



South Central Iowa STEM Region

Drake University

Action Items for SC STEM December 2012-March 2013

Action Items Related to Business and Industry

- 1) Determine what businesses in South Central Iowa identify themselves as “STEM businesses.”
- 2) Using the list of STEM businesses, determine their current level of engagement in K-16 education
 - a. Level 1 - time in the classroom
 - b. Level 2 – time at the site – visiting, experiencing what the professionals do
 - c. Level 3- mentoring single student, group of students (coach for FLL, FTC, Hyperstream, etc)
 - d. Level 4 – internships for students at the site; possibly leading to scholarships in that field
 - e. Level 5 - serving as a resource for teachers or providing externships for teachers
- 3) Using this as baseline data, set goals for increasing each area
- 4) Using the list of STEM businesses and information from workforce development, determine specific skills that are needed for the workplace.

Action Items Related to pk-16 Education

- 1) Develop a survey/interview protocol to determine the needs of LEAs
 - a. Identify and work with vendors to develop programs to meet needs
- 2) Convene a group of math/science teachers/consultants/experts to identify some of the key math concepts that are associated with each of the scale-up projects.
- 3) Work with AEA science consultants and DE to link STEM with next generation science standards
- 4) Develop a methods of teaching engineering course and a course on integrated learning models as a professional development opportunity for in-service and pre-service teachers; combine the training with student camps.