

**Testimony to Portland City Council August 13, 2014**  
**Donna L Cohen, MEd Vocational Education Administration;**  
**former Technology Education teacher**

Portland Pubic Schools is going to remodel Roosevelt H.S. and will include a STEM program – Science, Technology, Engineering and Math. This is a national, state and local initiative. STEM's problem-solving, project-oriented approach appeals to a range of students and holds the promise of attracting those who have shied away from Math and Science, including girls and minority students. STEM is a gateway program to good-paying in-demand careers in the trades, those which require community college, a four-year college degree and advanced degrees.

Students design and build projects – say, a small electric vehicle – and in the process apply Science and Math principles, and learn to use many types of technologies, from computer-aided design software to electrical test equipment to wood and metal fabrication tools.

But, its implementation in the Roosevelt remodel plan is seriously flawed. “Form follows function” – program design first, then spatial needs emerge. But, PPS designed a space before designing program; one which doesn't work. Also, no one with a Tech/Engineering background – the “TE” in STEM - was involved. The architects have only designed one, very specialized STEM space for a school of 400 hand-picked university-bound students. PPS naively relied on them and left out the specialists in the “engineering design process”, in project-based learning, and in the use of tools and fabrication equipment.

Roosevelt then made an artificial and arbitrary distinction between high-tech tools and traditional technology and placed them in two different workspaces in different areas in the school. This is pedagogically unsound for project-based work. It also perpetuates existing distinctions based on gender, race and class as students “track” themselves into those areas that are already comfortable rather than discovering the appeal of a unified high-quality STEM program.

Upon the community's insistent protest that the two different spaces be made adjacent, PPS now says that they would make EACH space fully-functional for STEM. But, the two spaces *combined* are needed to provide the necessary square footage for STEM. Had either of the spaces been sufficiently large, the community would have been satisfied months ago!

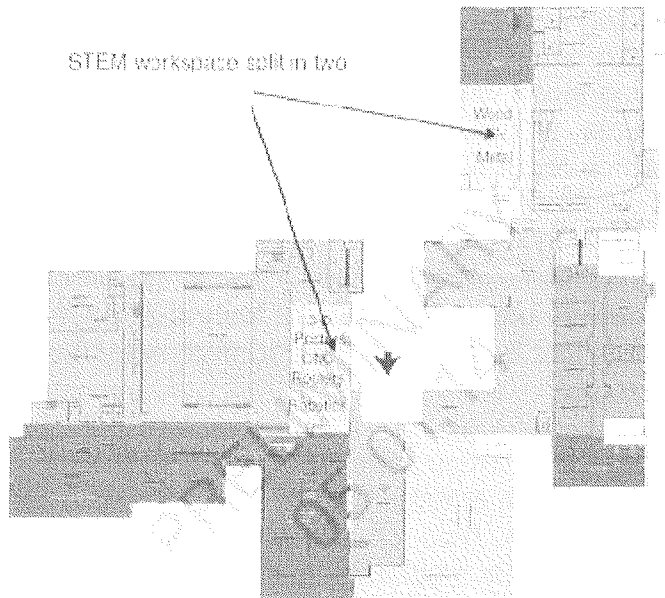
Unchanged, this will be a disaster for thousands of future students in the Roosevelt catchment area – if, indeed, they or their parents do not avoid the problem through transfer or movement into another high school's jurisdiction. PPS is setting terrible precedents for future remodels. Please help us, as a Council, or individually. Perhaps you know some businesspeople who would speak up – those who could be future employers of STEM students - who would be greatly disturbed to know how poorly students would be prepared at Roosevelt under the current plan. Feel free to refer them to me.

Thank you.

Note: see schematic on back side.

# Roosevelt's Design is Flawed

Instead of channeling Roosevelt's students, teachers and STEM technology down separate paths, like this...



## Parsons, Susan

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**From:** Jennings, Gayla  
**Sent:** Monday, June 16, 2014 11:22 AM  
**To:** 'Donna Cohen'  
**Cc:** Parsons, Susan  
**Subject:** RE: Speaking to Council

Hi Donna,

Not a problem!

I'm currently away from my desk but Sue Parsons, the Assistant Council Clerk, can help with looking at the next available date to sign up for Communications. I've copied her on this email.

Thank you and hope you're doing well,

**Gayla Jennings**

Deputy Auditor | Office of the City Auditor  
City of Portland, Oregon  
Phone (503) 823-3560

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**From:** Donna Cohen [mailto:dcohen@dcoheninfo.com]  
**Sent:** Sunday, June 15, 2014 4:28 PM  
**To:** Jennings, Gayla  
**Subject:** Speaking to Council

Hi Gayla,

I'd like to come speak to Council again, during a Communications time. Can you tell me when the next opening is?

I will be speaking to the issue of the Roosevelt HS remodel, and also to Oregon's efforts to institute STEM programs [Science, Technology, Engineering and Math] in the schools statewide. I'm all for it. I am a former Technology Ed teacher - and, have been to meetings of both the Oregon Education Investment Board and the Oregon STEM Investment Council this past week.

I realize the Council is not directly connected to these concerns but I see serious issues in both arenas and would like to bring them to the awareness of the Council.

Thank you.

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Request of Donna Cohen to address Council regarding Roosevelt High School remodel and the Science, Technology, Engineering and Math programs in schools statewide (Communication)

AUG 13 2014

PLACED ON FILE

Filed AUG 08 2014

**LaVonne Griffin-Valade**  
Auditor of the City of Portland

By 

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