



STEM Innovator®
2019-2020 STEM Scale-Up Program

Grade Levels: 6-12, available in school or out of school

Information Sessions: 4:00pm 1/28, 2/8, 2/21

<https://uiowa.zoom.us/j/607393418>

Website: www.steminnovator.org

Video Link: https://youtu.be/n_wrlmqRS0o

Award Provides:

- Online and onsite STEM Innovator® Institute
- Access to STEM Innovator® Curriculum Toolkit and Portfolio Assessment designed by STEM industry experts and the University of Iowa
- Hotel, parking, breakfast and lunch during onsite Institute
- An in-state network of professionals who share strategies across schools and leverage local, state and national partners
- STEM Innovator® certification
- STEMinars with national experts for educators and students
- Offer college credit to high school students
- Educator stipend of \$975 upon completion

Additional Cost(s) to Awardee In 2019-2020:

- Transportation to The University of Iowa, July 15-19
- Optional: Earn up to 5 graduate credits from the University of Iowa At \$149/credit

Approximate Sustainability Cost After Award Period:

- STEM Innovator® Toolkit and Portfolio Assessment Licensing Fee \$300 per teacher

Program Summary:

STEM Innovator® professional development empowers educators to design a unique innovation model for their school and district. Educators transform classrooms into incubator spaces where student teams solve real-world problems alongside industry mentors. Students demonstrate future-ready competencies through prototype development while employing the practices of science, engineering, innovation and entrepreneurship. Educators design an in-school or out of school model to meet their district's STEM education needs. The process prepares students with the skills and mindset to persist in STEM education, pursue STEM careers, and become innovators of the future.

Teachers emerge from STEM Innovator® with the capacity to implement the same tools, knowledge, and management strategies used in STEM industry, start-up, college, and university settings. These include Lean Start-up, Design Thinking, Agile, Canvassing, SCRUM, STEM practices, Maker, rapid prototyping, data-driven decision making and collaborative teaming. These innovation strategies provide students opportunities to experience and demonstrate adaptability, failing, resilience, effective communication, teamwork, critical thinking, and creativity- all skills critical for careers of the future, and become the innovators of the future.

STEM Innovator® educators have provided over 62,782 secondary students with the opportunity to engage in the innovation, invention and entrepreneurship process by leveraging partnerships with local and national mentors. High school students who submit a STEM Innovator® Portfolio demonstrating industry and college STEM innovation competencies may qualify for college credit. STEM Innovator® is research driven and provides evidence of impact on students to educators and community partners. A large, multi-year longitudinal research study indicates significant growth in 21st Century Skills (Collaboration, Creativity, Critical Thinking, Communication), Innovation and Entrepreneurial Skills and Mindsets (Resilience, Adaptability, Leadership, Teamwork, Grit, Decision Making), and NGSS Science and Engineering Practices. Significant growth persists when data is disaggregated by gender, racial classification, and school demographics. The STEM Innovator® platform assists in closing the achievement gap traditionally found in STEM education. The result is a more diverse pool of students who demonstrate and self-identify as having college and career competencies necessary to persist in STEM education and career fields.

Requirements to Implement the Program:

Educator(s) must participate in all onsite and online sessions. Teams of two or more educators from multiple disciplines receive priority registration.

Professional Development:

A five-day onsite STEM Innovator® Institute, 10 online sessions

Duration: 1 week on site; 1 week equivalent online

Date(s): July 15-19, 2019 on site; Online July 1-December 15, 2019

Location: University of Iowa onsite; Online from home institution

STEM Scale-Up Program Application Link: www.iowaSTEM.gov/Scale-Up-Application