

Puget Sound Consortium for Manufacturing Excellence Evaluation Summary



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Overview



- Progress on objectives
- What we know based on evaluation information
- Evaluation data that will be collected this year
- Conclusions
- Questions

PSCME Objectives



Objective 1: Deploy a manufacturing technology curriculum that will ensure that graduates of manufacturing programs can meet national skill standards.

Objective 2: Promote professional development of high school instructors, college faculty and manufacturing trainers by providing high quality instruction on the use and application of PSCME instructional products.

Objective 3: Present a plan for curriculum articulation and interaction between high schools, community and technical colleges, four-year colleges and universities, and industry.

Progress on Objective 1



- Boeing Summer Workshop (N = 7 students)
 - Safety in Manufacturing, Interpreting Technical Drawing, Precision Measurement, Management, Interpersonal Effectiveness
- Grants to Lake Washington Technical College and Renton Technical College
 - Precision Measurement, Safety in Manufacturing, Total Quality Management, Statistical Process Control, Introduction to Manufacturing, Computer Applications, Hazardous Materials, Manufacturing Field Trip, Applied Mathematics, Interpreting Technical Drawing, Shop Skills
- Shorewood High School/Shoreline Community College Partnership
 - Teaching all modules during the academic year; students are at SCC every Wednesday (N = 22 students)
- Oak Harbor and Anacortes High Schools integrating the modules this year

Objective 1:

What we know...



- Students have a range of ability levels, from basic to advanced.
- Students are overwhelmingly male.
- Students are mostly white/Caucasian, a few students are from diverse ethnic backgrounds.

- Students like the hands-on activities.
- Students feel the curriculum will prepare them for jobs.
- Some students need more challenging activities.
- Instructor feedback forms usually contain suggestions for additional resources.

Objective 1:

Evaluation data to be collected



- Module assessment rubrics will gather information on student learning outcomes.
- Currently developing a web-based information collection system for continuous feedback.

Progress on Objective 2:



- Counselor Workshop
 - October 27 at Seattle (N = 3)
- Teacher Workshops
 - May 1 at Shoreline (N = 6)
 - May 15 at Auburn (N = 13)
 - October 23 at Pasco (N = 3)

Objective 2:

What we know...



- Workshops are viewed as well organized and meet participants' expectations. Participants would recommend the workshops to others.
- Workshop content was reported as valuable/useful to the participants. Participants felt comfortable about sharing module information with their students.
- Participants were positive about being able to choose the modules that fit with their current curriculum.
- Participants liked the interaction they had with other educators and with PSCME staff.

Objective 2:

Evaluation data to be collected



- Interviews of teachers to determine if professional development is making an impact.
- In the spring, conduct a focus group with Teacher Leaders for insight on how they view their role.

Progress on Objective 3



- MESA Director Interview
- Student Field Trips:
 - Renton Technical College (N = 34, from Rainier High and the African American Academy)
 - Edmonds Community College and Dillon Works (N = 15, from the African American Academy)
- Highline Community College SCORE Program Director Interviews

Objective 3:

What we know...



MESA Director recommends:

- share information about PSCME with MESA staff
- develop teacher leaders
- give stipends for teachers who participate in summer institutes
- provide internships and field trips for students, and speakers for classrooms
- develop student learning strategies across grade levels

Objective 3:

What we know...



- Students liked the field trips and definitely would attend another.
- Students enjoyed hands-on activities and could state what they learned (i. e., classifications of solids, scientific names, what a composite is, how properties change when additional substances are added).

Objective 3:

What we know...



SCORE program's successful recruitment activities:

- no cost/low cost experiences
- include high school counselors and principals in program planning
- provide genuine college experiences such as eating in the college cafeteria
- plan small group activities
- interaction with current college students is essential

Objective 3:

Evaluation data to be collected



- Interview Moe Broom (OSPI) and community college administrators concerning articulation agreements and certification for students.
- Interview industry partners concerning their involvement in current and future activities.

Conclusions



PSCME has made good progress toward fulfilling objectives.

Necessary additional efforts :

- Objective 1: Include references for additional resources at a variety of learning levels. Make sure that student assessment rubrics are completed for each module.
- Objective 2: Continue professional development activities for teachers to establish strong Teacher Leaders in the field.
- Objective 3: Develop information about career pathways for students and work with counselors to disseminate the information. Cultivate articulation agreements and certification processes for students. Plan for program continuation by industry leaders and MTAG.

Questions?



- Evaluation Activities

- Evaluation Reports

<http://www.pscme.org>

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