



Washington Office of Superintendent of **PUBLIC INSTRUCTION**

Computer Science Grants

1. **Purpose:**

Create the computer science and education grant program to support the following three purposes: Train and credential teachers in computer sciences; provide and upgrade technology needed to learn computer science; and, for computer science frontiers grants, to introduce students to and engage them in computer science.

2. **Description of services provided:**

Grants provided for the purpose of introducing students to computer science supported innovative ways to introduce and engage students from historically underrepresented groups, including girls, low-income students, and minority students, to computer science and to inspire them to enter computer science careers.

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

Districts, schools, skill centers, and Educational Service Districts (ESDs) that demonstrate readiness; non-profit organizations in partnership with a school district, school or ESD; institutions of higher education in partnership with a school district, school, or ESD could apply for grants. Institutions of higher education could also apply to train and credential teachers in computer science. Funds for the computer science and education grant program may be expended only to the extent that they are equally matched by private sources for the program, including gifts, grants, or endowments. Engagement of underserved student populations is emphasized. Underserved student populations include: (1) economically disadvantaged students; (2) students from major racial and ethnic groups; (3) students with disabilities; (4) students with limited English proficiency (the federal term); (5) girls; and (6) students in alternative education.

Beneficiaries in 2019-20 School Year:

Number of School Districts:	50
Number of Schools:	200
Number of Students:	166,266
Number of Educators:	3447
Other:	AESD,

ESD 112,

Columbia Basin College,

Number of OSPI staff associated with this funding (FTEs): 0.50 FTE
Number of contractors/other staff associated with this funding: 1 Contract

FY20 Funding: State Appropriation: \$1,000,000
Federal Appropriation: \$0
Other fund sources: \$0
TOTAL (FY20) \$1,000,000

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	\$1,000,000	\$999,667
FY19	\$1,000,000	\$987,648
FY18	\$1,000,000	\$959,112
FY17	\$1,000,000	\$986,885
FY16	\$1,000,000	\$987,900

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	50	200	166,266	3,447	6
FY19	21	110	142,557	N/A	13
FY18	17	82	117,802	N/A	7
FY17	13	106	184,775	N/A	6
FY16	19	66	50,000	N/A	7

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

None

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

Final Reports are still being submitted, what we can see from the data is that:

- a. The number of girls taking the AP Computer Science Exams has increased from 493 in 2015 to 1005 in 2019.
- b. The number of underrepresented minorities taking the AP Computer Science Exams has increased from 91 students in 2015, to 712 students in 2019.
- c. The number of grants that are including their communities as participating stakeholders are increasing due to statewide SCRIPT(Computer Science Implementation) training.

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

The major challenge was the issue of equity in regards to requiring matching funds. This has been addressed and solved by a proviso change that will allow schools with FRL >50%, up to 500,000 in unmatched funds, beginning in the FY21 grant period.

Computer science (CS) and CS education have traditionally been highly segregated along race/ethnicity, gender, and socioeconomic lines due to a lack of access to high-quality computer science learning opportunities for all students (Margolis, Estrella, Goode, Jellison-Holme, & Nao, 2017, <https://mitpress.mit.edu/books/stuck-shallow-end>).

However, an increased awareness of equity issues in the CS education community presents a special opportunity to structure learning experiences and environments with equity considered throughout the progression from grades K through 12, as many CS frameworks, policies, and courses are being built or have yet to be built. Not only is CS an emerging field of study that leads to high-wage and high-demand careers that can address socio-economic inequality, it can empower students to be critical users of technology and creators in all fields touched by technology. Equity-based approaches to build K-12 CS programs from the ground up, progress against persistent inequities, while at the same time providing young people pathways for career and college success that will ultimately lead to a more just, equitable, and productive society.

10. **Future opportunities:**

The maintenance level funding for FY20 and FY21 will continue to expand computer science education across the state

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

ESSB 6168, Sec. 520 (12)(d) \$1,000,000 of the general fund—state appropriation for fiscal year 2020 and \$1,000,000 of the general fund-state appropriation for fiscal year 2021 are provided solely for the computer science and education grant program to

support the following three purposes: train and credential teachers in computer sciences; provide and upgrade technology needed to learn computer science; and for computer science frontiers grants to introduce students to and engage them in computer science. The Office of the Superintendent of Public Instruction must use the computer science learning standards adopted pursuant to chapter 3, Laws of 2015 (computer science) in implementing the grant, to the extent possible. Additionally, grants provided for the purpose of introducing students to computer science are intended to support innovative ways to introduce and engage students from historically underrepresented groups, including girls, low-income students, and minority students, to computer science and to inspire them to enter computer science careers. The Office of the Superintendent of Public Instruction may award up to \$500,000 each year without a matching requirement, to districts with greater than fifty percent of students eligible for free and reduced-price meals. All other awards must be equally matched by private sources for the program, including gifts, grants, or endowments.

12. **Other relevant information:**

N/A

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

See [OSPI's Grantee List](#)

14. **Program Contact Information:**

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