body Company, to immerse high school students in the business environment and experience advanced manufacturing in their community. Davenport West High School has four CNC machines purchased in collaboration with HAAS. Using this equipment, students collaborate with local businesses to learn CNC programming and operating. From this pathway, students go on to a high school registered apprenticeship program, embedding them into our industry partners workforce.
Fort Madison Community High School	2022 and 2016	Amy Wehrle amy.wehrle@fmcsd.org Kim Harmon kim.harmon@fmcsd.org	The three Lee County school districts (Central Lee, Ft. Madison and Keokuk) are partnering with economic development partners, local business and industry, and trade unions, in addition to post-secondary institutions to increase access and awareness of the career opportunities in STEM fields.
lowa City Community School District	2017	Matt Degner degner.matt@iowacityschools.org	We have implemented the STEM Innovator program through the University of Iowa into our business and science courses.
Keokuk Community School District	2022, 2021 and 2018	Nathan Harrison nathan.harrison@keokukschools.org Natalie Ulloa natalie.ulloa@keokukschools.org	Keokuk and Fort Madison high schools partnered with business and industry and economic development groups to create a regional career exploration center. The center provides students expanded opportunities in different career strands to build on the CTE courses currently offered at the high schools.

Awarded School	Year(s) Awarded	Contact(s)	Description
Linn-Mar Community School District	2021	Mark Hutcheson mhutcheson@linnmar.k12.ia.us Elyssa McDowell elyssa.mcdowell@linnmar.k12.ia.us	Venture Academics, located at Linn-Mar High School in Marion, IA, is a project-based learning initiative. It enriches traditional learning by integrating STEM processes into project work. Through Venture, students not only acquire foundational knowledge but also apply it to realworld issues, fostering crucial 21st-century skills such as critical thinking, creativity, time management, and collaboration. This program actively collaborates with local businesses and professionals, providing students valuable exposure to diverse knowledge and potential career paths.
Marion High School, Marion Community School District	2024	Gretchen Kriegel gkriegel@marion-isd.org	Develop and enhance the implementation of AMPED (Algebra, Manufacturing, Production, Entrepreneurship, and Design) in Algebra and Geometry in Construction (GIC) courses at Marion High School through community partnerships.
Marion Intermediate School, Marion Community School District	2024	Peggy Murphy pmurphy@marion-isd.org	Francis Marion Intermediate School will partner with the Marion Economic Development Corporation and Grant Wood Area Education Agency to help diverse young learners grow awareness of future high-demand careers impacted by computer science in the community and grow their identity as computer scientists.
Mount Vernon Community School District	2022	Susannah Maddock smaddock@mvcsd.org Jessica Fitzpatrick jfitzpatrick@mvcsd.org	Students in manufacturing, advanced materials processing and construction technologies courses, along with middle and elementary school students, under the direction of their teachers, designed and renovated a discontinued school bus into a state-of-the-art enrichment classroom! KWWL News , CR Gazette
Muscatine Community School District	2023, 2022, 2020, 2017 and 2016	Brandon Welsch brandon.welsch@mcsdonline.org	Muscatine High School's Work Based Learning program provides students with experiences to explore, prepare and train in a career area of their interest. These experiences can include things such as job shadows, site visits, cooperative learning projects, internships and apprenticeships.
New London Community School District	2023	Chad Wahls chad.wahls@nlcsd.org Matt May matt.may@nlcsd.org Allison Lair allison.lair@nlcsd.org Jessica Boyer jessica.boyer@nlcsd.org	The New London Community School District's main goal is to help students reach their best future. In order to do that, we've embraced technical training along with our college and career path
North Scott Community School District	2024	Katie Hoyt katie.hoyt@north-scott.k12.ia.us	Create a Quality Pre-Apprenticeship for pathways into residential, commercial and industrial electrical trades that will include careers in residential/commercial/industrial electrical, electrical automation and controls, maintenance electrical, lineman, communications and more.

Awarded School	Year(s) Awarded	Contact(s)	Description
Northeast Community School District	2022 and 2014	Jennifer Huling jennifer.huling@northeastcsd.org	An innovative, problem solving and discovery-based environment for students, created in partnership with Lyondell Bassell, that focuses on authentic, real-world problems through the infusion of technology and curriculum and a second HD award created a partnership with Twin State Technical Services that offers student internships, the re-outfitting of a computer lab and STEM room, and building opportunities in computer science
Pleasant Valley Community School District	2022	Grant Housman housmangrant@pleasval.org Bernadette Brustkern brustkernbernie@pleasval.org	Pleasant Valley Community School District will update existing classroom and coursework to provide an introductory course in CNC Machining. Students successfully completing the introductory courses can take advanced course work on the SCC campus where they can complete an industry recognized CNC Machine Operator Certificate. We have three students who have completed or are active in a registered apprenticeship at Arconic. There is even more demand for this program now than when we originally submitted as expressed by area businesses.
Van Buren Community School District	2023	Jessie Greiner jessie.greiner@van-burencsd.org	VBCO Print Shop is a print shop ran by students. Students meet with community business partners or Van Buren County School personnel to design graphics, measure spaces, print designs and install graphics to help beautify the community.

Southwest STEM Region

Awarded School	Year(s) Awarded	Contact(s)	Description
Atlantic	2017	Eric Miller	An apprenticeship approach to the welding
Community		emiller@atlanticiaschools.org	trades. Business partners provide support and
School		Alyssa Dovenspike	expertise (Master Licensed welders) as they
District		adovenspike@atlanticiaschools.org	create and implement a robust welding
		Heather McKay	apprenticeship program.
		hmckay@atlanticiaschools.org	
Boyer Valley	2022	Rebekah Gross	The Boyer Valley Community School District will
Community		rebekah.gross@boyervalley.org	create an elementary maker space that provides
School		Scott Frohlich	for STEM projects and activities that allows
District		sfrohlich@boyervalley.org	students to get hands-on experience in all HD
			fields, including field trips to major business
			partners that focus on manufacturing, computer
			science and health.
CAM	2021 and	Barry Bower	Students explore entrepreneurship by planning
Community	2018	bbower@cam.k12.ia.us	and opening a student-run storefront
School			collaboratively with community partners. They
District			sell student-made projects which are created in
			CTE, industrial arts, plasma cutter and small-
			business classes.

Awarded School	Year(s) Awarded	Contact(s)	Description
Coon Rapids- Bayard Community School District	2023	Kelly Sigler kelly.sigler@crbcrusaders.org Anne Pudenz anne.pudenz@crbcrusaders.org	A school-based enterprise will be launched where students will design, create and market their products to school, students and the community. Local small businesses will mentor the students and provide classroom speakers, job shadowing and facilities access.
Council Bluffs Community School District	2024	Tracy Matthews tmathews@cbcsd.org	Adding three College and Career Exploratory Labs to serve students in 6th-8th grades. Designed to provide content knowledge and hands-on exploratory opportunities to assist students in determining their potential interests and strengths within a range of career pathways, many of which fall within STEM fields.
Creston Community School District - Elementary School	2021	Callie Anderson at canderson@crestonschools.org	The Creston ECC program connects STEM- focused instruction with thematic activities and curriculum. An Innovation Zone includes retail centers, medical play centers, the problem stop where critical thinking is used and sensory activities including art, music and design.
Creston Community School District - Middle School	2021	Kimberly Fourez kfourez@crestonschools.org	STEM learning opportunities for middle school students beginning career exploration. Projects include Future Fest/STEM Fair, Digital Student Portfolio and Lunch and Learn opportunities.
Creston Community School District - Secondary	2023	Callie Anderson canderson@crestonschools.org	Secondary students who receive special education services will gain employability skills, have the opportunity to explore future career pathways and receive support to be successful in the workplace. A Job Olympics will be developed where industry leaders are invited to observe the students demonstrating their current level of proficiency towards the identified employability skills.
Earlham Community School District	2023 and 2021	Kristin Sheffield ksheffield@ecsdcards.com	Building a systemic K-12 STEM experience through intentional curriculum redesign. Current opportunities for students include a STEM embedded into Kindergarten instruction and classroom design, a K-12 MakerSpace, a K-8 STEM Family Night, STEM elective courses for grades 6-8, and collaboration with local STEM professionals to provide career-connected learning opportunities for students and families.
East Mills Community School District	2023	Kattie Lewis klewis@emschools.org	The East Mills School District will team up with regional school districts, business partners, and educational partners to create a regional career and technical education center, alongside launching a Farm to Table initiative featuring school gardens, greenhouses, and compost programs.
East Union Community School District	2023	Marcus Patten mpatten@eastunionschools.org Joan Gordon jgordon@eastunionschools.org	The district will develop a fully equipped, functioning maker space that will include the use of maker projects, coding products and a 3-D printer. This will support upper grade level partners by offering students hands-on work with the equipment at an earlier age.

Awarded School	Year(s) Awarded	Contact(s)	Description
Griswold Community School District	2023 and 2019	Sandy Nelson snelson@griswoldschools.org Brianna McCollum bmccollum@griswoldschools.org Jackie Brokaw jbrokaw@griswoldschools.org	Work-based learning opportunities for students to develop future job skills by partnering with businesses on authentic projects. With state-of-the-art resources, students gain high demand technical skills, including social media design and management, programming, video production and editing, broadcasting, creation of content for electronic information monitors, and advertising. A drone training program is utilized by both the Communication Arts department for media production as well as the Agriculture department for crop mapping.
Harlan Community School District	2023	Sara Fink sarah.fink@hcsdcyclones.com	STEM teachers will explore successful STEM schools in lowa and collaborate with local community partners to establish a STEM program. The program will provide learning spaces that expose students to careers and help with the transition out of high school.
IKM-Manning Community School District	2016 and 2017	Jenny Linde ilinde@ikm-manning.k12.ia.us	Spark is our middle school student-run business, offering a variety of services to teachers and community members, including poster printing, lamination, and specialty projects. Every 7th and 8th grade student has the opportunity to participate in Spark each year completing class projects and creating one holiday-themed project. They also organize a pop-up sale to showcase and sell their items. In Spark, we focus on three main objectives: Foster entrepreneurship and teach career-ready skills. Provide hands-on learning through teamwork and collaboration. Learn key aspects of running a small business.
IKM-Manning Community School District	2016 and 2017	LuAnn Langel <u>llangel@ikm-manning.k12.ia.us</u> Kevin Lahndorf <u>klahndorf@ikm-manning.k12.ia.us</u>	FIRE (Finding Innovative Reasons to Excel) is a student-led business focusing on vinyl printing and laser engraving. Associates will utilize soft skills used in real-world business and focus on 21st Century Employability Skills while completing paid jobs. Every day is a different day with new challenges.
Lewis Central Community School District	2024, 2022 and 2020	Dustan Kern dkern@lewiscentral.org	Our program combines teaching students about plastic recycling and plastic manufacturing to reduce plastic waste. We use pneumatic injection machines to make most products. The club uses CAD and CAM to design and cut aluminum molds with our CNC machine and students in the 6th grade design and resin print inserts for the molds. A 7th grade class makes keychains from recycled plastic. We have developed a method for turning plastic bags into solid sheets that can be vacuum formed or melted and molded into products. We use an extrusion machine that can make plastic lumber to build larger objects.

Awarded School	Year(s) Awarded	Contact(s)	Description
Logan- Magnolia Community School District	2024	Kenneth Killpack gkillpack@lomaschools.org	Expand the existing greenhouse to allow for the diversification of Big Cat Industries, a cross curricular, student-led business program. At the completion of implementing the project, there will be five content areas included: Science, Industrial Technology, Business and Marketing, Culinary Science and MultiMedia.Marketing, Culinary Science and MultiMedia.Culinary Science and MultiMedia.
Orient- Macksburg Community School District	2023	Connie Terry connie.terry@o-mschools.org	A Geometry in Construction course that meshes required core concepts with authentic construction experience. Community partners will provide projects for students to apply geometry knowledge and practice construction skills for real world projects for the public good.
Red Oak Community School District	2024	Janelle Erickson ericksonj@redoakschools.org	Structured opportunities for career-focused learning to be achieved through planning and reflection activities, authentic learning activities and competency growth-focused projects, both within the school walls and in supervised workplace environments.
Riverside Community School District	2021	Jamie Meek jmeek@riverside.k12.ia.us	RSTN provides online streams of all home events for Riverside Community Schools. We work with local businesses to create ads to play during breaks in the activities and also with KJAN on sports broadcasting of the events.
Saint Albert Catholic Schools	2019	Jeremy Hulshizer hulshizerj@saintalbertschools.org	A mobile STEM Lab where teachers will be able to check out materials to implement the building of robots, coding and computational thinking into their curriculum. Components include Elem. and MS robotic teams, 3rd grade coding, and 8th grade exploratory coding course, and Ozobots unit in 8th grade.
Southwest Valley Middle School of Villisca	2017	Erin Wetzel ewetzel@southwestvalley.org	Career Stop will offer a learning space where area businesses can come in to teach students skills they use on the job. Teachers and businesses will work together to create curriculum units that integrate entrepreneur and apprenticeship skills and hands-on learning for students.
Stanton Community School District	2019	Jeff Grebin jgrebin@stantonschools.com Katie Elwood kelwood@stantonschools.com	Students gain work-based learning experiences by working on authentic projects with a business partner. Using state-of-the art equipment and software, students identify a solution that adds value to the business.
Tri-Center Community School District	2019	Jeff Grebin jgrebin@stantonschools.com Katie Elwood kelwood@stantonschools.com	Students gain work-based learning experiences by working on authentic projects with a business partner. Using state-of-the art equipment and software, students identify a solution that adds value to the business.
Tri-Center Community School District	2022	Jennifer McGee jmcgee@tctrojans.org	Tri-Center Community School District will introduce students to career opportunities available in the medical field and provide hands-on experiences for those students who are interested in pursuing a career in the medical field through strong partnerships with local medical agencies.

Awarded School	Year(s) Awarded	Contact(s)	Description
Woodbine Community School District - IGNITE Pathways	2023, 2022, 2021 and 2020	Michelle Barry mbarry@ignite-pathways.com	IGNITE Pathways is designed for students to "learn by doing." IGNITE provides hands-on experiences that will easily transition into post-graduation life and high-demand jobs. Exploration includes instruction modules for an automotive program, applied sciences, health sciences, human services, robotics and automation and exercise science courses. Introductory healthcare courses are also available for 7-12 grade students.
Woodbine Community School District - Elementary	2022 and 2021	Tracy Kelley tkelley@woodbine.k12.ia.us Maureen Allen mallen@woodbine.k12.ia.us Jill Ridder jridder@woodbine.k12.ia.us Shawna Harris atsharris@woodbine.k12.ia.us	Interest-based STEM activities are available for students in grades K-4. Students participate in four, 30 to 45-minute classes on a weekly basis with 16 career-oriented options.