**Advanced Computer Science Education**

**Computer Science Integration Pilot Program Development**

**Competitive Grant - Request for Proposals (RFP)**

March 2023

Virginia Department of Education
Department of Strategic Innovation

**INTENT**

The intent of the Virginia Department of Education (Department) Request for Proposals (RFP) for an Advancing Computer Science Education grant is to provide funding to school divisions to provide high-quality computer science instruction, professional development, and authentic learning experiences for students. This Computer Science Integration Pilot Program Development is for the development of substantive and intentional integration of computer science with one or more academic disciplines.

Submitted proposals should deepen teacher and student understanding of computer science through integrated instruction and include experiential and/or authentic learning opportunities. Each proposal should consider the instructional and operational design when developing a plan as follows:

1. **Instructional**: The Computer Science Integration Grant proposal will be designed to integrate the 2017 *Computer Standards of Learning* through: (i) integrated learning, (in class, remote and hybrid), for K-8 students or within a discipline approach (English, history, mathematics, or science.) or (ii) the development of professional learning focused on integrated pedagogy that will foster the development of integrated instruction with two academic disciplines, one being Computer Science or within an academic discipline, and proposals should address the following:
2. Alignment to the 2017 *Computer Sciences Standards of Learning* (SOL);
3. Integration of Virginia’s 5 C’s which includes: critical thinking, creative thinking, collaboration, communication, citizenship;
4. Integration of computational thinking: pattern recognition, abstraction, decomposition, and algorithm design.
5. **Operational**: The program intent is to improve educators’ and students’ contextual understanding of the 2017 *Computer Science Standards of Learning* through integrated instruction which is:
6. Designed for implementation for educators within a predetermined grade or academic discipline;
7. Designed to produce shared lessons that are accessible format in #GoOpenVA;
8. Grounded in educational research of curriculum integration approaches - multidisciplinary, interdisciplinary, and transdisciplinary; and
9. Developed with an intentional design to deepen conceptual understanding of two academic disciplines, one being computer science; and another being English, history, mathematics, or science.

**GENERAL INFORMATION**

Schools may submit a proposal as an individual school or be part of a division-level grant. Awards will be given to proposals that meet the proposal requirements. It is anticipated that awards will be made on or about April 17, 2023. An individual school proposal may not exceed $75,000 per proposal. It is anticipated that 15-18 grants will be awarded. Schools and school divisions awarded a grant for the Computer Science Integration Pilot Program must be prepared to implement their models no later than December 2023.

**BACKGROUND**

In 2017, the Virginia Board of Education passed the Computer Science Standards of Learning to include concepts of computation and critical reasoning; problem solving and decision making; proficiency in the use of computers and related technology; coding and computational thinking; and cybersecurity.

The 2022 Virginia General Assembly, in its effort to promote the advancement of Computer Science education for all students and support the high demands of the Commonwealth’s workforce, has provided funding for Computer Science grants up to $1.35 million dollars. The program language from the 2022 Appropriation Act, reads as follows.

*JJ. Out of this appropriation, $2,700,000 the first year and $1,350,000 the second year from the general fund is provided to support the advancement of Computer Science education and implementation of the Commonwealth's Computer Science standards across the public education continuum. These funds are intended to provide high-quality professional development to current and future teachers; create, curate, and disseminate high-quality Computer Science curriculum, instructional resources, and assessments; support summer and after-school Computer Science-related programming for students;, and facilitate meaningful career exposure and work-based learning opportunities in Computer Science fields for high school students. Funds shall be disbursed through a competitive grant process and shall prioritize at-risk students and schools. The Department of Education shall develop a process to award these funds in accordance with the provisions of this language.*

**ELIGIBILITY**

All Virginia public school divisions, full-time regional public schools, and programs with a local or regional school board, are eligible to submit a proposal.

In partnership with one of the above, institutions of higher education, regional programs, and educational organizations are eligible to submit a proposal.

**PROPOSAL REVIEW**

Department staff will review proposals per requirements as defined in this RFP. If, in the judgment of the Department, a proposal is late or incomplete, the proposal will be omitted from the process. The decision of the Department is final. Applicants submitting proposals that are not awarded by the Department will be notified in writing.

An expert review panel will evaluate eligible proposals based on the required components and the established criteria, as outlined in **Attachment B**.

**TIMELINE**

Proposal Due – March 17, 2023, by 4 p.m.

Official Grant Award Notification Anticipated – April 2023

Progress Report – June 30, 2023

Progress Report – September 29, 2023

Final Report – December 29, 2023

The lead designee contact must [register](https://doe-virginia-gov.zoom.us/webinar/register/WN_LdFzz0cxRw2z1FuWgAX5-A) to receive a pre-recording of the pre-proposal webinar. All questions may be directed to Keisha.Tennessee@doe.virginia.gov

The lead designee’s contact will submit the completed Computer Science Integration Pilot Program proposal, as described in this RFP. Proposals must be received electronically by the Department no later than **4 p.m. on Friday, March 17, 2023.** The proposal must be submitted electronically in .pdf format to Keisha Tennessee at the email address below.

Keisha Tennessee
Computer Science Coordinator
Office of STEM and Innovation
Email: vdoe.stem@doe.virginia.gov
Phone: 804-225-3489

The subject line should be **Computer Science Integration Pilot Program\_School or School Division Name.** The Department will work with the designated contact person, as provided by the division, for all matters related to the proposal.

The Computer Science Integration Pilot Program awards will be made directly to the lead school or school division, and funding will be provided as a one-time lump payment. The school or school division may not accrue actual charges against the award until an official Grant Award Notification (GAN) is received from the Department.

**REQUIRED COMPONENTS**

The following are the required components of a proposal in the order they must appear:

1. The narrative sections of the proposal must be single-spaced with one-inch margins, and the font used must be 12-point Times New Roman.
2. The proposal may not exceed five (5) pages excluding the cover page, abstract, and the budget forms.
3. Applicants must adhere to the page limitations and may not append additional materials beyond that allowed in the proposal and list.
4. Proposal Introduction
5. Cover Sheet: The lead designee should complete this sheet with all the requested information. The cover sheet must be the first page of the submitted proposal.
6. Assurances: Use the Statement of Assurances form, page 9 of the Proposal Forms section of this RFP. The Statement of Assurances page for the lead designee must follow the Cover Page as the second page of the ACSE submitted proposal. If applicable, each participating school must fill out a Statement of Assurances form and place them in Appendix C of the proposal.
7. Abstract
8. The Abstract should be a clear but brief overview of the project to be implemented including goals and outcomes to be achieved.
9. This section is limited to one page.
10. Project Work Plan
11. Proposed plan must include the implementation of computer science within another academic discipline. Curriculum integration must be designed intentionally and focused on a Computer Science among the same grade level, a cohort of educators within the school, or a predetermined academic discipline: English, history, mathematics or science.
12. The pilot program may be for in-person, remote, and/or hybrid learning for K-12 educators and/or K-12 students. The school or school division may purchase instructional resources that may be used to integrate computer science. Instructional resources must be accessible for use at school, home, and on all devices.
13. Grant recipients must demonstrate alignment with the 2017 *Computer Science Standards of Learning*. A strong proposal will:
14. Provide an overview of the goals, performance targets/outcomes, and timeline of the plan that deepens understanding of computer science concepts and hones knowledge of history, mathematics, or science
15. Provide details about the platform and tool that may be selected. Details must include verification of alignment of the 2017 *Computer Science Standards of Learning (*SOL) and plans for integration with the standards of learning for either History, Mathematics, or Science.
16. Include research and evidenced-based practices focused on curriculum integration;
17. Allow for the creation of sample lessons that encourage the development of curriculum integration learning opportunities.
18. Includes written and/or video examples of exemplar lessons in an accessible format for publication to #GoOpenVA at the conclusion of the grant.
19. Provide a description of the professional development for teachers and leaders.
20. Demonstrate measurable benchmarks for successful integration.
21. For each participating school, a School Information form should be completed. The form(s) should be attached as **Appendix A** in the division’s submitted proposal
22. Budget and Budget Narrative
23. Proposals will provide an overview of the total budget for the option selected and the details by budget object code.
24. An individual school proposal may not exceed $75,000.
25. Funding may provide for materials and consumables up to 30 percent of the total budget requested. The materials must have a direct relationship to proposal objectives. Examples include but are not limited to:
	1. Professional development books/materials/resources;
	2. Training materials; and
	3. Notebooks, flash drives and other materials related to specific project planning goals.
26. Funding may be used for instructional technology devices up to 50 percent of the total requested.
27. Funding may be used for instructional platforms up to 75 percent of the total requested.
28. Funding may be used for teacher release time (substitute teachers) and pay for staff time outside of the workday for the creation of instructional resources or professional development.
29. Unallowable budget items for include, but are not limited to:
	1. Computer hardware without proper justification or prior approval;
	2. Food or refreshments at planning and work sessions or meetings;
	3. Construction or renovation of facilities; and
	4. Travel.
30. Budget Document: Expenditures should be organized under the following categories on the Project Budget forms provided in this RFP, pages 12-16, or a reasonable facsimile thereof. Please refer to the [OMEGA Object Codes document](http://www.doe.virginia.gov/school_finance/budget/grants_acct_reporting/omega/omega_user_guide.pdf) to determine correct categories for OMEGA.
	1. Personal Services (1000): This includes salaries and wages for employees and other staff involved in the project. Costs for staffing should reflect instructional and administrative salaries that are appropriate outside of normal work responsibilities. Entries should identify project staff positions; the appropriate rate of pay per hour, day, week, or month; and the total amount of time to be charged to the project.
	2. Employee Benefits (2000): This includes job-related benefits that are provided to employees as part of their total compensation. Fringe benefits include the employer’s portion of FICA, retirement, insurance (life, health, disability, etc.), and employee allowances.
	3. Purchased/Contractual Services (3000): This includes fees for special professional services to the project by individuals, partners, firms not involved as project staff (employees) of the local educational agency. Include name and title of consultant, and the type of consultant services to be provided.
	4. Internal Services (4000): This includes charges from an Internal Service Fund to other functions, activities, or elements of the organization for the use of internal services, such as print shop, central purchasing/central stores, or parking.
	5. Other Charges (5000): Stipends should be included in this section. The stipend rate should be consistent with the standard rate of the school division(s).
	6. Supplies and Materials (6000): This includes supplies, materials, and services directly consumed in the course of the planning process.
31. The completed budget document is NOT part of the allotted 20 narrative pages. It should be attached as **Appendix B** of the submitted proposal.

**Proposal Cover Page**

**Project Title:**

**Project Type:**

**Total of ACSE funds requested:**

**School(s) or School Division:**

**Superintendent:**

**Superintendent’s Email:**

**Lead Designee:**

**Title of Designee:**

**Email of Designee:**

**Consortium of Partners:**

**CERTIFICATION BY AUTHORIZED OFFICIAL**

*The applicant certifies that to the best of his/her knowledge the information in this proposal is correct, that the filing of the proposal is duly authorized by the local school board of the school division, and that the applicant will comply with the attached Statement of Assurances.*

**Typed or Printed Name of the Authorized Official:**

**Title:**

**Signature of the Superintendent:**

**Date:**

**Statement of Assurances**

Should an award of funds from the Advanced Computer Science Education grant be made to the applicant(s)\* in support of the activities proposed in this proposal, the authorized signatures below certify to the Department that the authorized school division officials will:

Upon request, provide the Department with access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations;

Conduct educational activities funded by this project in compliance with the following federal laws:

1. Every Student Succeeds Act
2. Title VI of the Civil Rights Act of 1964;
3. Title IX of the Education Amendments of 1972;
4. Section 504 of the Rehabilitation Act of 1973;
5. Age Discrimination Act of 1975; and
6. Americans with Disabilities Act of 1990.

Use grant funds to **supplement** and **not supplant** funds from any other sources;

Take into account during the development of programming, the need for greater access to, and participation by, students from historically underrepresented and underserved groups;

Submit all program and evaluation reports required by the Department in accordance with stated guidelines and deadlines;

Ensure that the majority of the local school board is fully supportive of the ACSE proposed program,

Ensure execution of the proposal in accordance with the program’s RFP and grant budget as approved by Department; and

Conduct educational activities funded by this project in compliance with all current executive orders in the Commonwealth.

By signing and submitting this Statement of Assurances, the lead designee assures that its participating schools will adhere to state and federal laws, and regulations governing public schools in the Commonwealth of Virginia. The applicant school division further certifies, to the best of its knowledge, that the submitted proposal has addressed all required elements of the Advanced Computer Science Education grant RFP and the applicant understands and will comply with the assurances.

**Typed Name of Division Superintendent**:

**Signature of Division Superintendent**:

**Date**:

**Typed Name of Division School Board Chairman**:

**Signature of Division School Board Chairman**:

**Date**:

\*A Statement of Assurances page is required for each participating school division. The signed Statement of Assurances page for the lead designee will follow the Proposal Cover Page in the submitted proposal packet. Other participating local educational agencies Statement of Assurances pages, if any, must be included as **Appendix D** of the proposal.

**Partner Identification**

Include a Partner Identification Form for institutions of higher education, educational regional program, Computer Science organization, agency, or other partnering group that is anticipated to have a key or embedded role in the Computer Science integration pilot program submitted in the proposal.

Partner:

Type of Organization:

Name of Primary Contact:

Title:

Address:

City:

Zip Code:

Telephone:

Email:

Potential Project Role/Responsibility:

Please attach a letter of support, printed on letterhead and signed by individual(s) authorized to enter into contractual obligations on behalf of the above-named organization.

Additionally, please provide a detailed scope of work that breaks down anticipated responsibilities and associated costs. Attach Partner Identification forms, letters of support, and a detailed scope of work if any, as **Appendix A**.

**Primary Contact Signature**

By my signature, I certify that the above-named entity is planning to be a key partner with the local educational agency, or consortium of local educational agencies, in the development and implementation of the Advanced Computer Science Education program.

Printed Name:

Signature:

Title:

Date:

Project Budget

**Period of Award: March 20, 2023-June 30, 2023**

**School:**

Personal Services 1000

(Salaries and wages for employees for time worked outside normal contract hours.)

| **Job Titles** | **Project Role** | **Rate of Pay** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- | --- | --- |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
|       |       |       |       |       | $0 |
| **Total Employee Benefits 1000** | No Data | No Data | $0 | $0 | $0 |

Employee Benefits 2000

(Job-related benefits.)

| **Job Titles** | **% of benefits** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- | --- |
|       |       |       |       | $0 |
|       |       |       |       | $0 |
|       |       |       |       | $0 |
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|       |       |       |       | $0 |
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|       |       |       |       | $0 |
| **Total Employee Benefits 2000** | No Data | $0 | $0 | $0 |

Purchased/Contractual Services 3000

(Fees for special professional services by individuals or firms not involved as project staff, i.e., consultants.)

| **Description (Please provide detailed cost calculations.)** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
| **Total Purchased Contractual Services 3000** | $0 | $0 | $0 |

Internal Services 4000

(Charges from an Internal fund to other activities of the organization such as print shop, parking, or central purchasing/central stores.)

| **Description (Please provide detailed cost calculations.)** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- |
|       |       |       | $0 |
|       |       |       | $0 |
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|       |       |       | $0 |
| **Total Internal Services 4000** | $0 | $0 | $0 |

Other Charges 5000

(Includes travel expenses and stipends.)

**Funding for travel related to project activities up to 15% of the total budget requested is allowed.**

| **Description (Please provide detailed cost calculations.)** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- |
|       |       |       | $0 |
|       |       |       | $0 |
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|       |       |       | $0 |
|       |       |       | $0 |
| **Total Other Charges 5000**  | $0 | $0 | $0 |

Materials and Supplies 6000

(Office supplies, educational materials, books, postage, printing, publication and photocopying services.)

**Grant funding may not be used for food or refreshments at planning and work sessions or meetings, construction or renovation, or computer hardware without proper justification or prior approval**

| **Description (Please provide detailed cost calculations.)** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Cost** |
| --- | --- | --- | --- |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
|       |       |       | $0 |
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|       |       |       | $0 |
|       |       |       | $0 |
| **Total Materials and Supplies 6000** | $0 | $0 | $0 |

Total Project Budget for ACSE Planning Grant

| **Budget Item** | **ACSE Fund Source** | **In-Kind Fund Source** | **Total Budget** |
| --- | --- | --- | --- |
| Personal Services (1000) | $0 | $0 | $0 |
| Employee Benefits (2000)  | $0 | $0 | $0 |
| Purchased/Contractual Services (3000) | $0 | $0 | $0 |
| Internal Services (4000)  | $0 | $0 | $0 |
| Other Charges (5000)   | $0 | $0 | $0 |
| Material and Supplies (6000) | $0 | $0 | $0 |
| **Total Project Budget**   | **$0** | **$0** | **$0** |