Computer Science Grant Application Guidance

For iGrants Form Package 777

Fiscal Year 2023 (July 1, 2022–June 30, 2023)

Washington Office of Superintendent of
PUBLIC INSTRUCTION

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Introduction

The Washington State Legislature allocated $1,000,000 of the fiscal year 2023 general fund for Computer Science and Education Grants (SB 5092, s 522(11)(d)). By providing these funds, the Legislature recognizes the benefit of computer science and computational thinking in education, not only concerning educational development but also in cultivating the skills needed to compete and excel in our state's career landscape.

The Computer Science and Education Grants may be for planning, implementation, or sustainability and must fall into one of the following categories:

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

Figure 1: Grant Opportunities at a Glance

Program Type	Planning Grant	Implementation Grant	Sustainability Grant
Teacher training and credentialing in computer science.		Avg: $38,000	Max: $15,000
Technology upgrades needed to learn computer science.		Avg: $38,000	
Engaging students in computer science.	Max: $5,000 for SCRIPT training	Avg: $38,000	Max: $15,000

Important Information

Timeline

Make note of the grant application timeline and due dates. Late applications will not be eligible for funding.

Figure 2: Grant Timeline and Due Dates

Date	Event
May 2, 2022	Form Package 777 opens in iGrants
June 13, 2022	Applications due to OSPI by 4 PM
July 2, 2022	Grants awarded (awards will be announced earlier if scheduling allows)
October 3, 2022	Baseline reports are due to OSPI
March 4, 2023	Midterm reports are due to OSPI
May 2, 2023	Grant expenditure and allocation report due to OSPI
June 30, 2023	Last day of the grant period, all funds must be spent
July 18, 2023	Final reports are due to OSPI

Applicant Eligibility (Who Can Apply?)

The following education and community partners may apply for Form Package 777:

- 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 should not submit a separate application.

How to Apply

Applications for the Computer Science and Education Grant (Form Package 777) must be submitted through iGrants 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.

Contact Information

For questions related to Computer Science grants, contact:

Shannon Thissen
Computer Science Program Supervisor
360-764-3778
shannon.thissen@k12.wa.us

For questions related to CTE, contact:

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

Purpose

For most districts, this is a matching grant opportunity. However, OSPI 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 (school grants that are state or federal dollars are not private sources and cannot be used as matching funds).

Washington State Computer Science K–12 Learning Standards must be used to anchor the implementation of these grants, "to the extent possible." Districts 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." (SB 5092, p 422).

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, write software to make computers do new things or accomplish tasks more efficiently, and create applications for mobile devices, websites, and computers.

In addition, since computing education incorporates skills and competencies around 21st century technologies, computational thinking, collaboration, and critical thinking, it can also be used to enhance student learning in the traditional academic disciplines such as math, science, and language arts.

As students learn computer science, they may use a wide variety of programmable hardware and software. Some 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 into 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.

K–12 Computer Science Implementation

Districts and schools implementing Computer Science (CS) have complex problems to solve: How will teachers get trained? What curricula should be used? How can we reach all students? What learning goals are appropriate at different ages? These are key questions. But a foundational question should not get lost in the rush to implementation: Why should all students learn computer science? Why should they, or their teachers, care? Why is CS education relevant to the issues people face in their communities?

Different answers to these questions will drive the development of different approaches to CS education. If partners don't clarify the central purposes of implementation, their efforts could wind up off course, losing sight of goals and priorities that really matter to their communities. To prevent that from happening, they need tools to support processes that clarify their values to answer the question: CS for what?

School Districts as the Units of Change: The SCRIPT Framework

Sustainable CS education requires long-term commitment and an informed, strategic approach from the local education system—school districts, local education agencies, and educational service districts—as well as the support of the local community. This shifts the ownership of the success of the CS education initiative from individual partners to a system level.

CSforALL (https://csforall.org) is the hub of the national Computer Science for All movement. Their mission is

to ensure that every student in the United States has access to high-quality computer science education. They have developed the free SCRIPT Framework—the **S**trategic **C**SforALL **R**esource & **I**mplementation **P**lanning **T**ool—to offer districts a framework to guide the creation of customized implementation plans that both meet the goals and needs of the district, and adhere to CSforALL values of rigor, inclusion, and sustainability. The SCRIPT engages school districts in goal setting across six thematic areas: (1) Leadership; (2) Technology Infrastructure; (3) Teacher Capacity and Development; (4) Curriculum and Materials Selection and Refinement; (5) Partners; and (6) Community.

The SCRIPT Framework helps districts develop a shared vision for CS education and brings multiple partners to the table. It helps districts identify rigorous pathways that connect multiple teachers across grades and schools. It encourages districts to support teachers in their first efforts to learn CS content, and also in their long-term efforts to develop rich pedagogy and reach for mastery over time. It empowers districts to engage their leadership in meaningful, concrete ways to support the efforts of teachers in the classroom.

Grant Types

Applicants may submit for the following awards:

Planning Year, Including SCRIPT Training ($5,000 max)

Districts may apply for a Planning Year award to participate in SCRIPT (Strategic CSforALL Resource and Implementation Training) workshops designed to engage districts with the rubrics and create a goal-setting process where they can create individualized plans for computer science education.

Implementation Year ($38,0000 average request)

Districts may apply for an Implementation Year award by providing a 1–3-year plan addressing the four areas in the CS Project Planning section. The areas are Materials and Curriculum Selection and Content Refinement, Leadership, Teacher Capacity and Development, and Partner/Community Participation. Districts applying for Implementation Year funding should already have engaged in SCRIPT Training or a comparable systems approach to creating a comprehensive CS plan.

Sustainability Year ($15,0000 max)

Districts may apply for a Sustainability Year Award to support additional work needed for the project phase(s) of previous Computer Science Education Grant awards.

A narrative of the outcomes and deliverables from the previous grant(s) should provide evidence that an extension of the project is beneficial for 2020–21. Evidenced reviewed will include project metrics, continued dedicated matching private funds, resource availability, and demonstrated sustainability of the project.

Grant Requirements

Required Assurances

The superintendent and school principal agree to the following conditions for funding the implementation of the Computer Science and Education initiative in your district.

1. Funding for schools participating in the Computer Science Education grant will be used by schools to cover the costs of the project reflected in the district's 1–3- year computer science implementation plan.

2. Ensure that grant funds will be used in a timely manner. By May 2, 2023, submit a report to OSPI of grant fund expenditures and allocations.
3. Provide a baseline (October 3, 2022), midterm (March 4, 2023), and final report (July 18, 2023) that documents project achievements, deliverables, and impact. Reports will include measurable data at each point along the grant timeline.
4. Reports should include: (1) Introduction/Project progress; (2) Project design (include data collection); (3) Project Formation; (4) Data Analysis; and (5) Report/Conclusions.
5. All grantees must show how the award impacts student and/or teacher growth. Impacts should include targeting special populations.

Project Summary

Regardless of which type of grant you apply for; you will need to provide a project summary (question 4a or 4b). When you write your response, please note that it may be posted on OSPI's computer science webpage.

Tip: If you are awarded a grant, your Project Summary will be posted on the OSPI Computer Science Grants webpage. Make sure your response is written for public view.

This grant is funded through a legislative proviso. To maintain transparency, we post an annual list of grantees, their award amounts, and their project summaries. If you are awarded funding, we will post your project summary exactly as it is submitted in your grant application.

Priorities

All projects must do the following:

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

Projects that do the following will be given priority:

- Address the needs of rural districts.
- Engage multiple districts in sustainable, regional work.
- 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.
- Create professional learning that supports the integration of authentic computer science experiences into academic instruction.

Free and Reduced-Price Lunch Percentage and Matching Funds

OSPI 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. Check the OSPI Report Card to see the list of eligible districts.

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 the monetary valuation of services, and the timeline for when they are supplied.

Application Questions

The following questions were taken from iGrants Form Package 777. This guidance document will help you prepare responses, so you can submit a high-quality application once the iGrants application opens.

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, institutions of higher education, and non-profits partnering and being served by the project)

Q4a. Proposed Project – Implementation (15 points) Provide an initial project summary. (250-word max)

Q4b. Existing Project – Sustaining (15 points) Provide a project summary. Explain how outcomes and deliverables from your previous grant(s) provide evidence that an extension of the project would be beneficial in 2021–22. Evidence should include project metrics, the continued dedication of matching private funds, resource availability, and demonstrate the sustainability of the project. (500-word max)

Q5. Type of Grant: (select one)

- ☐ Computer Science Education Planning Year (SCRIPT Training - $5,000 max)
- ☐ Computer Science Education Implementation Year (average request is $38,000)
- ☐ Computer Science Education Sustainability Year ($15,000 max)

Q6. Type of Project (select all that apply):

- ☐ Teacher training and/or credentialing teachers in computer science
- ☐ Provide and upgrade technology needed to learn computer science
- ☐ Introduce students to and engage them in computer science

Q7. District Information (select all that apply)

- ☐ My district FRL rate is greater than 50% (Reported % is _____)
- ☐ We have participated in SCRIPT training (we received a SCRIPT Grant ☐Yes ☐No)

- ☐ We have received a previous Computer Science Education Grant (Year(s) _____)
- ☐ My district considered Rural as defined by the Rural and Low-Income Schools (RLIS) program.

Q8. Student and Teacher Information (10 points)

a) Within the project area, approximately how many students are currently being served with Computer Science education? _____

b) Approximately how many additional students will be served in the coming year through the proposed project? _____

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

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

e) 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? (10 points)

Figure 3: Response Table for Question 9

Demographic Group	Number of Students	Percentage of Student Population
(1) economically disadvantaged students		
(2) students from major racial and ethnic groups		
(3) students with disabilities		
(4) students with limited English proficiency		
(5) girls		
(6) students in alternative education		

Important: Questions 10–13 are not required for the Planning Year grant

Q10. Materials and Curriculum Selection and Content Refinement (15 points) *The selection of appropriate, sequential (progression), and vision-aligned computer science materials and curricula are through a process that engages teachers and leaders. The selection process includes a focus on sustainability, rigor, and inclusion of diverse students in consideration of the curriculum and supporting materials.*

How does your plan address any of these goal areas: Curricular Selection, K–12 Alignment & Progression, Ancillary Materials, Assessment, Lesson Development Support, Integrated or Multidisciplinary Activities, and Materials for Diverse Learners? (500-word max)

Q11. Leadership (15 points) *A district leadership team engages multiple partners in a shared vision and collaboratively designed plan that includes goals with priorities for implementation and specific, measurable outcomes for CSforALL in the district. The plan is updated at regular intervals to ensure continual progress in CSforALL efforts and alignment with other district initiatives and policies.*

How does your plan address any of these goal areas: District Leadership, School Leadership, School Personnel

(Support Teachers and Staff), Planning, Implementation, and Outcomes? (500-word max)

Q12. Teacher Capacity and Development (15 points) *Do teachers understand the CS education initiatives in the district and opportunities for integrated CS projects. Teachers with responsibility for CS content have clearly defined opportunities to learn computer science and expand their pedagogical fluency. There are well-defined incentives for participating in such professional development opportunities.*

How does your plan address any of these goal areas: Orientation Teacher PD, Teacher Working Groups, Advanced Teacher Development, and Teacher Feedback? (500-word max)

Q13. Partner/Community (15 points) *Partners are engaged entities connected to the district or schools through formal or informal partnerships. They represent trusted entities that can provide opportunities for students or teachers. The engagement of the local community is an essential part of sustainability for CSforALL efforts.*

How does your plan address any of these goal areas: Local Partners (Including Informal Education), Professional Learning Partners, State, and National Partners, Families, Local Workforce Efforts, Local Diversity Efforts, Area Schools, and Educational Institutions (Private Schools, etc.)? (500-word max)

Q14. Describe the strategies you will use to attract/include underrepresented students. (10 points) (250-word max)

Q15. Describe how you will measure program growth. Specifically, address student and/or teacher learning outcomes and assessment. (10 points) (250-word max)

Q16. Describe how the project will integrate into other content areas that support Washington State Learning Standards. (10 points.) (250-word max)

Q17. Private Source Match (10 points) *Not required for districts with FRPL > 50%, as previously noted.*

Note: A Private Source Match is required for ESDs and higher education institutions, and consortium grants unless all partners meet the FRPL criteria.

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. School grants that are state or federal dollars are not private sources and cannot be used as matching funds Must have a private source match documented in writing (e.g., by a letter of support) in order to be considered for grant funding. Applicants should include private source match amounts in the budget.

Do you have a private source match documented in writing (e.g., by a letter of support?

- ☐ Yes
- ☐ No
- ☐ Not required

Describe the private source match (from whom, what is it, and how it will be used). (150-word max)

Q18. Project Budget (15 points)

Budget Overview—include state fund request and private match (except for districts with FRL > 50%). In the narrative text fields, cite activities and describe how each describes how each budget item was calculated; provide a breakdown of costs.

Indirect Costs—May be calculated at a rate of 7% for districts and 11% for ESDs

Figure 4: Budget Table for Question 18

Item	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			

Q19. How will the project be sustained after the grant concludes? (10 points)

Upload Letters of Support

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

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.

Novice Includes few of the required elements and is marginally compelling.

Emerging Includes one of the required elements and is somewhat clear and compelling.

Developing Includes some of the required elements and is somewhat clear and compelling.

Highly Developed Includes all the required elements and is clear and compelling.

Figure 5: Scoring Rubric

Scored Questions	Points	25%	50%	75%	100%
Q4a or 4b: Proposed Project	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q8: Student and Teacher Information	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q9: School Demographics	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q10: Materials and Curriculum	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q11: Leadership	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q12: Teacher Capacity and Development	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q13: Partner and Community	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q14: Strategies	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q15: Program Growth	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q16: CS Standards	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q17: Private Match	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q18: Project Budget	15	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Q19: Sustainability	10	☐ Novice	☐ Emerging	☐ Developing	☐ Highly
Total (160 Max)					

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/equity-in-computer-science-education/
- Next Generation Science Standards: https://www.nextgenscience.org/
- Common Core State Standards: https://www.k12.wa.us/student-success/learning-standards-instructional-materials
- CSforAll Consortium: http://www.csforall.org/
- San Francisco Unified School District: https://www.csinsf.org/
- National Center for Women and Information Technology: https://www.ncwit.org/
- Computer Science Teaching Tips: http://csteachingtips.org/
- Code.org: https://code.org/

Revision Log

Changes to this document made after June 1, 2022, will be noted in the table below.

Figure 6: Revisions Made After June 1, 2022

Section	Page	Description of Revision	Revision Date

LEGAL NOTICE

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Washington Office of Superintendent of
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Chris Reykdal | State Superintendent
Office of Superintendent of Public Instruction
Old Capitol Building | P.O. Box 47200
Olympia, WA 98504-7200