Project Overview: Engineering Activities are for All Americans

Convened with the support of the Corporate Member Council (CMC), the National Association of State Directors in Career and Technical Education (NASDCTEc) and Project Lead The Way (PLTW) the 1st National Conference on "Engineering and Engineering Technology Learning Standards" in October, 2006; Ray Morrison (ACETS, llc) as CMC Chair & Chair of the Conference with the participants from over 40 influential and interested Industries, Schools, Colleges, Universities, and Associations. The intent was to identify and establish standards which could be used by education in the K-12 arena to improve the instruction of Mathematics, Science, Engineering, and Technology (STEM) in the classroom. The resulting dimensions (5) were shared with the field of K-12 education and comments on their effectiveness and purpose were requested.

Using the resulting comments and input from the field, the 2^{nd} National Conference was convened on November 2007 with most of the original participants and some new ones (Ray Haynes [from NGC] Chaired) who had voiced interest or concerns. The resulting product of the 2^{nd} National Conference was a set of Guidelines and a Rationale for the documents use that was now adopted by the CMC and the NASDCTEc organizations. The Guidelines and Rationale were shared with the National STEM Leadership Group and included in the "2008 States' Career Cluster Initiative by the States' Career Clusters Group at the US Department of Education now published as a completed work at www.careerclusters.org.

With this accomplished, The CMC has continued their campaign to establish pilot programs in the schools at the K-12 levels. Working with the States of Georgia and Arizona, the CMC finalized an NSF Grant Request for Program Planning & Development Funding that would assist the two States in establishing a Plan for them to develop pilots that would support the concept of "Engineering Activities for All Americans." In addition, the CMC pursued the possibilities with the Department of Education on their FIPSE Grant requests, and is in the process of developing the grant request from them.

The central goals of the Engineering Activities are for All Americans is:

- 1. To establish more activities that will allow more parties to get involved for input and expertise in the K-12 arena.
- 2. To clarify the Need, purpose and position of the guidelines in the K-12 E/ET curriculum.
- 3. Develop a strategy that will increase the influence of the CMC, NASDCTEc and Career Clusters in American Education.
- 4. Establish activities that will develop a common language for STEM.
- 5. Use the CMC Guidelines to strengthen the STEM curriculum.
- 6. And, establish Engineering Activities as a tool to integrate STEM disciplines in the curriculum.