

Puget Sound Consortium for Manufacturing Excellence (PSCME)
Manufacturing Technology Advisory Group (MTAG)

Summary Report of Site Visit and Interviews

March 9, 2005

To evaluate outcomes and progress, interviews were held with educators who have either purchased the MTAG modules or who have been testing the modules during the current school year. The goal of this process was to document use of the modules in classrooms, and to provide information that will help PSCME and MTAG fine-tune processes.

Brief Overview of Sites

- **West Sound Technical Skills Center** instructor Bob Ramirez (3 years teaching experience) reports that his program is in “evolution” and that he uses MTAG modules at every opportunity. The modules supplement the current textbook-driven curriculum that is written above the educational level of his students.
- **SeaTac Occupational Skills Center** instructor Rich Marshall reports that he is not using the MTAG modules as written, but is using parts of the modules and incorporating them into his program. He feels that his instruction already covers the same materials, but in different ways.
- **Oak Harbor High School Technology Program** (Automotive Technology, Construction Technology, Electronics, Engineering, Metal Design) instructors are not using any of the MTAG modules. Teachers feel that MTAG modules provide basic instruction and their current curriculum covers advanced levels. The instructors have developed a grid to demonstrate how their courses meet MTAG competencies.
- **Anacortes High School** instructor Val Boyce tested MTAG modules last year and is integrating them into the curriculum this year. The school is currently developing a Manufacturing Pathway Program.
- **Auburn School District** – repeated calls/emails but no return contact.
- **Shorewood High School** first year teacher John Holmes is using MTAG modules as the only curriculum for his class. The instructor feels that it will take the entire school year to teach all of the MTAG modules.

Outcomes

- **Instruction varies from exclusive use of MTAG modules to no use.** Use of the modules may be related to instructor experience, with novice teachers more likely to use modules as written, and curriculum needs, with modules supplementing existing curriculum.
- **No sites are currently using student assessments and scoring rubrics as written in the modules.** Teachers seem to be using their own grading methods.
- **Instructors are more focused on meeting the MTAG competencies than teaching the modules.** Teachers believe the goal is that students acquire the skills. If students receive a grade of B or better in their courses, teachers think students have met the MTAG competencies.
- **Public school curriculum is based on the frameworks of Washington State** and has been approved by the Office of the Superintendent of Public Instruction (OSPI). For public schools, MTAG modules need to match State requirements or MTAG must create agreements with the State. Otherwise, it becomes just another thing for which teachers have to meet requirements.
- **MTAG Modules are set up in the industrial model** and teachers feel schools are not set up in the same manner. Students want to take something home to show what they have done in class.
- **Students and their families do not know what MTAG is or what MTAG means.** Parents must see a need for a MTAG Certificate for it to matter to them.
- **Most schools articulate with local community colleges through Direct Transcript Agreements** (students receive college credit for high school courses without paying tuition; transcripts of courses taken are mailed from the community college directly to the student’s home). Students in some schools receive college credit for completing coursework related to MTAG competencies.

Suggestions

- **PSCME/MTAG must work with local businesses.** When businesses advertise for jobs, the job description should state they are looking for someone with a *MTAG Certificate*. Currently, teachers’ recommendations for jobs carry more weight than a MTAG Certificate does. There may be a need for a “MTAG North” to work with businesses north of Seattle.
- **PSCME/MTAG should bring teachers and businesses together.** Local businesses need to know the teachers and what goes on in schools. Teachers need support from businesses. PSCME/MTAG could provide guest speakers, especially female speakers, for their classrooms and could provide support for student internships and field trips.
- **MTAG Certificate processes need to be in place.** Some teachers thought they understood that MTAG had a final test for competencies, but that students would have to pay for it and go somewhere else to take it. Teachers did not think this was feasible. How will students show they have met the MTAG competencies and attained a Certificate?
- **Articulation agreements need to be established.** Teachers would like all Washington State colleges to agree to give students credit for completion of MTAG-related coursework. It was suggested that PSCME/MTAG take the lead on this issue.