

OPAS Diversity Committee Meeting #3

Notes – Thursday, May 11, 2006

Attending: Don Kirkwood (N. Salem HS), Eda Davis-Butts (OSU/SMILE), Ivan Lumala (Microsoft), Shawna Blanchette (Phoenix-Talent HS), Gayle Yamasaki (OIT), Wendy Powless (OIT), Jo Oshiro (OUS/OPAS)

Introductions:

Committee members introduced themselves with short biographical sketches, as our ability to pull everyone together for a meeting has been suboptimal.

Gayle Yamasaki is in charge of OIT precollege programs, ably assisted by Wendy Powless. OIT has been very active in bringing middle schoolers and young women to OIT for a variety of enrichment programs targeting both individuals and schools.

Don Kirkwood teaches Computer Science at N. Salem HS. His students are mostly on the lower end of the socioeconomic spectrum. He has had good success with these kids in AP CS classes and some interdisciplinary classes that mix English, CS and math to drum up interest especially among young women. Don is convinced that if we could recruit and retain a more diverse student population, our problems with falling pre-engineering and applied science enrollments would be largely addressed.

Shawna Blanchette is a 4th year teacher at Phoenix-Talent HS, a small rural school where she teaches math. She is teaching woodworking and Autocad for the first time this year.

Ivan Lumala works for Microsoft as an academic relations manager for the Pacific Northwest region (Hawaii, Oregon, Washington, Idaho) working with a total of 12 universities. Ivan is very interested in issues around diversity, and is active in another initiative that works on these issues in developing countries.

Update on Steering Committee Activity (Don Kirkwood):

The Steering Committee is setting up its structure, elaborating strategy, and pursuing potential funding. The last meeting discussed whether the desired result of the process is to create a short-term entity that will be taken over by someone else, or whether a longer-term process and entity is needed. The OPAS Initiative does want to do something practical; Don sees Diversity as solving this whole problem by widening the potential pool of recruits to Pre-Engineering and Applied Science Careers.

Jo will be taking and distributing notes from the OPAS Luncheon featuring speaker Louis Bucciarelli on “Why I Don’t want My Daughter to Be An Engineer” on May 18,

Review of the Mission (from the website):

DIVR Mission: Increasing the ethnic and gender diversity in technical fields:

- Developing new strategies to attract diverse students.
- Enhancing and growing existing programs and methods to increase the diversity of students preparing for and succeeding in applied science and engineering education.
- Articulating Best Practices and communicate them, making them available as resources.

Recommendations: In order to raise the participation and performance of under-represented groups at all levels, this group's priority strategy was work through (in descending levels of priority)

- students
- parents
- teachers & administrators
- community & business leaders

providing them the information and insights required to overcome cultural barriers to engineering and related careers.

Committee Project:

The first project of the Diversity Committee is to identify existing resources (published documentation of best practices and programs centered on fostering diversity in engineering and applied science education, recruitment and retention), rate their quality, then decide what we want to do with them. As stated in the recommendations, students are our primary target audience.

First, how shall the ongoing conversation around these resources be done? Monthly meetings are not that productive a structure for this sort of work. At Ginnie Lo's suggestion, Jo is in the process of implementing a web-based collaboration tool called a wiki. An example of this is wikipedia, the online collaborative encyclopedia. See their entry on engineering at <http://en.wikipedia.org/wiki/Engineering>

At the moment, the committee will gather and review these resources rather than finding capacity, expertise, and funding outside of the committee.

Referring to the table of identified resources on the OPAS Diversity website at <http://opas.ous.edu/Committees/DIVR.html#PrevResources>, the committee will

- Comment as to quality
- Categorize the resource
 - Best Practices,
 - Anecdotal Evidence,
 - Background Data,
 - Programs
- Reviewer initials will be included in the table
- Large clearinghouse/gamut-type websites will require deeper review

Assignments were made as follows:

Minorities in Engineering (<http://faculty.washington.edu/olmstd/mwse/links.html>) – Ivan
Bridging The Gap – Jo has no record of assignment

Rocheport's paper (http://engr.oregonstate.edu/momentum/k12/sep04/M!_ASEE04_K12.doc) –
Don

“Boys are No Match for Girls ...” -

(http://opas.ous.edu/Committees/DIVR/Boys_No_Match.pdf) – Shawna

New resources:

- Eda will review and forward information to Jo:
 - “A 10 year assessment ...”
 - Northwest Girls Collaborative Project (NWGCP) – resource list
 - Gender and Science Digital Library – best practices, test, instructional materials, gamut of things that support STEM participation
 - Virtual of Library of Resources of Engineering; comes through as a mentoring project . This site, while generally good, has a bad link to the National Association of College Directors that leads into some really icky stuff.
 - Journal of STEM education, Nov/Dec 2005 – will send pdf; 10 year longitudinal study
 - Center for Diversity in Engineering Accountability Report – not around best practices; frames the work from a different state.
 - Science Gender and After School Resources Site, a program resource
- Don will forward to Jo
 - Computer Science Teacher's Association link
- Wendy & Gayle will also forward 2 or 3 items, including a paper about the messages young girls hear about engineering.

Ivan – what about MESA or SMILE?

Eda – our site is more about programming, less about the model. The framework of the program is not as clearly articulated. We need to look elsewhere for best practices.

As we gather more resources and comment, we will move closer to how to frame this information – what are we going to do with it? How are we going to shape recommendations to go forwards? How involved do we need to be with other committees? What form would be useful to other conferences AND INTERESTED PARTNERS. Do we have in mind a product or products?

Don – if we come up with a solid list of best practices, we could take them to a lot of audiences, including practicing teachers and administrators.

Next Meeting: Tuesday June 13 3:30-5:00; ok don, Shawna, eda, gayle, wendy;