



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

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

(Updated October 2018)

#### 2018

**Allamakee Community School District in the Northeast STEM Region:** Waukon High School (WHS) will be implementing an Allamakee Regional Welding Academy to serve the Allamakee County and surrounding area beginning fall 2019. This will be a partnership with Northeast Iowa Community College (NICC), WHS and Allamakee County Economic Development (ACED) with a goal of creating a pipeline of talent to fill current and future welding vacancies within the region.

**Contact:** Caleb Ferring at [cferring@allamakee.k12.ia.us](mailto:cferring@allamakee.k12.ia.us)

**Belle Plaine Community School District in the Southeast STEM Region:** The Belle Plaine Community School District will utilize a comprehensive (non-profit) manufacturing/production or "makerspace" facility within their new STEM Lab where all students will have the opportunity to create tangible projects and artifacts via the technology. The formation of "BP - R.O.C.K.S." (Recognizing Opportunity from Commercial Knowledge and Skills) program will provide an enhanced and more in-depth after-school activity focused primarily upon district and local business and industry needs within the regional community. There will be direct contact, training and education with local businesses, community partners and supporting post-secondary institutions.

**Contact:** Frank Jowitt at [fjowitt@belle-plaine.k12.ia.us](mailto:fjowitt@belle-plaine.k12.ia.us)

**CAM Community School District in the Southwest STEM Region:** The "curriculum" will include learning experiences based on 21st Century skills and mastery of Core Standards. Teachers will guide project completion, provide meaningful feedback and help students use their strengths to find success. Students will have several worked-based courses for students to choose from, both in core areas and in CTE pathways. There will be an emphasis in teaching and practicing some of the "soft skills" that employers so often say that students are lacking.

**Contact:** Shelly Miller at [smiller@cam.k12.ia.us](mailto:smiller@cam.k12.ia.us)

**Cedar Falls Community School District in the Northeast STEM Region:** The key strategy for the Cedar Falls CAPS Program is to take students out of the traditional classroom setting and provide real world work experiences. Students select a strand related to a career field they are interested in and are then immersed in a professional setting. They meet at a location off regular school grounds and work on projects connected to their field of interest. Students are provided training in professional skills to help them acclimate to the world of work. As needed, students are connected with mentors from local businesses who provide training in skills needed to complete the projects.

**Contact:** Kenton Swartley at [Kenton.swartley@cfschools.org](mailto:Kenton.swartley@cfschools.org)

**Central Community School District in the Northeast STEM Region:** 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.

**Contact:** Ann Gritzner at [agritzner@central.k12.ia.us](mailto:agritzner@central.k12.ia.us)

**Des Moines Independent Community School District in the South Central STEM Region:** The goal of the program is to develop a strategic approach to increasing the number of underrepresented minorities in the neurosciences by providing research and internship opportunities and improving college and career readiness of students. Through a partnership with Des Moines University (DMU) and Kemin Industries, students will collaboratively build a business model aimed at enhancing anatomy instruction through the development and sale of 3D printed models of the mammalian brain.

**Contact:** Kacia Cain at [kacia.cain@dmschools.org](mailto:kacia.cain@dmschools.org)

---

#### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

**Keokuk Community School District in the Southeast STEM Region:** The Keokuk Community School District will create an active learning center to include learning hubs, flexible seating and technology. This will provide a sophisticated space for students to interact with professionals to develop soft skills, job awareness and community partnerships.

**Contact:** Heidi Harness at [Heidi.harness@keokukschools.org](mailto:Heidi.harness@keokukschools.org)

**No Boundaries and Iowa Middles in the Northwest STEM Region:** A consortium of schools, including the Okoboji, Graettinger-Terril, and Ruthven-Ayrshire Community School Districts, are embarking on a shared program called the No Boundaries Project. In addition, a middle school pilot of the No Boundaries Project, called Iowa Middles, will start in January with 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.

**Contact:** Ryan Cunningham at [rcunningham@okobojschools.org](mailto:rcunningham@okobojschools.org)

**Ottumwa Community School District in the South Central STEM Region:** Ottumwa Community School District will expand their SparkTank program, which provides an off-campus, hands-on learning to link instruction with authentic work experiences through partnerships with local employers. The district will add two additional strands, STEM summer camp experiences for middle and high school students and professional development for teachers to incorporate more career exploration opportunities.

**Contact:** Kim Hellige at [kim.hellige@ottumwaschools.com](mailto:kim.hellige@ottumwaschools.com)

**Sioux City Community School District in the Northwest STEM Region:** Sioux City Community School District will expand the GeoPhysics (Geometry + Physics) STEM curriculum implemented during the 2017-2018 school year to establish authentic partnerships with three new business partners. Community partnerships will integrate real-world questions for students to practice problem-solving utilizing 21st century skills of collaboration, creativity, communication and critical thinking.

**Contact:** Shelly Nash at [nashs@live.siouxcityschools.com](mailto:nashs@live.siouxcityschools.com)

**St. Mary School (Humboldt) in the North Central STEM Region:** This project's aim is to 1) prepare students in grades 1-6 with the foundational interests, skills, and competencies for matriculation to middle school STEM coursework; 2) develop a STEM Learning Intermediary Network that will facilitate students and teachers networking with local industrial scientists skilled technicians in various learning environments; and, 3) coordinate technician-in-residency opportunities for educators to learn about local STEM careers and jobs to better guide students in their STEM studies.

**Contact:** Diane Dix at [ddix@stmaryhumboldt.org](mailto:ddix@stmaryhumboldt.org)

**St. Theresa School (Des Moines) in the South Central STEM Region:** Students will be paired with businesses to bring the real world of STEM into students' hands. By partnering with local businesses, students will learn from industry professionals, implement that learning in projects and present that learning in meaningful and professional ways to our partners. With the help of business partners, students will have the experience and confidence to explore STEM courses in high school and eventually become STEM professionals.

**Contact:** Ronda McCarthy at [rmccarthy@sainttheresaiowa.org](mailto:rmccarthy@sainttheresaiowa.org)

**Woodbine Community School District in the Southwest STEM Region:** Woodbine Community School District will expand upon their current award-winning Construction Trades Program to create MakerSpace learning links for grades 3-8, create a robust series of business engagement experiences and launch a digital activities calendar to keep businesses and the local community connected.

**Contact:** Shawna Harris at [sharris@woodbine.k12.ia.us](mailto:sharris@woodbine.k12.ia.us)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

### 2017

**Albia Community Schools:** The Albia Community Schools will commence a collaborative learning model between business, community and education in the fall of 2018. This model will bring relevant, rigorous and authentic learning experiences to life for students while working with business partners and Indian Hills Community College. Students will be immersed in community projects with a STEM focus that will solve real problems in the Albia area, thus improving the living and working conditions for our citizens.

**Contact:** Kevin Crall, Albia Community School District Superintendent, at [kevin.crall@albia.k12.ia.us](mailto:kevin.crall@albia.k12.ia.us)

**Alburnett Schools:** The Alburnett Community School District developed and implemented a program called the Pirate Collaborative in 2016-2017 to bridge the needs and issues of businesses with increased applicability and relevance in learning for students. The Pirate Collaborative aims to aid students in the work they do for businesses in their school projects, and these businesses provide career awareness, preparation and exploration to their students.

**Contact:** Brian Moretz, Principal, at [bmoretz@alburnettcsd.org](mailto:bmoretz@alburnettcsd.org)

**Ankeny Schools:** Ankeny created a college and career readiness program called Orbis that exemplifies the STEM BEST model, with a need for a full-time Director of College and Career Readiness to implement this program. The district also needs to begin pilot projects for Orbis which include meeting with local businesses, nonprofit organizations and students to engage in collaborative project planning and design, along with a collaboration space for all of this to occur.

**Contact:** Dr. Jill Urich, Director of College and Career Readiness, at [jill.urich@ankenyschools.org](mailto:jill.urich@ankenyschools.org)

**Atlantic Community Schools:** Atlantic Community Schools' STEM BEST® model is a pre-apprentice approach to the construction trades. Business partners provide support and expertise (Master Licensed contractors) as they create and implement a robust construction trades program. The Atlantic School Board purchased a facility to accommodate the program allowing room to develop more in years to come. Incorporating a comprehensive exploratory program at the middle school is another part of this project. The curriculum will include hands-on modeling and construction applications and 21st Century Skills, which will focus on employability skills, technology and financial literacy.

**Contact:** Heather McKay at [hmckay@atlanticiachools.org](mailto:hmckay@atlanticiachools.org)

**Cedar Falls Community Schools:** Cedar Falls is further developing a CAPS program in Engineering Technology, Communication and Design and Education. The community partnerships will involve students working on projects that fulfill needs for businesses, job shadowing opportunities, access to resources and equipment for students and fresh, creative minds for businesses.

**Contact:** Kenton Swartley at [Kenton.swartley@cfschools.org](mailto:Kenton.swartley@cfschools.org)

**Chariton Community Schools:** Chariton Community Schools in partnership with the Lucas County Development Corporation will implement the REAL (Relevant – Engaged – Applied – Learning) program in the 2018-2019 school year. The program will engage high school students in on-site, work-based, career-specific projects providing experience in STEM careers. Students will be exposed to high-demand fields such as design/engineering, diesel mechanics, IT, nursing, coding, finance and supply chain. Initially, nine businesses, including Hy-Vee, Johnson's Machine Works and the Lucas County Health Center, have partnered to provide career awareness, exploration and preparation & training opportunities for students through tours, speakers, career course development committees and hosting students in the workplace.

**Contact:** Tracy Hall, Chariton High School Principal, at [tracy.hall@chariton.k12.ia.us](mailto:tracy.hall@chariton.k12.ia.us)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

**Davenport West High School:** Davenport West High School purchased a Haas CNC Mill under the STEM BEST® Program in 2015 and is expanding its Advanced Manufacturing program with the purchase of a Haas CNC lathe. Working with business partnerships and focusing on Advanced Manufacturing, Davenport West HS plans to revitalize manufacturing in the Quad Cities by creating a high tech area of students learning CNC programming and operating. Davenport West HS will work to expand student internships with M.A. Ford for students wanting to pursue careers as engineering technologists and engineers.

**Contact:** Greg Smith at [smithgr@davenportschools.org](mailto:smithgr@davenportschools.org)

**Des Moines Hoover High School:** Hoover's STEM Academy implemented in 2012 is a school-within-a-school model that focuses on providing robust experiences for all students who connect the Hoover learning community with businesses and institutes of high education in authentic, collaborative and challenging ways. This award expands upon a previous STEM BEST® award and focuses on two goals: (1) providing students with opportunities to conduct research at a university or internship with local businesses and (2) providing teachers with ongoing, in-depth professional development.

**Contact:** Maureen Griffin, STEM Administrator, at [Maureen.griffin@dmschools.org](mailto:Maureen.griffin@dmschools.org)

Kathie Danielson, Hoover High School Interim Principal, at [Kathie.danielson@dmschools.org](mailto:Kathie.danielson@dmschools.org)

**IKM-Manning Community School District:** IKM-Manning wants to develop their Middle School SPARK program and repurpose a classroom into a Makerspace environment. This would help engage more students in project-based learning and with community business partners. The IKM-Manning Foundation GALA brings together many invested partners and has shown to be a sustainable source of funding in years past.

**Contact:** Luann Langel at [llangel@ikm-manning.k12.ia.us](mailto:llangel@ikm-manning.k12.ia.us)

**Iowa BIG North:** This is the second full year of operations for the Iowa BIG North consortium, which has been a catalyst for strengthening their business and school district partnerships. The expansion of Iowa BIG North includes the addition of Turkey Valley and Riceville community school districts. Within these districts, many local businesses have plans for incorporating student learning and relevance to their programs.

**Contact:** Mike Kuennen at [m\\_kuennen@new-hampton.k12.ia.us](mailto:m_kuennen@new-hampton.k12.ia.us)

Donna Forsyth at [dforsyt@charles-city.k12.ia.us](mailto:dforsyt@charles-city.k12.ia.us)

**Iowa City Community School Schools:** Iowa City community school district wants to scale all of their current STEM-driven programs to provide the experience to all students that connects each individual program. Many businesses have been involved with the individual programs for years and continue to support the school district.

**Contact:** Matt Degner, Assistant Superintendent, at [degner.matt@iowacityschools.org](mailto:degner.matt@iowacityschools.org)

**Marshalltown Learning Academy:** The Marshalltown Learning Academy was created to provide a personalized learning environment for students several years ago. Due to great success, they want to scale up the program and include apprenticeship programs with area businesses that are often already in partnership with the school district.

**Contact:** Eric Goslinga at [egoslinga@marshalltown.k12.ia.us](mailto:egoslinga@marshalltown.k12.ia.us)

**Muscatine Community Schools with West Liberty Elementary and Muscatine Community College:** STEAM into MCC was a recipient of a 2017 Iowa STEM Best grant. In the spring of 2017, all six elementary schools in the Muscatine Community School District (MCSD) and teachers from MCSD and Muscatine Community College (MCC) partnered to offer a unique after-school program for 4th and 5th graders. 28 kids participated in the inaugural program: 15 girls, 13 boys and 16 minorities. While much was accomplished the first year, work remains to meet all of the outcomes. In 2018, double the number of students will be served and the model will expand into a new elementary school with 54% Latino students.

**Contact:** Jerald Riibe, Superintendent, at [jerry.riibe@muscatine.k12.ia.us](mailto:jerry.riibe@muscatine.k12.ia.us)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

**Newton High School:** Newton High School's program is called Fledge Innovator, a partnership between the high school, businesses and the community. Area business partners will provide authentic projects for students to work collaboratively on their assigned projects 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. The class will be open for juniors and seniors and will meet for 1.5 hours for nine weeks.

**Contact:** Bill Peters, High School Principal, at [petersb@newtoncsd.org](mailto:petersb@newtoncsd.org)

**North Iowa Community School District:** Partnering with a primary local partner, NGT (Next Generation Technology), North Iowa CSD plans to develop Next Generation Kits (NGK's), providing hands-on student-led learning opportunities that engage students while aligning to NGSS and other CORE standards, to be used in their Solution Center. NGK's will foster creativity, innovation and problem solving skills. Initial kit topics will include build a PC, Drones, Networking, Web Development, Robot Vacuums, Smart Homes, Security Cameras, 3D Printing, Astronomy and App Design.

**Contact:** Joe Erickson, Superintendent, at [erickson@northiowa.org](mailto:erickson@northiowa.org)

**Oelwein Community Schools:** PROJECT ONE was created by the Oelwein Community School District in conjunction with the Oelwein Economic and Area Development to create opportunities for students to flourish in robust Project and Work Based Learning Environments. With support of 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. Pedagogical professional learning will be provided to teachers as OCSA prepares for this Project and Work Based approach to education. Oelwein Community School District believes EveryONE will have an opportunity to engage in: PROJECT ONE: ONE PROJECT, ONE BUSINESS, ONE STUDENT AT A TIME.

**Contact:** Deb Kaepfel at [dkaepfel@oelwein.k12.ia.us](mailto:dkaepfel@oelwein.k12.ia.us)

**Southwest Valley Middle School of Villisca:** Before the station closed, Villisca's local train station used to be a collaboration space for all community members. With the STEM BEST Grant, Villisca will regain that intellectual common place and it will be known as the Career Stop. Collaboration between community members and students will problem-solve real world situations. 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.

**Contact:** Lora Top at [ltop@villiscaschools.org](mailto:ltop@villiscaschools.org)

**Spirit Lake Middle School:** The goal at Spirit Lake Middle School is to create a multipurpose educational makerspace that connects school with community. The makerspace concept provides hands-on, creative ways that allow students to innovate while engaging them in deep learning in all academic disciplines. Connecting with local businesses and nonprofits to raise STEM career awareness and job skills are also a priority. The end goal is to establish a public asset Makerspace that will deliver STEM opportunities not only to Spirit Lake students but also to the community.

**Contact:** Rick Reinking, Director of Strategic Partners and K-12 STEM, at [rreinking@spirit-lake.k12.ia.us](mailto:rreinking@spirit-lake.k12.ia.us)

**West Liberty Community Schools:** The goal of the project is to bring an innovative technology experience involving virtual reality to the students. Shaking Earth Digital, LLC (SED) will design a program for students to create their own virtual reality (VR) game or experience. Students will create a project in an after school program. "I'm beyond excited. We have a unique opportunity to not just expose students to future technology, but to shape future itself," said Jens Zalzal, owner of Shaking Earth Digital. "We wanted students to be creators behind VR. We are thrilled to bring this experience to our students and grateful for partnering with Shaking Earth Digital!" said Jackie Henderson, West Liberty Community Schools teacher.

**Contact:** Jackie Henderson at [jhenderson@wl.k12.ia.us](mailto:jhenderson@wl.k12.ia.us)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

### 2016

**Assumption High School in Davenport:** 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.

**Contact:** Andrew Craig, President, at [andy.craig@assumptionhigh.org](mailto:andy.craig@assumptionhigh.org)

**Boone EDGE:** Boone EDGE is implementing a grades 3-12, work-based learning continuum of awareness (early years), exploration (middle years) and training (high school) in partnership with a variety of employers and higher education institutions. *Boone EDGE is one of four schools piloting a Quality Pre-Apprenticeship, building on grades 10-12 work-based learning experiences. They offer semester-length, project-based opportunities through the School Career Connections and vocational rehabilitation programs initially in plumbing and electrical fields in partnership with Kruck Plumbing & Heating Co. (a Registered Apprenticeship Program) and ABC of Iowa Apprenticeship & Training Trust. A goal is to expand these options with the growth of community apprenticeship partners over time.*

**Contact:** Kris Byam, Boone High School Principal, at [kbyam@boone.k12.ia.us](mailto:kbyam@boone.k12.ia.us)

**Fort Madison Community High School:** Students experience co-taught STEM courses of educators alongside industry partners in innovative learning spaces that introduce them to careers in their community, leading to job shadows and internships.

**Contact:** Greg Smith, Principal, at [greg.smith@fmcisd.org](mailto:greg.smith@fmcisd.org)

**IKM-Manning Community School District:** A learning environment focused on two important employability skills – communication and problem solving – where students, teachers and community leaders come together to brainstorm business project ideas and pursue them on teams.

**Contact:** Luann Langel at [llangel@ikm-manning.k12.ia.us](mailto:llangel@ikm-manning.k12.ia.us)

**Muscatine Community School District (STEAM Into MCC):** Fourth and fifth grade students in all of Muscatine's elementary schools take part in a five-month-long, afterschool program of hands-on projects led by community experts, held at MCC. *Muscatine CSD with MCC is one of four schools piloting a Quality Pre-Apprenticeship. Their program in the Manufacturing and Culinary Arts Academies is in partnership with MCC and aligned to the Iowa Core, leading to certificates in electronics and up to 38 credits toward an Engineering Technology Electromechanical Diploma (manufacturing pathway); or certificates in culinary arts and up to 32 credits toward a Culinary Arts Diploma. Partners are Chef Brad Scott for the culinary pathway, and companies HNI and Allsteel for the manufacturing pathway. All three are engaged in Registered Apprenticeship Programs.*

**Contact:** Dr. Jerald Riibe, Superintendent, at [jerry.riibe@muscatine.k12.ia.us](mailto:jerry.riibe@muscatine.k12.ia.us)

**North Cedar Elementary School in Cedar Falls:** Students work hand-in-hand with Sidecar Coffee (local chain) to learn about the science of roasting and brewing coffee in order to create their own product and market it to the community.

**Contact:** Katie Johnston, Principal, at [katherine.johnston@cfschools.org](mailto:katherine.johnston@cfschools.org)

**Spencer High School:** Students travel to workplace sites for training and experiences that align with the community's industry demand in construction, health care, manufacturing and entrepreneurship. *Spencer High School is one of four schools piloting a Quality Pre-Apprenticeship. Their program expands on the Construction Extended Career Experiences whereby students are at the job site receiving on-the-job training for an average of 12.5 hours a week. They also achieve their 10-hour OSHA certification in concert with the Quality Pre-Apprenticeship. Established Registered Apprenticeship Program partners include Milford Electric and Midwestern Mechanical.*

**Contact:** Elli Wiemers, Principal, at [ewiemers@spencerschools.org](mailto:ewiemers@spencerschools.org)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

**Story County Consortium:** Eight school districts in the consortium, including Ames, Boone, Ballard, Collins-Maxwell, Colonesco, Gilbert, Nevada and Roland Story, join forces to create a shared STEM BEST model that provides students with work-based learning opportunities with businesses in their communities.

**Contact:** John Kinley, Director, at [jfkinley@dmacc.edu](mailto:jfkinley@dmacc.edu)

**Waukee APEX:** Through a collaboration between education, business and the community, Waukee Aspiring Professional Experience (APEX) develops highly skilled, adaptable, global innovators and leaders. Waukee APEX draws on the expertise of Des Moines-area business partners to bring real-world experience to high-schoolers. Through passion-based learning, authentic projects and experiences, students add value to business partners while exploring career possibilities identified by economic trends within their metro area and state. *Waukee APEX is one of four schools piloting Quality Pre-Apprenticeships. Their program guides high school seniors in learning past the initial APEX course in the manufacturing, construction and technology fields. Students will gain valuable experience, earn credentials and college credits and connect to business partners in the community.*

**Contact:** Michelle Hill, Director, at [mhill@waukeeschools.org](mailto:mhill@waukeeschools.org)

**West Delaware County Community School District:** Students work directly with business leaders in the community to design and implement authentic projects for that business that also satisfy and align with state standards and teach students the professional skills necessary in the industry.

**Contact:** Tim Felderman, West Delaware High School Principal, at [timfelderman@w-delaware.k12.ia.us](mailto:timfelderman@w-delaware.k12.ia.us)

### 2015

**Davenport Community School District, Davenport:** Davenport Community School District's "INSPIRE" program partners with local businesses MA Ford, Alcoa, Phoenix Closures and more, to immerse high school students in the business environment and explore manufacturing curriculum and pathways in their community.

**Contact:** Jennifer Boyd at [boydje@davenportschools.org](mailto:boydje@davenportschools.org);

**Hoover High School, Des Moines:** Hoover High School's STEM BEST program pairs students with higher education partners Grand View University, ISU's Center for Biorenewables in Chemistry (CBiRC) and local businesses Accumold, DuPont Pioneer, EFCO, Storey Kenworthy and United Way of Central Iowa, to provide students with opportunities to conduct research at a university or a business.

**Contact:** Eric Hall, School Improvement Leader, at [eric.hall@dmschools.org](mailto:eric.hall@dmschools.org)

**Iowa BIG North:** A four-district consortium of Charles City, New Hampton, Osage and Rudd-Rockford-Marble Rock opted to brand as Iowa BIG North. Partners include Zoetis, Cambrex Corporation, Valent BioSciences Corporation and more, to immerse high school students in a half-day professional-based learning model.

**Contact:** Mike Kuennen at [m\\_kuennen@new-hampton.k12.ia.us](mailto:m_kuennen@new-hampton.k12.ia.us)

Donna Forsyth at [dforsyt@charles-city.k12.ia.us](mailto:dforsyt@charles-city.k12.ia.us)

### 2014

**Bettendorf/Pleasant Valley:** Bettendorf and Pleasant Valley School districts are developing an internship Academy structure with local business on authentic computer science problems and solutions.

**Contact:** Tammy Chelf at [tchelf@bettendorf.k12.ia.us](mailto:tchelf@bettendorf.k12.ia.us)

**Iowa BIG (Cedar Rapids/College Community):** Iowa BIG is an option for earning core academic credit through project-based learning in real-time with 100+ partners from business, nonprofit and government agencies.

**Contact:** Shawn Cornally at [headmasteriowabig@gmail.com](mailto:headmasteriowabig@gmail.com)

---

#### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)



## GOVERNOR'S STEM ADVISORY COUNCIL

dedicated to building a strong STEM education foundation for all Iowans

**Northeast Community School District in Goose Lake:** The Northeast STEM program provides students with an innovative, problem solving and discovery-based environment created in partnership with Lyondell Bassell that focuses on authentic, real-world problems through the infusion of technology and curriculum.

**Contact:** Jennifer Huling, Principal, at [Jennifer.huling@northeastcsd.org](mailto:Jennifer.huling@northeastcsd.org)

**Rocket Manufacturing (Rock Valley):** Rocket Manufacturing is a fully-functioning, student-run manufacturer that works with local businesses by crafting metal machined parts and tools that businesses or individuals request. Students do the marketing, accounting, design, production and customer communications as well.

**Contact:** Chad Janzen at [cjanzen@rvcsd.org](mailto:cjanzen@rvcsd.org)

**STEM Innovator (Kirkwood CC/Univ. of Iowa/Clear Creek Amana/Iowa City/Regina/Solon/Tipton/West Branch/College Community):** STEM Innovator course offered at the Kirkwood Regional Center at the University of Iowa research park is open to students from seven partner school districts to engage with STEM industry partners to develop solutions to problems of student and community interest. Students earn high school, Kirkwood Community College and University of Iowa credit.

**Contact:** Leslie Flynn at [leslie-flynn@uiowa.edu](mailto:leslie-flynn@uiowa.edu)

---

### IOWA GOVERNOR'S STEM ADVISORY COUNCIL

Operations Center • University of Northern Iowa • 214 East Bartlett Hall • Cedar Falls, Iowa 50614-0298  
Telephone: 319-273-2959 • Fax: 319-273-2779 • E-mail: [info@iowaSTEM.gov](mailto:info@iowaSTEM.gov) • [www.iowaSTEM.gov](http://www.iowaSTEM.gov)