

## Computer Science

1. **Purpose:** The purpose/objective of ESSB 6032, Sec. 501 (32) is to coordinate Washington’s work with ongoing national computer science standards and framework development and to coordinate computer science and education grants authorized by ESSB 6032.
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 goals 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:**

**Beneficiaries in 2018-19 School Year:**

# of Schools:	All schools statewide
# of Students:	All schools statewide
# of School Districts:	All schools statewide
Other:	AESD, Universities, Next Gen WA, Higher Education, Code.org, education and Industry partners, OSPI Internal partners (Social Studies, Art, Math, etc.), PESB, and other agency’s as applicable to work.

# of OSPI staff associated with this funding (FTEs):	1.0
# of contractors/other staff associated with this funding:	00

FY19 Funding:	State Appropriation:	\$117,000
	Federal Appropriation:	\$0
	Other fund sources:	\$0
	TOTAL (FY19)	\$117,000

4. Are federal or other funds contingent on state funding? If yes, explain. No
5. State funding history:

Fiscal Year	Amount Funded	Actual Expenditures
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., schools, students, districts) history:

Fiscal Year	# of Districts	# of Schools	# of Students	# of Other Beneficiaries
FY19	295	2,000+	1.1M	100+
FY18	295	2,000+	1.1M	100+
FY17	295	2,000+	1.1M	100+
FY16	295	2,000+	1.1M	100+

## 7. Programmatic changes since inception (if any): Revised learning standards were adopted in 2018.

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 AP Computer Science in Washington has grown substantially from 66 schools in 2015 to 155 schools in 2018. \* Simultaneously, the number of students taking the AP Computer Science exam has grown from 1,770 students in 2015 to 3,002 students in 2018\*\*. In addition to almost doubling the number of students taking the exam, 75% earned a score consistent with college credit, up from 70% in 2015.

While there has been progress in increasing computer science opportunities for students, less than 25% of high schools offer AP computer science. Projections for the years 2020–2025 estimate that in Computer Science, out of a total of more than 9,000 annual job openings, there will be nearly 6,000 more openings than there are graduates completing degree programs prepared to take them\*\*\*. 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 2018,

<https://research.collegeboard.org/programs/ap/data/participation/ap-2018>

\*\* AP Data – Archived Data 2015,

<https://research.collegeboard.org/programs/ap/data/archived/ap-2015>

\*\*\* WA State STEM Education Innovation Alliance, [2019 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 (32) - \$117,000 of the general fund—state appropriation for fiscal year 2018 and \$117,000 of the general fund-state appropriation for fiscal year 2019 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: None

13. List of schools/districts receiving assistance: See OSPI [website](#).

14. Program Contact Information:

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