



Washington Office of Superintendent of **PUBLIC INSTRUCTION**

Career & Technical Education (CTE)

High Demand Grants/FIRST Robotics/Secondary Career/Technical Ed Grants

1. **Purpose:**

Grant funds are provided for secondary Career and Technical Education grants pursuant to chapter 170, Laws of 2008 (2SSB 6377), and are intended to provide advancement of Career and Technical Education (CTE) in the areas of high-demand program areas. Grants are intended for middle schools, high schools, or skill centers to develop or upgrade high-demand CTE programs as identified under RCW 28A.700.020. Funds are also identified for the state Career and Technical Student Organizations (CTSOs) and the FIRST Robotics programs.

2. **Description of services provided:**

Grant funds are allocated on a one-time basis and may be used to purchase or improve curriculum, create pre-apprenticeship programs, upgrade technology and equipment to meet industry standards, and for other purposes intended to initiate a new program or improve the rigor and quality of a high demand program. Priority in allocating the funds is given to programs that are also considered high cost due to the types of technology and equipment necessary to maintain industry certification. Priority is also given to programs considered in high demand. Additionally, grants are provided to school districts to support FIRST Robotics programming, and the state recognized Career and Technical Student Organizations.

3. **Criteria for receiving services and/or grants:**

For high-demand grants, grantees must use grant funding for high demand areas for the following purposes:

- Purchase or improve curriculum
- Create pre-apprenticeship programs
- Upgrade technology and equipment to meet industry standards
- Initiate a new program or improve the rigor and quality of a High Demand program through other purposes

Funds are additionally used for: grants and professional development support to increase dual credit through advanced placement coursework, professional development in demand areas, and grants to support statewide access for industry certifications.

For FIRST Robotics grants, grantees may use funds for:

- Teacher stipends
- Teacher professional development
- Registration fees
- Supplies/materials
- Equipment and technology
- Other costs associated with direct participation in the FIRST programs including professional development

Career and Technical Student Organizations are granted funds based upon:

- Qualifying as one of the eight state recognized Career and Technical Student Organizations, providing the required extended learning component of the CTE model, and providing state level resources for use by local affiliated programs. These funds support the statewide supervision of the leadership activities offered through CTSOs.

Funds are provided to support professional development for in demand content areas, and content integration to support student achievement and academic performance.

Beneficiaries in 2019-20 School Year:

| | |
|------------------------------------|-----|
| Number of School Districts: | 278 |
| Number of Schools: | 0 |
| Number of Students: | 0 |
| Number of Educators: | 0 |
| Other: <i>Name other...</i> | 10 |

Number of OSPI staff associated with this funding (FTEs): 0.60 FTE

Number of contractors/other staff associated with this funding: 0

| | |
|---|-------------|
| FY20 Funding: State Appropriation: | \$2,052,000 |
| Federal Appropriation: | \$0 |
| Other fund sources: | \$0 |
| TOTAL (FY20) | \$2,052,000 |

4. **Are federal or other funds contingent on state funding?**

No

Yes, please explain.

If state funds are not available, the state will not be eligible...

5. **State funding history:**

| Fiscal Year | Amount Funded | Actual Expenditures |
|--------------------|----------------------|----------------------------|
| FY20 | \$2,052,000 | \$1,900,315 |
| FY19 | \$1,802,000 | \$1,729,722 |
| FY18 | \$1,802,000 | \$1,599,975 |
| FY17 | \$1,577,000 | \$1,346,092 |
| FY16 | \$1,577,000 | \$1,340,421 |
| FY15 | \$1,177,000 | \$1,161,243 |
| FY14 | \$1,177,000 | \$1,176,461 |
| FY13 | \$1,077,000 | \$1,066,510 |
| FY12 | \$977,000 | \$842,955 |
| FY11 | \$912,000 | \$423,369 |
| FY10 | \$2,475,000 | \$2,475,000 |

6. **Number of beneficiaries (e.g., school districts, schools, students, educators, other) history:**

| Fiscal Year | Number of School Districts | Number of Other |
|--------------------|-----------------------------------|------------------------|
| FY20 | 278 | 10 |
| FY19 | 324 | 10 |
| FY18 | 314 | N/A |
| FY17 | 298 | N/A |
| FY16 | 242 | N/A |
| FY15 | 259 | N/A |
| FY14 | 223 | N/A |
| FY13 | 210 | N/A |
| FY12 | 160 | N/A |
| FY11 | 96 | N/A |
| FY10 | 85 | N/A |

7. **Programmatic changes since inception (if any):**

The proviso was amended to include, "parts of programs that receiving grants that serve students in grades four through six." This language only impacts FIRST Robotics programs, as secondary CTE programs are defined as only programs in seventh through twelfth grades. Chapter 170, Laws of 2008 identified high demand funding exclusively for middle schools, high schools, or skill centers for CTE programs that prepare students for either a high employer demand program of study or a high-demand occupation or both.

8. **Evaluations of program/major findings:**

The number of school districts reflected in the beneficiaries table will reflect districts that may have received more than one grant; the number is duplicated.

More than 2 million dollars were requested to support High Demand CTE programs. Funded programs included Maritime Manufacturing, Mechanics and Fabrication, Computer Networking, Composites Manufacturing, Mechatronics, Biotechnology, and Nursing and Patient Services as example in-demand programs. Funded programs continue to provide input to other school districts in the area that look to build new or revise existing CTE programs.

Washington Applied Math Council was funded to coordinate and promote efforts to develop integrated math, science, technology, and engineering programs across the state to provide in-service and professional development to teachers that is required prior to implementing the Applied Math curriculum. Though educators are not direct recipients of funds, 195 educators benefitted from this funding.

| Session | # of School Districts | # of Schools | # of Educators | Other |
|---------------|-----------------------|--------------|----------------|----------|
| Fall | 50 | 62 | 86 | 4 |
| Winter | 25 | 25 | 37 | 2 |
| Spring | 37 | 46 | 72 | 3 |
| Totals | 112 | 133 | 195 | 9 |

Additionally, funding was provided to support Advanced Placement Computer Science training and implementation of coursework for CTE students. Training was provided by the College Board, supporting this high-demand pathway.

The eight state-recognized CTSOs provided both in-person, and virtual based events in the face of COVID-19. The CTSO organizations worked together with school district leadership and students to maintain engagement opportunities throughout the end of the school year.

9. **Major challenges faced by the program:**

The impact of COVID-19 and the closure of school facilities presented a significant challenge for grant recipients with respect to the ability to receive equipment in a manner timely enough to meet the spending timeline. Additionally, the delivery method and subsequent attendance of grant-funded professional development was drastically affected, as educator and student travel was largely banned.

As state-wide efforts to reduce spending in order to fund the impact of COVID-19 were explored, additional funding for career and technical education student leadership organizations initially passed in the budget was cut. Online/distance learning prohibited or greatly limited extended learning opportunities for students, an integral part of the CTE model.

10. **Future opportunities:**

\$600,000 in funds were awarded for high-demand grants alone, and application requests were in excess of \$2 million dollars. OPSI is legislatively mandated to narrow CTE offerings to high-demand areas. As districts continue to adapt to online/remote learning models, the need for increased access to equipment grows; larger numbers of student groups with smaller numbers necessitates the need for additional equipment, and additional funding support.

11. **Statutory and/or budget language:**

ESHB 1109, Sec. 522 (2)(a) \$2,052,000 of the general fund—state appropriation for fiscal year 2020 and \$2,052,000 of the general fund—state appropriation for fiscal year 2021 are provided solely for secondary career and technical education grants pursuant to chapter 170, Laws of 2008, including parts of programs receiving grants that serve students in grades four through six. If equally matched by private donations, \$1,075,000 of the 2020 appropriation and \$1,075,000 of the 2021 appropriation shall be used to support FIRST robotics programs in grades four through twelve. Of the amounts provided in this subsection, \$100,000 of the fiscal year 2020 appropriation and \$100,000 of the fiscal year 2021 appropriation are provided solely for the purpose of statewide supervision activities for career and technical education student leadership organizations.

12. **Other relevant information:**

The FIRST Robotics program funding is split into three separate grant awards that reflect the three options within age range and program requirements.

FIRST Robotics Competition: Grades 9-12, Ages 14-18

FIRST Tech Challenge: Grades 7-12, Ages 12-18

FIRST LEGO League: Grades 4-8, Ages 9-14

The number of schools awarded, amount awarded, and funding claimed for the three separate grants is:

| FIRST Robotics Competition | | |
|----------------------------|----------------|-----------------|
| # of Schools Awarded | Amount Awarded | Funding Claimed |
| 76 | 659,309 | 582,698.55 |

| FIRST TECH Challenge | | |
|----------------------|----------------|-----------------|
| # of Schools Awarded | Amount Awarded | Funding Claimed |
| 53 | 237,900 | 157,405.55 |

| FIRST LEGO League | | |
|----------------------|----------------|-----------------|
| # of Schools Awarded | Amount Awarded | Funding Claimed |
| 119 | 121,800 | 102,785.80 |

Note: Funding claimed as of July 2020.

13. **Schools/districts receiving assistance:**

See [OSPI's Grantee List](#)

14. **Program Contact Information:**

Name: Samantha L. Sanders

Title: CTE Assistant Director

Phone: 360-725-6259

Email: samantha.sanders@k12.wa.us