

In the OPASsphere November 21, 2008

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A service of the Oregon Pre-Engineering & Applied Sciences Initiative (OPAS) funded by ETIC

To subscribe or get more info, please contact Jo Oshiro - jo_oshiro@ous.edu or 503.821.1139

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Events – Announcements

- **SW Washington STEM Summit** Wednesday **December 10**, 8:30 – 4:00 – Come learn about what's going on in SW Washington's science, technology, engineering and math programs --
http://www.vancouver.wsu.edu/cywp/docs/STEM_Summit.pdf -- *Thanks to Natalie Pacholl*
- **Green Technology Showcase** – OIT East Portland , Friday **December 12**, 3 – 5 pm – An opportunity for legislators, business partners and guests to meet OIT's new President Dr. Chris Maples, understand OIT's statewide mission to prepare world-ready engineering and technology graduates, and its initiatives to build a green-technology workforce. Dr. Maples will also highlight how the legislature's investments in higher education and engineering through the Engineering and Technology Industry Council gives Oregonians the opportunity to invent the new technologies of tomorrow.
<http://www.oit.edu/Default.aspx?DN=c9bf3d37-4a8b-473e-acad-3f2b052f8dc9> – *Thanks to Lita Colligan*
- Check out our sensed robots and explore our amazing interactive labs!! Have you ever seen a human powered vehicle or wondered what a green roof lab looks like?? If you are interested in engineering, computer science or technology you do not want to miss this event!!! Join us for the **2009 Engineering Discovery Showcase** Friday **January 23**, 11:00 – 2:00 - eat lunch - win raffle prizes! This event is free!!! Register online at <http://www.pdx.edu/cecs/outreach.html>. Please contact Kristen Nieman at PSU if you have questions. (503)725-5030 or krisc@cecs.pdx.edu
- **Sign up NOW for Saturday Academy ASE Interns** : It's recruitment time for both students and mentors for Saturday Academy's Summer 2009 Apprenticeships in Science and Engineering program. If you know of students who would benefit from an internship at a technical company or in technical research, be sure to refer them to our web site: www.saturdayacademy.org/ASE. If you know of engineers who would make good mentors, have them check in as well. This year we are trying to offer more placements in small to mid-sized companies, so please tell your entrepreneurial friends how they can build the pipeline for their companies by working with amazing talent from our local high schools. Questions? Jeff Matson at 503-200-5860, jeff@saturdayacademy.org.

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Mentors Needed

- **PSU's STEM Mentor Project** is an NSF funded experimental field-test of the impact of STEM mentoring on 9th and 10th graders with disabilities who have expressed an interest in STEM careers and attend Portland Public Schools. Mentors and students do 2 activities a month for 6 months (March 2009 - August 2009). Any costs incurred for mentors are paid as well as a **\$250 stipend** of appreciation. Right now, we are trying to recruit as many mentors as we can from STEM fields. Please contact John Ossowski at jdo@pdx.edu or Alison Turner at turneral@pdx.edu to learn more.

Volunteers Needed

- The Oregon Robotics Tournament and Outreach Program seeks adult volunteers for their upcoming 20 **FIRST** LEGO League Qualifying Tournaments to take place across Oregon on the December 6, 7, 13 and 14. Student teams will be assessed for their robotics engineering, climate research project and teamwork. If you are interested in being a Judge, a Referee or a Day-of-the-Event Volunteer, please review additional information at our volunteer site. -- <http://volunteer.ortop.org> – *Thanks to Cathy Swider.*

Competitions

- Rubber Band Contest for Young Inventors, grades 5-8 -- <http://rubberbandcontest.org/> -- it's too late for this year, but check it out to position yourself for next year!

Weblinks

- Jo says: "No matter what they call it, it's really engineering." -- to see what inspired this comment, link to Celeste Baine's blog at http://www.engineeredu.com/celestes_blog/2008/11/probsolv.html
- **Arizona State** University has its own OPAS-like initiative with a **Virtual Counseling Center** for STEM Interest and Persistence programs -- <http://vcc.asu.edu/stem.shtml>
- **OSU Web site explores Oregon's communities**, The Hermiston Herald, 11.19.2008 -- <http://hermistonherald.com/main.asp?SectionID=1&SubSectionID=1&ArticleID=7553&TM=59361.23> -- The Oregon State University Rural Communities Explorer Web site (<http://oregonexplorer.info/Rural/>) compiles statistics, maps and scholarly works intended as a source of information for policy makers, nonprofits, local leaders and concerned citizens. "The Rural Communities Explorer provides them with a one-stop shop to get information they need to advocate for their community, apply for grants, and be more informed about where their community is with respect to environmental, economic, social and demographic issues," said Lena Etuk. She is a social demographer with the OSU Extension Service and one of the Web site's developers.

Funding

- **Gates Revamps its Strategy for Giving to Education** – Education Week, November 12, 2008 <http://www.edweek.org/ew/articles/2008/11/11/13gates.h28.html?tmp=572030999> – (sorry, available to subscribers only) – The Bill & Melinda Gates Foundation **announces an evolution of its high school grantmaking strategy** to focus on: identifying and promoting higher standards for college readiness, improving teacher quality, fostering innovations to aid struggling students, and an expansion beyond

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high school into postsecondary education access and retention. This includes targeting grants to help define effective teaching, devise tools to measure it, and work with school districts to develop systems to retain and reward teachers based on their classroom performance.

- **Another take on the Gates "Small Schools"** - <http://sify.com/finance/fullstory.php?id=14803346> – Yes, Virginia, numbers *can* lie.

Articles

- **OUS: University Enrollment Hits Record High --**
http://www.ous.edu/news_and_information/news/111308.php
- **NGA Center Announces States Selected for Career Technical Education Policy Academy, 10/23/2008 --**
<http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/?vgnextoid=0a5b53975ef2d110VgnVCM1000001a01010aRCRD&vgnnextchannel=6d4c8aaa2ebbf00VgnVCM1000001a01010aRCRD> – AZ, NE, NJ OH OK – work supported by NGA and Bill & Melinda Gates Foundation
- **Indiana College Holds Simulated STEM Job Fair --** Indiana's [Gary Post Tribune](#) (11/20, Ross) -- http://post-trib.com/news/neighbors/1285995_istem.article -- reported on "a recent simulated job fair at Purdue University Calumet," [hundreds of students grades 7-12] which was "sponsored by I-STEM (Indiana Initiative for Science, Technology, Engineering & Mathematics)." Program director Daniel Luncsford explained, "The goal of the job fair is to expose students to real opportunities in STEM careers in Northwest Indiana, and to point out to the students what they need to do now -- not later -- to start preparing for these opportunities." He added, "This is just like a real job fair; individual students have one-on-one contact with the exhibitors in their booths." The simulated fair included "representatives from 25 local companies." The Post Tribune noted, "I-STEM is a statewide initiative" tasked with bolstering "economic development by promoting STEM education and careers in Indiana. This is accomplished by building partnerships with kindergarten to 12th- grade students, teachers, K-12 school districts, higher education, business, and government." *Thanks to Dick Knight & Bruce Schafer.*

Professional Development:

- Per Jo's personal communication with WGBH Staff, **response to this webinar was enough that they can promise it will be done again**, and they have also promised to have some more West-Coast friendly time slots: DESIGN SQUAD is joining forces with ITEA to present an interactive webinar for middle & high school teachers. "DESIGN SQUAD: Engineering Activities, Energizing Kids" will provide an overview of DESIGN SQUAD, its outreach campaign, and the free resources available to teachers. Participants will also get great tips on how to talk to kids about engineering, and hear firsthand from other teachers about how they are using DESIGN SQUAD in their classrooms. Jo will keep you posted.

Classroom Resources

- For all you teachers of web design, computer-based graphic arts and Web 2.0 --
<http://www.newmedialiteracies.org/>
- From the **Junior Engineering Technical Society (JETS)**: On another note, we've launched our **new online version of Assess**, called PathAssess™. The new link is: www.jets.org/programs/assess/index. It's **quite a bit different than the Assess booklet**

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and isn't at all based on math and science. It's developed using scientific theory on people's likes/dislikes and personalities. Students answer a series of questions about their interests and then receive a customized profile as to the types of engineering careers they be want to pursue. ... Also, we took the Practical Understanding section of Assess and put it online for FREE! Any student can access this exercise now at: www.jetsproject.com/PracticalUnderstanding. It's the same as it was in the booklet just online and with results tallied instantly for the students.

- **NEW WGBH RESOURCE FOR 9-12 YEAR-OLDS** -- THE GREENS, a PBS Web site that encourages kids to explore sustainability and take action wherever they can, is offering FREE Activity Guides to educators working with 9 to 12 year-olds. The Guide pairs hands-on activities to deepen kids' understanding of topics like recycling and global warming with campaigns to reduce junk mail and get drivers to stop idling cars. Activities can be conducted over separate one-hour sessions. Download the activities at <http://meetthegreens.pbskids.org/features/>

Fun Stuff - couldn't resist repeating these:

- **Rubber Band Contest** for Young Inventors, grades 5-8 -- <http://rubberbandcontest.org/> -- it's too late for this year, but check it out to position yourself for next year!
- Jo says: **"No matter what they call it, it's really engineering."** -- to see what inspired this comment, link to Celeste Baine's blog at http://www.engineeringedu.com/celestes_blog/2008/11/probsolv.html
- Jo will be out of the office until Tuesday, December 2. Best wishes to all of you and yours for a happy Thanksgiving!

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