



SCIENCE ■ TECHNOLOGY ■ ENGINEERING ■ MATH
STEM
Southeastern Massachusetts Network

Employers and Educators Bridging the STEM Gap: A Conversation on Partnership
November 2, 2011
Attendee Responses

1.) ***How can educators and businesses work together toward the common goal of fostering students' STEM interests and readiness for STEM studies and the workplace?***

- Make connections between companies and careers
- Talk up and show the “cool” tasks in efforts to “hook the student”
- Career Expos for middle school → “Get ‘em young”
- Company sponsored design challenges
- Business partnerships provide word problems for classroom use
- “Real world” examples (i.e. Sample Flight)
- Interactive games
- Develop mentor programs
- Businesses & Community College leaders developing curriculum to integrate into primary education
- Strengthen the bridge between higher education expectations & secondary school “exit skills and readiness” (i.e. eliminate need for remediation to make room for business partners)
- Address the need for more seamless integration
- Build more externship opportunities
- Businesses developing female outreach programs
- Financial Literacy
- Developing Co-Op programs & on-the-job learning
- Introduce STEM careers to a wide audience early on
- Industry sponsored projects/service learning
- Focus on middle schools
- Bring engineers into schools as early as possible → convey “coolness”
- Develop hands-on programs in schools
- Expand career-based vocabulary
- Develop/utilize corporate advice for educators
- Develop certificate programs
- School Open-House: Bring in business representatives
- Connect schools and businesses via use of liaisons
- Develop local STEM Committees
- STEM Career day

- Classroom trips to businesses
- Summer opportunities (Teacher Externships)
- Provide financial support through grants
- Stellwagen Bank Partnership
- Product donations
- Create interactive & inspiring Career-Focused presentations for students
- “Near Peers” Mentoring program
- Job Shadowing → Specifically target to students’ interests
- Focus on students’ strengths early on in education
- Long term commitment between corporate partnerships & teachers

2.) ***What elements need to be present to ensure partnerships with educators are sustainable and effective?***

- Committed, passionate partners
- One central connection
- Clear expectations
- Networking opportunities between industries, government, and academia
- Industry must expand their views of “community”
- Train engineers in how to engage students
- Leveraging resources
- Communication
- Mutual benefits
- Social aspect
- Recognition
- Common identified goals
- Mutual accessibility
- Human resources
- Professional development
- Remediation of disconnection between k-12 and University
- Designating liaisons to connect schools and businesses through chambers, trades, and school committees
- Parent involvement to make careers relevant to students
- Benefits for both sides of partnerships
- Communication
- Planning
- Designated roles & responsibilities
- Shared vision
- Personal connections
- Communication with industry
- Connect teachers with STEM Professionals
- Regular re-evaluation of set goals
- Enthusiasm
- Initial Outreach

3.) ***What do you think the next steps are to increasing the number of partnerships between business and education in Southeastern Massachusetts?***

- Improve visibility of effort
- Increase communication
- Create directory of liaisons, outreach personnel
- Regional coordination
- Remedy the disconnect within STEM
- Public Relations in regards to STEM
- Representatives for each school to help spread the word
- Parent engagement
- Finding examples of good Education/Business relationships
- Tap into teacher experience in previous STEM careers
- “Match maker” for STEM schools → meets needs
- Core passion
- Find the “key” in each student
- Stakeholders
- FAA looking for partners
- Remedy disconnect between higher education and k-12 schools
- Create centralized resource center for partnerships
- Training programs for educators and industry professionals
- Mutual benefits for students & businesses
- Create online resources
- Publicize STEM’s needs
- Establish representation from districts/regions that work on outreach
- Develop service-learning infrastructure
- NGOs/Businesses develop curriculum
- Preserve teacher practicum
- Build a more cooperative relationship between schools & industry
- Update equipment (donate “old” equipment to schools)
- School outreach to STEM companies
- Connect with parents!
- Help teachers engage students
- Develop clear roles & expectations for all parties involved
- Provide an accessible resource where the teacher can return to and reference professional development
- Provide a sustainable method of keeping students involved outside of standard class period
- Develop a clear and shared goal/idea with which to push forward