**OPAS Steering Committee Meeting #6**
**Tuesday June 6, 2006**
**Capital Center 3:30 – 5:00**

**Attending**: Don Kirkwood, Roger Rennekamp, Dick Knight, Hyacinth Williams, Bruce Schafer, Jo Oshiro, Jim Troisi, Steve Day, Larry Flick, Don Domes, Ben Manny, Bill Becker, Ginger Redlinger.

A motion was made, seconded, and passed to adopt the **OPAS Vision statement** as amended: "All Oregonians have the opportunity to explore, choose, and successfully pursue engineering or applied science as their field of study and career, thereby helping Oregon's industries contribute to state economic needs, and innovate and prosper in the global economy."

**The Paradigms for Curricular Change** introduced at the last meeting are:

1. Academic Enhancement – get more students in to & through IB/ AP level courses
2. Technical Enhancement – get more students in to & through PTE & applied course
3. Redesign – change current curricula/ standards to include engineering problem solving, inquiry- and project-based learning

These are extensible in most instances to Middle School. There are ways we can flavor these paradigms. Discussion of the Paradigms continued:

- The Standards, Courses, and Curricula subcommittee also discussed these at their last meeting (the discussion will continue at the next):
    - They liked Academic Enhancement as a short term solution, which is in part addressed by national initiatives and Senate Bill 300,
    - They like folding Technical Enhancement into Redesign, as parts of existing Technical Education provide a valuable applied component for engineering problem-solving.
    - They would like to start work on Redesign.
    - Again, "Votech" is in ill repute in school districts and high schools many of which started phasing out shops to save money after Measure 5. [DonK – Professional Technical Education (PTE) is changing attitudes at some schools, because there is federal money attached to PTE through the Carl Perkins Supplemental Grant Program. Ginger sent a spreadsheet of Perkins-supplemented programs, which Jo will post on the website with some additional decoding information.]

- Dick notes the paradigms are not mutually exclusive. The approach you choose depends in part on the problem you want to solve. We need to focus carefully on what we want.
    - Academic Enhancement mostly increases the traditional pipeline of college-prep students.
    - Technical Enhancement may or may not develop a new population not necessarily headed into BS and graduate degrees.

- Bruce – Academic Enhancement is not necessarily limited to AP and IB. It could mean taking Beaverton School District Best Practices to rural Oregon thereby creating a population of better prepared rural students who know they want to take some engineering discipline when they reach college.

- Dick – do we know that AP and IB are necessarily good?

    - Donk – they are adding quality control certifications to help with the varying levels of quality now for AP & IB. Like everything else, depends on what you are teaching, who is teaching it, and the admin backing them up.
    - Jo passed around a copy of the Executive Summary of the 2002 study: **Learning and Understanding: Improved Advanced Study of Mathematics and Science in U.S. High Schools.** Committee on Programs for Advanced Study of Mathematics and Science in American High Schools, National Research Council as mentioned by Bill Becker in the SCC meeting; he says the report finds room for improvement in AP & IB curricula, particularly in the area of scientific inquiry and project-based work.

- Are we focusing on BSEs (Bachelors of Science in Engineering) who are going on to graduate degrees? Or on AA/AS, BSs who are stopping there? Before we said BS, and if we could benefit AA/AS/BSs so much the better.

- Don D – Academic Enhancement has to be number 1, so that graduates can get through college. College-prep students need the traditional science and math. PTE is needed because the practical has disappeared from the academic curriculum.

- Steve – We have many underidentified students, even in the Beaverton School District with its emphasis on academics and college preparatory work The Redesign Paradigm really applies mostly to K-10 model. Each Paradigm and target has a corresponding timeline. Asking people to accept too many different kinds of changes on overlapping timelines is a problem.

- Bruce – some models fit some schools better than others; not every school can have a Don Domes.

- Ginger/Ben – Can we look at the Paradigms through the lens of what is most likely to succeed? How can we make sure this type of changes will be adopted with everything else that is going on? State and Feds are sending things down the pike as well. No Child Left Behind mandates science testing in 2008. Oregon uses its state-defined windows of grades 5, 8, and 10.

Steve Day read the **White Paper**, authored by Duncan Weiss with substantial contributions by Jill Kirk, that the **State Board of Education (SBE)** is using to consider **graduation requirements**, and is troubled by it on many fronts. The SBE is a citizen board appointed by the governor. The point of new graduation requirements is to make sure students get exposure to a wide array of subjects, and don't get credit for work way beneath their potential. Ginger believes

this document was mostly reviewed at the policy level, and we do not know if the SBE has tapped ODE specialists in science and engineering. Ginger encourages us to provide feedback to the board before their annual retreat August 23-25.

- Ginger and Jo will put together a package of minutes, agendas, and white papers for distribution.
- If the endpoint of the process is feedback for ODE & the board on graduation requirements, that will take more than an agenda item in a monthly meeting. We need to balance decisiveness with adequate analysis and committee meetings, workshops, and staff time.

**Bruce's Conceptual Framework for Subcommittees–** an attempt to consider if the current committee structure services OPAS goals.

- The current activities of the subcommittees were summarized.
- Divide into What committees and How Committees, realizing that the category may change over time.
- What
  - Steering
  - Standards, Courses, and Curricula (SCC)
  - Alignment & Coordination: Curricular & Co-curricular (ACCC)
  - Alignment & Coordination: System-Wide (ACSW)
  - Career/Degree Pathways (CPTH)
  - Diversity
- How
  - Instructional Professional Development (IPD)
    - Do we need to consider a Pre-Service Preparation component? Quality, Quantity, Induction?
  - Diversity
  - Marketing
  - ACCC – information sharing
  - Student Success: Access, Motivation, Retention (SAMR)
  - Connections to ODE, OMEC and other professional organizations
- The committee was not convinced this was a useful framework, and will continue the discussion. Jo rather inarticulately expressed concern that the big picture was not being addressed. She will work on a clearer explanation.

**Should we have another summit in September?**

- Bruce is concerned over lead-time, staff time, and productivity
- The committee consensus was that it should be more of a retreat or working session for committee members, and could possibly be later in the year.

**The next meeting is scheduled for Tuesday, June 27, 2006 3:30 – 5:00 at the Capital Center.** Some future meetings should be on Wednesday because of conflicting schedules.

*Respectfully submitted June 7, 2006,*
*Jo Oshiro*