

*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>*

*e-Networking*

- Do you **know someone who would enjoy reading “In the OPASsphere”**? Please forward this to them, or have them email Jo Oshiro at [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) to subscribe. The opas\_interest listserv currently reaches 185 stakeholders in the future of engineering and applied science education in Oregon.
- **NOISE – the Network of Informal STEM Educators** – bandwidth issues have kept this effort from taking off after a conference at OMSI in February 2007, with the exception of these e-networking tools:
  - The Oregon University System maintains a listserv of NOISE members – to subscribe, please contact Jo Oshiro, [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) or 503.725.2910. You must be a member of the listserv to email the listserv.
  - OMSI maintains a homepage for NOISE – [www.oms.edu/noise](http://www.oms.edu/noise)
  - The Business Education Compact has made available a streamlined process for entering and correcting information on their on-line listing of informal science and technology education programs and opportunities, the TechnoScienceSupersite –
    - Site -- <http://www.technosciencesupersite.org/>
    - Submit a New Program -- <http://www.technosciencesupersite.org/submit.php>
    - Update an Existing Program – note “update” in the description box - <http://www.technosciencesupersite.org/submit.php>I’m working on getting these last two links on to the NOISE home page.
- **OIFLIG –Oregon Informal/Free-Choice Learning Interest Group** was formed to facilitate communication and collaboration among Oregon professionals interested in conducting or utilizing informal/free-choice learning research and evaluation. Current members of OIFLIG include independent consultants and affiliates of institutions such as Oregon State University, Portland State University, David Heil & Associates, and the Oregon Museum of Science and Industry. To subscribe to the OIFLIG research and evaluation listserv, please contact Toni Dancu at [tdancu@pdx.edu](mailto:tdancu@pdx.edu).

*Jobs*

- National science education consultants **David Heil & Associates (www.davidheil.com)** in John’s Landing seek a **Project Assistant** to assist with a range of client projects for museums, corporations, NGO’s and government agencies -- prepare reports and presentations; conduct research; collect and analyze data for projects including: strategic/business planning, evaluation/market research, and curriculum/program development. Candidate should enjoy working individually, but should also be comfortable working on a project team. Mac-based office. Fluency in Microsoft Word, Excel and PowerPoint required; experience with In Design a plus. Send resume and 3 references to Project Assistant, 4614 SW Kelly Ave., Suite 100, Portland, OR 97239. Fax (503) 245-2628 or via email to [kpeltier@davidheil.com](mailto:kpeltier@davidheil.com)

*Events – Announcements*

- **SuperQuest** – Techstart Education Foundation’s professional development by teachers for teachers

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- Taught by K-12 teachers who have previously successfully taught that class to K-12 students.
- Highly focused collaborative environment that promotes discussion about teaching methods, pedagogy, appropriate curriculum materials and classroom management. Share best practice ideas and methods as well as collaborate with others trying to provide similar services to students
- 3 to 5 day classes -- work all day every day of the course; dedicate time to focus intensely on skill growth.
- Graduate credit available from Western Oregon University.
- This year's summer offerings:
  - Oregon City - June 23 to 27 - Robotics only
  - OIT, Klamath Falls - July 21 to August 1 - Gaming as a Gateway to Computer Science (special focus). This session runs in parallel with the Amazing Gaming Camp for kids – take a student with you!
  - Western Oregon University - August 4 to 8 - Robotics, Gaming and other CS topics.
- Learn more and register on-line: <http://www.techstart.org/superquest.html> or contact John Ossowski at [john.ossowski@techstart.org](mailto:john.ossowski@techstart.org) (503-802-5211).

***Weblinks***

- **ODE's Program Brief on Career and Technical Education -**  
<http://www.ode.state.or.us/teachlearn/pte/cteprogrambrief4-2007.pdf>  
“Career and technical education (CTE) is an essential component of the total education system in Oregon and is critical to the state’s ability to compete in a global economy. CTE occurs in a variety of settings and levels including middle school career exploration, secondary program, postsecondary certificates and degrees, and customized training for employees in the workplace. CTE also provides students and adults (1) the technical skills and knowledge necessary to succeed in occupations and careers, (2) the crossfunctional or workplace basics necessary for success in any occupation or career (such as problem solving, teamwork, and the ability to find and use information) and (3) the context in which traditional academic skills and a variety of more general educational goals can be enhanced.” ... click the link to learn more

***Articles***

- “**Blurring the lines: Career and Technical Education Today**”, National Association of Secondary School Principals (NASSP) -  
[http://www.principals.org/s\\_nassp/bin.asp?CID=1466&DID=57205&DOC=FILE.PDF](http://www.principals.org/s_nassp/bin.asp?CID=1466&DID=57205&DOC=FILE.PDF)  
CTE classes, done with well-meshed academic, career, and technical content can improve student engagement, test scores, employability, desire and ability to pursue post-secondary education and reduce drop-out rates. Cases are cited, studies are referenced.

***Research & Reports***

- Foundations for Success: The Final Report of the Mathematics National Advisory Panel, 2008. US Department of Education.

<http://www.ed.gov/about/bdscomm/list/mathpanel/report/final-report.pdf>

Two articles discussing the findings:

- “Essential Qualities of Math Teaching Remain Unknown”, EdWeek  
[http://www.edweek.org/ew/articles/2008/04/02/31math\\_ep.h27.html?tmp=2028878730](http://www.edweek.org/ew/articles/2008/04/02/31math_ep.h27.html?tmp=2028878730) – While quality teachers are known to account for 12 – 14% of variation in elementary math learning, what preparation, professional development, certification and ongoing support makes a teacher that can make such a difference is not known. [Notes Jo: difficult to appropriately structure a controlled experiment to generate “research-based” results with such a complex model as two or more human beings interacting as teacher and student.]
- “Panel Calls for Systematic, Basic Approach to Math”  
[http://www.edweek.org/ew/articles/2008/03/19/28math\\_ep.h27.html](http://www.edweek.org/ew/articles/2008/03/19/28math_ep.h27.html) - trying to reign in extremes of the debates on calculation/memorization vs. conceptual problem-solving; teacher vs. student-centered instruction; use of calculators. The target is students well able to handle algebra in 8<sup>th</sup> and 9<sup>th</sup> grades. The report may de-emphasize applied math.

*New on the OPAS Master Resources List at <http://opas.ous.edu/Committees/Resources/>*

- New research on class size confirms anecdotes, shows mechanisms – EdWeek article.
- Use of “value-added analysis” statistical method to index teacher quality for formative assessment – Alliance for Excellent Education policy brief & EdWeek article on same.

### *Fun Stuff*

- Via eSchoolNews (<http://www.eschoolnews.com/>)-- Google Earth Lessons - <http://gelessons.com/lessons/> - free public resource created by teachers, for teachers gives educators tools and ideas for using the free Google Earth software in their classrooms. Teachers of all subjects and grade levels can incorporate Google Earth into their curriculum. A section called "Google Earth How-tos" gives educators the basic skills they need to use the software, and a discussion section includes threads for exchanging ideas on a variety of topics. Search for lessons by content area, share lessons with others, search through a library of screenshots, and more. All that is needed to use the lessons is a free download of Google Earth software.