

**OPAS Alignment and Coordination: System-Wide and Career Pathways
(ACSW/CPTH) Meeting #4 - December 12, 2006 – Chemeketa CC**

Attendees: Susan Boyanovsky (CCWD), Jay Bockelman (OIT), Ron Jantzi (Chemeketa CC), Scott Giltz (Clackamas CC), Gary Naseth (OIT), Scott Huff (Portland CC).

Italics indicate activity since the meeting.

Thanks to Ron Jantzi for arranging for the room and refreshments.

Items of Interest to OPAS:

Ginger Redlinger, Industrial and Engineering Systems Specialist at ODE, returned to the classroom this fall; her replacement will be on board in January – Tom Thompson. He has been a teacher in Philomath and very involved with OCSTA. (*After he's had a chance to settle in, he and Jim Schoelkopf will figure out how to divide OPAS liaison between them – Jo, personal communication with Jim, December 2006.*)

John Shea, head advisor for OSU's College of Engineering, is retiring. (*The new, single point of contact for the Community Colleges is Brett McFarlane, newly hired Director of Undergraduate Programs at OSU. He has been personally making the rounds of Community Colleges. His email is Brett.Mcfarlane@oregonstate.edu; phone 541.737.8765; some of you may have met him at the OPAS Workshop in November – Jo, personal communication, December 2006. Jo has **not** confirmed that OSU's College of Engineering is reorganizing itself into separate schools.*)

OPAS Activity:

The OPAS Workshop at OMSI on November 17 38 attendees, including member-facilitators and staff recorders. Feedback has been positive, and the room seemed pretty energized, with lots of side conversations keeping the energy up and the networks expanding. As a group, we concluded that the strategies we wish to focus on, for reasons of priority, do-ability, and personal passion are, by theme:

- Motivate: Enhance the ability of STEM education programs to increase students' interest and knowledge of engineering and applied science opportunities;
- Prepare: Increase the use of improved teaching methods such as active learning and student inquiry.
- Succeed: Increase the enrollment and successful completion of STEM courses by underrepresented populations.

(The Steering Committee considered the feedback from the workshop and ongoing committee activity at its meeting on December 15, 2006. With the concurrence of Dick Knight, chair, it was agreed that the Alignment and Coordination: Curricular and Co-curricular committee, currently acting as an advisory board to the OMSI grant, could appropriately sunset, especially if the steering committee, as a group, undertook to ensure that potential connections between formal and informal education sectors are encouraged. Bruce will talk offline with the other committee chairs about focusing the committee structure around these three strategies. Further

consolidation, despite admitted overlap among strategies, was dismissed as too likely to create loss of some aspect of each strategy. Bruce hopes to bring a new committee structure, complete with committed chairs, to the next steering committee meeting on January 16, 2007.)

Career Pathways Flyover Diagram – our vision:

The committee is looking for a simple, visual tool that can be used as the basis for unifying and communicating career pathways information to students, parents, teachers, counselors, and industry. The visual could also be the platform for drill-down and connection of information from various resources – educational institutions, programs, state labor market information, and professional organizations pertinent to particular occupations. While our focus is engineering occupations, if this template could be used across all disciplines, it would be a good thing. The committee’s priorities are that this visual be simple, accessible, and discourage the perception of false barriers while emphasizing:

- cost and time savings (shortened time to degree)
- multiple entry points
- drill down of info
- collaboration
- multiple articulation agreements

The committee reviewed several example career pathways documents from various community colleges and previous committee work. At the meeting, the previous box-and-arrow diagram was discarded in favor of the “subway map” model, shown in Linn-Benton Community College’s Radiologic Technician (Draft 3.27.06). Jay Bockelman prototyped a model which Jo has since named the “phase change” model.

At the meeting, the committee agreed to apply the “subway map” model to the Manufacturing Engineering Technology pathway, by funneling the relevant information to Jo, who will act as a collecting point and redistribute another prototype out to the committee. Assignments were as follows:

- SusanB will get labor market transition points to Jo.
- (ScottG, Susan, Gary) Knowledge and skills at each transition point (Scott & Susan have contacts with previous work that was never finished)
 - Also look at Oregon Skill Sets (Ron Dodge at ODE may be of help here).
 - Gary will check with ABET evaluators at OIT
 - National Skills Standards board (MSSC- manufacturing skills standards council) some proprietary (AMATROL)
 - Perkins reauthorization and performance measure around technical skill attainment (what do we mean by attainment – NCLB creeping into higher ed? Credential attainment by third party)
 - NOCTI – National Occupation Competency Testing Institute (Susan will connect with them)
 - National Career Clusters (Jay to email link to Jo)
 - o PLTW was part of the original development of this.
- RonJ will get a prototype “moneybags” map to Jo. (*Done.*)

- ScottG will get his prototype ovals/arrows map to Jo. (*Done.*)
- SusanB will get LBCC subway map to Jo. (*Done.*)

Subsequent to the meeting, Susan discarded the “subway map” in favor of the “phase change” map, which Susan and Jo are tweaking in pursuit of clarity – Jo, December 22, 2006.

Flyover Diagram Discussion Points:

- We need access to resources – the help of a graphics artist, some web expertise, and possible web hosting. (*Di Saunders, OUS Chancellor’s office, has agreed to supply some graphics, web, and communications expertise – Jo, personal communication, December 2006.*)
 - Chemeketa’s experience is that people access their information through the web, to the extent that they are discontinuing mass-mailings of printed course catalogs.
- We’d like to create a site -- a single entry point -- that makes sense for students, parents, counselors, and employers that unifies the career pathways information as much as possible. This would include course descriptions and crosswalks, and ideally the entire constellation of career pathways maps. (*The domain name that previously hosted some of this information, oregonengineer.org, is no longer under the control of OUS – Jo, December 2006.*)
 - Clackamas has some career advising training for HS counselors. They have an engineering technology program pathway that goes from Project Lead the Way (PLTW) to a Master’s degree.
 - We have some career pathways piece from high school to Community College; we need to connect in the University piece.
 - Is it possible to generate a list of jobs available today via iMatch or some similar tool, tapping directly into the Oregon Employment Department website?
 - “Workforce Re-entrants”, people returning to school from the workforce, are hard to map as they come in literally all over the map. Some need extensive remedial work.
- We’d like to have something in hand for the upcoming legislative session, so an ideal target completion date would be mid-February.
- Susan envisions a poster – perhaps 11 x 17, and a website – a guide on what an technician, technologist, engineer is, what they do, and how to become one.
- We need to align ourselves with industry’s cluster model, so that we can talk about pathways within the context of clusters.
- We may need to revisit engineering skill sets work done a few years ago (Scott Giltz and Susan Boyanovsky both took part.)
- We would like to find some mechanism to figure out all of what’s out there for Career Pathways and Engineering and Engineering Technology, and to bring together these various sources of information to eliminate duplication of effort. We need to unify this message. (*A uniform graphical and web presentation would help do this, and make the information less confusing, especially to semi-frequent users - Jo.*)
- Mimi Maduro, State Pathways Coordinator, is aware of our efforts. She has been identifying common and key elements on career pathways:
 - Labor market info
 - Occupational info

- Knowledge and skills at different points (ties to Perkins requirements)
- Course info by degree
- Participating employers
- Multiple entry points

Next meeting: Monday Jan 22 1:00 – 3:00 pm. OIT Metro Center, 7726 SE Harmony Rd, Milwaukie, OR 97222. Jay will make arrangements.