OPAS Proposal to ETIC – Marketing Sub Plan
Draft, March 18, 2008

Goal:

Make significant progress on ETIC's goal of doubling engineering majors by 2013, to meet state and industry needs for a highly-skilled, globally competitive workforce in Oregon. Increase diversity of students participating in these majors, including under represented minorities and women.

Objectives and Target Audiences:

Increase student participation and degree completion in OUS engineering and related degree programs by expanding capacity of, and awareness of, educational and pre-career opportunities in engineering related fields.

- The primary audience will be pre-college students, families, teachers, counselors and community members. Our goal will be to enhance awareness and understanding of the opportunities represented by engineering and applied science. We will also increase the awareness of in-class and out-of-class pre-engineering and applied science opportunities in Oregon.
- Secondary audiences include
    - OUS campuses, community colleges and K-12 as partners in our efforts.
    - The business community, nonprofit or community organizations as partners and co-sponsors of our efforts.

Top 3 Messages:

1. Many of the fastest growing, highest-paying, and most rewarding Oregon careers require degrees in engineering, computer science, and material science.

2. Technical careers are attractive and possible for students from any background and Oregon colleges and employers encourage all young men and women to explore degrees in these fields.

3. Oregon offers

    - strong college engineering and computer science programs that prepare Oregon students for solid careers; and
    - a growing number of pre-college programs, tools, and resources for students to explore and further their interests and prepare for success in college and their career.

Other Messages

- Oregon students can take advantage of many opportunities in Oregon to try out engineering and applied science either in the class room or through programs available after school and on weekends.

- Oregon students need to know about engineering and computer science career options and the educational pathways toward them.

- Computer science, applied science, and engineering are diverse fields that serve many kinds of businesses, organizations, and missions in an increasingly high-tech world.

- Engineers and computer science fields require and value not just technical know-how, but also creativity, ingenuity, communications, and people skills.

- Engineering related careers are open to individuals with diverse interests, with a wide variety of personality types.

- Employers are eager to increase cultural and gender diversity of the engineering and information technology teams.

- Oregon needs engineers, computer scientists, and information technology professionals today and in the future to support our state's key industries.

- Engineering careers are very team-oriented; technical products and services are created by teams of people bringing a variety of skills to the table. Seldom are modern projects the work of a single "genius."

- Pursuing a career in engineering or applied science gives students the ability to contribute to and be competitive in a global industry, engaging in with people and industry colleagues from around the world.

- Engineering and applied science related careers offer many opportunities for continued learning; those with strong engineering and applied educations develop additional specialized expertise through on the job training and experience.

TACTICS

1. Develop an increased and more dynamic web presence for pre-college outreach-related communications using websites and social networking

technology, aimed to increase youth awareness and participation in educational and pre-career opportunities in engineering related fields, including the following possibilities:

- Create statewide engineering & applied science web site covering
  - Career information
  - Guidance on appropriate academic choices
  - Opportunities to learn more while in middle or high school
- Serve both that know something about engineering and applied science and are looking for more information as well as those who really don't know what engineering and applied science is about.
- Serve students, parents, teachers, and counselors
- Engage students in creating content for our web site using contests.
- Facilitate the creation of online social networks to develop and support interest in engineering and to direct traffic to our site. Identify variety of niches that appeal to variety of student interest and backgrounds and facilitate the formation of online communities accordingly.

2. Develop and distribute printed marketing materials in companion with the web presence, including a brochure that:

- Describes the many career opportunities associated with degrees in engineering and applied science.
- Provides an overview of pre-college programs and where to go to get more information.
- Provides an overview of Oregon's college programs in engineering and applied science and indicates where to go to get more information, e.g. our statewide website.

3. Create a speakers' bureau and develop and expand speaking opportunities and materials. Increase arenas for adults with engineering/computer science expertise, including industry professionals, alumni, and/or college students, to present to classrooms and other K-12 student venues.

- Develop presentation materials and classroom exercises.
- Recruit strong presenters among current engineering students, recent graduates and seasoned professionals. In case of current students, work with existing student ambassador programs and facilitate creating these programs at more campuses. In case of recent graduates and professionals, work with National Engineers Month program but as much as possible expand to a year round program.
- Provide training and quality assurance to assure
  - Effective presentation skills
  - Knowledge of materials
  - Understanding how to engage students with hands-on exercises.
- Consider "traveling van" or other methods of increasing hands-on nature of students' exposure engineering and applied science.
- Market the program to high school administrators and teachers.

- Identify and use venues that give families with diverse backgrounds to benefit from this program.
- Schedule speakers to visit classrooms.
- Attend college and career fairs promoting engineering and applied science careers and associated academic programs.

4. Create and implement advertising campaign to expand awareness of and participation in engineering and computer science educational paths and careers. Recruit private funds to underwrite advertising campaign Engage advertising firm to design and implement campaign that compliments the design and content of web, print, and presentation efforts. Campaign may include

- placements on radio stations
- internet opportunities targeting youth audiences in Oregon.
- direct mail to prospective students in coordination with college admission departments.

5. In all of the above, we will

a. Draw on any relevant market research on intended audience.

b. Emphasize opportunities for women and minorities.

c. Connect to campus outreach and recruitment efforts.

d. Connect to national campaigns, e.g. ASEE, JETS, ACM CSTA, and NAE. Leverage recent increase in television programs that feature engineering, e.g. Myth Busters, Design Squad.

e. Connect to broader outreach programs including enhanced Oregon Opportunity Grant / Shared Responsibility Model outreach, campus “pathways” programs, and scholarship programs offered by colleges of engineering, etc.

f. Connect other elements of OPAS strategy to assure that a broad range of students, teachers, etc. know about pre-college opportunities.

Biennium Budget

	State Funds	Private Support*	Total
Leadingership, administration, reporting	20,000		
Web Presence	45,000	-	45,000
Printed materials & distribution	55,000	-	55,000
Speakers Bureau	50,000		50,000
Advertising		75,000	75,000
Other	30,000		30,000
Total	200,000	75,000	275,000

* Not including donated time

Metrics / Measurable Goals

We will measure the success of this plan in two ways:

1. Polling of high school students. We will perform a poll of high school students to assess the level of understanding and interest in engineering and computer science. We will repeat this poll every two years to assess the impact of this campaign.
2. Enrollment of university students. We will track the number of sophomores at Oregon University System campuses who choose engineering, computer science, or material science as their major.