Ballard Robotics Team - 3rd in Nation

Rainier Beach App Day

Nathan Hale FCCLA Region President
Presenting Award to Rep. Tomiko-Santos

Submitted by:

Mary Davison, CTE Program
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CAREER and TECHNICAL EDUCATION

Definition

Career and Technical Education (CTE) is a planned program of courses and standards that begins with exploration of career options, supports academic and life skills, and enables achievement of high academic standards, leadership development, and preparation for career and college. A sequence of courses can provide students with entry-level employability skills for internships, apprenticeships, preparation for industry certification, and pursuing career options in college.

Mission

The Career and Technical Education Department broadens career choices for students, supports and promotes quality instruction, and ensures that every secondary school has a range of CTE offerings for every student, including skill center options.

Vision

Career and Technical Education: Where all students imagine, design, and craft their future.

Central CTE Staff

Manager ........................................................................................................ Mary Davison
Administrative Assistant ............................................................................ Mark Daniels
Fiscal............................................................................................................. Wendy Turner

Specialists:
Academies and Work-Based Learning ........................................................... Joanne Patrick
Agriculture, Arts, Media, Science & Engineering ........................................... Robert Austin
Business, Marketing, & Information Technology ......................................... Michelle Chaney
Career & Guidance Services — .6 shared with College & Career Director. ............ Myrna Muto
Health & Human Services and Family & Consumer Science ...................... Roxanne Trees
Non-traditional Counseling - .5 part-time ..................................................... Cathi Rodgveller
State and Federal Reporting — .3 Part-time ....................................................... Patsy Ethridge-Neal
ASSESSMENT OF CTE PROGRAM

Career and Technical Education is an essential component of the high school curriculum. It is critical in meeting the needs of students in academic achievement, career exploration, career preparation, and leadership development with 21st Century Skills attainment.

Career and Technical Education (CTE) in Seattle Public Schools continues to offer students some of the finest CTE experiences in the nation. Through CTE in our district, students explore and prepare for career opportunities and learn how other subjects like math, science, reading, and writing are used in real-life. CTE students gain leadership skills through activities in their classrooms and participation in organizations such as DECA (Marketing), Future Business Leaders of American (FBLA), Skills USA, First Robotics, Family Career and Community Leaders of America (FCCLA), and HOSA-Future Health Professionals. CTE prepares students to succeed in high demand occupations in the 21st century competitive global economy by promoting quality instructional partnerships with business, industry, and the post-secondary community.

Nationally, Career and Technical Education (CTE) is organized around the 16 Career Clusters. Seattle Public Schools (SPS) CTE is organized around the following pathways with Specialists to support current programs, research new programs and initiatives, and work with industry partners for advice in keeping our programs current for now and in the future:

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1 See Appendix #1 – Career Clusters Pathways – Course Offerings, Pages 19-21
We have very strong programs in most pathways, and are moving to a Program of Study model for all course offerings. Programs of Study are detailed guides for students, mapping out specific course options for a chosen career path from high school through postsecondary education. Programs of Study show how to smoothly transition into postsecondary education, apprenticeships or work from high school CTE.

Program and Teacher Quality

As we continue to offer our students some of the finest Career and Technical Education experiences in the nation, our research we use to indicate we deliver in ways that are aligned to industry standards and best practices. The 2011, Pathways to Prosperity report from the Harvard School of Education cited Career Academies and Project-Lead-the Way (PLTW) engineering programs as best practices and bellwethers of quality. Seattle Public Schools is one of the only Washington State school districts to sustain Career Academies and we have done so since 1987. We were the first district in Washington State to implement Project Lead the Way (PLTW). Other high-quality, award-winning, and high-profile programs include:

- C89.5 KNHC Radio Station program at Nathan Hale
- Film/Video at Ballard, Center School, Cleveland, Hale, and Franklin
- ProStart Culinary at Rainier Beach, Ingraham, West Seattle, and Skills Center
- Photography at Garfield and AP Photography at Ballard
- Automotive Tech at Ingraham, West Seattle, and Skills Center
- Marketing at Ballard, Garfield, Hale, Roosevelt, and West Seattle
- Graduation, Reality and Dual-Role Skills (GRADS) Teen Parent Program at South Lake
- Microsoft IT Academy at Sealth and Ingraham
- Biotech at Ballard
- Biomed at Cleveland
- AP Psychology at Chief Sealth, Roosevelt and IB Psychology at Ingraham

In addition, we are using the Microsoft sponsored TEALS (Technology Education and Literacy in Schools) program to increase and sustain our computer science offerings at Ballard, Franklin, Garfield, Hale, Ingraham, Rainier Beach, and Roosevelt, and have been able to hire highly qualified computer science teachers at Ballard, Cleveland, Garfield, Hale, and Roosevelt and sustain our International Baccalaureate computer science program at Ingraham. We are

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2 See Appendix 1 – Career Clusters Pathways – Course Offerings, Pages 19-21
3 See Appendix 1 - Career Clusters™- Pathways – Course Offerings – Pages 19-21
4 http://www.k12.wa.us/CareerTechEd/ProgramsOfStudy.aspx
planning an agreement with code.org for additional computer science offerings in middle and high schools, and professional development opportunities for computer science teachers. Franklin High School is partnering with code.org for its computer science introductory course.

Seattle’s CTE teachers and staff win recognition and awards and are consistent leaders at regional, state, and national levels. Our Roosevelt Project Lead the Way program has been designated as a PRIME (Partnership Response in Manufacturing Education) Program for the Society of Manufacturing Engineers (SME) and the teacher has been named the National SME teacher of year for the current school year. Students who concentrate their studies in CTE, which is taking four semesters in a program area, go to college at a greater rate, and complete their programs more often than other students who do not as evidenced in research from the National Academy Foundation and the Work Force Training Board of Washington State. We are planning to feature these teachers and students at a June board meeting.

Because of OSPI requirements and best practices for CTE, courses are up for reapproval on a four-year cycle. Courses have been rewritten incorporating 21st Century Skill indicators, and the Common Core Standards for English Language Arts and Mathematics, and the Next Generation Science Standards that apply to the course content. The final group to add all of these standards, Environmental Science and Agriculture, is being submitted in January, 2015.

Current Skills Center Initiatives

Launching the Seattle Public Schools Skills Center has been a major focus and opportunity and consumed much time and energy over the last three years. Programs have been proposed; locations sought; skill panels designed by industry partners; facilities provided support; courses and frameworks were written and approved for OSPI and Seattle Public School course catalogs; instructors were hired; school partners approved locations and sites; and programs are up and running. Skills Center programs are half-day programs for students 16 and over. Students attend their assigned high school and then travel to the Skills Center for 2½ hour sessions of their school day. This can occur during the regular school day or after the regular school day. The following are current Seattle Skills Center programs and locations:

- Academy of Interactive Entertainment (AIE) Animation and Gaming – West Seattle - 2 sessions
- Aerospace Science and Engineering – Rainier Beach – 2 sessions
- Auto – Shop behind Washington Middle School – 2 sessions
- Culinary Arts – Rainier Beach – 2 sessions
- Fire Science – incorporated into Medical Services for this year at Lincoln
- IT CISCO Networking – Rainier Beach – 1 session
- Maritime Science and Engineering – planned for Ballard currently at Rainier Beach – 1 session
- Medical Careers – West Seattle – 2 sessions
- Medical Services – Wilson Pacific – moving to Lincoln – 2 sessions
- Multimedia Broadcasting – KNHC – Nathan Hale – 1 session
Planning for next year is taking place and additional programs we are planning to offer are:

- Fire Science – planned for Rainier Beach – 2 sessions
- Auto Body– Shop behind Washington Middle School – 2 sessions
- Construction and Pre-Apprenticeship – Rainier Beach – 1 session

We successfully completed our second summer of Skills Center offerings for rising 9th through 12 graders last summer and expect attendance to again double from the previous year for next summer.

**Enrollment/Staffing and CTE Funding**

High School and Middle School CTE have seen increased offerings of Computer Science, Engineering, Material Science, *Pro Start* Food Production, Visual Communication, Microsoft IT Academy courses, and AP Psychology. Our overall trends are increasing from 11.66% in 2010-11 to 12.2% of all high school students. We added 2 additional CTE sections in middle schools. Our Skills Center is gaining student enrollment each year. Our Skills Center Principal, Shani Watkins is managing day-to-day operations, promoting the programs, and driving future initiatives of the Skills Center. The 2013-2014 school year was the first year we had no cuts in CTE for years. This school year there were a few section cuts and additions with Cleveland and Ingraham leading the additions. We were able to increase our Skills Center registrar from a .6 to a 1.0 position to handle more students and City Campus registration issues.

We offered a Skills Center Summer School Program for the second time in the summer of 2014. This past summer and from now on, we receive allocation dollars from the state for our summer Skills Center programs. The summer Skills Center programs are open to rising 9th graders through 12th graders and are funded by OSPI as if a student was in a regular Skills Center program. We offered five sections our first summer and were able to offer 18 sections in two sessions for 2014. This number is projected to increase for the summer of 2015 as there will be two sessions of morning and afternoon classes rather than all-day to take advantage of space and staffing considerations.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FTE HS</th>
<th>FTE MS</th>
<th>SKILLS CTR</th>
<th>TOTAL FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>1538.43</td>
<td>73.63</td>
<td></td>
<td>1612.06</td>
</tr>
<tr>
<td>2009-10</td>
<td>1501.63</td>
<td>18.37</td>
<td></td>
<td>1520</td>
</tr>
<tr>
<td>2010-11</td>
<td>1464.49</td>
<td>26.78</td>
<td></td>
<td>1491.27</td>
</tr>
<tr>
<td>2011-12</td>
<td>1464.99</td>
<td>50.67</td>
<td></td>
<td>1515.66</td>
</tr>
<tr>
<td>2012-13</td>
<td>1485.54</td>
<td>72.41</td>
<td>50.5</td>
<td>1608.45</td>
</tr>
<tr>
<td>2013-14</td>
<td>1556.49</td>
<td>102.55</td>
<td>65.27</td>
<td>1724.31</td>
</tr>
<tr>
<td>2014-15</td>
<td>1598.06</td>
<td>122.81</td>
<td>74.12</td>
<td>1794.99</td>
</tr>
</tbody>
</table>
We were pleased that in addition to the growth in the Skills Center enrollment, our regular CTE FTE has grown in the high schools. While CTE FTE totals are increasing, compared to total High School and Middle School enrollment, the increases are still far below the averages of many other large districts. The following table shows the enrollment as a percent of the total high school and middle school enrollment.

**ENROLLMENT AS A PERCENT OF TOTAL ENROLLMENT IN HS and MS**

<table>
<thead>
<tr>
<th>Year</th>
<th>CTE/HS</th>
<th>CTE/MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>12.17%</td>
<td>1.20%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>11.97%</td>
<td>0.30%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>11.66%</td>
<td>0.43%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>11.51%</td>
<td>0.78%</td>
</tr>
<tr>
<td>2012-2013</td>
<td>11.47%</td>
<td>1.08%</td>
</tr>
<tr>
<td>2013-2014</td>
<td>11.99%</td>
<td>1.49%</td>
</tr>
<tr>
<td>2014-2015</td>
<td>12.02%</td>
<td>1.71%</td>
</tr>
</tbody>
</table>

Our Skills Center enrollment has increased this year. We were able to add Radio and Maritime, plus migrate Auto Body from City Campus to Skills Center and add extra sections of Culinary and Aerospace. Next year, additional programs moving from City Campus are the C-West Construction and Apprenticeship program and the Auto Body program. There is also a firm plan in place for Fire Science that includes a location and an instruction model.

**Skills Center Enrollment**

<table>
<thead>
<tr>
<th>School Year</th>
<th>Total Average FTE</th>
<th>Additional FTE Summer School</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>58.58</td>
<td>0</td>
</tr>
<tr>
<td>2013-2014</td>
<td>65.27</td>
<td>22.47</td>
</tr>
<tr>
<td>2014-2015 so far</td>
<td>74.12</td>
<td>Estimated +30</td>
</tr>
</tbody>
</table>

**CTE FTE Total is charted from 2008-2015:**
Student FTE Comparison with other Washington State Districts

Districts were chosen for comparison based on proximity to Seattle and their reputations for quality educational experiences for their students as well as the largest districts in the state.

DATA for 2013-2014 SCHOOL YEAR

<table>
<thead>
<tr>
<th>District</th>
<th>7-8 CTE FTE</th>
<th>% of Total</th>
<th>9-12 FTE</th>
<th>% of Total</th>
<th>Skills Center</th>
<th>Total CTE Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellevue</td>
<td>136.49</td>
<td>4.84%</td>
<td>588.77</td>
<td>10.07%</td>
<td>101.38</td>
<td>$4,959,195.40</td>
</tr>
<tr>
<td>Federal Way</td>
<td>41.88</td>
<td>1.29%</td>
<td>1092.36</td>
<td>17.64%</td>
<td>0</td>
<td>$6,682,310.98</td>
</tr>
<tr>
<td>Issaquah</td>
<td>52.58</td>
<td>1.84%</td>
<td>695.95</td>
<td>13.79%</td>
<td>21.37</td>
<td>$4,545,168.12</td>
</tr>
<tr>
<td>Highline</td>
<td>83.83</td>
<td>3.28%</td>
<td>850.59</td>
<td>15.42%</td>
<td>500.58</td>
<td>$8,639,578.74</td>
</tr>
<tr>
<td>Evergreen</td>
<td>113.38</td>
<td>2.87%</td>
<td>1835.55</td>
<td>22.57%</td>
<td>632.16</td>
<td>$15,790,099.04</td>
</tr>
<tr>
<td>Spokane</td>
<td>439.18</td>
<td>10.14%</td>
<td>1767.56</td>
<td>22.75%</td>
<td>424.79</td>
<td>$16,167,235.54</td>
</tr>
<tr>
<td>Tacoma</td>
<td>223.93</td>
<td>5.55%</td>
<td>1758.67</td>
<td>23.55%</td>
<td>0</td>
<td>$10,660,850.31</td>
</tr>
<tr>
<td>Seattle</td>
<td>102.55</td>
<td>1.50%</td>
<td>1556.49</td>
<td>12.50%</td>
<td>65.27</td>
<td>$10,196,694.81</td>
</tr>
</tbody>
</table>

REVENUE COMPARISON by DISTRICT for the 2013-2014 SCHOOL YEAR
In addition to apportionment Career and Technical Education received $606,185.98 in Carl Perkins, TEALS, and OSPI grants for particular programs and courses in 2013-2014.

**STRENGTHS AND QUALITY INDICATORS**

When principals are asked about exemplar programs or have outside visitors in the schools, you will often see that they point out their Career and Technical Education (CTE) programs and that these CTE programs are a point of pride for the school and community. Recent media articles have been about Video, Project Lead the Way, Computer Science, Culinary, and Radio at Nathan Hale. Our strengths and quality indicators are characterized by:
Strengths

- Strong programs in each of the pathways
- Curriculum, instruction, and assessment aligned with standards
- Teachers who are leaders in instruction and in their schools
- The SPS Skills Center running, and addition of programs
- Consolidated Program Review (CPR) OSPI Audit for CTE was completed in March 2014. There were minor findings related to our course catalog and providing data that was difficult at first for Power School.
- Advanced Placement programs up and running in each pathway except Agriculture
- Tech Prep Articulations – dual credit with the Seattle Colleges are up and running and gaining strength
- College in the High School for Computer Science and Oceanography
- Academies that are long-lived and strong
- Community engagement and strong advisory boards
- Clear and shared focus, mission, and vision
- High Standards and Expectations – new frameworks (program standards) on 4 year cycle for review and approval, common core state standards, Next Generation Science Standards, and 21st Century Skills incorporated into all frameworks with specific objectives
- Strong Career and Technical Student Organizations (CTSOs) that give students opportunities to compete alongside other students in the state and nation
- Opportunities such as IGNITE (Inspiring Girls in Technology Evolution) and ACE (Architecture, Construction, and Engineering) Mentors to provide students with opportunities and industry mentors
- Learning environments that focus on meeting industry and program design standards
- High levels of communication and collaboration

Quality Indicators

- Middle school offerings in Career and Technical Education beginning to gain steam with additional schools and offerings in the STEM fields
- Monitoring of teaching/learning and professional development provided
- IGNITE – Inspiring Girls Now in Technology Evolution offers girls and now boys, opportunities to job shadow, find mentors, and connect with companies that represent STEM fields
- Students qualifying and winning state and national Career and Technical Student Organizations (CTSO) awards and state and national awards in particular fields such as computer science, family and consumer sciences, robotics, and video
- Non-traditional fields especially in the science, technology, engineering, and math (STEM) areas that CTE students can access across the district

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6 See Appendix #2 – Exemplars in Each Pathway – Page 22
7 See Appendix #3- Academies – Page 23
8 See Appendix #4 – Advisory Boards – Pages 24-28
Community Engagement

Advisory boards are required for all program areas in CTE through our standards and by OSPI. We are very fortunate to have community and industry partners participating on our strong advisory boards for each of our program areas. Advisory boards and pathway specialists meet between three and nine times each school year to review, evaluate, and discuss current and planned programs. The advisory board members and other volunteers serve roles as speakers, judges for Career and Technical Education Student Organizations (CTSOs), field trips, career conferences, and informal advisors. These community partners allow us to keep our programs current with industry requirements and standards, and also, partner to take advantage of numerous opportunities for our students and staff.

CHALLENGES

Our challenges focus on three main areas: access for all students, sustainability of programs, and funding. These challenges represent areas that need to be negotiated with high school and middle school administration especially around sustainability and new program placement, as well as with central office staff around priorities. Among those items needing focused attention are:

- Scheduling conflicts – each high school has different schedules which make it very difficult to enroll Skills Center students. As we look at reinventing the high school schedule for 24 credits consistent times across the district will be addressed
- New college and career readiness standards
- Impact of additional math and reading support classes on elective programs making it difficult for students to enroll in Skills Center programs and additional CTE courses
- Exploring north end and south end Skills Center campus facilities
- Perception challenge to see CTE as a core part of program of study for all students
- Equity and accessibility of course offerings across district
- Sustainability of programs that are expensive to operate such as auto, woods, and video
- Locating space for Skills Center programs in the North End
- Finding funding for certification exams for students to earn industry certifications
- Funding for College in the High School (CHS) courses
- Funding for Tech Prep initiative – the Carl Perkins federal grant still requires college credit articulations with community colleges as a requirement but funding dissolved at end of 2010-2011 school year
- Students may fulfill the Occupational Education (Oc Ed) graduation requirement with non-CTE courses and there are a large percentage of students that do not take any CTE course in their high school program and fulfill the graduation requirement through non-CTE Occupational Education (Oc Ed). This impacts our CTE revenue

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9 See Appendix #4 – Advisory Boards – Pages 24-28

12 | CTE Board Report, January 2015
OPPORTUNITIES

Expanding and Strengthening CTE Programs

There are many initiatives and programs we are researching and examining to expand and strengthen our offerings especially in the Green Technology, and Science, Technology, and Engineering (STEM) fields. Our Skills Center Aerospace Engineering Core + program was initiated and developed by our advisory boards because of industry need for qualified employees and advisory board interest. We were named as one of 19 programs in the state for our Aerospace Engineering Skills Center program using the Core + model. Maritime Science and Engineering Skills Center program that began with this school year, has also adopted the Core + model. Most of our new programs and new initiatives are currently involved in the Skills Center but we are also looking at all program areas for opportunities and meeting with other CTE Directors in King County and the state to find best practices for our students. Middle School offerings are still a challenge especially in the K-8 schools.

Career Clusters

Career Clusters™ are an organizing tool for curriculum design and instruction. They provide students with relevant contexts for studying and learning and are organized nationally into 16 areas that support over 79 distinct career pathways. In Seattle Public Schools (SPS), we have organized and consolidated these 16 areas into 15 pathways with 3 Specialists, that link coursework with the knowledge and skills required for success in the workplace, career exploration, and for preparation for college and careers. They also function as a guide in developing programs of study (POS) bridging secondary and postsecondary curriculum, and for aiding students in development of their high school and beyond plans. CTE helps students discover their interests, their passions, and empowers them to choose a pathway that will aid their success in high school, college, and a career.

In Seattle Public Schools, as previously mentioned, we consolidate these 15 pathways into 5 areas:

- Arts, Communications, and Media
- Business, Marketing, Information Technology and Computer Science
- Environmental Science and Agriculture
- Health & Human Services, and Family & Consumer Science
- Science, Engineering, and Industry\textsuperscript{10}

These 5 areas are overseen by three Specialists and give us a focus for how to organize new initiatives and assess our strengths and gaps.

\textsuperscript{10} See Appendix #1 – Career Clusters Pathways – Course Offerings, Pages 19-21
**STEM – CTE Programs**

We have many strong course and program offerings in the STEM areas including our offerings at the Skills Center: Aerospace Science and Engineering, Medical Careers, and Medical Assisting, Animation and Gaming, Maritime Science and Engineering, and Cisco/IT Academy. The Project Lead the Way (PLTW) Biomedical at Cleveland, and PLTW Engineering at Cleveland, Ballard, Franklin, Garfield, and Roosevelt High Schools and Gateways to Technology (part of PLTW) at Denny, Madison, McClure, South Shore, Washington, and Whitman Middle Schools. Other STEM courses include: KNHC – Radio at Hale, Woods, C-West Construction and Apprenticeship, BioTech, Computer Science at seven high schools, and Middle-School STEM courses in computer science, technology, and video. **ACE** (Architecture, Construction, and Engineering) Mentors is an additional STEM after school program open to all Seattle Public School high school students. The mission of ACE is to engage, excite and enlighten high school students to pursue careers in architecture, engineering and construction through mentoring. We currently have 66 students taking advantage of this opportunity. CTE teachers are also the mentors for most of the First Robotics teams in the schools as after school activities.

We are continually investigating new programs and integrated models of delivery in the STEM areas and consider this an area for CTE growth.

**CROSS-CREDIT, DUAL CREDIT, and INDUSTRY CERTIFICATION OPPORTUNITIES**

The CTE Department participates in extensive interdisciplinary collaboration, in particular with science, math, and visual performing arts. Cross-crediting of CTE courses with core academics continues, and there is a rigorous application process between CTE and visual performing arts to authenticate courses. Most Skills Center courses are cross-credited with third-year math, lab science, or visual arts. We continue to pursue Advanced Placement (AP) and International Baccalaureate (IB) CTE courses and currently have courses in Computer Science, Psychology, Arts Portfolio, IB and AP Economics, and IB Business Management. CTE has supported Chief Sealth and applying for the IB Career Concentration (IBCC) diploma option.

**Math Options and Lab Science Options**

Financial Algebra, Applied Algebra, and Applied Geometry options are approved to fulfill the third-year math graduation requirement if they are part of a student’s high-school and beyond plan. Advanced Placement (AP) and International Baccalaureate (IB) Computer Science are approved for fourth-year math or third-year lab science. Other lab science options for graduation that are cross-credited are: Sports Medicine/ Athletic Training, Nutrition & Wellness, Food Science, Nutrition & Dietetics, Principles of Biomedical Science (PLTW), Human Body Systems (PLTW), Medical Intervention (PLTW), Medical Assisting SKC, Nurse Assisting SKC, Horticulture, Environmental Science, and Biotech Biology and Biotech Chemistry.
Double Credit – Dual Credit – Tech Prep

WAC 180-51-067 provides for students’ ability to check off two graduation requirements, so called – double credit – for CTE courses starting with the graduating class of 2015 – 2016 (current 9th through 11th graders). The language is as follows:

a) Students who earn a graduation requirement credit through a CTE course locally determined to be equivalent to a non-CTE course will not be required to earn a second credit in the non-CTE course subject; the single CTE course meets two graduation requirements.

Students can now earn dual credit with the Seattle Colleges through Tech Prep. This is dual credit for a college and a high school course much like Running Start but students and the FTE stays in the schools. Because the funding for Tech Prep was eliminated from the 2010-2011 Carl Perkins Grant, we made a decision to partner with the Seattle Colleges and CTE pays for half the funding for the Seattle College work-force liaison to continue this initiative. There were 890 students in CTE programs in Seattle Public Schools earning a total of 3170.50 credits through the three Seattle Colleges (they have taken Community out of their names) for the 2013-2014 school year. This translates to a savings for families of $338,767.90 at the current cost of $106.84 a credit at the Seattle Colleges. A list of our current Tech Prep courses can be found with a link from the SPS CTE page or at: http://www.techprepsaetle.org/11. We are currently working on additional courses for second semester and next year and will have those articulated sometime in March with the Colleges and SPS CTE teachers.

**UNDUPLICATED TRANscribed STUDENT COUNTS FOR TECH PREP**

<table>
<thead>
<tr>
<th>Year</th>
<th>Registered Students</th>
<th>Transcribed Students</th>
<th>Percent Completed</th>
<th>Credits Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>1,055</td>
<td>890</td>
<td>84.36%</td>
<td>3170.50</td>
</tr>
<tr>
<td>2012-2013</td>
<td>1,175</td>
<td>857</td>
<td>72.94%</td>
<td>2,422.00</td>
</tr>
<tr>
<td>2011-2012</td>
<td>1,074</td>
<td>853</td>
<td>79.42%</td>
<td>3,456.50</td>
</tr>
</tbody>
</table>

Our numbers have been pretty stable given the reduction of funding and the re-articulation of all classes. We have renewed our articulation process and expect an increase for this school year in number of students served and credits offered.

We have also been able to initiate the University of Washington College in the High School (UW in HS) model for computer science at Cleveland, Garfield, and Roosevelt. Students at these

---

schools can choose to pay for credit through the University of Washington’s partnership with the high school teachers. Nathan Hale and Ballard should join this group next year.

**Industry Certification**

Students have the option to earn industry certifications in most of our programs and pathways. Testing is now available in most areas because of the new OSPI agreement with Precision Testing. Precision is working towards aligning all of the CTE curriculum frameworks with their testing. A complete list of Precision Exams can be found on their website: [http://www.precisionexams.com/washington/exams.html](http://www.precisionexams.com/washington/exams.html). Besides Precision Exams, we have testing available now in the following classes:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Certification/State/National Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE and C-West</td>
<td>Direct entry in Apprenticeships</td>
</tr>
<tr>
<td>AIE Animation &amp; Gaming</td>
<td>Direct entry into AIE Technical College</td>
</tr>
<tr>
<td>American Sign Language (ASL)</td>
<td>Transfer credit with Seattle Community Colleges</td>
</tr>
<tr>
<td>AP Art</td>
<td>AP 2-D and AP 3-D</td>
</tr>
<tr>
<td>AP Economics</td>
<td>AP Economics at Garfield</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>AP Psychology</td>
</tr>
<tr>
<td>Automotive</td>
<td>Automotive YES – ASE exit exam</td>
</tr>
<tr>
<td>Cisco 1-4</td>
<td>CCNA</td>
</tr>
<tr>
<td>Computer Science</td>
<td>AP Computer Science and UW in the High School</td>
</tr>
<tr>
<td>Family Health, Nursing Assistant, Medical Assisting, Family Relations</td>
<td>CPR and First Aid</td>
</tr>
<tr>
<td>Human Development; Child/Parenting</td>
<td>Merit Certification for Learning</td>
</tr>
<tr>
<td>IB Psychology</td>
<td>IB Psychology</td>
</tr>
<tr>
<td>IT Essentials</td>
<td>A+ and Net+</td>
</tr>
<tr>
<td>Marketing</td>
<td>National Professional Certification in Customer Service</td>
</tr>
<tr>
<td>Medical Careers in Skills Center</td>
<td>NAC – Certified Nurse Assistant, HIPPA, First Aid/CPR</td>
</tr>
<tr>
<td>Microsoft Office Specialist</td>
<td>MOS Core; MOS Expert</td>
</tr>
<tr>
<td>NAF Academies</td>
<td>End of Course Exams</td>
</tr>
<tr>
<td>Project Lead the Way</td>
<td>End of Course Exams</td>
</tr>
<tr>
<td>Pro Start Food Production</td>
<td>Certificate of Recognition and Achievement</td>
</tr>
<tr>
<td>Precision Testing</td>
<td>Certifications for most of the CTE courses</td>
</tr>
</tbody>
</table>

**SKILLS CENTER**

Along with schools, industry partners, and advisors, CTE has been working with our Skills Center instructors and programs to ensure high quality programs. Stable facilities have been a major concern and locating facilities north of the ship canal has been our major challenge. Our goal is to determine offerings that afford access and equity across the district for all interested students. Planning for future expansion includes program quality, industry projection needs now and in the future, and facility availability. Our vision also includes facilities with campuses in the north end and south end of the city beside our regular satellite sites.
City Campus

Our City Campus programs were originally designed before Seattle Public Schools was approved for a Skills Center. City Campus programs are based on a Skills Center model of delivery in that students attend for half of their school day and they lead to industry certifications, apprenticeships, or direct to industry positions as well as college. The SPS City Campus programs have always had strong support from our community partners and next year most will have been moved to Skills Center programs to reflect their outcomes and take advantage of enhanced funding. Last year, we were able to make this change with Medical Assisting, which is being moved to the Lincoln site in February as Wilson Pacific is repurposed at the end of this school year. Our Automotive program located behind Washington Middle School, has also been moved to a Skills Center model. We plan to move Auto Body and Construction/Pre-Apprenticeship (C-WEST) next year to the Skills Center model for the 2015-16 school year. The Exploratory Internship Program (eXIP) that we operate cooperatively with Special Education will remain as the only City Campus program after next school year.
CONCLUSION

A strong JSCEE CTE staff works to ensure quality instruction occurs in CTE courses across the District. The CTE program is committed to keeping course offerings and programs up-to-date with cutting edge practices, approaches and content. The successful launch of our SPS Skills Center and our work to engage our communities is second to none. These commitments highlight CTE’s strengths in Seattle Public Schools. Equitable access for all students, sustainability of program offerings, and funding for current and future programs are challenges that we are addressing. Other challenges for the Skills Center are the disparate schedules of each high school, facilities with room in the north end of the city, and the demands for increased graduation requirements. By working with the opportunities we are creating and the new partnerships we are forging, some of these challenges can be addressed with the support of college and career readiness requirements. Growth areas are in middle school STEM offerings, cross-crediting initiatives, and a renewed focus on CTE in the district. As in the Pathways to Prosperity report from the Harvard School of Education, and United States Secretary of Education, Arne Duncan affirming CTE as a delivery model for college and career readiness, we are feeling renewed energy for CTE initiatives, courses, and programs in Seattle Public Schools.


Garfield Computer Science Hour of Code with Mayor Murray

Aerospace Science & Engineering/Core + Skills Center
Appendix #1 – Career Clusters™ - Pathways – Course Offerings

Each Career Cluster™ represents a distinct grouping of occupations and industries based on the knowledge and skills they require. The 16 Career Clusters™ and related Career Pathways provide an important organizing tool for schools to develop more effective programs of study (POS) and curriculum.

- **Agriculture, Food & Natural Resources**
  The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

  Offerings in SPS: Horticulture, Food Science, Nutrition and Wellness, Environmental Science

- **Architecture & Construction**
  Careers in designing, planning, managing, building and maintaining the built environment.

  Courses in SPS: Woods, C-West and opportunity for an ACE Mentor

- **Arts, A/V Technology & Communications**
  Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

  Courses in SPS: Video, Radio, Multimedia, Graphic Design, Yearbook, Animation, Photography, Technical Theatre

- **Business Management & Administration**
  Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

  Courses in SPS: Introduction to Business, Project Management, IB Business Management, AP Economics

- **Education & Training**
  Planning, managing and providing education and training services, and related learning support services such as administration, teaching/Training, administrative support, and professional support services.

  Currently no courses in SPS

- **Finance**
  Planning and related services for financial and investment planning, banking, insurance, and business financial management.

  Courses in SPS: Academy of Finance Program, Accounting
• **Government & Public Administration**  
*Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.*

Currently no courses in SPS

• **Health Science**  
*Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.*

PLTW Bio Medical, Medical Assisting, Medical Careers, Family Health, Sports Medicine, Nutrition and Wellness

• **Hospitality & Tourism**  
*Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.*

Courses in SPS: Academy of Hospitality and Tourism Program

• **Human Services**  
*Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.*

Courses in SPS: IB Psychology, AP Psychology, Teen Grads Program

• **Information Technology**  
*Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.*

Courses in SPS: Cisco Networking, Microsoft IT Academy, Computer Applications, Web Design, Computer Science, Phone Application Programming, AP Computer Science, UW in the High School Computer Science, Middle School Computer Science, Skills Center Animation & Game Programming

• **Law, Public Safety, Corrections & Security**  
*Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.*

Courses in SPS: Fire Science

• **Manufacturing**  
*Planning, managing and performing the processing of materials into intermediate or final*
products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Courses in SPS: Skills Center Aerospace, Auto, Auto Body, C-West, Metals

- **Marketing**
  Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.

Courses in SPS: Marketing 1-4, Store, Advertising

- **Science, Technology, Engineering & Mathematics**
  Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.


- **Transportation, Distribution & Logistics**
  The planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Courses in SPS: Maritime Academy Program, Auto
Appendix #2 – Exemplars in Each Pathway

Arts, Communications, and Media
  Video Program at Ballard
  KNHC Radio Station at Hale
  Animation and Game Programming in Skills Center at AIE
  Technical Theatre at Roosevelt

Business, Marketing, Information Technology and Computer Science
  Academy of Finance Programs at Chief Sealth, Franklin, and Ballard
  Academy of Hospitality and Tourism at Chief Sealth
  AP Computer Science at Ballard, Rainier Beach, Cleveland, Hale, Roosevelt, & Garfield
  Marketing at Ballard, Hale, Garfield, Roosevelt, and West Seattle
  Skills Center Cisco Networking Academy at Rainier Beach

Environmental Science and Agriculture
  Biotech at Ballard

Health & Human Services, and Family & Consumer Science
  GRADS Program at South Lake
  IB Psychology at Ingraham
  AP Psychology at Roosevelt and Chief Sealth
  Award winning Family & Consumer Sciences Programs across district
  PLTW Biomedical at Cleveland
  Medical Careers at Skills Center located now at Lincoln
  Skills Center Medical Assisting at West Seattle

Science, Engineering, and Industry
  PLTW Engineering across district
  Auto Tech at West Seattle, Ingraham, and Skills Center
  Woods at Ballard, Franklin, and West Seattle
  Skills Center Aerospace and Maritime Science and Engineering located at Rainier Beach
SEATTLE PUBLIC SCHOOLS ACADEMIES

National Academy Foundation (NAF)

NAF Academies are in 490 schools, 41 states and the District of Columbia plus the US Virgin Islands. The NAF Academies established in 1982; have been a part of Seattle Public Schools since 1987.

- Academy of Finance
- Academy of Hospitality & Tourism

Career Academies

- Ballard Maritime Academy
- Biotechnology Academy at Ballard
- CREATE Academy at Franklin
- John Stanford Public Service Academy at Franklin

Cleveland High School STEM Career Academies

Cleveland STEM stands for Science, Technology, Engineering and Mathematics, fields that are the underpinnings of modern life. The STEM Program at Cleveland High School will give students the opportunity for rigorous and advanced study in these subjects. The two academies that students can choose from are:

- School of Life Sciences which includes PLTW Biomedical
- Engineering and Design which includes Computer Science and PLTW Engineering

Seattle Academies Foundation

The Mission ~
The Seattle Academies Foundation ~ Academy of Finance, Academy of Hospitality and Tourism, and Academy of Information Technology promotes academic excellence and provides real-world experiences in a Finance, Hospitality and Tourism, and Information Technology environment and provides personal involvement with local business and industry leaders for qualified high school students.

The SAF Focus Statement ~
Our children are worthy of our Investment!
Appendix #4 – CTE Advisory Boards

Career and Technical Education Advisory Committees
Career and Technical Education (CTE) advisory committees advise, assist and provide support and advocacy for quality CTE programs. Advisory committee volunteers have the opportunity to learn more about the CTE program, and the instructor’s are able to increase their understanding of the job market, employers’ needs and community opportunities. Advisory boards are required for all CTE programs in the CTE standards through OSPI.
http://www.k12.wa.us/CareerTechEd/Forms/AdvisoryBrochure.pdf

GENERAL ADVISORY COUNCIL AND SKILLS CENTER ADVISORY BOARD

<table>
<thead>
<tr>
<th>First</th>
<th>Last</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay</td>
<td>Abram</td>
<td>Professional Solutions for Personal Computers</td>
</tr>
<tr>
<td>Robert</td>
<td>Austin</td>
<td>Career &amp; Tech Ed Dept, SPS</td>
</tr>
<tr>
<td>Bridgett</td>
<td>Bascomb</td>
<td>Seattle City Light</td>
</tr>
<tr>
<td>Tim</td>
<td>Bond</td>
<td>Boeing</td>
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<tr>
<td>Chris</td>
<td>Brandmeir</td>
<td>Highline Community College</td>
</tr>
<tr>
<td>Peter</td>
<td>Cavanaugh</td>
<td>Workforce Development Council of Seattle -King County</td>
</tr>
<tr>
<td>John</td>
<td>Lederer</td>
<td>North Seattle Community College</td>
</tr>
<tr>
<td>Mary</td>
<td>Davison</td>
<td>CTE Program Manager</td>
</tr>
<tr>
<td>Renée</td>
<td>Florio</td>
<td>SSCC, CTE Teacher Cert Prep Program</td>
</tr>
<tr>
<td>Taylor</td>
<td>Gaussoin</td>
<td>Media Design &amp; Production</td>
</tr>
<tr>
<td>David</td>
<td>Gering</td>
<td>Manufacturing Industrial Council (MIC)</td>
</tr>
<tr>
<td>Alfred</td>
<td>Griswold</td>
<td>Seattle Central Community College</td>
</tr>
<tr>
<td>Darren</td>
<td>Linker</td>
<td>Dept of Environmental Health and Safety, UW</td>
</tr>
<tr>
<td>Diane</td>
<td>Kocer</td>
<td>AGC</td>
</tr>
<tr>
<td>Gary</td>
<td>Fasso</td>
<td>PNW Regional Council of Carpenters</td>
</tr>
<tr>
<td>Karen</td>
<td>Mattson</td>
<td>WSECU Community Relations</td>
</tr>
<tr>
<td>Mike</td>
<td>McBee</td>
<td>IUOE Local 609</td>
</tr>
<tr>
<td>Annika</td>
<td>Mertz</td>
<td>Seattle Central College</td>
</tr>
<tr>
<td>Andrea</td>
<td>Samuels</td>
<td>Seattle Colleges</td>
</tr>
<tr>
<td>Kathleen</td>
<td>Moriarty</td>
<td>Port of Seattle</td>
</tr>
<tr>
<td>Jim</td>
<td>Nicholson</td>
<td>Oppenheimer &amp; Co Inc.</td>
</tr>
<tr>
<td>Mickey</td>
<td>Pierce</td>
<td>Community Activist - Contract – Microsoft</td>
</tr>
<tr>
<td>Lindsay</td>
<td>Pulsifer</td>
<td>Port of Seattle</td>
</tr>
<tr>
<td>Will</td>
<td>Rance</td>
<td>WSECU</td>
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<tr>
<td>Shepherd</td>
<td>Siegel</td>
<td>Project Lead the Way</td>
</tr>
<tr>
<td>Gary</td>
<td>Stauffer</td>
<td>Maritime Consultant, Retired NOAA</td>
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<tr>
<td>Neal</td>
<td>Storme</td>
<td>Music Production</td>
</tr>
<tr>
<td>Michael</td>
<td>Tolley</td>
<td>Seattle Public Schools</td>
</tr>
<tr>
<td>Dana</td>
<td>Twight</td>
<td>Twilight Financial Education, LLC</td>
</tr>
<tr>
<td>Debra</td>
<td>Zawada</td>
<td>DO-IT, University of Washington</td>
</tr>
</tbody>
</table>
BALLARD BIOTECH ADVISORY

Members 2014-2015

Reitha Weeks, PhD-Biotechnology Consultant/Shoreline Community College
Randy Howard, PhD-IDRI (Infectious Disease Research Institute)
David Warren, PhD-University of Washington, Atmospheric Sciences
Jason Zacker-ZymoGenetics/Bristol Meyer Squibb
Robert Vizenor- SABArchitects
Jenny Tenlen-SPU, Department of Biological Sciences
Robert Barren-University of Washington
Jenny Thomson-Ballard Community Member
Robert Austin-CTE, Seattle Public Schools

BALLARD MARITIME ADVISORY BOARD

Active participation – meetings monthly – can provide names if requested

BUSINESS/MARKETING/IT Advisory Board

Reconstituting members – can provide names and company affiliations if requested

FAMILY & CONSUMER SCIENCE and HEALTH & HUMAN SERVICES ADVISORY BOARD

Meet five times per year

<table>
<thead>
<tr>
<th>Advisory Board Member</th>
<th>Representing Industry/ Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crickmore, Suzi *</td>
<td>Northwest AED/ American Heart Ass’n.</td>
</tr>
<tr>
<td>Marsha Brown</td>
<td>South Seattle Community College</td>
</tr>
<tr>
<td>Annika Merz</td>
<td>Seattle Community College - Tech Prep</td>
</tr>
<tr>
<td>Trez Buckland</td>
<td>University of WA – Dept. of Nursing/ Health</td>
</tr>
<tr>
<td>Bob Tidwell</td>
<td>Education Volunteer</td>
</tr>
<tr>
<td>Aileen Gagney</td>
<td>American Lung Association</td>
</tr>
<tr>
<td>Nancy Bush</td>
<td>Seattle University; BA programs</td>
</tr>
<tr>
<td>Joanne Card</td>
<td>Hearthstone – Executive Chef</td>
</tr>
<tr>
<td>Darren Linker</td>
<td>University of WA – Environmental Health</td>
</tr>
<tr>
<td>Victoria Wentz</td>
<td>Education Consultant</td>
</tr>
<tr>
<td>Adrianna Tossini</td>
<td>WA Dept. of Voc Rehabilitation</td>
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SCIENCE, ENGINEERING, & INDUSTRY ADVISORY

Project Lead the Way Advisory – names provide on request

Auto Collision Advisory

<table>
<thead>
<tr>
<th>Austin</th>
<th>Bob</th>
<th>Seattle Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carl森</td>
<td>Peter</td>
<td>Total Sale &amp; Marketing</td>
</tr>
<tr>
<td>Chapman</td>
<td>Jack</td>
<td>SII &amp; Pac Assoc.</td>
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</table>
Hendricks Brad Puget Sound Skills Center
Huddleson Darren Huddleson's Auto Color World
Ing Chuck J&J Collision
Jamison Jason Carlyle
Jones Mark Brits of Seattle
Leddy John LDC Equipment Co.
MacKinnon Michael D. Wesco Auto Body
Meaker Scott Boeing
Muto Myrna Seattle Public Schools
Nakashima Tom Aki's Body Shop, Inc.
Nguyen Kiet Kiet Auto Body
Oldfin Steve A. PEMCO, Insurance Companies
Burgess Duncan SSC
Dillard Daniel SSC
Dimartino Michael SSC
Ford Steve SSC
Martin Vanessa SSC
Smock Erik SSC
White Debbie SSC Worksource

Welding Advisory

Austin Bob Seattle Public Schools
Amero Rick Madden Industrial Craftsman
Bhende Mohit
Bridge Lyle Iron Worker Local 86
Creamer Andy Exotic Metals
Eaton Mark Boilermakers Local 104
Henderson Don Carnitech US Inc./Marel
Jacobsen Chris PACCAR
Janson Jeff Nucor
Johnson Kenneth Vigor Shipyards
Larson Jan Covering for David Kirk
Mather Doug Vigor Industrial
Mckenney David Airgas, Inc.
Parker Ronnie Central Welding Supply
Pollard Steve Machninist Inc.
Reinhardt James Forward Fabrication
Rider Linda Seattle Jobs Initiative
Stedman Troy Capital Industries
Walsh Jerry Kvichak Marine Inc
Spector Jeff
Baker Rick SSCC
Brown Ocie SSCC
Burgess Duncan SSCC
Dillard Daniel SSCC
Dimartino Michael SSC
Johnson Ken SSCC/Vigor
Lee Joanne SSCC
Lockman Mary SSCC
Martin Vanessa SSCC
Weber David SSCC
White Debbie SSCC Worksource
2012-13 NATIONAL ACADEMY FOUNDATION BUSINESS & COMMUNITY PARTNERS

Note: Members prefer their company names only but personal names could be provided. Meetings are monthly – September through June with a Summer fundraiser.

**Academy of Finance – Ballard, Chief Sealth, & Franklin**

**Academy of Hospitality and Tourism – Chief Sealth**

Absolutely Northwest
Argosy Cruises
Boeing
Bolt Bus
buuteeq, Inc
Career Path Services
Central Washington University
Cognizant
Conover Capital Management
Courtyard by Marriott Downtown Seattle Lake Union
Deloitte & Touche LLP
Donna Longwell & Associates
Eagle Strategies/ New York Life
Highline Community College
Holland America
Holland America Princess
ITT-Technical Everett
Johnson Scannell & Associates
K 12 DigiPen Institute of Technology
K&L Gates
Key Bank
KMPG
Marsh
Microsoft
Morse Best Innovation
North Seattle Community College
Office of the Insurance Commissioner
Oppenheimer & Co, Inc
Parametric
Pineapple Hospitality
Polar Marine, LLC
Professional Claim & Loss Consulting
RBC Wealth Management
Roche's Travel
Russell Investments
Seattle University – Albers School of Business & Economics
Sellen Construction
The Janus Group LLC
Vulcan
Washington State Convention Center
Washington State Housing Finance Commission
### KNHC – WRPA RADIO ADVISORY BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlie Nordstrom</td>
<td>Owner, Bad Animals Recording Studio</td>
</tr>
<tr>
<td>Dan Magden *</td>
<td>Remote Engineer, KOMO</td>
</tr>
<tr>
<td>David Shield *</td>
<td>Engineer, Solar Energy Systems</td>
</tr>
<tr>
<td>Don Iverson *</td>
<td>Principal Engineer, Coffman Engineering</td>
</tr>
<tr>
<td>Eric Fraser *</td>
<td>Program Director, KUBE</td>
</tr>
<tr>
<td>Gregg Neilson</td>
<td>General Manager, KNHC</td>
</tr>
<tr>
<td>Jai Jaisimha</td>
<td>Owner, Open Mobile Solutions</td>
</tr>
<tr>
<td>Jamie Hammond</td>
<td>Television Executive Producer</td>
</tr>
<tr>
<td>Jill Hudson</td>
<td>Principal, Nathan Hale</td>
</tr>
<tr>
<td>Jim McKenna *</td>
<td>Owner, McKenna Gottlieb</td>
</tr>
<tr>
<td>Mary Davison</td>
<td>CTE Director, SPS</td>
</tr>
<tr>
<td>Michael Dever *</td>
<td>Supply Analyst, Boeing</td>
</tr>
<tr>
<td>Myron Partman *</td>
<td>TV/Film freelance producer</td>
</tr>
<tr>
<td>Shani Watkins</td>
<td>Director, SPS Skill Center</td>
</tr>
<tr>
<td>Shellie Hart</td>
<td>KRWM 106.9</td>
</tr>
<tr>
<td>Shepherd Siegel</td>
<td>Director School Engagement Project Lead The Way</td>
</tr>
<tr>
<td>Simon Thwaits *</td>
<td>Broadcast teacher, KNHC</td>
</tr>
<tr>
<td>Stacy Walters</td>
<td>Vandeberg, Johnson &amp; Gandara</td>
</tr>
<tr>
<td>Susan Harmon</td>
<td>Public Radio Capital, Emeritus</td>
</tr>
<tr>
<td>Vince Lerner *</td>
<td>Radio Voicework Personality</td>
</tr>
</tbody>
</table>

*Alumni of the program

### HORTICULTURE ADVISORY BOARD

- Cyle Eldred: O’Laughlin Shows, NW Flower and Garden
- Terri Benson: Little Creek Nursery
- India Carlson: Ballard CTE
- Jessica Torvik: Hale CTE
- Leif Herald: XIP Landscaping/Horticulture
- Robert Austin: SPS CTE

### IGNITE – Inspiring Girls Now in Technology Evolution Advisory Board

- Manisha Patel – Microsoft
- Aparna Vishawanathan – Microsoft
- Karl Ruff, Teacher PLTW Roosevelt HS
- Mickey Pierce- Consultant, contract work in technology
- Lynn Kepl – Microsoft
- Christy Vaughn – Waggener-Edstrom
- Lisa Sandoval – Department Head of Information Technology at Seattle Central
- Larisa Golden – Dreamclinic
**TERMS and LINKS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACE Mentors</td>
<td>Architecture, Construction, and Engineering Mentors – Open district wide</td>
</tr>
<tr>
<td>AOF</td>
<td>Academy of Finance – Franklin, Ballard, and Chief Sealth part of the NAF Academies</td>
</tr>
<tr>
<td>AOHT</td>
<td>Academy of Hospitality and Tourism – Chief Sealth</td>
</tr>
<tr>
<td>CPR</td>
<td>Consolidated Program Review – Audits that OSPI conducts</td>
</tr>
<tr>
<td>CREATE</td>
<td>Construction Related, Engineering, Architectural, Technical Experience - Franklin</td>
</tr>
<tr>
<td>CTE</td>
<td>Career and Technical Education</td>
</tr>
<tr>
<td>CTSO</td>
<td>Career and Technical Student Organizations. These include DECA, FBLA, TSA, Skills USA, HOSA, and FCCLA. Please refer to CTE SPS website for explanations of each.</td>
</tr>
<tr>
<td>FTE</td>
<td>Full-time Equivalent – can be used for explanation of teacher workload or student enrollment</td>
</tr>
<tr>
<td>GRADS</td>
<td>Graduation, Reality And Dual-Role Skills (GRADS) are programs for pregnant teens and/or young parents that focus on work and family foundation skills of significance to these students. GRADS programs include student demonstration of skills leading to high school graduation and economic independence.</td>
</tr>
<tr>
<td>IGNITE</td>
<td>Inspiring Girls Now in Technology Evolution – one of our Nontraditional programs</td>
</tr>
<tr>
<td>NAF</td>
<td>National Academy Foundation</td>
</tr>
<tr>
<td>Non-Trad</td>
<td>Nontraditional occupations – occupations that employ 25% or less of one sex</td>
</tr>
<tr>
<td>OSPI</td>
<td>Office of Superintendent of Public Instruction</td>
</tr>
<tr>
<td>PLTW</td>
<td>Project Lead the Way</td>
</tr>
<tr>
<td>POS</td>
<td>Programs of Study are detailed guides for students, mapping out specific course options for a chosen career path from high school through postsecondary education.</td>
</tr>
<tr>
<td>STEM</td>
<td>Science, Technology, Engineering, and Math</td>
</tr>
</tbody>
</table>