#### Career and Technical Education (CTE) in Washington State

In light of the McCleary decision and the State's <u>imperative</u> to create "ample" funding<sup>1</sup> [Ruling p 161], and the purpose of "education" [Ruling p 212] in Washington State is to provide the knowledge and skills citizens need to compete in today's economy and meaningfully participate in our State's democracy.

Washington is one of the top STEM states in the nation with Advanced Industries producing almost 40% of the Seattle's regional product.<sup>2</sup> However, the skills needed for the state's Advanced Industries have been changing at such a rate that a mismatch between needed skills, and those of the emerging workforce, exist at all levels.

With more than 40% of our youth entering directly into the workforce upon leaving high school this skill mismatch has significant impact on the lives of our youth, not to mention the economic impact. School districts are addressing the college and career readiness gaps that exist for many high school graduates. School districts, regional Skill Centers, and community and technical colleges have developed and continue to improve successful instructional programs that work to prevent students leaving high school with the necessary skills to be competitive in the new 21st century economy.

The purpose of this fact sheet is to provide policymakers and others with a specific way they can address our state's workforce needs, as well as understanding and promoting the Career and Technical Education (CTE) programs which

provide opportunities for youth who wish to enter a career pathway as an option other than directly attending a 2-year college or 4-year university right after high school graduation.

Career and Technical Education (CTE) completers<sup>3</sup> graduate at a higher rate and are provided with the fastest, most direct route for an opportunity to earn a living wage, afford health care, and continued postsecondary education and/or training. It is important to understand that Career and Technical Education (CTE) is defined as basic education by law and is not an addition to the basic education responsibility of the state.



### Benefits of Career and Technical Education (CTE)

Career and Technical Education (CTE) learning experiences are educational opportunities that emphasize hands-on learning where STEM skills are being taught with direct application to current and future careers in Washington State. Students learn in a pedagogical model that not only teaches technical skills and concepts in their program areas and also connect them with core academic concepts based in real industry-related, project-based learning activities in the CTE classroom, lab, and shop. The CTE instructional model<sup>4</sup> requires students to develop their "professional soft-skills" through student leadership activities and work-based learning experiences out in their local communities with local businesses.

This CTE instructional model for a High Quality CTE program<sup>5</sup> requires ample resources and funding from the state that are sufficient to teach and mentor students' in their foundational academic, technical, and soft skills. Additional class materials, supplies, and operating costs are needed to use up-to-date equipment, provide time, and additional training for extended student learning; this requires more than the current general education allocation. These CTE learning experiences are a proven effective educational strategy to prepare students for success in both career and college readiness for the 21st century economy.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> McCleary v. State of Washington

<sup>&</sup>lt;sup>2</sup> America's Advanced Industries: What They Are, Where They Are And Why They Matter

<sup>&</sup>lt;sup>3</sup> OSPI web site: <u>http://www.k12.wa.us/CareerTechEd/News.aspx</u>

<sup>&</sup>lt;sup>4</sup> CTE Instructional Model: <u>http://www.k12.wa.us/CareerTechEd/Presentations/CareerandTechnicalEducationModel.pdf</u>

<sup>&</sup>lt;sup>5</sup> High Quality CTE Project: <u>www.acteonline.org/high-qualityCTE/</u>

<sup>&</sup>lt;sup>6</sup> <u>Preparing 21st Century Citizens: The Role of Worksite Learning in Linked Learning. August, 2013).</u>

Research in various forms and sources suggests that quality CTE learning can:

- Increase performance on standardized assessments,
- Improve attendance,
- Increase graduation rates,
- Increase probability of enrollment into postsecondary education, and
- Increase future wages and lower future student debt after high school graduation.<sup>7</sup>

High Quality Career and Technical Education (CTE) experiences provide high school students the opportunity to obtain the needed career and postsecondary education readiness skills as described below.

- 1. **21st Century Skills** that enhance an individual's ability to interact with others and succeed in a job (e.g., communication, teamwork, conflict resolution, etc.);
- 2. **Technical & Academic Fundamentals** necessary to start a career in an individual industry (e.g., Advanced manufacturing industries would include safety, quality, lean manufacturing, statistical process control, etc.) that are embedded with and support learning of state learning standards;
- 3. Career Readiness and Awareness to develop an understanding of jobs in an industry, and how to get them (e.g., interviewing, resume and cover letter development, networking, etc.); and
- 4. Work-based and/or Community Application Students apply their learned skills through a supervised project in their community with support from their CTE instructor and/or mentor. Projects may be completed in the classroom, or on a site at a local business.

#### The Need for Additional Resources Beyond the General Education Allocation:

The value of Career and Technical Education (CTE) learning when understood is undeniable, and Washington State businesses want to support schools in providing these opportunities. A number of businesses in Washington currently provide CTE student experiences and are looking for expanded CTE opportunities in their local school districts; however, there are simply not enough of these experiences across our state to meet the demand.

Local school districts are making the hard decision of either offering core academic courses to meet current graduation requirements or offering higher cost Career and Technical Education (CTE) programs, the limitations in maintaining and expanding CTE programs is a direct function of higher costs and a lack of directed funding even if it is the right thing to do for those students not headed directly to a 4-year university after graduation.

### Solutions

As our state strategizes on methods to expand graduation rates for all social economic demographics in our state it is imperative that funding be provided to CTE and Skill Centers sufficiently to provide and expand programs where needed.

#### Background

The Washington ACTE and the CTE community are working to implement the proposals outlined in the "CTE and Skill Center Program Funding, Accounting and Data Reporting" report provided to the legislature in June 2014.<sup>8</sup> This report was a direct charge to OSPI by the legislature through language in the 2013-15 biennial budget. This budget request was previously submitted as part of the 2015-17 biennial budget request by OSPI and Washington ACTE. In the final weeks of the third session of 2015, the final request for \$19M for CTE MSOC failed to make the final 2015-17 Operating Budget.

<sup>7</sup> Center for Advanced Research and Technology (CART). (2011). Model for success: CART's Linked Learning program increased college enrollment. Clovis, CA: Author; and Ed-Data. (2012). State of California education profile 2010-2011: Schools

## **Current Situation**

In school year 2014-15 state funding averaged \$6,097.56 per CTE FTE compared to \$5,755.84 per basic education FTE. This enhancement of \$341.72 or 5.9% is insufficient to cover the additional costs associated with operating CTE programs, and in fact is not sufficient to cover even the allowed indirect rate charged to the CTE programs of 15%.

The CTE enhancement over basic education has declined over time. The 1995 Secondary Vocational Education in the State of Washington report stated the enhancement at that time was 28% above basic education.

For the 2014-15 school year, as reflected on August apportionment reports, 87.34% of the CTE enhancement is for MSOC (Materials, Supplies, and Operating Costs), and 12.66% for enhanced staffing allocations. This is particularly concerning because while the basic education MSOC allocation value has increased by 55.21% since the 2011-12 school year, the CTE MSOC rate has increased by only 6.24%. If you include the impact of the 2015-17 biennial budget, from school year 2010-11 to 2015-15, the basic education MSOC allocation value has increased by 121.47%, but the CTE MSOC rate has only increased by 7.3%. The total value of the CTE enhancement statewide is estimated to be \$36.8 million for school year 2014-15.

## **Proposed Solutions by Washington ACTE**

Funding formula changes are proposed in the following prioritized areas; based on the OSPI decision package for 2016:

- 1) <u>Revise CTE and Skill Center MSOC allocations to reflect what districts are actually spending using a three-year average vital to be achieved in the 2016 legislative session;</u>
- 2) Other CIS staffing ratio;
- 3) Implement QEC provisionally discussed class sizes;
- 4) Principal and CTE Director allocations; and
- 5) Funding for the startup of new CTE or Skill Center educational programs.

# Solution Details

### 1) Revise CTE and Skill Center MSOC Allocations

Recent budgets have reduced the CTE and Skill Center MSOC enhancements. The impact on the CTE MSOC enhancement is shown in the chart below:



A portion of the current CTE MSOC allocation is provided with the intent to cover costs associated with utilities, facilities maintenance, and district wide support. The workgroup found that there were no measureable increased costs in these categories for CTE programs; as such; CTE students should generate these allocations at the same rate as basic education students in the basic education program, thus removing existing "indirect charge" language from CTE funding.

The remaining categories of the MSOC allocation are intended to cover costs associated with technology, curriculum, library and other supplies, and professional development. The allocation for these should remain in the CTE program, and the enhancement above Basic

Education Apportionment (BEA) should be based on how much more CTE programs actually spend in these areas as compared to basic education. The following chart shows the proposed per student MSOC allocations for the 2016-17 school year for student MSOC allocations in CTE programs. This chart is based on the policy that all students should generate the BEA MSOC allocations and then an appropriate enhancement to certain MSOC categories should be funded for CTE programs, but only if the 15% indirect language is removed or reduced to 3%.

The multiplier in the chart below reflects a three-year average of comparing actual basic education costs to actual CTE program costs in each of these MSOC categories.

MSOC Category – 2016-17	General Educ. Allocation	CTE Multiplier	CTE Allocation
Technology	\$127.17	3.19	\$405.67
Curriculum	\$136.54	2.63	\$359.10
Library and Other Supplies	\$289.88	1.37	\$397.14
Professional Development	\$21.12	1.03	\$21.75
Total	\$574.71	2.06	\$1,183.66

Current law states that MSOC be adjusted for inflation each year, which has been done in the cost projection chart below.

The per student rates based on this proposal for CTE MSOC in future years, starting with the 2016-17 school year are shown in the chart below.

MSOC Category	2016-17	2017-18	2018-19	2019-20	2020-21
Technology	\$405.67	\$412.56	\$420.00	\$427.97	\$436.54
Utilities and Insurance	\$351.43	\$357.40	\$363.84	\$370.75	\$378.17
Curriculum	\$359.10	\$365.20	\$371.78	\$378.84	\$386.42
Library and Other Supplies	\$397.14	\$403.89	\$411.16	\$418.97	\$427.36
Professional Development	\$21.75	\$22.12	\$22.52	\$22.95	\$23.40
Facilities Maintenance	\$174.10	\$177.06	\$180.24	\$183.67	\$187.34
District-wide Support	\$120.61	\$122.66	\$124.87	\$127.24	\$129.79
Total	\$1,829.80	\$1,860.89	\$1,894.41	\$1,930.39	\$1,969.02

This chart reflects the combined BEA and CTE enhanced MSOC rates. With the proposed removal or reduction of the indirect rate as discussed in the OSPI decision package, only the portions of MSOC related to Technology, Curriculum, Library and Other Supplies, and Professional Development would actually be funded in the CTE program.

### **CTE Program Indirect Rate**

When the funding formulas are revised according to the OSPI decision package, the working group recommended a reduction of the indirect rate from the 15% currently to the federal restricted indirect rate (on average 3%).

## Skill Center MSOC

OSPI proposes that Skill Center MSOC values be enhanced above BEA rates based on a three-year average of the ratio of actual Skill Center MSOC expenditures per student compared to basic education. Because Skill Centers are their own cost centers, OSPI proposes a slightly different policy than what was discussed for CTE programs. Rather than adjusting individual MSOC components based upon whether or not they are direct program costs, OSPI believes that the total BEA funded MSOC should be adjusted by a factor that reflects the actual cost of Skill Center MSOC compared to BEA.

Per Student MSOC	BEA	Skill Center (Proposed)
2016-17 School Year	\$1,230.62	\$2,768.90
Three-Year Average Multiplier		2.25

The proposal for funding CTE and Skill Center MSOC as outlined in the OSPI decision package, with the additional cost (in millions) by school year is as follows:

School Year	2016-17	2017-18	2018-19	2019-20	2020-21
CTE (MSOC Reduction)	-\$19.3	-\$19.6	-\$20.0	-\$20.4	-\$20.8
General Education	\$42.3	\$43.2	\$43.8	\$44.6	\$45.5
Skill Centers	\$9.9	\$10.1	\$10.3	\$10.4	\$10.7
Combined MSOC Costs	\$32.9	\$33.5	\$34.1	\$34.7	\$35.4

The previous chart shows a reduction in CTE MSOC funding and an increase or shift to General Education MSOC funding is because the elements of MSOC related to utilities and insurance, facilities maintenance, and security and central office are no longer being generated within the CTE programs. CTE students are generating this MSOC allocation within the general education program, thus the increases on that line item in the chart.

The combined costs of implementing the proposed MSOC revisions for the 2016-17 school year is \$32.9 million.

### **Other CIS Ratio**

CTE and Skill Center programs currently receive a lower allocation for Other CIS staff per student FTE than basic education. Each student should be considered a basic education student first and foremost. This is not currently how the funding formula works for CTE and Skill Center programs. The following chart shows a comparison across all programs for the 2014-15 school year.

Other CIS Staffing	Prototypical HS Allocation	Allocation per 600 Student FTE		
Position	Per 600 Student FTE	CTE Programs	Skill Center Programs	
Librarian	0.523	0.268	0.302	
Counselor	2.539	1.303	1.466	
Nurse	0.096	0.049	0.055	
Social Worker	0.015	0.008	0.009	
Psychologist	0.007	0.004	0.004	
Total	3.180	1.632	1.836	

Based on feedback received from the CTE workgroup that studied the funding formulas and assisted OSPI in the June 2014 report, CTE programs do not require enhancements to these staffing positions, thus the BEA allocation would be sufficient. To rectify this situation, these staff units should be moved out of CTE programs and be allocated through either the prototypical middle or high school as part of basic education.

Skill center programs shall continue to generate an allocation for these staff members within their program allocation, but the allocation should equal what is generated at the prototypical high school.

Total cost of shifting the Other CIS staff allocation back to basic education for CTE and increasing the allocation within the Skill Center program is \$12.1 million for the 2016-17 school year.

### Implement QEC Recommended Class Sizes

The Quality Education Council (QEC) provisionally discussed class sizes of 19.0 for middle and high school CTE programs, and 16.0 for Skill Center programs. These class sizes were recommendations from the Funding Formula Technical Working Group report, issued in 2009. Superintendent Dorn's plan to fully fund basic education implements lower class sizes for CTE and Skill Center programs beginning with the 2017-18 school year. These cost estimates include the impact of increasing student caseload as projected by the caseload forecast council. There is no cost related to class size reduction in the 2016-17 school year, as the class size reductions do not occur until the 2017-18 school year.

## Principal/CTE Director Allocation

The current funding formula backs out the principal allocation from basic education and moves it to the CTE program for each CTE student FTE. This creates an issue due to the fact that Activity 23 – Principals is not an allowable charge to the CTE program in the accounting structure, so CTE is being funded for an allocation which cannot be charged to the program.

It is recommended that CTE students generate a principal allocation at the prototypical middle or high school as part of BEA, and not within the CTE program. The state saves money in this transition because CTE programs get a 2.5% enhancement over the prototypical high school for school based administration in the funding formula, which the state would no longer have to pay.

### Total savings to the state realized through shifting the principal allocation back to basic education is \$0.4 million.

An allocation should be provided for a CTE director within the funding formula, separate from a principal at a rate of 1:432 middle school CTE FTE and 1.39:600 high school CTE FTE. All expenses associated with the CTE director allocation should be charged to Activity 21 – Supervision in the accounting structure and would be allowed to be accounted for as CTE expenses.

CTE Director Allocation for 2016-17 School Year				
	High School	Middle School		
Projected 2016-17 FTE	57,786.45	7,693.95		
CTE Director	1.39 per 600 student FTE	1.00 per 432 student FTE		
Allocated CIS Staff Units	133.87	17.81		
Salary	\$7,377,611	\$983,066		
Fringe Benefits	\$1,578,097	\$210,535		
Health Benefits	\$1,253,042	\$166,702		
Total CTE Director Allocation	\$10,208,750	\$1,360,303		
Total Combined Cost	\$11,569,053			

The total cost of funding a CTE director for both middle and high school programs for the 2016-17 school year is \$11.6 million.

### Funding for the start-up of new programs

One funding gap identified by the workgroup is the lack of funding to start new CTE and Skill Center programs. OSPI is requesting \$250,000 per year to fund equipment and curriculum startup costs for new programs. To meet the local economic needs, these grants would differ from those currently funded by SSB 6052 – High Demand Grants. With high-demand grants, grantees must use grant funding for one of three high-demand areas: 1) construction; 2) health care; 3) information technology. The start-up grants proposed, as part of the OSPI decision package would not be limited to only those three areas.