

OPAS Steering Committee Meeting #20 August 16, 2007 – Capital Center and Teleconference

Attendees: Michal Young (UO); Bruce Schafer (ETIC/ OUS), Dick Knight (Saturday Academy); Jeff Triplett (PCC); Roger Rennekamp (4H); Ben Manny, Don Domes (Hillsboro HS)

Notes taken by Cathy Swider. *Italics indicate activity since the meeting.*

Agenda

3:30 – 3:35	Introductions, opening remarks
3:35 - 3:45	Review of status/plans of Workgroups - Status summary <ul style="list-style-type: none"> • Motivate -- Eileen Boerger and Ben Manny • Prepare -- Sean Gallagher and Dick Knight • Succeed -- Eda Davis-Butts • Pathways --Tom Thompson and Scott Giltz
3:45 - 4:00	Status/Plans for ETIC/OPAS Pre-college RFP <ul style="list-style-type: none"> • including OPAS Strategy overview
4:00 - 4:55	Developing Legislative Concepts for 2009 <ul style="list-style-type: none"> • Review criteria • Brainstorm possible concepts including ideas previous discussed • Apply criteria to prioritize
4:55 – 5:00	Next Meeting: Tuesday, September 11, 3:30 - 5:00?

Summary as emailed August 30, 2007

Due to staffing and server issues, this summary was emailed and posted in a much less timely fashion than usual.

Seven members of the committee attended a meeting on August 16, 2007.

Workgroup status reports were distributed. Additional highlights were given by Ben Manny (Motivate) and Dick Knight (Prepare).

- Margie Lowe, Policy Adviser to the Governor’s office, met with Mary Beth Horton of the [BEC](#) to explore ways to enable government agencies to offer internships.
- Don Domes pointed to a shortage of CTE and CS teachers that could limit the impact of our efforts to motivate students to sign up for these courses.

- [ACM](#) (Association for Computing Machinery) will host a national SIGCSE (Special Interest Group on Computer Science Education) [Conference in Portland](#) in March of 2008. We should consider what opportunities there might be for OPAS, especially for connecting with national experts and leaders.
- [“Transitions: The Two High School Pillars Supporting College Science”](#) from the AAAS Journal Science implies that math is the critical factor in introductory college science class success, which agrees with intuitive and anecdotal evidence. It is unclear whether the observed pattern means that taking math makes students more successful, or that higher-achieving students take more math and continue to achieve at higher levels after high school.
- Exposure to math in an application setting is critical for retention.
- Nationwide, one out of two CTE students is also taking a college prep curriculum.

The ETIC/OPAS Pre-college RFP is expected to be reviewed by the Oregon Department of Justice approval by August 17. After any needed changes are made it will be formally publicized.

- *The RFP was approved and distributed by email starting on August 20 to OUS campuses, community college campuses, the OPAS interest listserv, school districts and administrators, and regional PTE representatives. As a follow up, hard copies were sent via mail.*
- As part of the RFP, a [summary of strategy](#) has been written; this was approved unanimously by the committee.
- Final grant approvals will be made at the ETIC meeting on October 26, or at a special phone meeting in November.
- Possible alternate configurations for future RFPs was discussed.

Prioritization, packaging, [criteria](#) and new and [previously discussed ideas](#) for legislative concepts were discussed.

- We should develop know more than three legislative concepts, fewer if possible. None if we can accomplish our goals without legislation.
- Some concern that multiple concepts in a bill create greater risk of derailment; on the other hand, presenting concepts creates the opportunity for these needs to be addressed in ways other than legislation.
- Legislation can be coercive, provide an incentive, or fill a gap. ETIC’s success is due to the use of carrots rather than sticks by providing sources of incremental funding as a method for planning, advocacy, and oversight.
- Funding bills have a two-year impact unless renewed. Policy legislation lasts indefinitely unless a sunset is specified.
- Tax incentives may be part of legislative solutions, and typically last indefinitely.
- We should develop properly sequenced concepts over multiple biennia.

Potential concepts discussed at this meeting:

- Tuition loan waivers for future teachers in certain disciplines.
- Summer bridge programs.
- Tax credits
 - for businesses providing internships.
 - for businesses connecting to classrooms.
- Differential compensation for early-career teachers in critical shortage areas .

- Study on methods of preparation of high school students for college.
- A computer science endorsement for teachers.
- Additional funding of technology courses, perhaps calculated as base rate x 1.3 (standard courses funded at base rate; Washington uses a model like this.)

Areas in which we need more knowledge were identified:

- What does it take to become a teacher at public universities in Oregon? At private universities?
- Is it true that most teachers are from private schools? Why?
- We need to talk further with some School of Education people, perhaps Sam Stern of OSU.

State standards: It is difficult to get states to add technology to science standards but some have added engineering problem solving and design to science inquiry standards. There is a drive to reduce the amount of detail in standards, especially prescriptive "laundry lists" of required content. Massachusetts has been at the forefront of integrating science and technology standards, but has not so far demonstrated clear success with this approach.

The next meeting will be Tuesday, September 11, 2007.

Action items

- As emailed August 31, 2007: Please read the "Brainstorming Legislative Concepts" document distilled from the meetings of July 31, August 16, and ensuing emails.
 - [Brainstorming Legislative Concepts – August 31, 2007](#)
 - [Brainstorming Legislative Concepts – September 07, 2007](#)

Additional points of discussion and information

Workgroup status reports:

- Membership in the Oregon Computer Science Teacher's Association (CSTA) is small; only 60 CS classes are offered in all of Oregon. This affects not only current and future capacity, but how we build an infrastructure for addressing these teachers.
- The Prepare workgroup:
 - is exploring an advocacy role supporting Project Lead The Way (PLTW); the role as outlined on the PLTW website appears to be a staff position. Bruce points out that ETIC and ODE are already underwriting considerable support for OIT as the state PLTW affiliate and we should be sure not to duplicate any of that effort.
 - has touched on the possibility of using PLTW and the Credit By Proficiency program for meeting science and math requirements.
 - notes that PLTW does not have a CS component. National CSTA prefers to identify more closely with explicitly college-preparatory curricula, while PLTW offers both a CTE and a college-prep facet.
- The Motivate workgroup is concerned about NOISE's (Network of Informal STEM Educators) momentum and progress; there are hopes the situation will improve when the BodyWorlds 3 exhibit leaves OMSI.
- Roger: Using "doubling the number of technical graduates" as a metric has an issue in that there are companies recruiting freshman and sophomores

ETIC/OPAS Pre-college RFP:

- Alternative configurations for future use:
 - Define more specific fields of interest or goal/projects.
 - High school to college transitions, such as summer bridge programs
 - Propagating more CS classes.
 - Possibly divide funds among program/goals.
 - Reserve funds for special projects.

Developing Legislative Concepts for 2009:

- Don highly recommends Ron Dexter's class at Concordia University on how to shepherd a bill through the legislative process.
- Dick: Categories of what legislation can do:
 - Coercion: legislative mandate. Not the preferred method, especially if not backed up by funding.
 - Incentive: create incentives for desired behavior, such as tax credits.
 - Gap-filling: For example, how do you take at-risk and underserved populations and get them to college?
- Pre-service teacher preparation:
 - Bruce: The PSU Provost is working to create linkages between the School of Education and the Center for Science Education.
 - Dick: If OUS desires to change to produce more science teachers, what changes should be made? Do Schools of Education own that problem?
- In-service professional development:
 - Helping existing teachers to cross disciplines (*with appropriate credentials per NCLB*).
 - Updating teachers on their area of certification (*especially necessary for technical teachers.*)
 - Updating teachers on methodology. (*Discussions to date have shown that methodology may be constrained by resources such as class size and classroom space.*)
 - We could spend a lot of time on gap analysis, especially if taken down to the elementary level.
- An expanded directed study of how well Oregon and OUS are preparing students to help improve linkages.
- Endorsement for Computer Science: There are pros and cons for teacher endorsements. If an endorsement exists, then we can't hire someone without an endorsement even though we have someone capable of teaching the subject matter. It would, however, provide a way to get an IT professional credentialed to teach.

Side note on "technology courses"

- Bruce: "Technology courses" can mean several things: may include those on a BS/MS in engineering track and/or increase the supply of technicians and technologists.
- Dick: OPAS has always had a professional (BS/MS) and career bent. However, it is important that all students have some exposure to technology and technological literacy.

Next Meeting: September 11, 2007 3:30 – 5:00