

# Computer Science Prof Development Grants

# 1. Purpose:

\$250,000 in legislative funds were provided to create grants to support teachers with costs associated with becoming certified, endorsed, or licensed in computer science, including, but not limited to, professional development, training, costs for licensure exams, courses in pedagogy, and courses in computer science content.

PESB used these funds to create the Computer Science Professional Learning grant and later used remaining funds to create the Expanding Computer Science for Elementary Educators grant. The goals of the grants were to support organizations in offering professional learning opportunities to educators to increase CS learning and attainment of CS credentialing, as well as increase opportunities for all educators to incorporate CS learning for their students.

# 2. Description of services provided:

#### **Computer Science Professional Learning grant**

Grantees were required to support a minimum of 15 educators, including educators from populations that have been historically underrepresented and systematically excluded from the educator workforce, in seeking one of the elementary or secondary computer science specialty endorsements, computer science endorsement, or provide guidance to educators on how to seek one of these computer science credentials. Grantees were also required to provide professional learning related to computer science.

Grant funds were used for:

- Educator professional learning related specifically to computer science
- Compensating educators for computer science endorsement assessment fees
- Compensating educators for costs such as tuition related to computer science endorsement and specialty endorsement programs
- Compensating educators for time, travel, substitute reimbursements, or other costs

• Organizational planning to offer a computer science endorsement or specialty endorsement in the future

#### **Expanding Computer Science for Elementary Educators grant**

To apply, grantees submitted a short application providing an overview of the grant plan, the organization's overall goals for this grant, and a complete budget. The overview was required to include computer science tools or resources that would be purchased and plans for how they will be used with P-6 students. Grant funds were allowed to be spent on computer science tools and resources for educators to use in the classroom, school library, computer lab, etc.

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

#### **Computer Science Professional Learning grant**

Washington State school districts, tribal schools, charter schools, ESDs, approved clock hour providers, PESB-approved educator preparation programs and accredited colleges and universities were eligible to apply. Organizations eligible to become approved clock hour providers were also eligible to apply.

After being awarded, grantees were required to:

- Complete an itemized budget
- Attend grant support meetings
- Provide their educator participants with professional learning in computer science
- Allow PESB staff to convene a site visit with each grantee during the grant period
- Present about their grant project and future opportunities at the Washington Educators Computer Science Virtual Showcase hosted by PESB.
- Complete grant report survey, as well as ask educator participants to complete a pre and post survey

#### **Expanding Computer Science for Elementary Educators grant**

After being awarded, grantees were required to:

- Participate in virtual professional learning during spring 2022 which was provided free of charge by PESB and OSPI, and included guidance on designing computer science lessons, using purchased computer science tools and resources, and information about computer science credentialing. OSPI and ESD 101 provided free clock hours to educators for this professional learning
- Submit a brief virtual exhibit for the convening showcasing the technology and learning resulting from their participation in the grant.

- Share at least two posts on social media during Teacher Appreciation Week (May 1- May 7, 2022) highlighting the technology they purchased and how they've used it with students.
- Complete pre- and post-grant surveys

#### Beneficiaries in 2021-22 School Year:

Number of School Districts: 37
Number of Schools: 53
Number of Students: 12,000
Number of Educators: 231

Other: Grantees were Citi University, ESD 112,

the University of Washington, Western Washington University, and Whitworth

University.

Number of OSPI staff associated with this funding (FTEs): 0

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

**FY22 Funding:** State Appropriation: \$236,000

Federal Appropriation: \$0
Other Fund Sources: \$0

TOTAL (FY22) \$236,000

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

### 5. State funding history:

Fiscal Year	Amount Funded	Actual Expenditures
2022	\$236,000	\$235,958

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

Fiscal Year	Number of Schools
FY 22	53

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

N/A

# 8. Evaluations of program/major findings:

#### **CS Professional Learning grant**

120 total educators participated in the CS Professional Learning grant to completion, as reported by grantees. The data below was collected from 128 educators who participated in the grant pre-survey and 63 educators who participated in the grant post-survey.

Educators indicated that they were interested in participating in the CS Professional Learning Grant for a variety of reasons, including increasing student engagement, earning STEM clock hours, personal interest, and earning an endorsement in CS.

Educators had a wide range of cs knowledge and skills before participating in CS professional learning. Before receiving professional learning, 2.5% of educators felt "very knowledgeable and skillful" in CS, 11.8% felt they had "no knowledge or skill" in CS, and the majority of educators fell in between with some knowledge of CS. By the end of the grant, more educator participants felt they had more knowledge and skill in CS with the majority of educators rating their level higher than they started and zero educators rating themselves as "no knowledge or skill".

#### **Expanding Computer Science for Elementary Educators Grant**

Free CS professional learning was provided by PESB and OSPI. Nine professional learning sessions that focused on the tools and resources that grantees planned to purchase with grant funds were conducted throughout the spring. These were interactive workshops where educators could ask questions, share what they are doing in their classrooms, and gather great ideas on how to implement CS in their own contexts. Educators were also eligible to earn free clock hours for each session they attended.

Grantees used funds to purchase tools and resources to help them learn more about implementing CS in the classroom and engage students with CS. Tools and resources included programmable robots, online coding platforms, books, and hands-on coding games.

# 9. Major challenges faced by the program:

#### **Short application timeline**

The timeline for grant applications was relatively short which may have impacted the number of grant applications received. The grant application period began on September 9, 2021, with a kick-off webinar. The application period ended on October 4, 2021, giving applicants a little less than a month to develop a grant proposal during a very busy time for education organizations.

#### Educator participant recruitment and grant timeline extension

Initially, four of five grantee organizations struggled to recruit educators to participate in grant projects. This could be due to various factors, including educator burnout in the middle of the school year, effects of Covid recovery, and lack of capacity to take on new learning opportunities. In response, PESB assisted grantee organizations with advertising their professional learning opportunities to great success through GovDelivery as well as social media. Three organizations were able to recruit enough educators to fulfill minimum grant requirements, though all five organizations granted funds to support educators. The grant end date was also extended from June 30 to August 30, 2022, to accommodate grantees moving professional learning to the summer to be responsive to educator needs.

#### **Attrition**

Over the course of the grant period, a common challenge for the grantee organizations was attrition of educator participants. This was due to a number of reasons, including Covid and educators' lack of capacity for the amount of work that was required of educator participants for professional learning.

#### **Funding**

Grantees expressed the need for future funding to support additional development of CS endorsement programs. Some grantees stated that it would be beneficial to have funding for further development of professional learning modules for the endorsement they were developing. Other grantees found that greater funding would have allowed more educators to participate in their professional learning.

# 10. Future opportunities:

As these were one-time grant funds, PESB will not be offering this grant as it stands in the future. However, it is important to support educator preparation programs and eligible organizations that are interested in offering the CS endorsement or specialty endorsements, as well as continue to support organizations that are already offering the CS endorsement.

## 11. Statutory and/or budget language:

ESSB 5693, Sec. 522(27) - \$236,000 of the general fund—state appropriation for fiscal year 2022 and \$14,000 of the general fund—state appropriation for fiscal year 2023 are provided solely for grants to support teachers with costs associated with becoming certified, endorsed, or licensed in computer science including, but not limited to, professional development, training, licensure exams, courses in pedagogy, and courses in computer science content. Entities eligible for these funds include, but are not limited to, individual teachers, local education agencies, approved professional learning providers, and institutions of higher education located in Washington state.

# 12. Other relevant information:

# 13. Schools/districts receiving assistance:

See OSPI's grantee list.

# **14.** Program Contact Information:

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