

*A service of the Oregon Pre-Engineering & Applied Sciences Initiative (OPAS)*

*To subscribe or get more info, please contact Jo Oshiro - [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) or 503.725.2910  
archives: <http://opas.ous.edu//OPASsphere/index.html>*

*In this issue --*

- *Job Search – Mission Mill Museum in Salem*
- *Event Announcements – “What Scientists Know and How They Know it”; OACTE*
- *Kudos – OSU Environmental Design students take 1<sup>st</sup>; Professor Jovanovic honored*
- *Classroom Resources – Standards-Based, Teacher-reviewed weblisting*
- *Articles – College Board drops some AP tests*
- *Data – National Center for Education Statistics (NCES) Oregon Demographic Profile*
- *Weblinks – Age-appropriate resources for parents on education & career planning*
- *Fun Stuff – Big Dog Robot on YouTube; Brains & Language; mentoring*

*Job Search*

- Mission Mill Museum in Salem seeks an executive director. Review of applications will begin May 1 and will continue until the position is filled. For detailed information about the position, as well as about Mission Mill Museum, please see <http://www.missionmill.org/>.

*Events – Announcements*

- **“What Scientists Know and How They Know It”** -- Professor Steven Goldman of Lehigh University is the featured speaker at the Institute for Science, Engineering, and Public Policy’s **Linus Pauling Memorial Lecture** at the Schnitz, 7:00 pm May 1, 2008 - <http://www.isepp.org/Pages/07-08%20Pages/Goldman.html>.
- **Oregon Association for Career and Technical Educators (OACTE) annual conference begins April 16** in Sunriver - <http://www.oregonacte.org/>. OPAS Initiative activist and teacher Don Kirkwood will make a presentation aimed at administrators, focusing on the importance of STEM education and ways to make it happen. I hope to follow up by posting some of his presentation materials.

*Kudos*

- **OSU Engineers take first in design competition**, The Daily Barometer, 4.10.2008, by Candice Ruud. -- This week, 21 OSU engineering students traveled to New Mexico to compete in the **18th annual International Environmental Design Contest (EDC)** at New Mexico State University and came home with first prize. Students from as far away as Bogazici University of Istanbul, Turkey came to show off their ability to create new and innovative environmental technologies. The students spent almost all of winter term preparing for the contest. **OSU Professor Goran Jovanovic** was honored with a **lifetime achievement award** for bringing students to the competition on his own since its inception. <http://media.barometer.orst.edu/media/storage/paper854/news/2008/04/10/News/Engineers.Take.First.In.Design.Competition-3315954.shtml>

*Local Topics*

- The **Oregon Institute of Technology (OIT)** has developed the country's first four-year undergraduate **degree program in renewable energy management systems**. This year the program is training 50 students and will graduate its first class. What differentiates this

*The OPAS Vision is that all Oregonians have the opportunity to 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.*

*A service of the Oregon Pre-Engineering & Applied Sciences Initiative (OPAS)*

*To subscribe or get more info, please contact Jo Oshiro - [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) or 503.725.2910*

*archives: <http://opas.ous.edu//OPASsphere/index.html>*

program from alternative-energy degree programs at other universities is that it delves into the systems management of renewable energy, a factor that is garnering more focus as alternative energy sources are being developed.--

<http://www.convergemag.com/story.php?catid=420&storyid=107032>

- ETIC's Dave Brown (Tek) and OPAS' Tom Thompson (ODE) got together to make a **major donation from Tektronix to high school electronics/physics labs** happen: <http://www.oregonlive.com/news/argus/index.ssf?/base/news/1207682587253770.xml&coll=6> – I hope to follow up with pictures of actual students doing actual work with this sophisticated instrumentation.

***Classroom Resources***

- The Boston Museum of Science is a leader in integrating engineering and technology education (as opposed to educational technology) into the classroom –
  - “Search through our teacher-reviewed selection of the best standards-based technology and engineering curriculum resources for your classroom” (filterable by PreK/grade level/adult) – [www.mos.org/TEC](http://www.mos.org/TEC)
  - A report on the first year of the school district leadership program “Gateway to Technology and Engineering Education” started in 2004 highlights what ten school districts are doing to implement Massachusetts technology/engineering standards – [http://www.most.org/events\\_activities/collaborations&d=1442](http://www.most.org/events_activities/collaborations&d=1442)
- ***OSU Engineering Ambassadors*** - Teachers can request an Ambassador at: <http://engr.oregonstate.edu/students/ambassadors/> On the right column, there is a link for teachers. (You may also want to explore that site and learn more about the program.) You can see Ellen Momsen's Women and Minorities in Engineering site at: <http://engr.oregonstate.edu/wme/>

***Articles***

- ***EDUCATION WEEK*** (premium article access compliments of [edweek.org](http://edweek.org))  
["College Board Intends To Drop AP Programs in Four Subjects"](http://www.edweek.org/college/board-intends-to-drop-ap-programs-in-four-subjects)  
Officials overseeing the Advanced Placement program have announced that they intend to drop AP classes and exams in four subject areas, in a pullback expected to affect about 12,500 students and 2,500 teachers worldwide. After 2008-09, there will be no AP courses or exams in Italian, Latin literature, French literature, and computer science AB. The College Board has never taken so many courses off its table of offerings at the same time.
- Editorial that includes a paragraph about need for more STEM in high schools: <http://www.statesmanjournal.com/apps/pbcs.dll/article?AID=/20080405/OPINION/80404052/1049/OPINION>
- Teaching "NetGen" students: <http://connect.educause.edu/blog/rowe/facingthechallengemeetthe/46528?time=1207396495>

*The OPAS Vision is that all Oregonians have the opportunity to 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.*

*A service of the Oregon Pre-Engineering & Applied Sciences Initiative (OPAS)*

*To subscribe or get more info, please contact Jo Oshiro - [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) or 503.725.2910*

*archives: <http://opas.ous.edu//OPASsphere/index.html>*

- Tech Ignorance Keeps Teens from Changing the World  
[http://chronicle.com/wiredcampus/index.php?id=2676&utm\\_source=wc&utm\\_medium=en](http://chronicle.com/wiredcampus/index.php?id=2676&utm_source=wc&utm_medium=en)

**Data**

- **NCES State Education Data Profiles** – while the data is often not as recent as one would like, it is clean, comparable, queryable, and plentiful, e.g. Oregon Demographics for 2000 - [http://opas.ous.edu/Committees/Resources/Data/NCES\\_OR\\_Demographics\\_2000.pdf](http://opas.ous.edu/Committees/Resources/Data/NCES_OR_Demographics_2000.pdf)
  - The whole kit and caboodle can be found at <http://nces.ed.gov/>
    - Data tools - <http://nces.ed.gov/datatools/>
    - Fast Facts - <http://nces.ed.gov/fastfacts/>

**Weblinks**

- From Oregon's Partnership for Occupational and Career Information:
  - website with tips, activities divided by age group --  
<http://www.mychildsfuture.org/parents/item.htm?id=0>
  - brochure and powerpoint: <http://www.mychildsfuture.org/parents/materials.jsp>

**Fun Stuff**

- **Big Dog Quadruped Robot Packhorse** -  
<http://www.youtube.com/watch?v=YUoW43Xq7ts>
- An interesting short article about **kids' brains and language in middle school** (ages 9-15), talks about how girls use more language parts of their brain and boys use more audio and visual parts of their brains. The podcast is from science magazine, it's about 15MB. You can download podcasts here: <http://www.sciencemag.org/rss/podcast.xml> and get the march 14th issue, the article is about 24 min into the podcast.
- **OPAS walks our talk** – this week we hosted a high school student from Centennial in Gresham whose senior project is to teach an engineering lesson to a class of 4<sup>th</sup> graders at the school at which he is a regular volunteer. We provided some resource links, a chance to review printed material, a bit of advice from the trenches of volunteerism, and some encouragement. We hope to have a follow-up report in six weeks or so.

*The OPAS Vision is that all Oregonians have the opportunity to 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.*