## **Computer Science**

## 1. Purpose:

Coordinate Washington's work with ongoing national computer science standards implementation and framework development.

## 2. **Description of services provided:**

This proviso supports OSPI staffing to provide leadership, guidance, resource development, professional development, and program management to support achievement of state learning standards related to computer science for Washington students. Staff work with schools and districts to support the implementation of K–12 Computer Science Learning Standards, including cross-subject connections and development and/or identification of professional learning and technical assistance.

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

All districts benefit from technical assistance in support of computer science learning standards.

#### Beneficiaries in 2019-20 School Year:

Number of School Districts:All Schools StatewideNumber of Schools:All Schools StatewideNumber of Students:All Schools StatewideNumber of Educators:All Schools Statewide

**Other:** AESD, Universities, Next Gen WA, Higher Education, Code.org, education and Industry partners, WA ECEP Broadening CS Participation, OSPI Internal partners (Social Studies, Art, Math, etc.), PESB, and other agency's as applicable to work.

Number of OSPI staff associated with this funding (FTEs): 0.90 FTE

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

**FY20 Funding: State Appropriation:** \$117,000

**Federal Appropriation:** \$0 **Other fund sources:** \$0

**TOTAL (FY20)** \$117,000

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	\$117,000	\$116,000	
FY19	\$117,000	\$116,018	
FY18	\$117,000	\$117,000	
FY17	\$117,000	\$113,422	
FY16	\$122,000	\$109,222	

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

Fiscal Year	Number of School Districts	Number of Schools	Number of Students	Number of Educators	Number of Other
FY20	296	2000+	1.1M	65K	100+
FY19	295	2000+	1.1M	N/A	100+
FY18	295	2000+	1.1M	N/A	100+
FY17	295	2000+	1.1M	N/A	100+
FY16	295	2000+	1.1M	N/A	100+

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

Revised learning standards were adopted in 2018; implementation is ongoing.

## 8. Evaluations of program/major findings:

Having dedicated staffing at the state level to focus on computer science education enables the state to provide direction and leadership to support state priorities. In the last year, the computer science lead has managed the state's computer science grant program, collaborated with Educational Service Districts to build regional support for computer science, and provided technical assistance to school districts.

Since this position was created, computer science standards have been adopted, and the number of high schools offering computer science in Washington has grown substantially to 184 school districts and 704 computer science courses in 2019.\*

Projections for the years 2020–2025 estimate that out of a total of more than 14,000 annual job openings in computer science, there will be 10,000 more openings than there

are graduates completing degree programs each year prepared to fill them. Underrepresented populations continue to face challenges in science, technology, engineering and mathematics (STEM) fields. A gender imbalance in STEM achievement tends to widen as students move through their education. \*\* Engaging more K-12 students in computer science is needed to increase the likelihood students will pursue postsecondary computer science education pathways to meet the workforce demand.

\* AP Program Participation and Performance Data 2019, <u>AP Program Participation and Performance Data 2019</u>

\*\* WA State STEM Education Innovation Alliance, 2020 STEM Education Report Card.

## 9. Major challenges faced by the program:

The maintenance level funding is insufficient to support the salary and benefits of a 1.0 FTE program lead, given the state COLAs over the last four years, and provides no operating support.

## 10. Future opportunities:

Leadership for computer science education is consistent with the state's focus on STEM (Science, Technology, Engineering and Mathematics) opportunities to prepare students for Washington jobs and careers. With the Legislature's continued funding for computer science grants in FY20 and FY21, and the implementation of HB1577 and SSB5088, the need for state coordination and leadership remains vital.

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

ESSB 6032, Sec. 501 (1)(m) - \$117,000 of the general fund—state appropriation for fiscal year 2020 and \$117,000 of the general fund-state appropriation for fiscal year 2021 are provided solely for professional implementation of chapter 3 (SHB No. 1813), Laws of 2015 1<sup>st</sup> sp. sess. (computer science).

#### 12. Other relevant information:

N/A

## 13. Schools/districts receiving assistance:

See OSPI's Grantee List

### 14. **Program Contact Information:**

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