



**OPAS Workshop  
November 17, 2006  
OMSI Auditorium**

**Candidate Strategies**

**Motivation:** Enhance students' knowledge of degree and career opportunities and increase their motivation to pursue these opportunities.

- **M1** - Document and communicate a variety of pre-engineering and applied science degree and career pathways.
- **M2** – Enhance the ability of STEM<sup>1</sup> education programs to increase students' interest and knowledge of engineering and applied science opportunities.
- **M3** - Improve the number and diversity of students participating in informal STEM programs.

**Preparation:** Increase the number of students prepared for college-level work in engineering and applied science as well as the depth of that preparation.

- **P1** - Enhance Oregon's STEM standards and assessments, especially in regards to engineering and applied science.
- **P2** - Increase the number of schools that provide high-quality opportunities for students to learn about and prepare for further study in pre-engineering and applied science.
- **P3** - Increase the use of improved teaching methods: active learning, student inquiry, engineering problem solving, and creative teamwork.

**Success: Diversity, Retention, and Transitions:** Increase diversity of students participating in STEM programs, enhance retention rates in engineering & applied science programs, and increase alignment between STEM educational levels.

- **S1** - Increase the enrollment and successful completion of STEM courses by young women, minorities and economically disadvantaged students.
- **S2** - Improve retention rates of college programs, both generally and in specific underrepresented populations.
- **S3** - Assure that the outcomes of courses are aligned with the prerequisites of more advanced courses.

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<sup>1</sup> STEM: Science Technology Engineering & Mathematics.