IMAGE & MARKETING OF ENGINEERING TECHNOLOGY EDUCATION:

A Follow-up to A National Agenda for the Future of Engineering Technician Education (Funded by National Science Foundation Grant, NSF 99 – 53)

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The Engineering and Industrial Technology Division of Sinclair Community College (Dayton, Ohio) administered a grant from the National Science Foundation (NSF) from January 1, 1995 through December 31, 1996. The grant project sponsored a workshop at Sinclair Community College held on October 26 - 28, 1995 to identify essential changes that must occur within the next several years in order to meet the changing demands of business, industry, and society as a whole. A total of 53 invited key participants from 20 states met to discuss the critical issues and to set forth recommendations for the academic institutions, their oversight bodies, professional societies, the business and industrial community, and governmental funding agencies. The participants, who were leaders in engineering technology education from business, government, and academia, investigated aspects of engineering technology education to "define a national agenda for the future of engineering technician education." The continuing dialogue was recorded and a series of recommendations were issued in seven strategic areas:

- 1. Evolution of the Educational Environment
- 2. Accreditation of Professionalization
- 3. Technical Employment
- 4. Assessment and Evaluation
- 5. Education Continuum
- 6. Image and Marketing
- 7. Faculty Issues

The project team met and wrote a major national report, entitled *A National Agenda for the Future of Engineering Technician Education*. A manuscript, entitled "Workshop Ponders Campus of the Future," was published in the fall 1997 edition of this publication.

The section of the report on image and marketing concluded that the success of an engineering technician education program depends heavily upon the following factors that are related to impact and marketing:

- Having a sufficiently large number of students coming into the program in order to justify continued support.
- Having the students gain appropriate competencies and attitudes while they are in the program.
- Producing graduates in adequate numbers with the variety of specialties needed by employers.
- Successfully placing graduates in career positions that will lead to productive employment throughout their professional lives.

According to the report, "These success factors, in turn, depend on the existence of *a strong*, *positive image of engineering technician education* and of the career paths available to prospective students. Of equal and related importance are *the means by which the nature of engineering technology programs are marketed* to prospective students, their parents, academic colleagues, future employers, government bodies and society at large."

Clearly, as the *National Agenda for the Future of Engineering Technician Education* report indicates, "*Positive coherent messages* must be developed for prospective students that define and promote careers in engineering technology and the messages must be disseminated by a variety of media. Focused messages should be developed for both students who would enter high school and those having some post-secondary experience."

There is a continuing, growing need for more associate degree engineering technology graduates across the country. Nationally, there are 698,000 engineering technicians employed in industry with a projected 10% growth through 2006. In Ohio, the 41,970 engineering technicians employed in industry are expected to grow 5.3% through 2006. Across the country there are severe shortages of manufacturing technicians especially in tooling and machining.

The National Science Foundation funded a two-year grant project to implement the image and marketing recommendations (DUE 0071103). The project, which has a timeline of June 2000 through June 2002, has project partners from:

- American Society of Engineering Education / Engineering Technology Council
- Middlesex County College
- Motorola University (a division of the Motorola Corporation)
- University of Central Florida
- University of Dayton, Engineering Technology Department

Additional matching funds for the project were contributed by:

- Improved Solutions for Urban Systems
- Miami Valley Fire / EMS Alliance
- Sinclair Community College

The Engineering Technology Division of the American Society for Engineering Education and the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology provided additional sponsorship.

The goal of the project is to create a strong, positive image of engineering technology education, to market that image to prospective students, and ultimately encourage more students to enter the profession. The objectives are to:

- Identify components of a strong, positive, national image of engineering technology education.
- Develop a comprehensive marketing plan to convey this image to prospective students.
- Produce appropriate marketing materials to improve the nationwide image of engineering technology careers, especially manufacturing and tooling and machining.

The project is directed and managed by individuals and organizations with considerable experience in engineering technology and manufacturing education. One person from each of the five partners has been identified as a Principal Investigator. In addition, six NSF National Centers and 15 additional colleges have agreed to be pilot test sites. A national marketing consultant was commissioned through a competitive bid process to conduct market research and produce marketing materials.

This project was implemented in six phases:

- 1. Conduct Market Research
- 2. Develop a National Marketing Campaign
- 3. Identify and Produce Prototypes of the Marketing Materials
- 4. Marketing Materials Dissemination to the Pilot Sites
- 5. Production of Marketing Materials
- 6. Dissemination of Marketing Materials.

The research phase included compiling knowledge of marketing tools, campaigns, and success stories from two year and four-year institutions, nationally. It also included surveying students, educators, and industry participants as to how, when, why and the current perception of engineering technology education. From this research information, project participants developed a menu of marketing campaign components for engineering technology education. One of the most important campaign components is the development of a new interactive web site www.eteducation.org for students, parents, educators, and industry partners. The web site will also house a comprehensive resource guide for recruiters and library of customizable artwork for advertising, direct mail, and off-site programs at secondary schools and industry partners.

Much consideration has been given to how to give the marketing campaign life after the conclusion of the grant (June 2002). Following the approval and recommendation of the ETC Board of Directors, the ASEE has agreed to accept the marketing materials and web site for ongoing maintenance. Notices of the availability of the marketing materials will be posted on listsery. For additional information, please contact:

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Main Components of the IMETE Advertising Campaign and Site Map are as detailed on next two pages.

IMETE Campaign Components

- 1. Website
- 2. Video
- 3. Direct Programming
 - a. Workplace
 - i. Poster
 - ii. Information session postcards (HR managers)
 - iii. Sign up postcards (employees)
 - iv. Follow up postcards (employees)
 - v. Letter (event confirmation) with posters and sign up cards
 - b. Current students (undecided/undeclared)
 - i. Local school recruiting event (use HS student postcards)
 - c. High School
 - i. Poster
 - ii. Video
 - iii. Information session postcards (guidance counselors)
 - iv. Sign up postcards (students)
 - v. Follow up postcards (students/parents)
 - vi. Letter (event confirmation) with posters and sign up sheets

4. Advertising

- a. Outdoor
 - i. 1 design, 3 formats: 30-sheet, bulletin, king bus sign
- b. Newspaper
 - i. 4 designs: 2 for parents, 2 for adults
 - ii. 3 sizes: full-page, 4-column x 15", 3 column x 10-1/2"
 - iii. 2 colors: black & white, black plus 1 color
- c. Movie theater ads
 - i. 3 slides
- d. Program ads
 - i. 3 sizes: 7" x 10", 7" x 5", 3-1/2" x 5"

5. Administrators Kit on CD with Jacket

- a. Resource guide
 - i. Contains sections on market planning, program administration, customizing the IMETE artwork, media buying, recruitment integration, using the website, contacting/working with ASEE, use of the Standards Manual, and a sample marketing campaign.
- b. Standards manual
- c. Artwork
- d. CD art
- e. Jacket design

IMETE Site Map

(www.eteducation.org)

Take the ET Aptitude Test
Find A School
ETE Hard At Work
Contact the ASEE
FAQ – What is ETE?

1. Prospective Students

- a. Working Adults
 - i. Learning about career opportunities
 - ii. Working with your manager and HR department
 - iii. Financial aid scholarships, grants, and loans
 - iv. Questions about going back to school
- b. High School Students
 - i. Questions for your guidance counselor
 - ii. Questions for your college recruiter
 - iii. Financial aid scholarships, grants, and loans
 - iv. Careers and lifestyles
 - v. College life
- c. Current College Students
 - i. Developing a curriculum when your major is undeclared
 - ii. Matching your aptitude with a career track
 - iii. Learning more about ETE
 - iv. Financial aid scholarships, grants, and loans

2. Parents

- a. Engineering technology at a glance
- b. Preparing your child for college
- c. Careers in ET
- d. Working with guidance counselors and college recruiters
- e. Financial aid scholarships, grants, and loans

3. Guidance Counselors

- a. Working with your local ETE schools
- b. Setting up an ETE event
- c. ET career opportunities

4. HR Managers/Recruiters

- a. Working with your local ETE schools
- b. Setting up an ETE event
- c. Supporting local and national ETE efforts

5. ETE College Recruiters

- a. Understanding IMETE
- b. Joining the IMETE
- c. IMETE library of materials (downloadable)
- d. Working with other IMETE leader schools