

OPAS Steering Committee Meeting #17
April 24, 2007 3:30 – 5:00 Capital Center and Phone Conference

Attendees: Dick Knight (Saturday Academy), Bruce Schafer (OUS/ETIC), Tom Thompson (ODE), Jo Oshiro (OUS/OPAS), Ben Manny (NOISE), Jay Bockelman (OIT)

Italics represent activity since the meeting.

Summary As Posted and Distributed April 26, 2007:

The most recent (rescheduled) Steering Committee meeting was held April 24, 2007.

Bruce gave an update on legislative activity. K12 looks good, but the picture for community colleges and universities is not so good. The ETIC budget includes OPAS staffing and RFP funding as an allocation over and above the ETIC base budget, and is in question. It is possible that money for staffing and perhaps a small RFP can be found either through ETIC, increased revenue projections anticipated for May, or other residual non-ETIC funds.

The RFP funded from within ETIC's base budget, which previously funded OIT pre-college programs, 4H, and Saturday Academy's ASE program, is targeted for release in May to all 8 campuses with proposals due in June and awards in July.

Workgroup status reports:

- Motivate continues to make progress researching the needs of volunteers, aiming to increase the presence of STEM volunteers in the classroom; connecting businesses to STEM volunteer and education opportunities has seen some early success thanks to the BEC providing a menu of additional options as part of the debriefing evaluation for National Engineers' Month participants; collaboration with NOISE continues as they work to establish themselves as an organization. Additional points and connections:
 - Recognizing the need for an infrastructure to connect volunteers with the classroom, what about the use of SMART as a possible model, especially as a way of scaling up later?
 - Mailchimp is a possible tool to help us track the use of listserv, web survey, and email use.
- Prepare continues discussions and research:
 - Identify ways of connecting to the standards, assessments, and textbook adoption processes at ODE and school districts;
 - Identify exemplar programs and teachers
 - ways to document and disseminate that information
 - best ways to leverage exemplars
 - adding academic rigor to PTE/CTE courses
 - adding applied content to academic courses
 - we will invite Tim Brower to inform us about Project Lead The Way (PLTW) a national high school engineering education program driven by a non-profit
- Pathways is wrapping up the first statewide articulation agreement on Manufacturing Engineering Technology, which includes articulation to PLTW. Informational materials

developed by the committee were used for a presentation at the recent OACTE conference, which was well-received.

- Bruce recently attended a Pathways Academy II Conference in Eugene; Pathways is a framework whose use is becoming more common nationwide, particular among community colleges.
- Concern: some Pathways materials or work may make options appear more limited than they are, and/or emphasize vocational opportunities over baccalaureates.
- Recent Activities: PAVTEC Middle School Girls Conference at PCC; George Fox Engineering Expo (student projects – PR shared with OPAS members); OHSU asked for robotics clubs contacts to offer an opportunity to observe a robotic surgery; AeA scholarships, through use of OPAS contacts, have achieved greater diversity this year; MESA Pre-engineering conference came off well (funded by an ETIC grant this year, MESA hopes to offer the event to a wider audience next year); an additional 7 schools (5 new districts) have signed up for Project Lead The Way.

A discussion of external funding sources and how to leverage them was tabled for the next meeting. Eda Davis-Butts' "NSF Primer" was distributed for review.

Staff will investigate the following and prepare material for the committee:

- Opportunities for influencing the implementation of the new high school graduation requirements may come up in the next 90 days as advisory teams are formed; Tom Thompson thinks OPAS' best leverage will come during the review process.
- Congress is moving on legislation to increase the use of AP courses and the number of credentialed science and math teachers.
- In Oregon, Bill 589 is expected to pass and fund a study on investment in CTE.

Jo will e-poll for the next meeting date, first preference Wednesday May 16, second Monday May 14.

Action Items:

- All – email Jo your availability for (1) Wednesday, May 16 or (2) Monday May 14 both 3:30 – 5:00 for the next meeting.
- All – review Eda's "NSF Primer" – for the next meeting
- Bruce/Jo – 2-10 links for review of Congressional activity on increasing AP and credentialed teachers
- Jo – follow up with Andi Morgan at ODE re: AP

Additional Points, Connections, and Resources Discussed:

ETIC base budget RFP – will be soliciting proposals for OPAS-like goals from 8 campuses.

Motivate Status Report –

- Bruce – what about using SMART as a model?

- Ben – haven't looked at that more closely, lots of infrastructure associated. Background checks to meet students outside of classroom. Still in learning mode.

Prepare Status Report (Dick)

- 2 ideas underlying what we are doing at the moment.
 - o Are we in agreement as to the changes we want to see?
 - o Where is our greatest impact?
- Standards setting process: Our alternatives include:
 1. Beef up the academic content of PTE so they can more legitimately qualify as a science class;
 2. Beef up the technical/applied content of traditional science; we liked less was creating another piece of the pie in curriculum and standards.
 - o Exemplars – (Discussed but no plan) – identify things that meet the new science requirements and propagate those—we would have to partner to do this; OPAS is too small.
 - Looking for exemplar programs – talked to Larry Flick;
- Extension into a larger environment – PLTW as an example.
 - o PLTW is somewhat analogous to FIRST's robotics programs: States leverage infrastructure created by a national non profit.
 - Bruce: Is the cost structure analogous to FIRST (high school) Robotics or one the other FIRST programs?
 - Tom: Saw some PLTW at OACTE looked very interesting.
- Dick: we need to look more closely at the Museum of Boston program – at first blush it looked pretty light. Bruce: Do we need someone from MOS to come and give us their pitch? Dick would like to talk to him before the next Prepare meeting?
- Bruce: Should we structure this around “20 questions” and then ask those same questions of MOS?
- Tom: Saw some PLTW at OACTE looked very interesting.
- Bruce: Might there out there be a physics textbook that in the process of teaching physics also exposes kids to engineering disciplines? Tom: Seen lots of those and they just don't work. Perhaps some leverage points there, some bucks because of APT initiatives.
- Dick: collaborate with textbook review process? Is there a way we can plug into that? Needs research.

Pathways –

- Bruce got invited to attend a 1.5 day conference in Eugene – Pathways Academy 2 – About 200 people from 17 community colleges and a state team representing CCWD and some other Salem people; 1 OUS delegate (Bruce). From the point of view of the Academy, pathways is not a project or program it is a framework. In addition to the articulation of high school and college courses the pathways framework includes concepts like working closely with employers at the regional level. A community college will often create customized pathways to reflect employment opportunities in their region of the state. Generally university campuses are not using the pathways framework, except for OIT and to a limited extent. Does OPAS leadership need an orientation?
- Dick: Concern with whole thing – top-tier vs. second tier. Concern about Pathways framework doing as much damage – vocational path keeping some students from

preparing for a 4-year college – e.g. not taking enough math and science in high school. Tom Thompson of ODE felt the anecdotes we are hearing along these lines are very much exceptions, not rules.

Outreach bulletins:

- Dick thinks FLL could add value to MESA.
- Robotics pit at MESA day?
- Make a bigger connection to MESA schools? Talk to David. Ken Cone, Roger Swanson, and Cathy Swider of ORTOP are planning to make connections with David Coronado of MESA.

Other news (Bruce): Oregon State Board of Education and the Oregon Department of Education are about to start a process for planning the implementation of new HS requirements – new advisory team, and 4 design teams for aspects of the new requirements. Bruce thinks there will be an opportunity to volunteer for one of these design teams in the next 90 days. Tom – not all going to roll out at the same time. Some teams being populated now from current resources. These materials will also go out for review. Right now looking for really knowledgeable people – Tom thinks OPAS best leverage is at the review stage.

Jo – Graduation requirements on Master Resources List? *Posted 3/15/07 – 2 page summary and longer document provided by Tom Thompson.*

Oregon Ways & Means Co-chairs' budget has competitive school improvement fund – may be able to help them do the right thing, assuming the school improvement fund carries forward. Also, SB 589 funds study on investing in CTE. OPAS should consider these opportunities once the Legislature adjourns.