



Office of Superintendent of Public Instruction (OSPI)
Computer Science Education Grant
Request for Proposal Application Guidelines
(July 1, 2017 – June 30, 2018)

Background/Purpose

The 2017 Washington State Legislature allocated \$1,000,000 of the general fund in Fiscal Year 2018 and \$1,000,000 in Fiscal Year 2019 for computer science education ([ESSB 5883](#), Sec. 501, 35). These funds are designated for:

- (1) Teacher training and credentialing in computer science
- (2) Technology upgrades needed to learn computer science
- (3) Engaging students in computer science

Washington State Computer Science K–12 Learning Standards must be used to anchor the implementation of these grants, “to the extent possible.” Grants should submit applications that “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.” (ESSB 5883, Sec. 501, 35). Grant applicants will have the opportunity to apply for the continuation of projects in 2018–19, if there is evidence of a successful initial implementation during 2017–18.

Students should have access to computer science learning experiences at every grade level; providing these pathways will prepare them with the in-demand skills they need to thrive in a rapidly evolving world. Computer scientists are employed in a variety of settings, such as big tech firms, government agencies, startups, and nonprofits. They use technology to solve problems, writing software to make computers do new things or accomplish tasks more efficiently, and to create applications for mobile devices, websites, and program software.

As students learn computer science, they may use a wide variety of programmable hardware and software. Aspects of computer science can be learned without the use of computer hardware or technology of any kind. Applicants are encouraged to:

- Think creatively about the most effective means of advancing student knowledge and skill in computer science.
- Consider and demonstrate how their proposal supports the integration of computer science in other content areas.
- Provide an inspiring and inclusive K–12 computer science experience that empowers students at every age level, appeals to students of diverse backgrounds, and challenges them to solve real-world problems.

Applicant Eligibility (who can apply)

- Public or private schools
- Tribal compact or tribal schools
- School districts

- Skill centers
- Educational Service Districts (ESDs)
- 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 (NOTE: Institutions of higher education may apply independently to train and credential teachers in computer science without a district, school, or ESD partner.)
- Multiple parties may apply under one proposal. However, one organization must be the lead applicant and serve as the fiscal agent for the project.
- Only lead organizations (fiscal agents) may submit applications. Partner organizations need not apply independently from the lead organization.

Priorities

Projects MUST:

- Have a private source match documented in writing (e.g., by a letter of support) in order to be considered for grant funding.
- Align proposals, where relevant, to Washington State Computer Science K–12 Learning Standards.

Projects will be given priority that:

- Address the needs of rural districts.
- Develop K–12 computer science pathways.
- Through innovative ways, engage and serve students from groups of non-traditional and historically underrepresented students to computer science.
- Support the integration of computer science with core content areas (science, math, arts, language arts, social studies, etc.) and other strategies that ensure sustainability over time.
- Focus on a K–5 computer science pathway; providing a seamless multi-year pathway of computer science learning experiences at every grade level.
- Make a clear, compelling case that the project is grounded in rigorous and appropriate computer science knowledge and skills.
- Create professional learning that supports the integration of authentic computer science experiences into academic instruction.
- Establish how the grant project will be sustained and scaled.
- Engage multiple districts in sustainable, regional work.

Timeline

- Application opens via iGrants—August 28, 2017
- Applications close—4 p.m., October 16, 2017
- Grants announced—October 31, 2017
- State funds expended by June 30, 2018, for the fiscal year 2017–18 projects

TechStart Virtual Reality Integration Matching Opportunity and Eligibility

TechStart is offering to each eligible school, one kit (computer, camera, [Oculus Rift](#) equipment (3-D headset)), curriculum support, and professional development for educators. Eligible schools will have 60 percent or greater percentage of students receiving free or reduced-price lunch. This opportunity equates to a private match of approximately \$5,200.

TechStart is a program developed by Facebook, Inc. that aims to give students access to high-quality computer science and virtual reality education to generate interest in computer science careers and provide instruction for students. TechStart uses a combination of virtual reality instruction, curriculum support and professional development for educators, and access to computer science events to provide a powerful tool for students.

The program is not a stand-alone curriculum but provides several units for use in a computer science, math, or science classroom.

Interested applicants are encouraged to leverage the matching funds to provide students with authentic and enriching computer science learning opportunities. This opportunity is optional; it is not a required component of the application. Interested schools will need to agree to TechStart's Program Terms, including required professional learning so that teachers can fully realize the program benefits.

Letters of Support

For projects with multiple applicants (one lead and additional partner organizations), letters of participation from each partner must be submitted. Applicants may choose to include letters of support that convey organizational commitment and project sustainability.

Private match letters must define monetary valuation of services, and timeline for when they are supplied.

Supporting Resources

- Washington State Computer Science K–12 Learning Standards: <http://www.k12.wa.us/ComputerScience/LearningStandards.aspx>
- K–12 Computer Science Framework: <https://k12cs.org/>
- Equity in Computer Science Education: <https://k12cs.org/>
- Next Generation Science Standards: <https://www.nextgenscience.org/>
- Common Core State Standards: <http://www.k12.wa.us/curriculuminstruct/>
- CSforAll Consortium: <http://www.csforall.org/>
- CSTA Approved Alignment Examples: <http://www.csteachers.org/page/CompletedCrosswalks>
- San Francisco Unified School District: <http://csinsf.weebly.com/curriculum.html>
- National Center for Women and Information Technology: <https://www.ncwit.org/>
- Computer Science Teaching Tips: <http://csteachingtips.org/>
- Code.org: <https://code.org/>

Requirements

- All grantees will attend and/or review an online webinar to discuss Computer Science K–12 Learning Standards, open licensing requirements, and effective resource distribution.
- All grantees will work with OSPI staff to schedule a one-day site visit and virtual check-ins, as needed, to assess progress towards project goals and provide technical assistance for project challenges.
- All grantees should prepare to present or demonstrate projects at the conclusion of the grant to computer science education stakeholders.
- All grantees will provide a baseline, midterm and final reports that document project achievements, deliverables, and impact. Reports will include measurable data at each point along the grant timeline.
- All grantees must show how the award impacts student and/or teacher growth. Impacts should include targeting special populations.
- (TechStart Program Only) All grantees will abide by the Program Terms.

How to Apply

Application for the Computer Science Education Grants (Form package 769) must be submitted through OSPI's iGrants system at <https://eds.ospi.k12.wa.us/iGrants/Default.aspx>.

If you do not currently have access to iGrants, directions on how to gain access can be found here: <https://eds.ospi.k12.wa.us/iGrants/Docs/15-16/Help/gainingaccess.html>.

Application Questions

Note: Applications must be submitted through iGrants. The application questions in this guidance document are provided for your information and planning purposes only.

Q1. Lead Organization (serving as fiscal agent)

Q2. Lead Applicant Contact Information:

Name:

Title:

Organization:

Email:

Phone:

Q3. Partner Applicants/Organization(s) (e.g., school districts, schools, IHEs, and non-profits partnering and being served by the project)

Q4. Short Summary of Project (150-word max)

Q5. Type of Project (select all that apply):

- (1) Teacher Train and/or credential teachers in computer science

- (2) Provide and upgrade technology needed to learn computer science
- (3) Introduce students to and engage them in computer science

Q6. Project Description (15 pts.) Provide a description of your proposed project and the innovative ways the project will introduce and engage students from historically underrepresented groups and is rooted in rigorous and appropriate computer science knowledge and skills. Include what, where, for whom, and how. (500-word max)

Q7. Project Timeline with Milestones (5 pts.) Provide a project timeline with milestones, including who will be responsible for meeting the milestone in the case of partnerships. Include estimated claim dates for grant expenditures.

Q8. Student and Teacher Information (10 pts.)

Within the project area, approximately how many students are currently being served with Computer Science education and/or technology?

Approximately, how many students will be served in the coming year, through the proposed project?

Within the project area, approximately how many teachers are currently being served with Computer Science professional development or credentialing?

Approximately how many teachers will be served through the proposed project?

What is the approximate cost per student or teacher based on your budget?

Q9. Approximately what number and percentage of students to be served are underrepresented in STEM and from which demographic groups? (15 pts.) (1) economically disadvantaged students; (2) students from major racial and ethnic groups; (3) students with disabilities; (4) students with limited English proficiency; (5) girls; and (6) students in alternative education.

Q10. Describe the strategies you will use to attract/include underrepresented students. (15 pts.) (500-word max)

Q11. Describe how you will measure program growth. Specifically, address student and/or teacher learning outcomes and assessment. (10 pts.) (500-word max)

Q12. Describe how the project will integrate into other content areas that support Washington State Learning Standards. (15 pts.) (500-word max)

Q13. Private Source Match (10 pts.) (150-word max)

Grant funds may be expended only to the extent that they are equally matched by private sources for the program, including gifts, grants, endowments, and in-kind services which can be quantified. Applications that do not have a private source match in hand will not be reviewed. Applicants should include private source match amounts in the budget.

Describe the private source match (from whom, what is it, and how it will be used).

Q14. Project Budget (15 pts.)

Budget Overview—include state fund request and private match. In the narrative text fields, cite activities and describe how each describes how each budget item was calculated—provide a breakdown of costs.

Item	Description	State Fund Request	Private Match	Total
Salaries				
Benefits				
Supplies (consumables)				
Instructional Resources (e.g., teacher guides, software)				
Purchased Services (e.g., contractors, workshop fees, etc.)				
Travel				
Capital Outlay (e.g., computer hardware)				
Indirect Costs				
Total				

Q15. How will the project be sustained after the grant is concluded? (10 pts.)

Upload Letters of Support

Applicants may choose to include letters of support that convey organizational commitment and project sustainability.

Grant Application Review

A review committee comprised of individuals with deep knowledge and experience in education and computer science learning will contribute to the review process. The following scoring rubric will be used in the review process.

Scoring Rubric

Scored Questions	Points	Outstanding	Competent	Below
Rural—K—5—CS Pathway	15	(pts. 11–15) All apply	(pts. 5–10) Two apply	(pts. 0–4) One or zero apply
Q6. Project Description	15	(pts. 11–15) Includes all of the required elements and is clear and compelling.	(pts. 5–10) Includes some of the required elements and is somewhat clear and compelling.	(pts. 0–4) Includes few of the required elements and is marginally compelling.
*Q7. Project Timeline with Milestones	5	(pts. 4–5) Includes all of the required elements and is clear and compelling.	(pts. 2–3) Includes some of the required elements and is somewhat clear and compelling.	(pts. 0–1) Includes few of the required elements and is marginally compelling.
Q8. Student and Teacher Information	10	(pts. 8–10) The number served is very reasonable given the funding request.	(pts. 4–7) The number served is somewhat reasonable given the funding request.	(pts. 0–3) The number served is marginally reasonable given the funding request.
Q9. Serving Underrepresented Students	15	(pts. 11–15) The type, number, and % of underrepresented students to be served is high (e.g., over 75%).	(pts. 4–7) The type, number, and % of underrepresented students to be served is moderate (e.g., over 50%).	(pts. 0–3) The type, number, and % of underrepresented students to be served is low (e.g., under 50%).
Q10. Describe the strategies you will use to attract/include underrepresented students	15	(pts. 11–15) Provides clear and compelling strategies to attract these populations.	(pts. 5–10) Provides somewhat clear and compelling strategies to attract these populations.	(pts. 0–4) Provides marginally clear and less compelling strategies to attract these populations.
Q11. Student and/or teacher learning outcomes and how those will be assessed	10	(pts. 11–15) Includes clear and compelling student and or teacher outcomes.	(pts. 5–10) Includes some clear and compelling student and/or teacher outcomes.	(pts. 0–4) Includes few clear and compelling student and/or teacher outcomes.
Q12. Project’s integration into other content areas that support Washington State Learning Standards	15	(pts. 11–15) Provides a clear and compelling connection to and integration with multiple student learning standards.	(pts. 5–10) Provides a somewhat clear and compelling connection to and integration with one set of student learning standards.	(pts. 0–4) Provides a marginally clear and compelling connection to and integration with one set of student learning standards.
Q13. Private source match committed or in hand? If yes describe.	10	(pts. 8–10) Provides a clear and compelling description of the match and how it will be used.	(pts. 4–7) Provides a somewhat clear and compelling description of the match and how it will be used.	(pts. 0–3) Provides a marginally clear and compelling description of the match and how it will be used.
Q14. Project budget	15	(pts. 8–10) Provides a reasonable budget based on the number of students and/or teachers served and	(pts. 4–7) Provides a somewhat reasonable budget based on the number of students and/or teachers served	(pts. 0–3) Provides a marginally reasonable budget based on the number of students and/or teachers served

Scored Questions	Points	Outstanding	Competent	Below
		the cost of each item.	and the cost of each item.	and the cost of each item.
Q15. How will the project be sustained after the grant is concluded?	10	(pts. 8–10) Provides a clear and compelling description of project sustainability.	(pts. 4–7) Provides a somewhat clear and compelling description of project sustainability.	(pts. 0–3) Provides a marginally clear and compelling description of project sustainability.
Letter(s) of Participation and Support	N/A	Letter(s) demonstrate a strong commitment to participate and/or support the project.	Letter(s) demonstrate moderate commitment to participate and or support the project.	Letter(s) demonstrate little or no commitment to participate and or support the project.
Total Points	135			

For questions about this grant opportunity, please contact:

For questions related to Computer Science Grants, contact:

Shannon Thissen
 Computer Science Program Supervisor
 360-725-6092
shannon.thissen@k12.wa.us

For CTE questions, contact:

Lance Wrzesinski
 Business and Marketing Program Supervisor
 360-725-6258
lance.wrzesinski@k12.wa.us