

# Issaquah School District

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## Career and Technical Education

Program Evaluation for the 2016-2017 School year

Program Plan for the 2017-2018 School Year

## CTE Program Evaluation (Continued)

### Overview

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Career and Technical Education (CTE) is an invaluable part of Issaquah School District's middle and high school programming. Students enrolled in CTE courses learn and practice skills and habits of mind that help them bridge the relationship between school experiences and post-secondary experiences—continuing education or employment. CTE programs clearly align with the District's mission: *"Our students will be prepared for and eager to accept the academic, occupational, personal and practical challenges of life in a dynamic global environment."*

To ensure that CTE offerings are relevant, timely, and appropriate, annual program evaluations are conducted by the Director of Career and Technical Education, CTE Specialists, and community members. This document outlines areas of focus for program compliance, growth and refinement. Each area also includes a minimum of one "Strengths, Weaknesses, Opportunities, and Threats (SWOT)" table summarizing characteristics of each area. This process is inclusive of both internal and external variables and their impacts on CTE programming.

In reviewing the FTE counts, the revised graduation requirements for the Class of 2019 have begun to impact enrollment. Programming will continue to need to be revised as Core 24 allows for fewer choice and interest electives in a student's schedule.

The following areas were reviewed:

- Educator Licensing
- Curriculum, Instruction and Evaluation
  - Create and sustain new programs
  - Increase equivalency in CTE programs
  - Increase enrollment in CTE programs
- Leadership
- Community and Educational Partnerships

### EDUCATOR LICENSING

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CTE teachers are appropriately certificated through the Office of the Superintendent of Public Instruction (OSPI).

- Instructors who hold conditional or probationary CTE certificates have developed Professional Growth Plans that are reviewed and approved by the individual, the school administrator CTE lead and the CTE Director annually.
- Instructors who are on conditional or probationary certificates have also been approved by the CTE General Advisory Council (GAC).

## CTE Program Evaluation (Continued)

	Positive	Negative
Internal	<b>Strengths</b> <ul style="list-style-type: none"> <li>• 22 CTE instructors hold initial or continuing certifications.</li> <li>• Issaquah Schools Foundation provides a scholarship for CTE certification.</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>• 23 instructors hold limited certifications.</li> <li>• 7 CTE instructors are likely to never qualify for initial or continuing certifications.</li> <li>• 2 CTE instructors are teaching outside of their continuing certification.</li> </ul>
External	<b>Opportunities (Action Plan)</b> <ul style="list-style-type: none"> <li>• OSPI modified the requirements of the STEM Technology certificate (v141000). Now MS STEM instructors can transition onto continuing certificates using teaching as 6,000 hours of industry experience.</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>• OSPI requires that no otherwise qualified person is available to teach the course.</li> </ul>

## CURRICULUM, INSTRUCTION AND EVALUATION

Curriculum, instruction, and evaluation are based on state-approved standards and frameworks.

- STEM & CTE courses are all aligned to CIP codes, Career Clusters, and OSPI Pathways.
- Approved frameworks are posted on the STEM & CTE department site at: <http://www.isdstemandcte.com/frameworks-1/>
- There is consistency in framework conventions such as the alignment to state standards including Common Core Math, Common Core ELA, Next Generation Science Standards, other WA State Learning Standards, and Industry Standards specific to course content.
- Courses provide clear objectives and competencies which are tested through the Measurement of Student Growth (MOSG), a district wide assessment that is given at the beginning and end of course terms.
- Curriculum frameworks and MOSG's are re-evaluated and updated on a five-year cycle to ensure content is relevant and up to date.
- This year we brought on Adobe Creative Cloud to update our applied CTE art related courses to industry standard software.

Looking forward there are three areas of focus for curriculum, instruction and evaluation. These are to create and sustain high quality CTE programs, to increase equivalency in CTE programs, and to increase enrollment in CTE programs. With new legislation in Core 24, students have less opportunities for electives which creates a demand for equivalency crediting in core academic areas for our CTE programs.

## CTE Program Evaluation (Continued)

Create and sustain new programs

	Positive	Negative
Internal	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Strong computer programming offerings.</li> <li>• Strong Arts-related offerings.</li> <li>• Strong Sports Medicine offering.</li> <li>• Many CTE courses have dual-credit agreements through Tech Prep (college credit).</li> <li>• Issaquah High School will begin AP Economics in the fall of 2017.</li> <li>• Skyline High School will begin IB Economics in the fall of 2017.</li> <li>• Beaver Lake Middle School will begin Design &amp; Modeling and Automation &amp; Robotics in the fall of 2017.</li> <li>• Issaquah High School will resume offering Advanced Topics in Computer Science (post AP) in the fall of 2017.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Some buildings have no additional space for program expansion.</li> <li>• Difficulty in finding qualified instructors.</li> </ul>
External	<p><b>Opportunities (Action Plan)</b></p> <ul style="list-style-type: none"> <li>• Consider which programs need to sunset.</li> <li>• Increase core subject equivalency crediting.</li> <li>• Continue to expand 7-12 pathways through MS STEM program expansion.</li> <li>• Develop CTE frameworks for the new STEM elective App Creator.</li> <li>• Develop CTE frameworks for Applied Algebra 1 and Applied Algebra 2.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• The class of 2019 has increased graduation requirements that limit the number of CTE courses a student might take.</li> </ul>

## CTE Program Evaluation (Continued)

Increase equivalency in CTE programs

	Positive	Negative
Internal	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• AP Computer Science satisfies a post-algebra 2 math equivalency</li> <li>• Sports Medicine satisfies a science equivalency</li> <li>• Material Science satisfies a science equivalency</li> <li>• CTE Health satisfies a health graduation equivalency</li> <li>• Graphic Design 1 &amp; 2 satisfies a fine arts equivalency</li> <li>• Photography 1 &amp; 2 satisfies a fine arts equivalency</li> <li>• Technical Theatre satisfies a fine arts equivalency</li> <li>• Yearbook 1 &amp; 2 satisfies a fine arts equivalency</li> <li>• American Sign Language satisfies a World Language equivalency</li> <li>• NJROTC provides a PE exemption</li> <li>• Criminal Justice satisfies a social studies equivalency</li> <li>• Journalism 1, 2 (Issaquah) satisfies a senior English equivalency</li> <li>• AP Economics satisfies a social studies equivalency</li> <li>• IB Economics satisfies a social studies equivalency</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Creating new equivalencies often requires re-writing existing courses.</li> <li>• Curriculum re-writes may require time spent on other priorities (writing, math, science)</li> <li>• Many CTE teachers do not have mathematics or science backgrounds.</li> </ul>
External	<p><b>Opportunities (Action Plan)</b></p> <ul style="list-style-type: none"> <li>• Create a connection with Renton Technical College for Culinary Programs.</li> <li>• Determine what other potential high school equivalency crediting options exist.</li> <li>• Increase college crediting through Tech Prep.</li> <li>• Develop CTE frameworks for Applied Algebra 1 and Applied Algebra 2.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• OSPI is requiring a minimum number of cross-credited courses.</li> <li>• The class of 2019 has increased graduation requirements that limit the number of CTE courses a student might take.</li> </ul>

## CTE Program Evaluation (Continued)

Increase enrollment in CTE programs

	Positive	Negative
Internal	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• High enrollment in computer programming</li> <li>• High enrollment in health</li> <li>• High enrollment in arts-related</li> <li>• Beaver Lake Middle School will begin STEM &amp; CTE programs in the fall of 2017.</li> <li>• Issaquah High School will begin AP Economics in the fall of 2017.</li> <li>• Skyline High School will begin IB Economics in the fall of 2017.</li> <li>• Projected increased enrollment in Issaquah Middle School STEM programs.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Some of the most expensive offerings have the fewest sections/enrollment:</li> <li>• Only 1 semester course in Robotics - Issaquah High School</li> <li>• Only 1 offering in Video - Issaquah High School</li> <li>• Low enrollment in Liberty High Culinary Arts</li> <li>• Low enrollment in Liberty High NJROTC</li> <li>• Low enrollment in Issaquah High Woods</li> <li>• No programming at Pine Lake Middle School</li> </ul>
External	<p><b>Opportunities (Action Plan)</b></p> <ul style="list-style-type: none"> <li>• Develop new AP Psychology course as a CTE offering.</li> <li>• Develop new Business English/Communications program as a CTE offering.</li> <li>• Increase marketing for Teaching Academy, Culinary Arts, NJROTC, Woods.</li> <li>• Continue to promote CTE courses inside and outside the school.</li> <li>• Continue to work with Middle School principals to implement STEM-based programs.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• The class of 2019 has increased graduation requirements that limit the number of CTE courses a student might take.</li> </ul>

## LEADERSHIP

Provide new and revised leadership opportunities to all students in STEM and CTE programs.

- All students enrolled in STEM/CTE have opportunities to participate in leadership activities that are integrated into daily class activities.
- Most STEM/CTE programs are connected to a CTSO where members affiliate and participate at regional, state, and national levels.

## CTE Program Evaluation (Continued)

	Positive	Negative
Internal	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• DECA is an award winning CTSO.</li> <li>• FCCLA is an award winning CTSO.</li> <li>• WCTSMA is an award winning CTSO.</li> <li>• HOSA is an award winning CTSO.</li> <li>• FIRST Robotics engages students in all 3 comprehensive high schools.</li> <li>• Some CTE courses have high quality leadership and are not aligned with a CTSO.</li> <li>• Began a Technology Students of America CTSO at each comprehensive high school in the fall of 2016.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Some courses are not aligned with a CTSO, and limited opportunities for leadership exist outside the classroom.</li> </ul>
External	<p><b>Opportunities (Action Plan)</b></p> <ul style="list-style-type: none"> <li>• Focus on development and growth of the Technology Students of America CTSO in each comprehensive high school.</li> <li>• Continue to work with CTE teachers to develop alternative leadership opportunities.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• OSPI is now requiring all CTE programs to provide leadership opportunities inside, and outside the classroom. A CTE teacher must supervise activities, including community service and competitions at local, state, and national levels.</li> </ul>

## COMMUNITY AND EDUCATIONAL PARTNERSHIPS

Increase partnerships through General Advisory Council (GAC) and Pathway Advisory Committees (PAC).

- STEM/CTE programs utilize an advisory committee with appropriate representation, such as business, industry, education, community, government agencies, and special population groups. The objective of the advisory committee is to provide continual and regular input and recommendations for program improvements. This year we have formed new groups and revised naming conventions.
  - GAC meets three or more times per year, primarily comprised of industry professionals and district administration and has written agendas and minutes on file with the CTE Office. One of the roles of the GAC is to oversee the overall work of STEM/CTE as well as advise the work of the PAC.
  - PAC also meets three or more times per year and has written agendas and minutes on file with the CTE Office. The PAC includes STEM/CTE instructors, students, business/industry professionals, and district administration. Their roles include annual program evaluation, long-range planning, marketing, curriculum review, and program recommendations.

## CTE Program Evaluation (Continued)

	Positive	Negative
Internal	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• The District has a general advisory that has community and educational representation</li> <li>• Advisory meetings have sign-in processes and all take minutes.</li> <li>• The District partners with Lake Washington School District in ASL, Information Technology, and Criminal Justice.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Most advisories have more teacher participation than community participation.</li> <li>• Most advisories do not have adequate representation from the program specific businesses and industries.</li> </ul>
External	<p><b>Opportunities (Action Plan)</b></p> <ul style="list-style-type: none"> <li>• Invite college faculty to advisory meetings.</li> <li>• Invite college administrators to advisory meetings.</li> <li>• Continue to partner with the Issaquah Chamber of Commerce.</li> <li>• Continue to partner with the Issaquah Schools Foundation.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Advisories do not meet OSPI requirements regarding representation.</li> </ul>

## SUMMARY

Based upon this evaluation and input from the GAC and PAC, Issaquah School District's CTE programs will begin planning for the following:

### Program Maintenance and Development

Determine which programs need to sunset

Working with GACs, PACs, and school Principals a discussion about which programs need upgrading or sun setting will coincide with new course proposals.

Increase equivalency crediting

To increase the number of CTE courses that qualify for credit equivalency, CTE will begin development of (2) new courses: Applied Algebra 1, and Applied Algebra 2. These courses will meet the same standards as Common Core Algebra 1 and Common Core Algebra 2. CTE will begin the development of AP Psychology and Business/English Communications frameworks. These courses will provide additional equivalency for Fine Arts.



## CTE Program Evaluation (Continued)

### Connections for Dual Crediting

The Director of Career and Technical Education will work with teachers and CTE Specialists to design coursework that will increase the number of dual crediting opportunities through our local Tech Prep partners. Cooperation with our Tech Prep partners will continue, and new opportunities will be examined.

### Increase enrollment in CTE programs

#### New program offerings

The following new programs will be developed:

- App Creators
- Applied Algebra 1
- Applied Algebra 2
- AP Economics
- IB Economics
- AP Psychology

#### New leadership opportunities

CTE will continue to work to increase the level of involvement in Technology Students of America clubs in all comprehensive high schools. Since middle school programs are only 60 hours, middle school students will be encouraged to participate in their local high school chapters.

### Increase educational/community partnerships

#### College partnerships

CTE will work to invite local technical and community college faculty to advisory meetings. In addition, local technical and community college administrators will be invited as well.

### Summary

Career and Technical Education is an important component of secondary education in the Issaquah School District. Students learn and practice skills necessary to the mission of the District. Recent graduation requirement changes for the class of 2019 will strictly define the number and types of credits needed for graduation. Career and Technical Education has evaluated its programs and provided a plan that will allow continued programs within the structure of these new graduation requirements.

## CTE Program Evaluation (Continued)

Respectfully submitted,



Lesha Engels

3/17/2017

CTE Director, Issaquah School District.

### Annual CTE FTE

*2012-2013*

Middle School: 35.56

High School: 680.16

Skills Center: 26.34

*2013-2014*

Middle School: 52.58

High School: 695.95

Skills Center: 21.37

*2014-2015*

Middle School: 53.07

High School: 779.26

Skills Center: 19.50

*2015-2016*

Middle School: 52.33

High School: 783.91

Skills Center: LWSD Now Fiscal Agent

*2016-2017*

Middle School: 70.06

High School: 753.42