

Iowa Governor's STEM Advisory Council
Guidelines for

STEM BEST® H.D. Program
Businesses Engaging Students and Teachers

Key Attributes of a STEM BEST® H.D. Program proposal

The heart of the STEM BEST® H.D. Program model is the relationship of business or industry partner(s) who with educators define curriculum and work space. Topics and projects are driven by real world learning opportunities through community partner(s) in collaboration with educators specifically within the high demand sectors of computer science/IT, health professions and/or advanced manufacturing. Learning spaces are separate and distinct from the standard school environment—ideally at the community partners' location.

The proposal should:

- develop of a rigorous and relevant STEM curriculum
- identify diverse partnership(s) demonstrating commitment to the program
- provide the plan for professional development, utilizing partners and educational resources
- align with STEM goals
- contain a financial model with a cost-share commitment
- address sustainability of the model
- discuss methods to collect and evaluate evidence of effectiveness and areas of need

Four Key Attributes of the STEM BEST® H.D. Program Model

1. Education Driven by Community Partners (e.g. business or industry) knowledge and practice

- Real-world industry and/or student-led projects that connect students to industry knowledge base
- Quality work-based learning experiences driven by local opportunities
- Regional schools, districts or district clusters collaborate with business and industry to maximize opportunities for students in a cost-effective model
- Partnership focused to meet needs of identified high demand areas of computer science/IT, health professions and/or advanced manufacturing.

2. Rigorous, Relevant and Dynamic STEM Curriculum

- Interdisciplinary instructional strategies foster creativity, innovation and an “entrepreneurial mindset” through collaborative work-based learning opportunities
- Driven by 21st Century skills needed in current and future workforce

- Accounts for all learners, especially underrepresented populations
- Mastery of state academic standards demonstrated through a competency-based approach

3. Authentic Partnerships

- Engages community businesses and organizations (e.g., nonprofits, informal education) and plans for local business and industry needs
- Clusters of schools and/or school districts encouraged
- Partner commitment narratives are detailed and consistent with the application description

4. Expertise at the post-secondary education and training level involved

- Consulting with post-secondary experts and/or partners to see how STEM BEST H.D. Program will meet the needs of students transitioning out of High School