A Comparison of the Remodel Planning Processes for Roosevelt High School and Franklin High School 2013-2014
[Portland Public School District, Oregon]
For the United States Department of Education, Office of Civil Rights

Demonstrating distinct differences in planning which negatively affected the outcome for Roosevelt High School in regard to the STEM—Science, Technology, Engineering and Math- workspace

Roosevelt is a school at which 70% of the student body are Students-of-Color. Franklin is a majority White school. We believe unintentional discrimination in the planning process created a situation which resulted in a discriminatory outcome for the students at Roosevelt High School.

This outcome will negatively affect all future students at Roosevelt High School [during the lifetime of the remodel design], and disproportionately, Students-of-Color and girls.

For many students - for the rest of their lives.
Community group members who have working to correct the situation with the Roosevelt remodel in regard to STEM:

Donna Cohen, St Johns, MEd Voc. Ed. Admin., former Technology Educator—Co-complainant
Joe Purkey, St Johns, Principal, Convergence Architecture, RHS Campus Improv. Comm., PPS Parent—Co-complainant
Dennis Phillips, Retired Mechanical Engineer, PPS Parent, Grant Neighborhood
Paul Anthony, MBA, Our Portland, Our Schools PPS Parent, Humbolt Neighborhood
Tom Karwaki, MBA, MA, Urban Affairs, Chair, University Park Neighborhood Association
David Crandall, Board Member and Education Specialist, Piedmont Neighborhood Association

Why a complaint was filed with the Dept of Education, Office of Civil Rights.

The situation described in this report reflects unjust and inequitable treatment to all in the Roosevelt community. The education of every student will be negatively impacted; and, those who are under-represented in STEM studies and careers [People-of-Color and females] will be additionally affected. As the saying goes “There ought to be a law” for situations like this. Perhaps there are other laws that are being broken, based on providing a poorer education to any school in a district, or a school in a lower-income neighborhood, or providing courses which reinforce racial and gender bias [these will, in fact, be true if the current plan goes through].

We’ve used all appropriate and available tools to rectify this situation. One of those tools is that, because Roosevelt is predominantly a school with Students-of-Color, a disparate planning process with a school that is majority White and which results in negative outcomes to the first school, is illegal. If the complaint prevails—and we feel it should—the thousands of future students at Roosevelt will all benefit from this action.

If anyone knows of additional ways to fight this / additional tools we can use, please let us know.

Do you know a group wanting more information and a chance to ask questions about Roosevelt and STEM? You may contact Donna Cohen dcohen@hevanet.com or Joseph Purkey jpurkey@convergencearch.com about arranging a group meeting.

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How to Use this Document

Many, but not all, pages will follow the format below. You may review this document two ways:

A. Scan each page by reviewing the information in the large double-border box. These are the main themes of that page. Also, review diagrams and images.

B. Review every page in detail.

There are references to a variety of Attachments—DAG [Design Advisory Group] Meeting Notes, Workshop Presentations, Emails, etc.

Terminology Used

**STEM** is the project-based study of Science, Technology, Engineering and Math in which students solve real problems by designing and building solutions. It is a foundation for many careers, but is not focused on a specific career.

The **workspace used for designing and building STEM projects** is referred to by several names: STEM Lab, STEM Space, Makerspace, FabLab, Innovation Lab, etc. They all represent the same thing. However, this is not understood by the Roosevelt Remodel Team.

**CTE** is a specific career-oriented program taught by instructors who are teachers with industry background.

PPS, however, does refer to STEM [as well as some other subject areas] as CTE and also uses the phrase “Enhanced Electives” to refer to these same areas of study.

**Remodel Team**—a school’s Remodel Team refers to PPS staff assigned to work with the team [Project Manager, etc.], and representatives from the architectural firms involved.

**DAG**—Design Advisory Group—Ideally, a group consisting of community stakeholders representing various community groups, people with subject expertise [especially where lacking on the Remodel Team], business, post-secondary, etc. In the case of Roosevelt there was an ongoing issue in regard to a lack of broad stakeholder representation.
The promise of STEM fades at Roosevelt High School

This document contains evidence of unprofessional and negligent treatment in the remodel planning of a STEM [Science, Technology, Engineering and Math] workspace for a high school with a student body that is 70% students-of-color, in a lower-income neighborhood. Concurrently, a high school with different demographics – majority white, somewhat higher income - was treated significantly better.

STEM is an essential school program for many reasons:
- Fosters learning in the areas of Science and Math by having students apply these principles – through the “Engineering Design Process” - to the design and creation of real projects, thereby encouraging curiosity among students with many abilities and interests who may not have felt confident / comfortable to pursue single–focus Science and Math studies.
- People-of-color and girls are underrepresented in Science, Math and Engineering studies and careers. STEM can narrow the “achievement gap” and open possibilities to these underrepresented students, possibilities that will serve many of them for a lifetime.
- Provides students with exposure to a wide range of knowledge and skills development in multiple technologies that would serve to introduce to them the possibilities of numerous careers – from the trades to advanced high-tech careers, and many careers in-between.
- Provides students with a wholistic learning experience in a collaborative, creative, problem-solving environment – an environment that prepares students for many work settings.
What happened, in short:
1. Community votes overwhelmingly for STEM subjects.
2. RHS designs split STEM workspaces in different parts of the school for different STEM equipment.
3. No advocates / expertise in the design of Tech Ed workspaces [the “TE” in STEM] is there to point out that these spaces need to be co-located; alone they are too small.
4. PPS says they will outfit both spaces completely for STEM, and purchase redundant equipment. [Yes, bizarre. Re-read #3. ]
5. Remodel Team ignores PPS Educational Specifications – which list the STEM subjects.
6. Remodel Team responds to Arts advocates on the Design Advisory Group as well as the desire of PPS Administration, which would like an Arts/Entertainment/Recreation program.
7. RHS says they are responding to the community’s wishes. They are not. [Votes shown later.]
8. No expertise was ever applied to determine whether either space could accommodate the facility needs.
9. On the suggestion of STEM community advocates RHS expands the footprint of the school to create more space for the STEM facility—and then uses that space to create expanded gym facilities in the remodel!

Result:
A non-functional “STEM” space means no STEM program.
An Arts / Entertainment / Recreation program created in part on the desire of district personnel takes over one of the two spaces intended for STEM.
Athletic expands to an area recommended by the community for enlarging the STEM space.

What should have happened:
1. Community votes for STEM subjects.
2. A person knowledgeable about STEM workspaces is involved.
3. RHS Remodel Team / DAG is familiar with the PPS Ed Specs for STEM.
4. RHS designs an adequate STEM workspace.

Result:
A median-sized STEM space that will support a STEM program able to encourage creativity, collaboration and problem-solving skills through Engineering design activities, exposure to a wide range of Technologies through project-based learning, and an opportunity to promote Science and Math to a broad segment of the student population. These are the skills which hold the promise of educating the largest number of students in areas where career potential is greatest. This is what Roosevelt has lost.
What are the requirements for a STEM workspace?

A STEM workspace must have a variety of tools and equipment for the design and creation of many types of projects. Collaboration among groups of students developing a project, supervision of students working with equipment, work areas for different types of equipment and materials, e.g. electronics, woods, metals, newer additive [e.g. 3d printing] and subtractive technologies [e.g. CNC milling machine] require some physical separation. But, those areas still need to be co-located, with, in some cases, glass partitions [walls with glass from waist up] so that teachers can see that students are working safely.

Work tables—of different types so as not to contaminate projects with dust, solvents, etc. used in different phases of a project are needed, as is a large floor space for working on projects that do not fit on tables and/or for testing of projects [that require movement, for example], a not uncommon situation. Much equipment requires safety clearances which take up significant square footage. A great deal of storage—for a variety of materials, tools, supplies, projects, etc. is needed.

These considerations put a modest size STEM workspace at about the combined square footage that Roosevelt has planned for STEM/Makerspace [5,500-6,000 sq ft plus a CAD Lab]. But, as pointed out, everything must be co-located. The current plan creates two spaces—neither of which is large enough for STEM. Unlike at Franklin, the Remodel Team for Roosevelt did not bring in expertise in project-based STEM workspaces, did not base space requirements on a list of equipment, let alone create an equipment layout for the workspace, to show that what they have planned is even possible!

The most rational approach is what the theatre teacher asked for: “I told them from the get-go that they can put all the resources into a super STEM space as it should be and just give me a 20x20 blank room in its current location attached to the stage with access to both backstage and Black Box with sufficient power”. Providing the theatre a small workshop with an additional area for storing sets, while creating a decent-sized STEM workspace near Sciences and Math is the approach that makes sense.

The current design will make a viable STEM program impossible. This school—known for years as under-performing and under-sourced, with a low graduation rate, and located within a lower-income, diverse community—needs, if anything, more help than other schools which are already ahead of Roosevelt in terms of facilities. Currently, many students in the Roosevelt area choose to go to other high schools which have better programs/facilities. It was hoped the remodel would attract some of these students back. A poor STEM program at Roosevelt will surely not do that for those families interested in Science, Technologies, Engineering and Math studies.

A good STEM program can be the heart of learning which leads to a wide variety of good paying jobs. For Portland Public Schools to provide lesser, and lesser quality, resources to this school because of a lesser, and lesser quality remodel planning process is discriminatory and unfair. To have learned from the planning experience with Roosevelt—to acknowledge this, as you will see the School Board has—and intend to use those “lessons” to improve upon the remodel planning process for the other high schools in Portland, while leaving Roosevelt behind is reprehensible.
The Importance of STEM Cannot be Overstated

“Progress on STEM is critical to building a just and inclusive society: STEM participation and achievement statistics are especially disturbing for women and minorities, who are substantially underrepresented in STEM fields. While earning a STEM degree is one important milestone in pursuing a STEM career, just 2.2 percent of Hispanics and Latinos, 2.7 percent of African Americans, and 3.3 percent of Native Americans and Alaska Natives have earned a first university degree in the natural sciences or engineering by age 24. While women constitute the majority of students on college campuses and roughly 46 percent of the workforce, they represent less than one in five bachelor’s recipients in fields like computer science and engineering, and hold only 25 percent of STEM jobs.

The STEM Strategic Plan sets out ambitious national goals to drive Federal investment in five priority STEM education investment areas [Note: including, among others]:

- Increase and Sustain Youth and Public Engagement in STEM: Support a 50 percent increase in the number of U.S. youth who have an authentic STEM experience each year prior to completing high school;

- Better Serve Groups Historically Under-represented in STEM Fields: Increase the number of students from groups that have been underrepresented in STEM fields that graduate with STEM degrees in the next 10 years and improve women’s participation in areas of STEM where they are significantly underrepresented….

- Underrepresented minorities in STEM now account for almost 40 percent of K-12 students in the U.S.; however, they earn only 27 percent of all associate’s degrees from community colleges, 17 percent of the bachelor’s degrees in the natural sciences and engineering, and 6.6 percent of the doctorates in those fields.

...learning theory and empirical evidence about how people learn suggest that STEM experiences that engage learners in “active learning” improve retention of information and critical thinking skills. Furthermore, research studies in STEM education support this positive relationship between STEM engagement experiences and student achievement. ...

The disparities in access to STEM courses and programs that exist in higher education are also evident at the K-12 level.”

Excerpts from: FEDERAL SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATION 5-YEAR STRATEGIC PLAN
A Report from the Committee on STEM Education National Science and Technology Council May, 2013
http://www.whitehouse.gov/sites/default/files/microsites/ostp/2013.pdf
Diagrams of STEM Spaces

“Woods/Metals” was eventually changed to an Arts/Entertainment/Recreation program, leaving only one undersized STEM space

RHS Open House June 4 2014
8 pages, including three schematic drawings which still say “preliminary”.

Total square footage combined equals approximately 5,500 sq ft.
Portland Public Schools Educational Specifications pertaining to STEM Subjects

PPS Comprehensive High School(s) Area Program

<table>
<thead>
<tr>
<th>AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Technology Engineering Math (STEM) program with</td>
</tr>
<tr>
<td>STEM education is experiential, interdisciplinary, collaborative, specific facility and programmatic needs are developed</td>
</tr>
<tr>
<td>General STEM spaces - applicable to all STEM focus types</td>
</tr>
<tr>
<td>Computer lab with 3D printer</td>
</tr>
<tr>
<td>Lecture Hall</td>
</tr>
<tr>
<td>Small group work space</td>
</tr>
<tr>
<td>Project Display</td>
</tr>
<tr>
<td>Engineering &amp; Design/Construction or Manufacturing (higher education)</td>
</tr>
<tr>
<td>STEM Lab - woods, metal fabrication, welding</td>
</tr>
<tr>
<td>Science - AP Physics</td>
</tr>
<tr>
<td>Math - AP Calculus</td>
</tr>
<tr>
<td>Intro to Engineering</td>
</tr>
<tr>
<td>Alternative energy</td>
</tr>
<tr>
<td>Health Sciences / Biomedical (university or research partner)</td>
</tr>
<tr>
<td>Sports Medicine</td>
</tr>
<tr>
<td>Health</td>
</tr>
<tr>
<td>Anatomy</td>
</tr>
<tr>
<td>AP Physiology</td>
</tr>
<tr>
<td>AP Chemistry</td>
</tr>
<tr>
<td>STEM Lab - biotechnology</td>
</tr>
<tr>
<td>Automotive Services Technology or Transportation, Distribution</td>
</tr>
<tr>
<td>Small Engine Lab</td>
</tr>
<tr>
<td>Electronic Trades</td>
</tr>
<tr>
<td>Mechanic</td>
</tr>
<tr>
<td>Sustainable transportation</td>
</tr>
<tr>
<td>Information Technology Studies (technology partner(s))</td>
</tr>
<tr>
<td>Computer labs</td>
</tr>
<tr>
<td>Software engineering</td>
</tr>
<tr>
<td>Web and digital communications lab</td>
</tr>
</tbody>
</table>

Franklin High School defined STEM subjects with this list, from the PPS Ed Specs, which is also the accepted way of defining STEM subjects.

Roosevelt High School did not define STEM using the Educational Specifications [or, any other standard STEM definition]
The People

Roosevelt

Michelle Platter, PPS Project Manager
Sara Oaks, PPS Project Team
Kimm Fox-Middleton,
Lorne McConachie Bassetti [Architects]
Michael Davis Bassetti
Renée Roman Bassetti
Joe Echeverri Bassetti
Glen Pak Bassetti
Michael Davis, Bassetti
Scott Martin, GBD
Nate Buddress Lease Crutcher Lewis
Andrew Beyer Lease Crutcher Lewis
Charlene Williams RHS Principal
Greg Neuman RHS Vice Principal

RHS DAG
Bobbie Regan, PPS Board
Jo Strom Lane
Alicia Brown
Paul Gouveia
Julie Ocken
Kelsey Green
Herman Green
Mike Verbout
Jo Lane RHS
Jenni Villano [joined Jan 2014?]
Abby Pasion
Jason Starman
Catherine Theriault
Michael Verbout
Jenni Villano

Franklin

Debbie Pearson, PPS Project Manager
Karina Ruiz, DOWA-IBI Group [Architects]
David Johnson, DOWA
Tonie Estaban, DOWA
Steve Olson, DOWA
Marc Nordean, DOWA
Alene Davis, SERA [Architects]
Clark Brockman, SERA
Stuart Colby, SERA
Craig Rice, SERA
Shay James, FHS Principal
Marshall Haskins, FHS Vice Principal
Ivonne Diblee, FHS Vice Principal
Dennis Joule, FHS Vice Principal
Steve Mathews, FHS Business Manager

FHS DAG
Greg Belisle, School Board Rep
Leigh Brown, SPED Representative
Jeff Hammond, Neighbor
& Local Business Rep
Joyce Gago, Community Rep
Roger Kirchner, PTSA
Pam Knuth, FHS Alumni President
Heidi Leineweber, Teacher Rep
Dana Vinger, Teacher Rep
Lisa Zuniga, Parent Rep
Amber McGill, SUN School Rep
Joyce Gago – Community Rep
Jeff Hammond – Neighbor/Local Bus Rep.
Maria Carlsen, Student Rep

PPS Admin
Carole Smith, Superintendent
CJ Sylvester, Director of Office of School Modernization
Jim Owens, Facilities Manager, Office of School Modernization
Patrick Facilities, Office of School Modernization
Rolando Aquilizan, Office of School Modernization
Jenn Sohm, Office of School Modernization
Kimm Fox-Middleton, Communications and Public Relations
David Mayne, Communications and Public Relations
Tom Peterson, Bond Accountability Committee
Kevin Spellman, Bond Accountability Committee

Portland Public Schools Board
Bobbie Regan
Steve Buel
Pam
Greg Belisle
Matt Morton
Ruth Adkins
Tom Koehler

Community Group:
Donna Cohen, St Johns, MEd Voc. Ed. Admin., former Technology Educator
Joe Purkey, St Johns, Principal at Convergence Architecture, RHS Campus Improv. Comm., PPS Parent
Mike Verbout, St Johns, Retired Principal, Roosevelt Alumni Assn., Our Portland, Our Schools
Paul Anthony, MBA, Our Portland, Our Schools PPS Parent, Humbolt Neighborhood
Dennis Phillips, Retired Mechanical Engineer, PPS Parent, Grant Neighborhood
Tom Karwaki, MBA, MA, Urban Affairs, Chair, University Park Neighborhood Association
David Crandall, Board Member and Education Specialist, Piedmont Neighborhood Association
Currently Franklin has more students than Roosevelt, partly because many students in the Roosevelt area decide to go to other schools in the district that are better. Roosevelt’s graduation rate is very low—lowest in the district for a full-size high school. The goal of the district—and of the remodel—is to make Roosevelt desirable to its own community, which is growing faster than the Franklin community. [With a poor STEM program this becomes somewhat less likely] Ultimately—and, most definitely long before the life of the remodel is over—the population at Roosevelt will balance out to equalize with Franklin. All High Schools in Portland are planned for a capacity of 1,700 students. A STEM workspace is not the type of facility that can be easily changed so without a change now the student body will have a substandard facility for decades to come.

<table>
<thead>
<tr>
<th></th>
<th>Hispanic</th>
<th>African-American</th>
<th>White Only</th>
<th>Other or Multiple Race</th>
<th>Total Enrollment</th>
<th>Projected Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roosevelt HS</td>
<td>35%</td>
<td>21%</td>
<td>30%</td>
<td>14%</td>
<td>914</td>
<td>1,700</td>
</tr>
<tr>
<td>Franklin HS</td>
<td>17%</td>
<td>6%</td>
<td>51%</td>
<td>26%</td>
<td>1,460</td>
<td>1,700</td>
</tr>
</tbody>
</table>

Attachment 2013 PPS_Enrollment
RHS DAG #1 June 10 2013 [14 p] DAG notes acknowledge that representation is not sufficient: "Known that all stakeholders may not currently be at the table, DAG members encouraged to evaluate current group make up and share recommendations for expansion and/or outreach."

Also commented on was the need for outreach "specifically to families with high school students who intentionally do not send their students to RHS." [Roosevelt’s reputation has been so poor, many families send their children to other high schools. Bringing students back to Roosevelt is a hope with the remodel.]

FHS DAG #1 June 13 2013 [14 p] DAG is described as "representative of stakeholder groups”, although a concern was expressed that there may be a lack of diversity.

The Educational Specifications for “comprehensive high schools” are mentioned. The primary architectural firm for the Franklin HS remodel—DOWA/IBI—was involved in the development of the Educational Specifications.

A document “Full Modernization Scope”, covering the categories of changes that can be expected with the remodel process was provided.

Note: Franklin HS has an active PTA [RHS had none then] and the Head regularly spreads the word about what is going on and encourages people to participate in the remodel process.

The Roosevelt Remodel Team acknowledges that their DAG is not fully representative in terms of stakeholder groups. This issue will continue to be commented upon from now until the very end of the RHS remodel planning process. Community “diversity” is a concern of both groups.

At this first meeting of the DAG, the Portland Public Schools Educational Specifications are referenced by the Franklin Remodel Team. This is important, as those Specs outline what are considered STEM subjects.

It should be noted that during much of the design process, the Roosevelt Principal, Charlene Williams, was heavily involved in contentious contract negotiations between the teachers’ union and the school district. She was thus less available to work on the remodel process.
RHS DAG #2 July 11, 2013 [15 p]
ROOSEVELT HAD NO PEOPLE FROM AN ARCHITECTURE FIRM AT THE MEETING. Most of the focus of the meeting continued with process issues: outreach, scheduling, etc. with a repeat presentation of slides from June.

End of August, 2013 - Roosevelt had not yet involved an architectural firm and DAG discussions were considerably less robust than those at Franklin.

Franklin had TWO architectural firms actively involved and had provided DAG members with information on best practices at other schools.

The primary Franklin architectural firm had been working with PPS for over a year as part of the development team for the Educational Specifications for Comprehensive High Schools. This is important, as those specs outline what are considered STEM subjects.

RHS DAG #3 Aug 22, 2013, [37 p] STILL NO ARCHITECTURAL REPRESENTATION FOR RHS.
The Educational Specifications are mentioned briefly at this meeting. There was a preview of the Seattle/Tacoma tour.

FHS DAG #3 Aug 12, 2013 [35 p] FIVE PEOPLE FROM TWO ARCHITECTURE FIRMS attended - from DOWA and SERA.

A “virtual tour” of slides of “21st Century” new school facilities was presented. An extensive discussion around curriculum occurred.

FHS DAG #4 Aug 19, 2013 [34 p] FIVE PEOPLE FROM TWO ARCHITECTURE FIRMS ATTENDED. A values and visioning exercise was conducted. There was a review of the Seattle/Tacoma tour.

On August 15th DAG members from both RHS and FHS went on a “Seattle and Tacoma Tour of Historic High School Renovations” tour. A slide show created by the Franklin architects about these schools was also shown to members of both DAGs during this bus tour.

For RHS the first instance of the term “STEM” was from a community member at the Sept Community Design Workshop.

For FHS the first instance of the term “STEM” came up in the July, 2013 Franklin DAG Meeting.
September 2013 DAG

RHS DAG #4 Sept 4 2013 [11]
Finally, an architect is present for Roosevelt and discussed themes and goals for the remodel which the RHS Project Manager describes: “Michelle mentioned that the themes being discussed are building upon previous work from the district and the Long Range Facilities Group.” [One might wonder where is reflected input on themes from the Design Advisory Group?]

FHS DAG #5 Sept 11 2013 [65]
Comprehensive overview of historical and current school features. Discussion of issues of the site. 65 page presentation.

The planning processes for the two schools reflect disparities.
The architects working with Franklin were involved with the process from the 1st DAG meeting. In addition, these architects had specialized knowledge of the PPS Educational Specifications, which they helped to develop. These Ed Specs hold critical information for STEM planning and are discussed early on with the Franklin Remodel Team and DAG.

Notice the numbers in brackets next to the section Titles, e.g. [11] They represent the amount of documentation, in pages/slides available online for these activities. The difference in quantity and quality of knowledge and information provided by the Remodel Teams is reflected in the quantity and quality of online documentation provided.

RHS DAG #5 Sept 19 2013 [4] “The DAG was split into 3 groups for a scenario planning design “charettes” [small group discussions].

Attachment: 2013Sept4_RHS_DAG; 2013Sept19_RHS_DAG
Attachment: 2013Sept11_FHS_DAG
RHS Schematic Design Workshop [3 p]
Bassetti, the architects for the remodel, were introduced. Workshop participants broke into three discussion groups: Site, Building and Classroom.

STEM has not yet been mentioned by the RHS Remodel Team, however, a community member brought it up in the workshop.

FHS Workshop presentation [60 p]
Focus on: visioning, historic design, a graphical inventory of current floor plans, and pictures of various FHS building elements followed by pictures representing what “21st Century” school facilities look like. 3 slides were aerial views of the Franklin campus and focused on e.g. patterns of circulation, sun/wind.

The last slide charted the main FHS program areas with approximate square footage. Note that Performing Arts are not considered as STEM, in line with the Portland Public Schools Educational Specifications [and in line with what the acronym stands for].

Into the 4th month of remodel planning, RHS finally brings in an architect.

FHS Remodel Team, with two architectural firms having been on board since June, provides a substantive Community Workshop. STEM is included.

### Core Classrooms A – English / Health
<table>
<thead>
<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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<tbody>
<tr>
<td></td>
<td>16,500</td>
<td>21,500</td>
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### Core Classrooms B – Social Stud / World Lang
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<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>17,500</td>
<td>22,500</td>
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### STEM – Science & Math
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<th>RHS STEM</th>
<th>FHS</th>
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<tr>
<td></td>
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### STEM – CTE
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<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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<tr>
<td></td>
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<td>9,000</td>
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### Fine & Performing Arts
<table>
<thead>
<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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<tbody>
<tr>
<td></td>
<td>34,000</td>
<td>44,000</td>
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### Athletics – Locker Rooms and Support
<table>
<thead>
<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>12,000</td>
<td>16,000</td>
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### Athletics – Gyms and Athletic Rooms
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<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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<tbody>
<tr>
<td></td>
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### Administration & Counseling
<table>
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<tr>
<td></td>
<td>11,000</td>
<td>14,000</td>
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### Media Center / Library
<table>
<thead>
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<tr>
<td></td>
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<td>15,000</td>
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### Student Center / Commons
<table>
<thead>
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<tr>
<td></td>
<td>17,000</td>
<td>23,000</td>
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### Partners / Wrap-Around Services
<table>
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<tr>
<th></th>
<th>RHS STEM</th>
<th>FHS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>7,500</td>
<td>9,000</td>
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</table>

Presentation of Programs at FHS Community Design Workshop Sept 21, 2013
RHS DAG #6 Oct 3, 2013 [7 p]

4 “Schemes” are presented for the remodel. None of the schemes mentions STEM.
Washed diagonally across each slide of the schemes are the words “Not for publication”.

This is where the Roosevelt Remodel went off-track with STEM - project-based Science, Technology, Engineering, Math. [Actually, it appears it was never on a track, since hasn’t been mentioned by the Remodel Team.]

A “Maker Room” - wood / metal shop / “scene shop” is joined—conceptually and physically— to Performing Arts. Performing Arts are not STEM. The Roosevelt Remodel Team is making decisions that critically affect STEM - but not discussing STEM, have no one with expertise involved, and, in fact, don’t even know they are leaving it out of the discussion!

Franklin Remodel Team and DAG is discussing and reviewing detailed and accurate STEM information, as well as utilizing the STEM subject outline from the PPS Educational Specifications. FHS is on target.

DAG comment:
“A wood shop could double up with the Performing Arts scene shop. A ‘Maker Room’ discussed: a flex space with reduced metal shop, reduced wood shop, ... a flex space."

Instead of talking about STEM, the RHS Remodel Team is talking about a woodshop / metalshop—divorcing wood/metals manufacturing technologies from their appropriate place as integral parts of STEM. STEM is being effectively stripped of much of the equipment needed for project-based learning.

FHS DAG #6 Oct 2, 2013 [35 p]

5 “Schemes” are presented for the remodel.
ALL schemes implement STEM/CTE (Career Technical Education).

STEM Program Review and Prioritization:
Karina [Architect] provided a visual tour of current STEM & Career Technical Education (CTE) trends from recently completed High School projects, diagrams of possible STEM arrangements for Franklin and the list of subjects which fall under STEM.

DAG comment:
“The consolidation of STEM program was viewed as important. The group indicated that there was a preference for the STEM/ CTE building to be located adjacent to the existing science and math classrooms for collaboration purposes.”
RHS DAG#6 Oct 3, 2013 (cont.)
Why is STEM not part of the RHS discussion?

1. There is no one involved with a Technology/Engineering Educator background — an educator who knows about the tools, equipment and space needs of a STEM project-based learning environment. “TE” represents fully half of what STEM is.

2. The Remodel Team did not appear to even recognize the lack of, and need for, an educator knowledgeable of the type of workspaces STEM required.

3. Neither the Roosevelt Remodel Team nor DAG is familiar with the STEM guidelines in the PPS Educational Specifications, which list subjects which constitute STEM.

4. RHS Theatre Dept is highly regarded, and there is an advocate for this on the DAG—the Theatre teacher. Yet, it is the Theatre teacher who advocated for STEM, too. She supported a small “Scene Shop”, so that there can be a fully-equipped STEM program. But, Roosevelt ignored even her suggestion

Franklin’s Remodel Team is unaware of STEM, even failing to realize STEM knowledge was missing! Franklin’s Remodel Team based their understanding of STEM on the school district’s Ed Specs, the expertise of Tech Ed teachers at the school, and, along with that, the architects educated the team about STEM, providing slides of STEM facilities and diagrams of possible STEM configurations for Franklin. With this considerable foundation, FHS DAG members and members of the community present registered their specific STEM “Pathways” interests.

FHS DAG #6 Oct 2, 2013 (cont.)
Key themes include:
- Transparency between educational spaces [Note to OCR: This would be for safety—glass for viewing students in various parts of the STEM workspace, which have been separated, but co-located, depending on needs, e.g. to partition dusty areas.]
- Large, lab spaces are often adjacent to lecture and computer design labs for flow from instruction to design to production

Karina provided a overview of “...elements included in the comprehensive high school program…” [aka Ed Specs].

Based on the description of the proposed STEM pathways, the group voted on which ones made the most sense to include on the Franklin campus:

<table>
<thead>
<tr>
<th>Pathway</th>
<th>DAG</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering/Design/Manufacturing</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Technology and Transportation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Information Technology</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

These are, indeed, all STEM.
4 “Schemes” are presented for the remodel. **None of the schemes mentions STEM.** Every slide has the words, “Not for Publication” across it.
Co-location of learning resources are needed for any subject!

STEM is based on collaboration for problem solving, design and construction of projects.

Franklin October 3 2013 DAG

STEM | CTE – VIRTUAL TOUR

Franklin DAG
Oct 2 2013
STEM Virtual Tour

Attachment: 2013Oct2_FHS_DAG
PPS Education Specifications for STEM

STEM education is experiential, interdisciplinary, collaborative, specific facility and programmatic needs are developed with lo

<table>
<thead>
<tr>
<th>General STEM spaces - applicable to all STEM focus types depend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer lab with 3D printer</td>
</tr>
<tr>
<td>Lecture Hall *</td>
</tr>
<tr>
<td>Small group work space *</td>
</tr>
<tr>
<td>Project Display</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering &amp; Design/Construction or Manufacturing (higher ed, loc</th>
</tr>
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<tbody>
<tr>
<td>STEM Lab - woods, metal fabrication, welding</td>
</tr>
<tr>
<td>Science - AP Physics *</td>
</tr>
<tr>
<td>Math - AP Calculus *</td>
</tr>
<tr>
<td>Intro to Engineering *</td>
</tr>
<tr>
<td>Alternative energy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Automotive Services Technology or Transportation, Distribution and</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Engines Lab</td>
</tr>
<tr>
<td>Electronic Trades</td>
</tr>
<tr>
<td>Mechanic</td>
</tr>
<tr>
<td>Sustainable transportation</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Technology Studies (technology partner(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer labs *</td>
</tr>
<tr>
<td>Software engineering *</td>
</tr>
<tr>
<td>Web and digital communications lab</td>
</tr>
</tbody>
</table>

One STEM area has been left off—Health Careers. This would require another facility which is not the purview of this OCR Complaint.

Attachment: PPS_Education_Specifications_02_3_14
Roosevelt  Oct 21 Report on October 19  2013  Schematic Design Workshop

There is no documentation online from the workshop. This is a three-page report written Oct 21 about it:
Report indicates that 3 master schemes for the school were on display at the workshop. There is no indication of voting by community on the schemes, “The community walked around and took a look at the various schemes with Bassetti. [architects]”.
Voting was taken for Enhanced Electives; it appears the Remodel Team and DAG’s knowledge of STEM was limited to non-existent. Several of the subject categories near the bottom of the list belong under STEM. Were that to be considered, valid voting results would be these—in which all STEM subjects are counted as STEM [two crossover and are added to both STEM and Communications].

<table>
<thead>
<tr>
<th>RESULTS OF VOTES</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Oct 2014 Community Workshop</td>
<td></td>
</tr>
<tr>
<td>STEM SUBJECT AREAS</td>
<td>16</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>4</td>
</tr>
<tr>
<td>Communications: Writing / Publishing / Film / Video [ 2 crossover with STEM]</td>
<td>6</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>5</td>
</tr>
<tr>
<td>Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>1</td>
</tr>
<tr>
<td>Cosmetology and Fashion Design</td>
<td>0</td>
</tr>
</tbody>
</table>
“Based on the voting by community members, the preferred Enhanced Electives were Science Technology Engineering and Math (STEM) spaces, Shop Space for Wood/Metal/Welding, and Performing/Visual Arts”.

The community actually chose STEM subjects almost as often as all other choices put together! The Remodel Team’s flawed analysis was used to rive what needed to be a co-located STEM area into separate parts of the school - a “Shop” space for “Wood / Metal / Welding” [aka “Maker’s Lab”], where it could act as a “Scene Shop”, and a “STEM Lab” near Science and Math classrooms. The whole point of STEM is to apply Science and Math principles to the design and creation of *real functional items* using various technologies [information, manufacturing, construction]. You can’t design and build if learning resources are in totally different locations in the school.

In reality, the *only* function that would remain of those ostensibly planned for these spaces—STEM, Wood/Metal/Welding shop, Scene Shop, Community Workshop—was a Scene Shop. The space near the theatre will not be able to contain all equipment, storage, supplies, safety clearances, etc. needed for any other function. Neither is the STEM Lab big enough to hold all it needs. This is why—as for any unique functional space in a school, gym, theatre, etc.—expertise in those spaces and what they will contain is necessary for intelligent decision-making. That’s common sense. And, if you don’t have that expertise in-house, then you must get it elsewhere.

With no expertise in regard to STEM project-based learning environments and apparent ignorance of the school district’s own guidelines, the Remodel Team / DAG—NOT the community, made the decision to divide—and, in the process, destroy— the STEM program.
FHS Oct 26 Community Design Workshop A 93-page PowerPoint presentation covered: A review of all prior work that had been done including graphics reflecting themes, ideas, due diligence, 40 slides about “Sustainability” concerns, drawings of all the Master Plan options that had been considered. Floor plans were shown for every Master Plan option.
RHS DAG Nov 6 2 pages of comments and 4 pages of drawings of schemes, as below. “Three schemes that are **similar in layout but different in size and capacity**” are reviewed by the DAG. No schemes show STEM.

A reiteration of the misperceived tabulation of interest in Enhanced Electives is reflected in this comment: “The results showed a strong interest in traditional shop spaces, STEM programs, and Performing Arts…”

A comment from a school Board member: “Bobbie Regan had a suggestion that the Roosevelt and Franklin DAGs should have a meeting together.” This was a great idea and would have shed light on so much of this STEM issue, but the Remodel Team never took up the suggestion.

RHS DAG Nov 17 Notes for this meeting include 2 pages of comments and 3 pages of drawings of schemes, as below, and a repeat of the graphic of the board with which participants at the Oct Workshop expressed interests.

One wonders: Why are so many drawings for RHS tagged as “Not for Publication”? FHS drawings are not so tagged.

---

**LEGEND**

- General Education
- Special Education (SPED)
- Performing /Visual Arts
- Enhanced Elective
- Media Center / Library
- PE / Athletics

**STEM is not shown in any scheme and is not on the Legend.**

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Attachment: 2013Nov6_RHS_DAG; 2013Nov17_RHS_DAG
Franklin Nov 1 2013 Special Outreach to the Community

Nov 1 FHS Remodel Team published an 11-page document, A Citizen’s Guide To Proposed Franklin High School Master Plan Options. The document was emailed to the Franklin email list and included a link to an online survey for community feedback. [The Roosevelt community asked about a similar survey (in fact, offered to help). We were told one had been done. Never having been aware of this, we asked for results, but received nothing! We do not believe this was done.]

A Citizen’s Guide To Proposed Franklin High School Master Plan Options

Over the last few months the Franklin community has helped develop a series of Master Plan options for the new Franklin High. Join us by reviewing this document and then taking our online survey to provide your feedback on the selection of a site plan for Franklin. Then come to the upcoming Rebuilding Franklin Open House to review the preferred option created by the Design Team using your feedback.
Franklin DAG Nov 5 and Nov 20 2013  Responding to a Community

FHS DAG #7 Nov 5 [79 pages]  
Continued a review and discussion of the 5 schemes being considered as presented at the Oct 26th Schematic Design Workshop, along with **15 slides of comments received from the public**.

Fully informed about design options, the community is prepared to express opinions at the Open House. The Remodel Team and DAG can feel confident about design direction by the end of November.

FHS Nov 20 Community Open House [37 pages]  
Prior materials reviewed and a focus on the “preferred” Master Plan—based on all prior DAG discussions, Community Design Workshop, and Community Online Survey in response to the document, “**A Citizen’s Guide To Proposed Franklin High School Master Plan Options**.
<table>
<thead>
<tr>
<th></th>
<th>Roosevelt</th>
<th>Franklin</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHS</td>
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<td>Oct 19</td>
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<td>Oct 26 Community Workshop held</td>
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<td>Report</td>
<td>Oct 21</td>
<td>Nov 1 Community Outreach</td>
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<td></td>
<td>3 pages</td>
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<td>Nov 6</td>
<td>DAG meeting Nov 5</td>
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<tr>
<td></td>
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<td>79 pages</td>
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<tr>
<td>DAG Meeting</td>
<td>Nov 17</td>
<td>Nov 20 Open House</td>
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<td></td>
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<tr>
<td><strong>Total documentation available</strong></td>
<td><strong>= 17 pages</strong></td>
<td><strong>= 220 pages</strong></td>
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January 2014 DAGs

RHS DAG #9 Jan 16 [11 pages]
On Jan 16, The “direction of the Enhanced Electives was approved” with 10 voting members, 3 from PPS Central Admin, 5 from RHS, and 2 community members:
Kimm Fox Middleton PPS Communications
Michelle Platter PPS OSM [Office of School Modernization]
Sarah Oaks PPS OSM
Greg Neuman RHS DAG Vice Principal
Jo Lane RHS DAG Teacher
Kelsey Green RHS DAG Teacher
Jenni Villano RHS DAG Teacher
Catherine Theriault RHS DAG Teacher
Mike Verbout RHS DAG Community
Jason Starman RHS DAG Community

A community member wanted to know what is being programmed in the Enhanced Electives spaces. “Bassetti is to develop these spaces during Schematic Design and look at different options to ensure the spaces can be flexible to teach a number of different curriculum.” The question is, how much might you be restricting your potential curriculum if you don’t first establish space (and equipment) requirements to match. You can easily end up with an inadequate space [in fact, what happened].

To the Roosevelt community, specific curriculum issues are avoided.

In spite of not following the PPS Educational Specifications for STEM, in spite of not having curriculum, in spite of the community voting overwhelmingly for the learning areas of STEM, in spite of not having anyone involved—inside or outside of PPS—with a Tech Ed or STEM background who has knowledge about space or equipment requirements for a STEM project-based program or facility, the RHS Remodel Team moves ahead, responding to everyone’s interests, including PPS Administration, EXCEPT for the community’s.

FHS DAG #8 Jan 23 [38 pages]
25 pages of preliminary design drawings are shown.
At FHS that when they speak of “CTE”, they mean the STEM area.

“Maker’s Space” – large shared space for project based learning is being developed in the STEM/CTE wing.” Although there is some distinction made between the “shops” and the “Makerspace”, they are seen as essential parts of the STEM program and placed next to each other.

Attachment: 2013Jan16_RHS_DAG
Attachment: 2013Jan26_FHS_DAG
Two entirely different programs—one Arts, one STEM. At this point, there is effectively, no STEM. Neither space is big enough for any of the uses to which the RHS Remodel Team / DAG intends to put them, except for the Maker Space as a Scene Shop. No planning for equipment, sizes, safety clearances, storage, etc. has happened.

[Notice the not-so-subtle shift from “Shop Space for Wood/Metal/Welding” to “Wood and Metal Arts”!]
Enhanced Electives discussion will be pushed forward via focus groups [Note: discussion of Focus Groups to follow]. Results of these focus group discussions will be forwarded to DAG members via email as they become available.”

[This is the start of a series of claims told to the community which held out hope that our concerns would be resolved in focus groups, in future design meetings, in the next design stage, and on and on. We were constantly given the message that modifications would be possible later. Although, we were also sometimes told that the process was running out of time. Some contradictory messages but mostly hopeful. None of this proved to be true.]

Concern was expressed about the locations of the Maker’s Lab and the STEM Lab being separated. The response was: “The Maker’s Lab should be closer to the stage, as sets and deliveries are large. Scenery is typically built from 4’x12’ panels. Rentals for the theater also would come through the shop to the stage.”

In fact, the only interest for the Maker Space which has been clearly defined by the Remodel Team is that of a Scene Shop.

Whether or not the space can fulfill the other two purposes which the Remodel Team envisions—woods/metals/welding workshop, available to the community for evening use—is never addressed.

At least some DAG members were concerned about the split arrangement: “DAG members commented that better proximity of STEM to the Maker’s Lab is desirable. “ But, this advice is ignored.

Remember in the Introductory material we emphasized that STEM workspaces are called many things: STEM space, STEM Lab, Makerspace, Innovation Center……

The name isn’t important; what is, is that it be a very large area of co-located spaces for working with different technologies collaboratively — space for equipment [with safety clearances], work spaces [different for different materials], storage space, space for supplies, etc. The total square footage of the STEM Lab and Makerspace combined would have provided a median-sized STEM space. Thus, the community group advocated for the two spaces to be co-located, or the “STEM Lab” to be enlarged.

The Remodel Team originally said students could walk outside with their projects and re-enter the school when they needed to use equipment in another space [unsupervised?]. This is totally unreasonable.

The key point here is that PPS told the community group both spaces were for STEM, while planning two different programs! In fact, you can find planning diagrams with different labels on the spaces, depending on what the district wanted to project at the time. In the end, they just labeled each space with its unique name AND also called them STEM Lab 1 and STEM 2.
January 2014—(cont.)

Franklin is miles ahead in STEM planning. The basic shape [physically and conceptually] of the STEM area has been properly set. The Tech Ed teachers have been given the tools they need to refine the design—encouragement from school leadership, dimensional drawings which can be worked with [not static images], outside assistance from industry. Peter Mahr, especially, takes the lead role. He taught Tech Ed at Franklin for 25 years and now volunteers to teach there since retirement. The Tech Ed team works with the drawings, fitting in equipment, storage—all that is necessary for a successful program. They determine more space in needed—ultimately, the STEM space at Franklin totals 9,000 square feet [versus 3,500 at Roosevelt].

A core community group—with life experience and background that informs their concerns about STEM—begins a strong advocacy effort on behalf of a STEM space that is proper in design and size at Roosevelt. It is now clear to many people that Roosevelt is going in the wrong direction in regard to STEM. The community group and School Board Members question decisions around the Roosevelt STEM/CTE space—and do not get answers.

At Roosevelt when reference is made to “CTE” it usually referred to all the CTE programs—STEM, Publishing, Social Justice, etc. Franklin used CTE to refer to the STEM/Woods/Metals space, thus, when Franklin speaks of 6,000 sq ft minimum for "CTE", it means the STEM space.

Roosevelt would take the 6,000 sq ft minimum CTE figure [supposed to be minimum CTE space in the Ed Specs] and say that STEM had to fit in along with all the other programs.

One might hope that a school district could agree on important terms among all high schools.

On Jan 29 2014 Dennis Phillips, a retired Mechanical Engineer, met with Michelle Platter, Project Manager of the RHS Remodel Team. He asked for dimensioned floor plans for the CTE space: “These alternative floor plans will allow for comparisons and provide insight into which CTE programs of study can, and can't be taught in 6000 sf, 8000 sf, 10,000 sf etc. This level of detail will enable experienced CTE educators, business people, private makers-paced folks like ADX etc, and even the common folk to provide their input as to whether they think the base case is adequate “...

In an email exchange to Board Members Dennis asked about the limited space at RHS. Bobbie Regan, a PPS Board Member responded: “I've posed similar questions to our Chief Academic Officer. We should be building our schools with the expectation that there will be substantive career technical education offerings for every student. My best, Bobbie”.

Dennis also points out to that we are not planning around a curriculum; we are planning space without knowing what needs to go in. Another Board Member responds sympathetically, “Dennis - this is a question I have been asking but have not received an answer to...because the of our renewed new emphasis on CTE we honestly don't know the details.” [Exchange with Tom Koehler]
Schematic Design
SUBJECT SPECIFIC FOCUS GROUPS

Remember this? Jan 30 DAG “Enhanced Electives discussion will be pushed forward via focus groups. Results of these focus group discussions will be forwarded to DAG members via email as they become available”

We could find no information about a Subject-Specific Focus Group for STEM actually taking place. One seems to have been planned for May 19. Since the community group had a meeting taking place at Roosevelt that day, we can’t imagine not having been aware of a STEM Focus Group meeting, had one been held.

You may recall that a member of the community group specifically requested dimensional drawings with which we could work to establish space needs. These were requested at least twice. However, no response was ever received.

In January and into spring, 2014, Franklin held several CTE/STEM/Woods/Metals Focus Group meetings. A Subject Specific group composed of Tech Ed instructors at Franklin and others met several times to refine the basic plan for the Franklin STEM/Makerspace. Their input caused important changes in the Franklin design—for example, in significantly enlarging by 1/3rd the total square footage of STEM—from 6,000 to 9,000 sq ft.

These changes came about because the Tech Ed experts were able to show the space needed to accommodate the necessary equipment. In fact, final drawings for the total space included the position of all equipment. The Tech Ed team also had the support of Franklin’s Business Manager. [See next page for a drawing of the STEM space.]

From time-to-time, smaller “focused” groups composed of remodel team members and school subject specialists met to provide expertise. Franklin made good use of these sessions for CTE/STEM starting in January, with Tech Ed teachers and outside experts in Tech fields providing guidance over the course of 3+ meetings. [See some results on the next page.]

Roosevelt started Focus Groups in February, with Theatre, and held them through March. There were several planned for May [including Theatre/Performing Arts] with supposedly the last on May 19 for CTE/STEM Lab. It appears the last was never held.

[To partially make up for this deficit [certainly not a substitution], in spring, 2014, the community worked to get the RHS Remodel Team to visit existing STEM facilities to better understand what STEM was. On one trip, to OMSI, [Oregon Museum of Science and Industry, where they have a nationally recognized integrated exhibit design and construction facility (essentially, a STEM workspace)], the Associate Project Manager from the RHS Remodel Team could not have look less interested, and barely said a word the whole time.]
SUBJECT EXPERTISE VIS-À-VIS SCHEMATIC DESIGN
Layout of all equipment—making decisions based on space requirements!

Franklin High School  Spring 2014
Roosevelt High School, Schematic Plan for June 4 2014 Open House

These drawings are from just prior to approval of the remodel plan. This is as far as Roosevelt got in terms of space planning for layout, equipment, etc. for STEM Lab / Maker’s Lab.

No detailed drawings were ever created for the interior spaces.
Where Are The Experts?

From February—May 2014 the community group made many attempts to draw in experts and to communicate expert opinions we were gathering to the RHS Remodel Team and DAG. The best that could be said is that receptivity by RHS was tepid.

“Dennis showed Peter Roosevelt’s design with STEM split into two spaces in separate wings and asked for his reaction. He said: ‘they had to be nuts to propose that’. Then he started listing all the reasons to combine them into adjacent spaces from the pedagogical to the tactical including duplication of tools and equipment to ventilation, compressed air, water, etc. He noted FHS even needed ventilation for its 3-D printers which create fumes from melting plastic.” [Dec, 2014]

“If I could start with a blank slate I would create a hub type interconnected environment with a lot of windows that allow students and staff to visually experience the excitement across the variety of spaces…”
Don Domes, Hillsboro High School Technology Education Instructor- Robotics, Electronics, Architecture, Drafting - CAD/CAM/CNC/RP. Feb 24 2014

“.it is a no brainer to have them side by side with easy workflow between them ...What a game changer if science and math labs were in close proximity. Wow, STEM all is one area! Put that in the front of a school and see education change….
John Neibergall, Sherwood High School, Technology Ed / STEM Teacher March 4 2014

“The Westview [High School] Shop is about 10,000SF and there are 3 adjacent classrooms that have doors directly into the shop”
“I believe a “maker space” or shop can never be too big. …”
[For 2500 students; we were asking for 5,500-6,000 sq ft for anticipated 1700 students during the life of the facility]
Brian Gerber, Westview High School May 1 2014

“It sounds to me like you and your fellow community folks are on the right track. Key issue re facilities is first, what is the program you are trying to implement and what is the pedagogy that supports it best”
Bob Perlman, 21st Century School and District Consultant, Tucson, AZ 85719 May 5 2014

In response to a Guest Editorial in the Oregonian Newspaper about this situation.
http://www.oregonlive.com/opinion/index.ssf/2014/11/portland_high_school_stem desi.html:

As a former Vice Principal of a Project-Based Learning High School (Science Leadership Academy: a diverse public HS in Philadelphia, PA) and an educator that recently spent a year designing learning supports aimed at Post Secondary Success at Roosevelt HS in North Portland, I can say with authority that the case made out by the authors here is spot-on accurate and fair. The STEM fields are the only disciplines that can lead large numbers of students to decent paying jobs in our increasingly austere labor market. There are best practices with regard to the architecture and delivery of quality project based teaching and learning at the high school level. What has been proposed at Roosevelt falls short of the industry standard and is also inferior in this respect to what is proposed for Franklin.
Jon Amsterdam
Director, Communities Without Borders Nov 9 2014

Please read Attachments for full information about the experts, STEM field trips et al.

Attachments Experts Attachment FHS Tech Ed Planning
Comments from “Close-out” Survey at end of Workshop:

“How can we do thing better?”
“Have more meetings like today; less intro and control of meeting; more open discussion”
“Keep conversations going”

Concerned that there was only 1-2 individuals of color from the RHS community present, despite meeting being located at CJCC” [a community center in a neighborhood where there is a larger % people-of-color]

“Better outreach to community members, associations, businesses, much more engagement of teachers and students in planning, Office of Schools needs to be present, actively driving decisions. Where are they??”
“More, wider community involvement, especially students and young parents.”
“More sessions like this one.”
“Figure out why people are not coming to these meetings and take appropriate outreach steps to redress lack of engagement”

Do you feel that the Roosevelt design is headed in the right direction?
“Actually respect and support CTE by giving it the space (and storage) necessary”

“Build CTE spaces based on academic strategic plan and based on advice from CTE teachers/experts on how much space is needed.”
“No, not in relation to CTE”

“Compare this process with Franklin’s. Teachers and students.”
“I think the STEM lab needs to be highly visible both to students and the community/parents/others that need to see we are “cutting edge” and drawing students in.”

Continuing concerns about CTE[STEM].

“Issue of program not set before space is some issue.”

“CTE space community has been completely ignored and told repeatedly that 6000 sq. ft. is all we’ve got.”
“CTE needs to be larger.”

What is your favorite thing coming to Roosevelt and what is your least favorite?
“CTE / Maker Space!”
“Do put STEM and Maker Space together. They are inherently related and students will see that represented by location. Plus, right now Maker Space is in a corner of the school – many students will never see it; there must be a required component for exploratory CTE for gender equity.”

“More CTE opportunities”

Give us some homework. Is there something we should read? Someone we should talk to?

“Maybe some community spaces for CTE and how partnerships can help (ADX style); Research STEM and what will actually go in the space; need a comparative matrix (program vs. space allocation) of what Sherwood, Hillsboro, Lincoln, etc. high schools, have in comparison to Roosevelt and PPS You need to talk to teachers and look at CTE...in other school districts e.g. Sherwood to have a realistic idea of resources needed [in reference to STEM]”

Figure out how to get appropriate CTE space! Include teachers/students/community/trade partners!”

References: 2014Feb22_RHS_Schematic Design Workshop
RHS DAG #11 Feb 13 2014 [5]
A question was asked if the curriculum of the Enhanced Electives [that includes STEM/Makerspace] has been established yet.
Answer: Greg [Vice-Principal] said the spaces will be built and the curriculum for the spaces will follow.
Bobbie [Board Member] thinks a more robust conversation is needed concerning the Enhanced Electives."

RHS DAG #12 Feb 27 2014 [3]
“Who makes decisions when issues are on the table?
Answer: “Depends on the issue, but most times involves input from various stakeholders” [Vague and unhelpful; typical of the response the community has received before, when we try to pin down who really holds decision-making power, so we can

FHS DAG #9 Feb 18 2014 [23]
Karina shared a movie preview of the documentary “If You Build It” as an example of a Maker’s Space. Link to the trailer can be found here: http://www.ifyoubuilditmovie.com/

FHS March 5 2014 Career Construction Day
“More than 80 Franklin students learned about construction-related careers while participating in a lively, hands-on competition Feb. 25 hosted by the PPS bond’s Franklin High School Modernization Team....PPS Remodel Project Director Debbie Pearson spoke about her role as an owner’s representative and architect Karina Ruiz, from DOWA-IBI Group, described an architect’s career path.

...Internship opportunities offered
Students at the event were invited to apply for internships with businesses working on the Franklin Bond project.

Roosevelt continues to plan STEM space without any curriculum and no idea of equipment needed. “Form follows function” - especially with programs requiring spaces which contain specialized equipment.

When shown a teaching certificate with a Technology Education endorsement the Principal of Roosevelt had never seen such an endorsement and was unaware that there is a teaching discipline of Technology / Technology-Engineering Education.

Franklin already had Woodshop / Metalshop programs, as well as having a 3d printer, CAD computer area, et al. Since use of these tools is part of a STEM program those teachers knew the types of equipment and, most importantly, the space that would be needed. Combined with a school administration that is supportive of Tech Ed, the Franklin STEM program was on a good track.
FHS Mar 8 Community Design Workshop [53]
Review of designs, programs, square footage associated with the programs, and results of poll of subject interests. It is a bit unclear to us when this poll was done, but it was clearly done at a much later phase of the Franklin remodel planning process than Roosevelt did. Thus, it would have been when the community was more generally informed about STEM. Notice that, as they had done at least two times prior, the list of Enhanced Electives for STEM follows the PPS Ed Specs, unlike Roosevelt—which never used an accurate list of these STEM subjects, for anything.

**Career Preparedness / CTE**
**Dual Credit Programs**

<table>
<thead>
<tr>
<th>Woods</th>
<th>Metals</th>
<th>Maker Space</th>
<th>8,900 SF</th>
</tr>
</thead>
</table>

**Enhanced Electives / CTE**

**STEM Spaces**
- Computer Lab with 3D printer
- Lecture Hall
- Small Group Work Space
- Project Display
- Robotics Lab

**Engineering Design & Construction**
- STEM Lab - Woods & Metals
- AP Physics Lab
- AP Calculus
- Architecture & Engineering Lab

**Health Science & Biomedical**
- Sports Medicine
- Health
- Anatomy
- AP Physiology
- AP Chemistry Lab
- STEM Lab - Biotechnology

**Information Technology**
- Computer Labs
- Software Engineering Lab
- Web & Digital Media Lab | Journalism

Attachment: 2014March8_FHS_Community Design Workshop
Roosevelt March 15 2014 Schematic Design Workshop  Notes

"Career related learning (CRL)/CTE spaces were chosen through community input as well as administration desires. At previous community outreach meetings potential programs were voted on and informed the current proposed programs."...

This is simply not true [See votes below]. The community mostly chose STEM subjects. The Re-model Team didn’t know what STEM was and couldn’t put the results together conceptually as STEM. Thus, there is no viable STEM space.

“Locations of Maker’s Lab/STEM seem artificially separated. Answer: The design team heard different committee input on layouts for location of Maker’s Lab/STEM. This is what drives the current locations. Each space is serving a different CRL/CTE program.”...

Vote results Oct 2014 Community Workshop

<table>
<thead>
<tr>
<th>STEM</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sciences</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Communications: Writing / Publishing / Film / Video [crossover with STEM]</td>
<td>6</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>4</td>
</tr>
<tr>
<td>Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>1</td>
</tr>
<tr>
<td>Cosmetology and Fashion Design</td>
<td>0</td>
</tr>
</tbody>
</table>

“There were letters from Hillsboro/Sherwood instructors that offered advice about CTE. What happened with those?” Answer: “Those letters are being reviewed to look at design layout.”

Community never received feedback.

Comment: “There is a concern that community outreach has been poor through St John’s.” Comment: “Concerned about the process. What does community have input on?”

Still concern about community outreach and input!
Roosevelt March 15 2014 Schematic Design Workshop Transcript

It feels to me that the building plans are going to drive the curriculum and that feels backwards. We need to build a building that will last for generations. My fear is that we are going to build a building that will shortchange the Roosevelt community again and that it will constrain the opportunities that will be available for kids 30 years from now.

Joe Purkey Roosevelt Campus Improvement committee under the alumni association
We’ve heard a lot today about issues surrounding ownership of the design. Those issues can be halfway addressed with engagement and input sessions. But until there is a change in the decision making process where the stakeholders have ownership over the design decisions the ownership won’t change in the design. The stakeholders will still have to compromise without being a part of that process. The decisions have to come out of the Districts hands and into the community’s hands.

Board Member Bobbie Regan
It seems like there are three areas still of concern to people classrooms vs. workspaces, the auxiliary gym and the CTE spaces. On the CTE space I still have concerns about the 2700 sq. ft. maker space. We have a 67% graduation rate at PPS for the most part we are leaving boys behind and that’s a national trend. If we really want to engage students certainly theater and athletics are ways to really engage students but when I see the graph on how we are dividing up the spaces and we get a tiny sliver for Career Technical Education and even a lesser sliver for Maker Space where kids can do hands on learning I have huge extreme concerns with that.

Citizen (earlier self identified as Franklin Teacher and parent)
With all due respect Board Member Reagan if a community has continued to be ignored and students have continued to be rejected and to not see themselves as stakeholders or having value or have not been valued by the larger community you can’t expect that in the 30 days we have left that you are going to catch the light and be behind that 100%. Were talking about what we need to do and what we need to go back to. How about old school relationships? How about building rapport. And if this is a microcosm of that, we are in trouble.

Dennis Phillips Retired Bonneville Power civil engineer
Input is one thing my concern is that the input disappears behind closed doors at PPS. I want to be involved in the trade-off decisions. We want involvement in decision-making not putting dots on a board. I want to be involved. I want to work with the architects. I was told I have to go through PPS and Joe was told the same thing.

John Iscaes
One reason we have Bassetti Architects here today is for people to be able to talk to them. And I think if anyone wants to directly talk to them I don’t think there’s a problem. I’m happy to facilitate that as

Attachment: 2014March15_RHS_Community Design Workshop_Transcript
Comparing Schematic Designs

<table>
<thead>
<tr>
<th>Roosevelt</th>
<th>Franklin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEM</strong></td>
<td><strong>ALL FHS STEM</strong></td>
</tr>
<tr>
<td>17,959 SF</td>
<td>8,900 SF</td>
</tr>
<tr>
<td>STEM /Maker Lab 1</td>
<td>(2) Shops</td>
</tr>
<tr>
<td>3,359 SF</td>
<td>(2) Lecture / Lab Classrooms</td>
</tr>
<tr>
<td>Small Group Learning (1)</td>
<td>Maker Space</td>
</tr>
<tr>
<td>500 SF</td>
<td>3D Printer / CNC</td>
</tr>
<tr>
<td>Science Classrooms (6)</td>
<td>Support Space</td>
</tr>
<tr>
<td>3,700 SF</td>
<td></td>
</tr>
<tr>
<td>Math Classrooms (6)</td>
<td></td>
</tr>
<tr>
<td>5,100 SF</td>
<td></td>
</tr>
<tr>
<td><strong>Arts &amp; Entertainment</strong></td>
<td></td>
</tr>
<tr>
<td>6,850 SF</td>
<td></td>
</tr>
<tr>
<td>STEM /Maker Lab 2</td>
<td></td>
</tr>
<tr>
<td>2,000 SF</td>
<td></td>
</tr>
<tr>
<td>Small Group Learning (2)</td>
<td></td>
</tr>
<tr>
<td>1,000 SF</td>
<td></td>
</tr>
<tr>
<td>Outdoor Work Area</td>
<td></td>
</tr>
<tr>
<td>800 SF</td>
<td></td>
</tr>
<tr>
<td>Black Box Theater</td>
<td></td>
</tr>
<tr>
<td>1,600 SF</td>
<td></td>
</tr>
<tr>
<td>3D Arts Classroom</td>
<td></td>
</tr>
<tr>
<td>1,450 SF</td>
<td></td>
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</tbody>
</table>

**RHS Arts /Entertainment / Recreation**

STEM SPACE at Roosevelt approx. 3,400 SF
STEM SPACE at Franklin approx. 8,900 SF

“The Makers Lab was desired by community and has been developed to support the Administration’s desire to have a future CTE program in Arts, Entertainment and Recreation.”

David Williams, PPS Government Relations Director [email to State Senator Chip Shields April, 2014]
To fully grasp the ineptitude in determining spatial requirements for a STEM facility—apart from the fact that the Roosevelt Re-model Team had no list of what equipment and other space needs would have to be met—you are referred to these Attachments. Starting with a quote for size estimate sent to Senator Chip Shields in APRIL of 2014:

“. . . the plan is to fully outfit the STEM Lab to support a STEM program. The lab will be 2000 s.f.”
David Williams PPS Government Relations Director in email to Senator Chip Shields April 2014

It was the community that brought information to the district, from our own research, from experts we had spoken with, from PPS’s own Ed Specs. From a 300-page study for high schools: “Conclusions drawn include recommended unified technology/engineering facility spaces with a range from 4,000 sq ft to 6,500 sq ft with a median of 5,250 sq ft.” And, since the Portland School District is about 110th in size in the nation, our facilities should be above the median.

Ed Specs show—just for these STEM elements: Computer lab with 3D printer 1,350 sq ft; STEM Lab -woods, metal fabrication, welding 4,500 sq ft. Here is the full spectrum:

| Computer lab with 3D printer | 0 | 1 | 1,350 |
| Lecture Hall * | 0 | 1 | 2,000 |
| Small group work space * | 0 | 4 | 350 |
| Project Display | 0 | 1 | 500 |

<table>
<thead>
<tr>
<th>Engineering &amp; Design/Construction or Manufacturing (higher ed, local industry partner(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Lab -woods, metal fabrication, welding</td>
</tr>
<tr>
<td>Science - AP Physics *</td>
</tr>
<tr>
<td>Math - AP Calculus *</td>
</tr>
<tr>
<td>Intro to Engineering *</td>
</tr>
<tr>
<td>Alternative energy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Automotive Services Technology or Transportation, Distribution and Logistics (higher ed., industry partnere(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Engine Lab</td>
</tr>
<tr>
<td>Electronic Trades</td>
</tr>
<tr>
<td>Mechanic</td>
</tr>
<tr>
<td>Sustainable transportation</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Technology Studies (technology partner(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer labs *</td>
</tr>
<tr>
<td>Software engineering *</td>
</tr>
<tr>
<td>Web and digital communications lab</td>
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</tbody>
</table>

“Jon [Isaacs, PPS Chief of Communication and Public Affairs] thinks it just isn’t the case that the wood and metal shops need to be near the STEM space and wasn’t receptive to the idea that PPS needs to invite someone from outside PPS with CTE/STEM teaching expertise to join this advisory group.” 4/2014

Attachments related to spatial requirements for STEM:
PPS-TESTIMONY- Cohen-PPS Board Testimony 2014 Aug 4
PPS Educational Specifications [page 37]

Attachment S10 2014 Experts
Attachment– High School Engineering Design Facility
Attachment Communications from PPS to Senator Chip Shields
Franklin  May 6  2014 Neighborhood Meeting with Architects

There was not one question, complaint or comment related to community representation, community input, or overall concerns with major aspects of the design.

Franklin is DONE with their planning. The process for STEM was excellent.

The Roosevelt STEM planning process is the reverse.
RHS DAG #13 May 1 2014  Note: all are quotes from minutes
RHS: During the master planning process, a building capacity conversation ran parallel. This expanded Roosevelt to a 1350 capacity / 1700 core space size.

RHS: STEM lab still adjacent to Science classrooms for curriculum integration; Maker’s shop still adjacent to Theater space for dual use for set production.

Audience members noted the need to listen to community and use professionals with expertise to inform the design of the career related learning spaces in the same manner than spaces like the theater and athletics were developed in conversation with RHS staff.

Response from RHS: CTE groups comprised of RHS teachers and other district CTE professionals will be convening to help develop the spaces through the next phase of design (Design Development) This didn’t happen for STEM.

An audience member asked if there is currently any CTE certified staff members at RHS. Charlene responded there is not.

A few audience members brought up concern about separation of Maker’s Lab and STEM Lab.

A DAG member commented on the need for a larger community voice, and felt that there wasn’t enough involvement from the community CTE advocates present.

An audience member expressed that she did not feel that the design reflected best practices in education and that best practice would have the Maker’s Space and STEM lab together to better support STEM curriculum.

“...use professionals with expertise to inform the design of the career related learning spaces in the same manner than spaces like the theater and athletics were developed in conversation with RHS staff.”

The DAG had a Performing Arts advocate and an Athletics advocate. Over time, both subject areas expanded their original space into areas that had either been planned for STEM originally, or had been suggested as an option for expanding STEM to a proper size—the latter by the community group!

Franklin, on the other hand, saw its STEM area grow by 1/3rd because of the work done by their Tech Ed experts.
Possibly earlier, but no later than at the DAG meeting in May, Donna Cohen informed PPS about the International Technology and Engineering Educators Association [ITEEA] and that in March 2015, they would hold their national convention. The theme was “BUILDING TECHNOLOGY AND ENGINEERING STEM PARTNERSHIPS”.

Given by this time, PPS had still not included any Tech Ed expertise into the discussion, and the clear lack of understanding about STEM—especially the “TE” of STEM— in the district, one might assume that PPS would recognize a great opportunity.

As of August 15, when the community group last met with Roosevelt/PPS staff, there was no indication of any movement in regard to following up on this information. Fully half of what STEM is—the Technology and Engineering parts—are simply ignored.

On August 7, Ms Cohen sent information to three Board members, who passed it along to others:
From: Donna Cohen  Sent: Thursday, August 07, 2014 12:22 PM
To: 'Tom Koehler'; bobbieregan@comcast.net; sbuel@comcast.net  Cc: 'Joe Purkey'; et al 'Filip Hristic'; 'Charlene Williams'  Subject: STEM Tech Ed and CTE Conferences
I hope district people - teachers - are going to relevant conferences, too.
Especially this one:
International Technology and Engineering Educators Assn.
Theme: Building Technology and Engineering STEM Partnerships [URL added]
In addition, this is a good, free STEM newsletter that I subscribe to. [URL added]
Donna
RE: May 8 2014 MEETING with RHS Remodel Team, Superintendent and Community Group
Including pre– email commentary

RHS May 7 2014 Community Group Email
Dear Superintendent Smith:
Thanks again for agreeing to meet with us this coming Thursday. We wanted to make sure we were all on the same page before going in to the meeting.

Purpose of the Meeting:
Identify all outstanding design issues (see attached list), and ensure that options have been or will be developed for any outstanding issues. Since we originally developed the list, a couple of additional items have emerged from our discussions: choir practice space, and the location of CAD vis–à–vis the Makerspace. Our understanding is that, at this point in the process, money is no longer a major limitation to generating options. We further understand that Loren McConachie [architect] is already working on the list, including getting cost estimates for different options.

Desired Outcomes:
We hope to leave the meeting with a clear commitment around next steps:

1. A date certain – preferably by May 24 – for distribution of 2-3 design options that represent significant changes from the existing plans in response to the issues we and others have identified.

Documents Requested for the May 8 meeting:
In order to make best use of our limited time, we ask that the following documents be made available: Floor plans with exact square footage noted, in a font that is easily read, particularly for career-related space. Also helpful would be the designated use of the space (e.g. classroom, shared space, storage). We understand via Michelle that these were to be posted on the web Monday ...” [THIS WAS NOT DONE.]

MINUTES FROM THE MEETING MAY 8
“Lorne said we will be testing the size in the next phase of the design process.”

Bobbie says [Board Member] that we don’t have an internal CTE expert as part of this process.

The community group is clear as to concerns. We make a request for documents—which is ignored. We are told again that sizes of spaces can be changed in the next phase, during the summer—not only does this not happen, the next phase never happens.

Community group provides alternative design proposals for STEM to all present.

Board Member, Bobbie Regan, continues to be concerned with same issues as community.

Michele [Project Manager] say that we have been at a disadvantage because we don’t have existing CTE programs—acknowledging the lack of expertise we have been working under!

Donna Cohen gave a talk about STEM. Dennis did a presentation. And handed out the Roosevelt & Franklin designs.

Bobbie [Board Member]. She is concerned about square feet for CTE still

Michele said that “we have been at a disadvantage because we don’t have existing CTE programs”.

Attachment S3 2014 April-May May 8 meeting with Superintendent
RHS May 8 2014 Meeting—Post emails among community members [all quotes]

I do want to clarify one thing that I think was a significant understanding. Lorne and Michele explained to us that schematic design is just the first step of completing the design. The next stage is Design Development where teams are being convened to align the space use with the schematic design. The work of these teams could result in some design shifts to align program with space design. These teams will include internal and external experts, and they are being built by Charlene and the RHS staff. [DIDN’T HAPPEN. ONE meeting was held over the summer with one community member, Charlene and the Science Lead. It was one hour and superficial, with no discussion of space requirements whatsoever.]

Negative:
1. There were no options given, still the same basic design.
2. No answer to why that much maker space needs to be next to the theater.
3. No answer to what type of CTE space is appropriate for an "entertainment and media" CTE program that Charlene mentioned the school wanting to have (This only concerns the space near the theater).
4. I worry that PPS did not take the right message away from the meeting. They seemed too happy with what has gone on.

From email Joe Purkey:
All the times they agreed with a critique, comment, or suggestion, it was said that level of design would be figured out in the next phase, called Design Development. —Joe

The promise of even holding let alone using Design Development meetings for space changes, was as substantial as vapor.

The “entertainment and media program” the Remodel Team had slipped into the STEM space under false pretenses [well, at least they were honest about it in emails to our State Senator] was as limited in planning as everything else, save the Scene Shop.

May 9 Email from Josh Curtis OPOS [Our Portland, Our Schools]:
Positives:
1. There was some movement toward having better location of STEM & CTE, mainly by allowing for the possibility of flexibility in surrounding classrooms.
2. Bassetti has designs (or at least thought about designs) where the STEM and CTE are adjacent.
May 19 2014 DEBRIEF MEETING for May 8 meeting with RHS Remodel Team, Superintendent and Community Group  [includes post-email commentary]

POST May 19 meeting emails [all quotes]

May 20: At yesterday's meeting did you get a chance to show or at least discuss with Charlene the two new design alternatives we'd like Bassetti & PPS to look at? - Dennis

We discussed those, and Mike, Joe, and I had discussed them with her last week. - Paul

Charlene seems open to them – although it’s quite obvious to me that she doesn’t really understand what you get with CTE and what CTE really needs. Jon was saying that we would still be able to – for instance – move 3000 sf of space in the programming design phase.

... I think Jon knows we're not fine. The next meeting will be spent clearing up this mess. The clock ticks on. They wear you down this way. You say one thing and it comes back different, if at all. Always in the dark, always waiting and wondering, until time and/or patience runs out and we can no longer persevere. He's good at what he does:-)

Honestly, I'm at a loss as to what we - as a group - are doing at this point, besides being dragged along a PPS road.” - Donna

The Remodel Team had mentioned experts for months. By the time any possibility of experts we had suggested coming in was agreed to [aka found money], they were unavailable [It was end of the school year and they had other projects. As to Charlene talking to Bassetti—nothing happened.

My hope is that we bring in some outside professionals, they start talking about the space, and one way or another ... we get a big enough STEM/CTE space to work with. –Paul

As I understand it, PPS (Jon) is saying no flexibility will be lost in moving on to the next stage of the project: The Design Development Stage.

We want them to sit down with us and our experts and with them and their experts to spend three hours evaluating the feasibility and cost of alternative designs that would allow Roosevelt's STEM facilities to be located adjacent to one another and do so at no additional cost. We have requested this meeting several times and in public forums. PPS is clearly unwilling to meet with us for this purpose... again, we did not get any commitment to evaluate STEM space directly with Bassetti.” - Paul

Email from Jon Isaacs  05/23/2014 8:32 AM:

OPOS will work with Charlene to bring in agreed upon external experts on to design development teams.

Charlene is speaking with Lorne at Bassetti to find out what the issues were, if any, with the option of moving the gym to create more space next to the STEM lab. She will let us know what she finds out.

Jon made the statement that there are very few options left for design changes and the best place for any to emerge is design development.

Jon Isaacs, Chief of Communications & Public Affairs, Portland Public Schools, O - 503-916-3054 C – 503-757-5721  jisaacs@pps.net
PRE-meeting The community group agreed to meet with the Principal and selected others. Since it had been insisted that major schematic changes could occur during the next phase, Design Development, we wanted to set a direction that would insure proper representation—including proper expertise—during that stage.

We sent an email to the Principal before the meeting outlining goals [See Attachment]. In addition we provided a detailed background of where the community group felt the process was to that point, the stakeholder groups we felt were still not being included [reminiscent of what we had been looking for since the remodel planning began], some background on the nature of STEM—as it had become abundantly clear that the RHS Remodel Team lacked understanding, basic requirements for a STEM workspace, teaching requirements for the “TE” part of STEM, information, etc. and quotes from STEM experts we had been in contact with over the months who supported what we saw as the correct approach to the STEM workspace.

We received an upset response from the Principal May 28 which was very telling, in terms of a commitment she said she had made: “The content of this letter really concerns me. It completely ignores the fact that we agreed that STEM and Maker Spaces WILL be connected. It ignores my requests for you to provide me with names of the experts”. She also wrote: “Bassetti will not be able to join us for the meeting but I was able to make progress on the optional drawing conversation.”

POST May 29 meeting—one day after our meeting with Charlene

From: Jim Owens Date: May 30, 2014 [Owens is PPS Facilities Head]
To: Tom Koehler Subject: RE: Roosevelt

May 29 Charlene, Principal, writes “we agreed that STEM and Maker Spaces WILL be connected”.

May 30, Jim Owens, PPS Facilities Head writes “The project team has split the STEM/Maker spaces into two programs....called lab1 and lab2.”

June 2, Dennis talks with Jon Isaacs at the PPS Board meeting. Jon says, “design issues have been kicked down to her [Charlene] to resolve - period...I asked Jon if Charlene has authority to engage Bassetti to evaluate our design alternatives and he said yes.”

Excellent examples of the double-speak community was subjected to and commitments not fulfilled.

“Tom, ...The project team has split the STEM/Maker spaces into two programs....called lab1 and lab2.”

There was a PPS Board meeting which Donna and Dennis attended on June 2. On Mon, Jun 2, 2014, Dennis Phillips wrote to our community group: “While Donna engaged the reporter I took the opportunity to speak with Jon Isaacs. I explained to Jon that in our meeting with Charlene she had said that Bassetti was working on designs to provide adjacency and that we would get adjacency - but that according to the latest Jim Owens comments there were still two labs, lab 1 and lab 2? So we didn’t know what to believe. He said believe Charlene.”
THE RHS REMODEL TEAM LIKED THE COMMUNITY GROUP’S IDEA TO MOVE THE GYM TO GAIN SPACE. THEY USED THE COMMUNITY GROUP’S IDEA.

RHS DAG #14 June 4 2014

“Major design developments: Site Plan

-New gym building has been expanded westward to eliminate basement and incorporate a 3-court gym scheme.”

REMEMBER THIS EMAIL?

Email from Jon Isaacs May 23 2014

“Charlene is speaking with Lorne at Bassetti to find out what the issues were, if any, with the option of moving the gym to create more space next to the STEM lab. She will let us know what she finds out.

Jon made the statement that there are very few options left for design changes and the best place for any to emerge is design development.”

Jon Isaacs, Chief of Communications & Public Affairs, Portland Public Schools, O - 503-916-3054 C – 503-757-5721 jisaacs@pps.net
On June 16, the RHS Remodel Team asked the PPS Board for approval of the Remodel Plan. Excerpts from a video of the session: Superintendent – “both projects went through a different process”; Michelle [RHS Project Manager] “STEM Makers Lab II is directly associated with the performing and visual arts...it is not contiguous space; it’s two different programs...” - straightforward acknowledgement that “Makers Lab II” is not meant to be STEM.

“there are two separate planning teams (RHS and FHS) and they each aren’t fully aware of what the other is doing”...Board Member Buel asks for some comparison information between Roosevelt and Franklin, which is not available. Michelle “personally as the project director for Roosevelt I know what we’re doing for Roosevelt” [implied-not for FHS]

Art teachers get what they need. Athletics is expanded—while STEM advocates fight for the basics. STEM—the educational area which has the most potential to help the most students enter the most good careers—has been abandoned. Here is acknowledgement that RHS lacked crucial information about STEM, which the community made them aware of—and that, in the future, if in-house expertise is lacking, PPS should contract out for this expertise; the “lessons learned” will improve the remodel process at all other schools!

Instead of correcting a huge mistake, the Roosevelt community—a lower-income, diverse neighborhood—is, not for the first time, neglected.* We see there is better treatment of Franklin—which resulted in a 9,000 sq ft STEM space versus the 3,500 sq ft space at Roosevelt- and PPS promises better treatment for all other high schools in Portland. A vital STEM program for Roosevelt, however, is abandoned.

[about 2:56] Bobbie [Board and DAG] “one thing that’s been hard...has been... around CTE and STEM; What was missing from the discussion was actual CTE teachers who were advocating for their space so.. we saw a lot of the Art teachers advocating for their spaces, and the sports folks advocating for their spaces, and what we didn’t really have were the CTE [meaning STEM/CTE] folks advo-

cating for the spaces – at least the CTE teacher voice... but I think in the future as we go to the next design what we probably need to do is maybe even contract or bring in a couple of CTE teachers to really be that advocate for students and for that space, so I guess I would kind of put that on the agenda for lessons learned in what we need to do ‘cause what we ended up having was a lot of community folks who were coming in and trying to advocate and that was really helpful but it’s not the same as having the teacher who can kind of really talk about, you know, the actual students in the room and what you need and why you need and the adjacencies and all of that part, so I would want to do a shout out to our community members who tried to fill in that role for us but I would also like to ask that as we go forward we make sure that

See all Attachments: PPS Board Meetings. *As a side note: When community group people handed out fliers about the what was happening with RHS/STEM to people attending various local events, a common response was, essentially—’so what else is new’. Neglect dis-empowers people and thus cycles of discrimination and neglect become breed more neglect and discrimination. Only conscious intervention creates change.
Our request of the district was not for more square footage; it was to put the total square footage originally allotted to STEM/ Makerspace [again, the terms denote the same thing to the world outside of Roosevelt] next to each other. Placing the spaces together would provide enough square footage [about 5,500-6,000 sq ft] to create a recommended median size facility. The split approach undermined STEM while supporting the interests of advocates for other programs. The lack of advocacy for STEM was due to negligence on the part of PPS, which future students will pay dearly. They should not have to.

Students enter STEM from different initial interest points—from an interest in using tools and equipment, to an interest in problem solving and creating real solutions, to computer aided design, to robotics, etc. Students who otherwise avoid Science and Math find themselves drawn in to project—building, in the course of which Science and Math come alive. Students find they need Science and Math to build their projects. Interests broaden. STEM makes Science, Math and Engineering real, and interesting, and fun! This is especially true for students-of-color and girls, who tend not to choose classes that have anything to do with Science and Math. The great range of skills learned in a well-run STEM program build a foundation for a multitude of careers—from the Trades, to jobs requiring a Community College Technical degree, and on up to advanced degree, “high-tech”, jobs. Good STEM programs can help students-of-color and girls move into studies that lead to good-paying jobs—jobs in which they are currently under-represented, in part because of the lack of good STEM opportunities in public school. Unless compelled to “do STEM right” by creating a proper STEM facility - it will not exist at Roosevelt.

On August 4, Donna Cohen, at a PPS Board meeting, challenged Board Members to be “evidenced-based” in decision-making and pointed out that PPS had not shown the community that the plans they had for the STEM/Maker’s Lab spaces could contain the equipment needed. Would they have determined the space for a gym, or a theatre, without such information? But, although the community had insisted on the need for this type of analysis for some time, it was never done, unlike at Franklin. Due diligence was not in the Roosevelt Remodel Team’s toolkit.

On August 12, Donna Cohen and Adam Robins, Treasurer of the St Johns Neighborhood Assn., testified at the School Board. Adam pointed out that correcting this mistake now will be far more fiscally responsible than correcting it down the line.

Final community meeting with RHS/PPS August 15 2014 Several of us met with the new Principal Filip Hristic, the former Principal who is now Supervisor, Roosevelt Cluster [all feeder schools] and Benson H.S., the CTE Coordinator for PPS. It did not change anything.

Attachment C4 From email: Donna Cohen 08/07/2014 to: Tom Koehler [et al] in regard to the list of specialists who took part in the study cited in my testimony, Paul Anthony responded to us: “The groups of experts you list are the same groups of experts who are represented on Seattle’s Bond Advisory Committee and advise the Seattle school district on their buildouts. These are the people Portland needs to be pulling in, listening to, and giving a deciding voice before any design is contemplated - and certainly before one is completed.” [Reference is to types of specialists, not specific people.]

Attachment S5 Cohen-Sylvester Ed Specs
Attachment S7 Final Community Meetings
Nov 2014

- Still no planning around space design
- Still not bringing in people who understand the STEM workspace best

We would like to be clear that we don’t believe anything that happened during the remodel planning process falls on Mr Hristic. He was in the unfortunate position of inheriting a bad situation when he came to Roosevelt.
What happened, in short:
1. Community votes overwhelmingly for STEM subjects.
2. RHS designs split STEM workspaces in different parts of the school for different STEM equipment.
3. No advocates / expertise in the design of Tech Ed workspaces [the “TE” in STEM] is there to point out that these spaces need to be co-located; alone they are too small.
4. PPS says they will outfit both spaces completely for STEM, and purchase redundant equipment. [Yes, bizarre. Re-read #3. ]
5. Remodel Team ignores PPS Educational Specifications – which list the STEM subjects.
6. Remodel Team responds to Arts advocates on the Design Advisory Group as well as the desire of PPS Administration, which would like an Arts/Entertainment/Recreation program.
7. RHS says they are responding to the community’s wishes. They are not. [Refer back to the vote tally.]
8. No expertise was ever applied to determine whether either space could accommodate the facility needs.
9. On the recommendation of STEM community advocates RHS expands the footprint of the school to create more space for the STEM facility—and then uses that space to add a third gym to the remodel plan!

Result:
A non-functional “STEM” space means no STEM program.
An Arts / Entertainment / Recreation program created in part on the desire of district personnel takes over one of the two spaces intended for STEM.
Athletic expands to an area recommended by the community for enlarging the STEM space.

What should have happened:
1. Community votes for STEM subjects.
2. A person knowledgeable about STEM workspaces is involved.
3. RHS designs an adequate STEM workspace.

Result:
A median-sized STEM space that will support a STEM program able to encourage creativity, collaboration and problem-solving skills through Engineering design activities, exposure to a wide range of Technologies through project-based learning, and an opportunity to promote Science and Math to a broad segment of the student population. These are the skills which hold the promise of educating the largest number of students in areas where career potential is greatest. This is what Roosevelt has lost.