How to Ensure Equity and Rigor in Dual Credit and CTE

West Valley Futures
We only think when we are confronted with problems.

- John Dewey
Recognition and Awards

• 2013 - WVJH Washington STEM Lighthouse School
• 2013/2014 - College Board AP Honor Roll District
• 2014/2016 - DA Magazine - District of Distinction
• 2015 - NSBA Magna Award Honorable Mention
• 2016 - International Center for Leadership in Education - Innovative District
• 2019 - Ignite International Girls in STEM - School of the Year

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Professional Memberships/Studies

- 2016-18 - AASA Digital Learning
- 2016 - ZfA German Dual Education System (Berlin and Erfurt)
- 2017-Present - AASA Early Learning Cohort
- 2017-Present - Digital Promise League of Innovative Schools
- 2017 - CEMETS - Washington State (ETH Zurich, Switzerland)
- 2018-Present - AASA Personalized Learning Cohort
- 2018-Present - District Administration - Leadership Institute
- 2019-Present - AASA Redefining Ready Cohort
- 2019-Present - Futures Institute

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Five Steps to Student Success

- Kindergarten Readiness -
- Enriching Kindergarten Experience -
- 3rd and 4th Graders to Benchmark -
- Algebra Ready by 8th Grade -
- Career and College Ready -
Washington students fall behind early and fall out over time.

80,700 start 9th grade*

3,500 drop out before 10th grade
Another 3,400 drop out before 11th grade
Another 4,900 drop out before 12th grade
Another 8,300 drop out before graduation**
14,000 do not enroll in a postsecondary program***

Another 21,200 fail to earn a postsecondary degree****

25,500 obtain a postsecondary credential***

Notes:
* Includes students who transfer in after 9th grade and excludes students who transfer out.
** Estimate counts students who do not graduate in five years as dropouts.
*** Six years after graduation.
**** Seven years after graduation. Student obtaining a postsecondary degree does not equal the number of students starting 9th grade less the students exiting the “leaky pipeline” due to rounding.

Source: Analysis of data from Education Research Data Center, OSPI.
Washington Student Achievement

- 80,700 - 9th Graders who enter high schools
- 25,500 - Will earn a post-secondary credential. - 31%
- 55,200 - Will not have an adequate credential to enter the workforce. - 69%
Swiss education system
Current overall education levels / permeability

Mandatory School

- 1% University degree
- 13% University of Applied Sciences degree
- 14% Higher VET certificate
- 36% VET certificate without immediate continuing education
- 14% no immediate education
Post Secondary Outcomes and Workforce Demands

<table>
<thead>
<tr>
<th></th>
<th>University</th>
<th>Certification/Technical Degree/Transfer Degree</th>
<th>VET Certification</th>
<th>Secondary School Completion</th>
<th>Non Completer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>20%</td>
<td>20%</td>
<td>36%</td>
<td>12%</td>
<td>12%</td>
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<tr>
<td>Washington</td>
<td>24%</td>
<td>23%</td>
<td>30%</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>WA Projected</td>
<td>30%</td>
<td>40%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Legend:
- University
- Certification/Technical Degree/Transfer Degree
- VET Certification
- Secondary School Completion
- Non Completer
2019-20 Legislative Concerns

Carl Perkins V
CTE Directors
- CTE Concentrator
  - Two Academic Credits
- Indicators of Performance
  - Industry Certification
  - CTE Dual Credit - or
  - Work Based Learning
- State Determined Levels or Performance

HB 1599
HS Principals
- CTE Sequence
- Relevant to CTE
  - Postsecondary Pathway
- Core Plus
If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.

- John Dewey
West Valley Futures

- Pathways are Career First built from Economic Labor Data
- All Pathways lead to College Credit or Industry Certification
- Pathways use Equivalency Credit to enable students to meet the Washington CADR (University Entry Requirements) and Graduation Requirements
- All Pathways lead to further education through University, Community College, Technical School, Apprenticeship OR direct connection to employment

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- **EARLY ENGAGEMENT** - Engagement begins in 7th grade with exploratory courses and interest assessments.
- **DEPTH** - All programs of study are a sequence of courses building off of each other. Minimum of two credits.
- **RIGOROUS** - All programs lead to an industry recognized certification and/or college credit.
- **PERMEABLE** - All programs lead to workforce, apprenticeship, AND post-secondary education.
- **REAL WORLD** - All programs include work based or work site learning.

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To find out what one is fitted to do, and to secure an opportunity to do it, is the key to happiness

- John Dewey
West Valley Futures - EARLY ENGAGEMENT

• Junior High Exploratory Program - 35% CTE STEM
  • 7th Grade
    • Science - Human Body Systems
    • Computer Essentials - MOS Certification
    • Pre-Engineering - Boeing Core Plus
  • 8th Grade
    • Science - Material Science/Green Energy
    • Aviation Manufacturing - Drone Manufacturing
    • Computer Science - Microsoft Python Certification

• Interest Based Course Registration

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Arriving at one goal is the starting point to another.

- John Dewey
## West Valley Futures - DEPTH

<table>
<thead>
<tr>
<th>7th Grade</th>
<th>8th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
</table>
| **Core Plus:**  
- Lean Manufacturing  
- Auto CAD  
- Additive CNC  
- Subtractive CNC | **Core Plus:**  
- Material Science | **Welding - AWS**  
- Certified Welder 1  
- Certified Welder 2 | **Manufacturing Boeing Core Plus** | **AJAC Apprenticeship** |

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West Valley Futures - Manufacturing

• West Valley Junior High - Pre Engineering - Core Plus
  • AutoCad
  • CNC Programming
  • Lean Manufacturing Principles

• West Valley Junior High - 8th Grade Science - Core Plus
  • Material Science

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West Valley Futures - Manufacturing

• West Valley Junior High - AMPED
  Algebra 1 in Manufacturing Processes, Entrepreneurship, and Design
  • Team Taught
    • One Algebra Teacher
    • One CTE Manufacturing Teacher
  • Combines Algebra Theory with Applied Algebra
West Valley Futures - Manufacturing

• Sophomore Year
  • American Welding Society -
    • SENSE Level 1
    • SENSE Level 2

• Junior Year
  • 540hrs - Core Plus Manufacturing
  • OSHA 10
West Valley Futures - Manufacturing

- Senior Year
  - Related Supplemental Instruction (RSI) - 7am - 11am - Monday
  - Academic coursework 11:30 - 2:30pm - Monday through Friday

- Students have paid work in Aerospace Manufacturing
  - 7am - 11am Tuesday through Friday
    - Triumph Actuation Systems
    - Cub Crafters
    - Pexco Aerospace
West Valley Futures - Manufacturing

• Registered Apprenticeship
  • Aerospace Joint Apprenticeship Committee (AJAC)
  • Competencies filed with Department of Labor and Industries
  • 2000hrs of On the Job Training (OJT)
• Earn Math, Science, and English Academic Credit
• Earn Fifteen College Credit
The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative.

- John Dewey
West Valley Futures - RIGOROUS

- Career Ready Indicators
  - 90% Attendance Rate
  - One or more Co-Curricular Engagement
    - Community Service
    - Academic Engagement
  - Industry Credential
  - Dual Credit Career Pathway
  - Workplace Learning Experience
  - Student Income Levels - ERDC
Education, therefore, is a process of living and not a preparation for future living.

- John Dewey
West Valley Futures - PERMEABLE

- Academic Indicators
  - Minimum of 12 useable Dual Credits - One Academic Quarter
  - College Development for ELA and/or Math
  - Academic GPA - 2.8 - 4.0
  - Pre College Coursework Rate

- Assessment Benchmarks
  - SAT - MATH 520 | Reading/Writing 480
  - FAFSA Completion Rate - Support from WSAC

- Post Secondary Enrollment - ERDC
West Valley Futures - PERMEABLE
West Valley Futures - REAL WORLD

- [www.wvfutures.org](http://www.wvfutures.org)
  - Comprehensive Program info
  - Career pathway planning
- Research Proven
- You Tube
  - Intro
  - Manufacturing
WV Programs of Study

Career Pathway
- JROTC
- Allied Health
- Manufacturing
- Fire Science
- Marketing
- Woods Technology
- Agriculture
- Education

6 Credits of Machining
- 2 English
- 1 Math
- 1 Science
- 3 Social Studies
- 2 Health and Fitness
- 1 Art
- 6 Elective
- 2 World Language

2 Lab Science
- 2 Math
- 2 English
- 1 CTE
- PPR

Personal Pathway Requirement:
Students have the ability to prepare for direct Careers in Aerospace, Technical School Machining at Perry Tech, Community College Machining at YVCC, or Mechanical Engineering in University.
West Valley Futures

• Realize.... **WHY?** is a completely reasonable question.
• Place teachers, **ACADEMIC** and **VOCATIONAL**, in Job Shadows
• Track economic performance data of our graduates
• Develop **PERMEABLE** educational pathways
• Career exploration should begin early
• Workforce preparedness is a **PROCESS** not a **FINISH LINE**

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