

***Bold Italics indicates Brainstorm additions by
CCSTEM North Board of Directors on 1.14.13 to
Draft Goals from CCSTEM Advisory meeting on Mar 16, 2012***

1. Fund proposals

- a. Secure sustainable funds to support collaborative (admin, hosting)
- b. Attract at least \$500,000
- c. Work with other organizations to fund collaborative grants
- d. ***Become a 501©(3) tax exempt unincorporated association (will be discussed at future Board Mtg.***
- e. ***Learn how to write grant requests from Wendy.***

2. Facilitate STEM events – annual and other. Help advertise & coordinate others' events.

NOTE: #7 is similar to this category.

- a. Student showcase
- b. Annual STEM EXPO for public
- c. ***Support Balloon Fest 4/20/13***
- d. ***Support Mini Makers Faire 5/11***
- e. ***Support Kinetics race***
- f. ***Support a Summer of Science even partnership potential with Exploration station***
- g. ***Support Science after Dark (formerly known as Pub Science)***
- h. ***Support National Teacher of the year event, 3/13/13***

3. Educator professional development

- a. Implement STEM curriculum
- b. Identify a STEM Ed coordinator in each school (e-mail contact)
- c. Identify a dedicated STEM teacher in every elementary school
- d. ***Matching prof development opportunities/providers to needs of teachers/districts.***
- e. ***Publicize prof development opportunities.***
- f. ***Facilitate Needs Assessment***

4. Connect and build effective STEM relationships (government/schools/businesses/other providers)

- a. Seek greater industry/business involvement
- b. Develop business community STEM Ed support teams
- c. Encourage STEM in out-of-school time
- d. Identify Lab schools in Santa Maria
- e. Encourage AVID enrollment in Santa Maria
- f. Develop strong business partners
- g. Find K-16 STEM internships
- h. Increase Community college connections
- i. Partner with CA Math Council for a county-wide math festival or north county and south county
- j. ***Develop official connections with Alan Hancock College and Cuesta College***

- k. *Connect with PTA's and principals*
- l. *Partners in Education....connecting volunteers with opportunities in STEM ED*
- m. *Web connecting of STEM volunteers and schools*
- n. *Database of Community volunteers for Schools*
- o. *Advertising STEM opportunities locally*
- p. *Links on CCSTEM website to learn by Doing, & Lending Librar*
- q. *Bridge providers and students/parents/teacher*
- r. *Asset mapping (SLO & SB)*
- s. *Develop/enhance "science support ed programs" for teachers from non-professionals*
- t. *CCSTEM participation in major business conferences*
- u. *Work force development*
- v. *General meetings can facilitate this.*

5. Be a recognized, respected, and valued collaborative

- a. Publicize CCSTEM accomplishments

6. Be a visible resource to support increased and quality STEM activities by developing:

- a. Equipment and loaning library
- b. Funding/micro grants to the community
- c. Functional, current website
- d. Consolidated directory of all activities
- e. Demonstration STEM spaces
- f. Identify STEM teaching architectural spaces
- g. Advisory team to identify expectation of a STEM facility
- h. Identify a team to support development of a STEM module
- i. *Spaces for STEM/Project learning.*

7. Facilitate Community STEM Activities

- a. Engineering activities for elementary and out-of-school time
- b. STEM events funded by mini-grants
- c. Summer STEM camps
- d. Cal Poly students in out-of-school time settings

**Addendum B to Jan 14, 2013 CCSTEM NORTH BOARD AGENDA PACKET
SMALL GROUP BRAINSTORMS AT SAN LUIS OBISPO STEM FORUM MAY, 2011**

STEM 2011 FORUM Group 1 – Structure for Collaborative Partnerships Across Sectors

Goal: *Convene stakeholders to partner and collaborate in order to provide high-quality STEM programs.*

- A. Field trips to Vandenberg Air Force Base, Diablo Canyon Nuclear Power Plant, oil platforms, Local Maker Faire, Solarponics and architectural firms.
- B. Organize partners and resources to provide students with real-world opportunities.
- C. Mentorship programs.
- D. Organize “cooperation” for students to create projects that impact community stewardship.
- E. Collaborate with agriculture community to develop the idea that farming is science.
- F. Reach out to at-risk/low income families.
- G. Collaborate on Pre-K-16 curriculum, projects, facilities.
- H. Use current structure (i.e. Curriculum Education Council) to identify 1 common “project” to develop collaboratively with universities/colleges, businesses and publishers and then implement county-wide.

STEM 2011 FORUM Group 2 – Funding

- A. STEM grant and other funding repository
- B. Establish partners and funding needs
- C. Put together A-team-load and partners to give best chance to be competitive and successful
- D. Post grant success and lessons learned (if not successful with grant)
- E. Sources of funding—Corporate foundations, non-profit education, state and federal grants.
- F. Product of grant produces measurable outcomes to compete—some require proven results and research

STEM 2011 FORUM Group 3 – Teacher Training & Support

Goal: *Sustained STEM professional development.*

- A. Communication of STEM professional development opportunities to teachers in SLO/SB Counties
- B. Encouragement of in-class training and support
- C. Integration of STEM curriculum into other content areas
- D. List professional development resources available (ala Creak website)

STEM 2011 Forum Group 4 – Student Mentoring/Apprenticeship

Goal: *STEM Social Network—Interactive Network Tool—linking experts and opportunities to students and teachers.*

- A. County Office of Education could be the facilitator (list of mentors, apprenticeships and internships)
- B. Apprenticeship Certification—Courses—develop a skill set—earn certification—student electronic portfolio built

STEM 2011 FORUM Group 5 – Project-Based Learning

- A. Online database for project-based learning: resources and projects with reviews, a virtual repository.
- B. Tips for running projects—how to facilitate.
- C. Teacher training—real life experience.
- D. Allen Hancock College Friday Night Science—connect with contact person, Eric Doster.

STEM 2011 FORUM Group 6 – Out-of-Classroom Learning

Goal: *Integrate STEM into out-of-classroom learning*

- A. Form a partnership between resources and programs.
 - a. Identify/inventory resources and programs on the central coast.
 - b. Define needs of out-of-classroom sites.
- B. Increase STEM-oriented out-of-classroom learning, focusing on after school programs, events (camps, fairs, Passport) and museums.
 - a. Identify STEM-qualified teachers and leaders.
 - b. Adopt greener schools initiatives in out-of-classroom learning.

STEM 2011 FORUM Group 7&8–Promoting STEM Image & Communication

Goal: Connect stakeholders (students, parents, organizations, businesses, research and development, educators, interns and volunteers) via a clearinghouse to facilitate local access and coordination of STEM opportunities.

- A. Website including database, calendar, newsletters, email subscription
- B. Personal contact, phone calls, etc.

STEM 2011 FORUM Group 9 – Improve STEM Instruction for K-12

Goal: *Inspire K-12 students and teachers to embrace STEM education.*

- A. After/in school enrichment
- B. Subject integration
- C. Articulated K-12 standards and curriculum (advocate at state level)
- D. Professional development for teachers
- E. STEM specialists in elementary schools
- F. Utilize local projects/groups/ experts (example: FIRST Robotics Team 973) to inspire students