



**MARYLAND CENTER FOR COMPUTING
EDUCATION (MCCE)**

REQUEST FOR PROPOSAL

**Maryland Preservice Computer Science
Teacher Education Program**

Proposals Due Date: Friday, September 30, 2022
NO LATER THAN 4:00 p.m.

Email: mcce@usmd.edu

SUMMARY TIMETABLE

Wednesday, August 31, 2022	MCCE Preservice Computer Science Teacher Education Program RFP Round 3 Issued
Friday, September 30, 2022	Proposals due by 4:00 p.m.
Friday, October 14, 2022	Grant award notification 2-3 large grants of \$35,000-\$50,000 will be awarded 4-6 medium grants of \$20,000-\$34,000 will be awarded Payment of awarded funds will follow award notification
Thursday, November 17, 2022	A representative from each grant project team should plan to attend the Maryland CS Summit at the Ocean City Convention Center with Common Ground special at the Thursday afternoon session in person or virtually. Each project team should prepare a 5-10 minute summary of the grant plans.
July 2023 (date tbd)	A representative from each grant project should plan to attend the Maryland Preservice CS Education Intensive and prepare a 5-10 minute summary of highlights of the grant with the grant teams.
Monday August 7, 2023	Grant project end date
Monday, August 21, 2023	Final report, expenditure report, and unexpended funds due

This RFP and related documents are located at cs4md.com.

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Maryland Preservice Computer Science Teacher Education Program: Partnership Grants for Professional Development Round 3

PROGRAM AUTHORIZATION

Securing the Future: Computer Science Education for All went into effect on June 1, 2018. It established the Maryland Center for Computing Education (MCCE) at the University System of Maryland (USM) with the directive that it “identify ways to expand access to high-quality computer science education, strengthen the skills of educators, and increase the number of computer science teachers” and “work with certain institutions of higher education.”¹ To fulfill such a mandate and within this purview, the MCCE is issuing a request for proposals through the Maryland Preservice Computer Science Teacher Education Program.

PURPOSE

The purpose of this grant program is to expand access to high-quality computer science education, strengthen the computer science skills of educators, and increase the number of computer science teachers through the development of preservice programs and professional development of education faculty at the institution.

The grant program will utilize a collaborative framework that has been developed outlining the essential topics to be taught in a Maryland preservice computer science education program, and to develop courses and pathways to implement that framework. The essential topics constituting the core of computer science education for preservice teachers in Maryland include what should constitute a core of essential topics to be taught:

1. Teach computer science (CS) content knowledge, focus on Maryland’s K-12 Computer Science Standards
 - a. Recognize an emphasis on cybersecurity
2. Introduce CS pedagogy and methods
 - a. Include a focus on equity, inclusion, and diversity

(Materials are at cs4md.com/highereducation)

ROUND 3 GRANT-FUNDED PROJECTS MUST ADDRESS THE FOLLOWING PURPOSES:

1. Provide methods course(s) or unit(s) of study incorporated into courses to provide students with meaningful experiences in understanding CS content and CS pedagogical best practices;
2. Develop lasting programs that expose future teachers to computer science and computational thinking content and teaching methods;
3. Share resources and results with other grant project teams in Maryland.
4. Have a plan to provide the necessary knowledge and experience to integrate computer science and computational thinking for all education faculty at the institution.

A successful grant request should consider and address the following questions as appropriate within the proposal narrative and/or timeline:

- Is there collaboration with local public-school districts?
- Is there collaboration between institutions of higher education to benefit all Maryland programs? Will you produce materials or resources that can be used by classroom teachers, or other preservice programs?
- What will the project contribute to Computer Science literacy and education programs in Maryland?

¹ Department of Legislative Services HB 281: Securing the Future: Computer Science Education for All 2018 Fiscal and Policy Note

- Is there an emphasis on awareness of equity of access to CS and the need for diversity?
- Is there a plan to reach a significant percentage of students in education programs to weave computational thinking and computer science into multiple aspects of preservice programs?
- Are there in-kind contributions (e.g., personnel time, etc.) from the institution?
- Will students gain both content and pedagogy knowledge? How well does content cover the breadth of Computer Science across K-12, including cybersecurity content, as outlined in Maryland’s K-12 CS Standards?
- Are there clear plans described for the sustainability of the program beyond the grant-funded period?
- Is time and funding allocated to send personnel to the Maryland CS Summit in November 2022 and the Maryland Preservice CS Education Workshop in July 2023?
- How will this knowledge be shared with all education faculty at the institution so that there is a shared literacy on computational thinking, computer science, and the content and methods needed to provide meaningful experiences to K-12 students?

ELIGIBILITY

Eligible awardees *funded* under this grant must include a Maryland public or independent two- or four-year institution of higher education (IHE) and **its division that prepares teachers and/or K12 school administrators**. The proposal must have a lead IHE that is the named applicant and fiscal agent. In addition, the lead IHE may also include other organizations as appropriate. Community colleges may serve in partnerships *and* may be lead partners if they have a division that prepares teachers. Project directors must be faculty or permanent staff members at the applicant institution and have expertise in the content areas or methodologies the activities address.

If an applicant project director, project manager, or project evaluator is overdue in submitting reports to MCCE for other grant projects, or has a history thereof, their proposal for the program may be considered ineligible.

GRANT PERIOD

Proposals are **due Friday September 30, 2022 by 4:00 p.m.** to the Maryland Center for Computing Education at the University System of Maryland, (submission via email at mcce@usmd.edu). The grant project end date is August 7, 2023, and the final report is due August 21, 2023.

Grant projects may be discontinued or terminated before the end of the stated grant period if the project fails to meet its approved objectives. (See “Grant Management” Post-Award section.)

FUNDING

Total Funds Available in Round 3:	Approximately \$300,000
Grant Amount:	\$20,000-\$34,000 per small grant award
	\$35,000- \$50,000 per large grant award

MCCE reserves the right to make a larger award for a project of exceptional breadth or depth that serves teachers in high-need schools that will improve the academic achievement of students at those high-need schools.

Date for Funding Awards: Monday October 17, 2022 (full amount)

MCCE reserves the right to request changes to the original plan in order for the program to move forward. MCCE also reserves the right to terminate projects that fail to demonstrate adequate progress toward goals (see “Program Closeout, Suspension and Termination,”).

Awards will be disbursed after winning grants have been selected and all forms have been completed with any adjustments made as requested by MCCE. A fund transfer form with signatures is required in order to process grant awards by check or by electronic transfer.

Grantees who wish to request changes to their original plan and/or line item budget allocations may do so at any time. (See “Grant Management,” section “Post-Award Changes” for the guidelines.)

COLLABORATIVE PLANNING

A Collaborative Framework team consisting of at least one member from each award grantee will attend both the Maryland CS Education Summit in November 2022 and the Maryland Preservice CS Intensive in July 2023. This team will share an outline of the grant plans at the Summit, summarize results to date at the summer CS Preservice Intensive, and participation in collaborative development of additional resources to support statewide CS education efforts.

Successful projects demonstrate cooperative planning between education faculty, information technology or computing faculty, the Collaborative Framework team, and, where relevant, representatives from public school districts. These entities work together to assess statewide or school district and teacher needs and learn from the experiences of practicing teachers in computer science classrooms. Applicants might wish to describe previous collaboration, including any lessons learned.

ELIGIBLE GRANT PROJECT ACTIVITIES AND PRIORITIES

Faculty from education and other divisions of higher education institutions must work together to plan activities that meet the professional development priorities of the collaboratively developed Framework for Maryland Computer Science Teacher Education. Funds may be used for the development of computer science methods courses as well as activities integrated into other courses. **Activities should be content-rich, clearly demonstrate the integration of computing content, and be evidence-based using current teaching and learning research regarding effective teacher professional development strategies.**

Project activities must include sustained, high-quality instructional contact hours with the participants. For the purpose of this program, activities should improve and increase students’ knowledge of academic subjects and teaching methodologies particular to computer science. These activities should be sustained (e.g., not one-day or one-time workshops) and classroom-focused; advance teacher understanding of effective, evidence-based instructional strategies; and be developed with the participation of in-service teachers and the inclusion of the Framework for Maryland Computer Science Teacher Education. Proposed projects should also take into consideration teacher certification requirements and other related assessments.

No more than 10% of total funds should be requested for materials of instruction or consumables.

PROPOSAL PACKET FORMAT

- Proposals must be typed in a reasonable, 12-point font, single-spaced.
- Proposals must include a cover sheet with the name and signature of the approving authority, contact information for the financial offices, and account information for transfer of funds and the receipt of checks.

The proposal **narrative must not exceed seven (7) pages**. The page limit includes only elements of the proposal narrative, not the cover sheet, abstract, budget, assurances, planning agreements, or appendices if included. The

proposal narrative pages must be numbered; page numbering is not required for appendices, assurances, etc. but is encouraged.

The proposal file should contain the following items **in the order indicated**: (see Appendix for required forms)

1. COVER SHEET
2. ABSTRACT: Summarize the project goals and plan in 1 or 2 short paragraphs.
3. PROPOSAL NARRATIVE
4. BUDGET

Use the following outline to write the proposal narrative. Reviewers will evaluate your proposal for each section and item listed. Label the parts of the proposal with the headers below.

1A) Project Goals and Objectives (15 points)

Project goals should be clearly stated. These are the broad, general principles guiding the project over the long term. For each goal, list specific objectives.

Objectives should follow “SMARTIE” guidelines; they should be:

Specific (focused, detailed, and name the target population to be served);

Measurable (provides quantitative data - qualitative indicators may supplement quantitative measures);

Achievable (possible and plausible within the grant period);

Results-oriented;

Time-bound (have deadlines);

Inclusive. (Many people are left out of computing education; how will you support participants with unique needs and abilities to participate in your activities?)

Equity-Focused (Many people do not see the relevance of computing knowledge for themselves or their students. How will you engage diverse learners?)

Proposals will be assessed on the extent to which the objectives meet these guidelines. It should also be clear what will be achieved by whom. Baseline data should be included to convey that your goal is both reasonable and ambitious. Objectives should reference institution baseline data describing currently available programs and efforts, number of Education students served, and number to be reached by the proposed grant project.

1B) Sustainability and Management Plan (30 points)

Partner responsibilities may be presented in narrative and/or table formats.

- Describe each partner’s roles and responsibilities.
- Describe the time commitment of the project director and other key project personnel. It should be clear that the project director will have sufficient time to dedicate to the project.
- Project staff responsibilities and duties should be clear and linked to the budget, management, and activity plans. This information is often presented effectively in a table format.
- If the units of study developed or used by the project are not to be required for all students in the institution’s preservice program, then recruitment is a key element of project success, and, as such, must be planned (and sometimes re-planned) carefully. Recruitment cannot wait and is one of the most important management responsibilities. Include a recruitment and selection plan for the target population. “Selection” may include both selecting what groups are recruited and what students are

selected from a pool that is recruited. In the past, brochures and flyers alone have not proven to be an effective recruitment method.

- Retaining participants in a program can be a challenge; a good management plan will address this problem. The management plan should articulate participants’ incentives and any strategies being used to retain participants (e.g., awarding credits or paying stipends after milestones are met or follow-up is complete, scheduling).

The sustainability and management plan will be evaluated on:

- Its adequacy to achieve the objectives of the proposed project on time and within budget;
- The recruitment and retention plan(s) if needed;
- The extent to which program management operations are clearly defined (who will do what, when, and where);
- The extent to which the services to be provided involve the collaboration of appropriate partners for maximizing the effectiveness of project services; and
- Plans for a sustained effort that will continue for years beyond the original project.

1C) Timeline (20 points)

This section describes the development and instructional activities that will achieve the project goals and objectives. Information will be presented in both narrative and tabular format as described below.

The plan of operation will:

- Be a detailed plan that includes strategies and activities, timeframes, and key personnel responsible for each project objective and major activity supporting each objective;
- Include specific information on how, when, and where the project participants will be identified;
- Describe how, when, and where follow-up with participants will take place; and
- Indicate how many and what kind of credits may be earned by each participant group if applicable.

The timeline should indicate both when major activities (e.g., recruiting) will take place and when professional development delivery and follow-up activities will take place. While exact dates are unlikely to be available for all activities, the project should be planned in enough detail that reasonable amounts of time are allotted for activities. The timeline should also be a way of showing that the project can start on time, reach its goals, and conclude on time. See sample table below.

Sample Activities Timeline Table

Date Range	Key Personnel Involved	Activity Description	Estimated # Participants (if applicable)	Estimated # Contact Hrs. (if applicable)
9/2022	Project Director, Lead Instructor	Planning meetings with State Collaborative Framework team Determine baseline data for a pre-survey of participants	n/a	n/a

10/2022	Project Director, CS Specialist, Education Specialist	Participant recruiting Design assessment for learning to be given to participants at the end of the project	n/a	n/a
11/2022	Project Director, Instructional Staff	Participant orientation Gather input and feedback from local schools on needs, wants, and course offerings	20	5
12/2022 - 7/2023	Instructional Staff	CS/CT course offerings	20	45
7/2023	Project Director, CS Specialist, Education Specialist	Refine or develop additional materials	20	10
2/2023 - 7/2023	Curriculum & Instruction, Instructor	CS/CT course offerings Post survey; assessment of learning	20	15
Ongoing	Evaluator	Data collection, material refinement, feedback from participants	n/a	n/a
6/2023 – 8/2023	Evaluator, Project Director	Analysis and evaluation report	n/a	n/a

1D) Project Evaluation and Outcomes (20 points)

The program evaluation will be an integral part of the project’s design and implementation, not something done after the project is completed. The evaluation plan will reflect the project’s goals and objectives for building a new program or modifying existing programs. Its specific methodology will depend on the project and the type of data collected but all evaluation plans must include:

- Appropriate evaluation methods that are used to develop, analyze, and **apply formative and summative measures linked to the project objectives**;
- A clear means of describing the project’s benefits and outcomes to stakeholders (e.g., teachers, students, parents, school administrators, grantors, policy makers);
- A review of the obstacles and progress made in providing essential Computational Thinking and Computer Science literacy to all education faculty.

A summary (and summary table where applicable) of the evaluation results must be included with the project’s final report. Detailed supporting documents should be included in an appendix, including sample surveys, data tables, reports, etc.

The plan for evaluation must:

- Be a systematic means for monitoring and evaluating the program based on the partnership goals and objectives;
- Describe a plan for collecting data throughout the project to be used for both project improvement and to report project outcomes;
- Describe how, when, and by whom the data will be collected;
- Identify how any baseline for comparison was established;
- Include an appropriate mechanism to disseminate evaluation results to stakeholders; and
- Provide an account of project evaluation data results in the final report.

That section lists specific, basic information to be kept by all projects. (See the Reporting Requirements in “Grant Management”.)

2. BUDGET (15 points)

The budget and budget narrative should clearly link all costs to the project activities detailed in the Plan of Operation; by the same token, it should be clear how all activities are accounted for in the budget and budget narrative. Use a detailed budget narrative to explain how all figures in the budget summary were calculated (e.g. unit cost, number of units).

Provide evidence of institutional commitment to the project, including the amount of staff time dedicated to the project and any in-kind contributions. Matching funds are not required but should be included in the budget if offered.

The proposal's budget and cost-effectiveness will be evaluated on the extent to which:

- Budget summary is correctly computed (this is a common error);
- Budget narrative explains how the budget summary figures were calculated, **matches** the amounts in the budget summary, and fully explains what purposes these costs serve;
- Budget is adequate to support the project and it is clear how activities are funded;
- In-kind contribution(s) from the institution or other sources are provided;
- Costs are reasonable in relation to the objectives and design;
- Costs are reasonable in relation to the number of participants to be served (per participant cost);
- There is adequacy of support—including facilities, equipment, supplies, and other resources—from the lead institution and the other partners;
- Administrative costs are kept to a minimum; and
- There is potential for continued support of the project after the funding ends.

2A) The Budget Summary Form

The Budget Summary Form should show all planned expenditures for the project.

- Column 1: “Funds Requested” is the request amount of grant funding.
- Column 2: “Matching Funds” will include both cash and in-kind contributions (if applicable) from the Applicant who will serve as the fiscal agent if the grant is awarded.
- Column 3: “Other Funds” shows funds or in-kind contributions committed by cooperating organizations, agencies, institutions, local education agencies (school districts), or others to this project. If more than one agency is committing funds to this project, indicate the specific breakdown of such funds on a separate page.

2B) The Budget Narrative

The budget narrative should explain the rationale for each line item in the budget summary for grant expenditures and matching funds. This narrative, which will be organized by the corresponding line item on the budget summary, must show how the amounts indicated were determined (e.g., hourly rate x # hours, unit cost x #units, % of salary for each project staff member, fringe rate applied to salary).

Applicants should fully and clearly articulate how the project activities are being funded, how costs were computed, and what the various project expenses mean in terms of service to participants. The budget narrative should not exceed 3 pages.

2C) Ineligible Costs

Applicants **may not expend funds** for the following purposes:

- Travel to professional conferences beyond the required MCCE CS Summit and CS Preservice Intensive, unless a presentation is being made about the grant work done for the Maryland Center for Computing Education. A limit of \$1,000 may be funded through the project for conference presentations.
- Purchase of non-instructional equipment (these are not equipment grants);
- Purchase of supplies for something other than the professional development activities being provided; and
- Entertainment/entertaining.

Funds may only be expended on targeted participants to include faculty, teachers, principals, assistant principals, highly qualified paraprofessionals, students in the program, and primary participants.

2D) Budget Guidelines

The following budget guidelines apply (arranged by the line item corresponding to the budget):

A. Salaries and Wages

Estimates of personnel time should be justified in terms of the tasks to be performed and the instructional contact hours. Salaries are to be part of the individual's regular compensation for the academic year and should be expressed as a percentage of commitment of time.

Pay should be calculated based on the individual's regular compensation. Salaries cannot be drawn at a higher pay rate than that which the individual normally receives. **MCCE reserves the right to request salary verification for this purpose.**

1. Professional Personnel

- List individually all key personnel and the requested salary amounts to be funded during the summer and/or academic year by indicating what hours or percent of the individual's annual time will be committed to the project.
- Summer salaries may be in a lump sum but must not be proportionally more than the institution compensates for similar work during the academic year. Explain how the summer salary was calculated.
- Actual instructional compensation, if requested, is restricted to one course load equivalent for academic semester courses and/or one summer course equivalent. This rule may be waived if documentation and explanation justify why and how a greater time commitment than that is required.
- If effort is committed as an in-kind institutional contribution, it should be noted in column 2 or column 3.

2. Other Personnel

List individually all support personnel by support category and the requested rate of pay. Support personnel must be clearly justified and may include clerical and student assistants. Support personnel requests are restricted to the actual planning and instructional time equivalent for the project. If effort is committed as an in-kind institutional contribution, that should be noted in column 2 or column 3.

B. Fringe Benefits

These are the costs normally paid by the institution to the salaried members of its faculty and staff who will be involved in the project (calculated for the percentage of effort in the project). The fringe rate should be supplied (e.g., 18%, 23%) for each staff member in the narrative. These may appear as direct costs or match, or a combination of both. If summer and academic year costs are different, please distinguish these in the budget narrative.

C. Travel

Enter travel costs of grant project staff if travel is necessary for key personnel to conduct off-campus activities. Mileage allowances charged to the grant may not exceed the State mileage reimbursement rate in effect at the time the travel occurs. All travel funding must be specifically designated by place, date, duration, and method of travel, and be approved in the project budget. Travel to the MD CS Summit in November and the MD Preservice CS Intensive in July should be included in the budget along with the cost of accommodation, if needed.

D. Participant Support Costs

1. Stipends or Tuition – not both

Participant stipends for a summer or weekend component may be requested and supported by grant funds **not to exceed \$210 per day**. The amount of the total stipend may exceed this amount if supplemented by funds from other sources. These stipends must be clearly justified. Stipends are not allowed for the time during which participants receive their regular pay.

For the duration of the grant project, the grant may pay for up to three (3) semester credit hours of regular tuition and fees per participant.

2. Subsistence

The MCCE encourages in-kind contributions for subsistence from the partners or an outside source (e.g., snacks, or a vendor/supermarket supplies lunch).

3. Other (specify)

Examples of Other Participant Costs might include:

- Grant participants can be reimbursed for travel such as gasoline reimbursement.
- **Related receipts should be kept by project directors for appropriate reimbursement and audit procedures.** Project directors should keep these receipts on file with their other financial management and auditing records for this grant.

E. Other Costs

- Equipment that is necessary to perform project activities for training and implementation in the classroom is allowable up to 10% of the total requested amount. The budget narrative should indicate how such materials will be maintained, housed, and/or used after the grant project ends.
- Marketing and recruitment costs to attract students to the program are allowable.

F. Total Costs

Enter sum of items A, B, C, D, and E.

3. REQUIRED ASSURANCES (Required; no points)

Each grant proposal must be accompanied by a Statement of Assurances signed by the appropriate organizational representative (Appendix A). The purpose of this document is to ensure that the grant recipient is fully aware of its obligations to adhere to all state and federal requirements in the event the grant proposal is approved. Recipients of funds will assure the MCCE that:

- Professional development programs will ensure equitable access for all eligible program participants, considering barriers that may exist based on gender, race, ethnicity, national origin, disability, or age.
- Applicants must agree to participate in any statewide assessment program as required by MCCE during the grant project.

4. ADDITIONAL APPENDICES (Optional; no points)

Additional appendices may be included. Appendices should not include material that *is required* by the *proposal narrative*.

PROPOSAL CHECKLIST

An electronic copy of the entire proposal, the Abstract, and the Budget Summary worksheet should be emailed to mcce@usmd.edu by 4 pm on Friday, September 30, 2022.

Electronic Proposal Checklist (email to: mcce@usmd.edu)

Every electronic submission should contain the following in the order and format indicated:

- _____ Cover Sheet (Word document or PDF)
- _____ Abstract (Word document or PDF)
- _____ The budget request (spreadsheet file)
- _____ The budget narrative (Word document or PDF)
- _____ Signed Statement of Assurances (Word document or PDF)
- _____ The entire proposal (PDF)

PROPOSAL REVIEW PROCESS

- Proposals must be received by the deadline.
- Proposals must include all requisite forms. Applicants may copy the forms to include in proposal packets or reproduce them in their own word processing files.
- Applicants will receive electronic notification that their proposal has been received.

- A panel of qualified reviewers will read each proposal and score each proposal according to the criteria summarized below and explained above in “Proposal Format.” Each proposal is read and scored by at least three reviewers. Every effort is made to ensure that there are no conflicts of interest.
- Reviewers may include retired Maryland principals, former Maryland teachers, retired faculty and academic administrators from higher education institutions, professional staff from Maryland State Department of Education (MSDE) and MCCE, and other qualified professionals.
- Reviewers frequently offer written comments on their review forms. Comments will be compiled and returned to applicants when the review process is complete.
- The full review panel is convened after each reviewer has read the proposals individually. Panel members discuss recommendations as to funding and adjustments that the project staff might make to improve either the project identified for funding or the proposal, should it be rejected for this round of funding.

EVALUATION AND SELECTION CRITERIA

The full Review Panel will be convened to discuss each proposal and their respective scores. The rating given for each criterion (see below) will serve as a significant, but not the only, aspect of the judgment made by the Review Panel. Grants may be awarded with consideration to geographic distribution and to State needs.

Each proposal will be evaluated by the Review Panel and scored based on these categories:

<u>Category</u>	<u>Maximum Points</u>
Project Goals and Objectives	15
Sustainability and Management	30
Timeline	20
Project Evaluation and Outcomes	20
Budget and Budget Narrative	<u>15</u>
Total	100

MCCE reserves the right to negotiate budgets and proposal activities before awarding a grant.

NOTIFICATION OF AWARDS

Preliminary notification of awards will be made on or about Friday October 14, 2022, via e-mail, prior to midnight. No funds will be disbursed for conditional awards until all conditions of the award are met.

GRANT MANAGEMENT

1. FISCAL PROCEDURES

All funds under this program must be assigned to a specific account.

For this grant cycle, institutions will receive one payment. Expenditures in excess of approved budget amounts will be the responsibility of the recipient institution.

2. POST-AWARD CHANGES

The grant recipient shall obtain prior written approval for any change to the scope or objectives of the approved project. This includes any changes resulting in additions or deletions of staff and consultants related to or resulting in a need for budget reallocation.

The grant recipient must obtain written approval from MCCE:

- To continue the project during any continuous period of more than three (3) months without the active direction of an approved project director;
- To replace the project director or any other persons named and expressly identified as a key project person in the proposal, or to permit any such person to devote substantially less effort to the project than was anticipated when the grant was awarded; and
- To make budget changes exceeding 10% in any line item or \$1,000, whichever is greater.

3. PROGRAM CLOSEOUT, SUSPENSION, and TERMINATION

Closeout: Closeout should be completed **no more than 90 days after the expiration or termination** of the grant unless otherwise approved by MCCE. A project director's history of failure to close out grants in a timely fashion may have a negative impact on future proposal consideration. In closing out the grant, the following shall be observed:

- The grant recipient shall immediately refund or otherwise expend, in accordance with instructions from MCCE, any unobligated balance of cash advanced to the grant recipient.
- The grant recipient shall submit all financial, performance, evaluation, and other reports required by the terms of the grant within 90 days of the date of expiration or termination.

The closeout of a grant does not affect the retention period for rights of access to grant records.

Suspension: When a grant recipient has materially failed to comply with the terms of a grant, MCCE may, upon reasonable notice to the grant recipient, suspend the grant in whole or in part. The notice of suspension will state the reasons for the suspension, any corrective action required of the grant recipient, and the effective date. Suspension shall remain in effect until the grant recipient has taken action or given evidence satisfactory to MCCE that such corrective action will be taken, or until MCCE terminates the grant.

Termination: MCCE may terminate any grant in whole or in part at any time before the date of expiration, whenever MCCE determines that the grant recipient has materially failed to comply with the terms of the grant. MCCE shall promptly notify the grant recipient in writing of the termination and the reasons for the termination, together with the effective date. The grant recipient may terminate the grant in whole or in part upon written notification to MCCE setting forth the reasons for such termination, the effective date, and in the case of partial terminations, the portion to be terminated. However, if in the case of a partial termination MCCE determines that the remaining portion of the grant will not accomplish the purposes for which the grant was made, MCCE may also terminate the grant.

Closeout of a grant does not affect the right of MCCE to disallow costs and recover funds based on a later audit or review, nor does closeout affect the grantee's obligation to return any funds due as a result of later refunds, corrections, or other transactions.

4. REPORTING REQUIREMENTS

- MCCE staff may conduct site visits, undertake telephone interviews, or request written materials in order to monitor grant activities.
- Formal final reports are required from all grantees, including a financial and a narrative report to MCCE. Final reports should address the items described below under "Final Financial Reports" and "Final Narrative Reports." (Refer to the Summary Timetable for report due dates.)

4A) Preparing for Reporting

Project directors should maintain records indicating when and where activities took place, the length of time participants spent on activities, who participated in each activity by name, and how funds were expended, as well as total project cost. In addition, project directors should maintain evidence that demonstrates whether activity and project goals are being met. (See Appendix B for the Final Report Form.)

4B) Final Report due 8/21/2023

- A final report must be submitted; **failure to submit a final report will make the project director ineligible to apply for future grants.**
- The final report has a final financial report section and a narrative report section.
- The final report includes evaluation of the grant; this evaluation will include the accepted evaluation plan components from the proposal. The Final Report should include any evaluation report completed for the project. Data tables, sample surveys, and other related evaluation tools should be placed in an appendix.
- A discussion assessing the attainment of the goals and objectives should be included. Each grantee will provide an account of the project evaluation data results in the final report and in an online survey. Grantees will be required to complete the online survey as part of their final report requirement. The survey questions are organized into two categorical areas:
 - Area 1: Changes in Participant Content Knowledge
 - Area 2: Changes in Participant Pedagogical KnowledgeNote, in each area grantees are asked for three types of information: the type of study conducted, the measurement instrument used, and the general trend of the evaluation results.
- Final reports should include Participant Contact Hours
- The final report includes a *Budget Summary* report and a *Budget Narrative*. (See Appendix B)

1) Final Financial Reports

The financial report should be structured like the approved budget, with both a budget summary and a budget narrative (see forms in appendix for an example of the format to use). **It must be signed by a financial officer at the institution serving as the fiscal agent.** Grantees should keep records indicating how funds are expended, the total cost of project activities, the share of the cost provided from other sources (in-kind or otherwise), and any other related records to facilitate an effective audit. Any unspent grant funds should be returned to MCCE with the financial report.

2) Final Narrative Reports

Narrative reports must include the results of the evaluation plan outlined in the project proposal and document the project outcomes. These reports will:

- Address the goals of the project, explaining how project activities addressed those goals, and to what extent the project was successful in meeting those goals;
- Note where or how the project activities might be improved; and
- Indicate the number of participants that were served and estimate how many students were impacted.

The narrative report should also detail participant data, reflecting the total number of participants. In addition to the information contained in the roster/table, the report should include, if applicable, the number of participants successfully completing assessments and the number who passed Praxis II exams.

Relevant student achievement indicators might be test scores, expansion of curricula, or documented changes in student behavior and performance. The specifics will have to be relevant to your project and your evaluation. Try to demonstrate as clearly as possible the impact your project had on the participants served.

6. ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER

An acknowledgment of the Maryland Center for Computing Education within the University System of Maryland must appear in any publication of materials based on or developed under this project in the following manner:

“The activity that is the subject of this [type of publication (e.g., book, report, film)] was produced with the assistance of a grant from the Maryland Center for Computing Education within the University System of Maryland under the auspices of the Maryland Preservice Computer Science Teacher Education Grant Program.”

MCCE may request that materials, except those published in academic journals, contain the following disclaimer:

“Opinions, findings, and conclusions expressed herein do not necessarily reflect the position or policy of the Maryland Center for Computing Education or the University System of Maryland, and no official endorsement should be inferred.”

All media announcements and public information pertaining to activities funded by this grant program should acknowledge support of the Maryland Center for Computing Education within the University System of Maryland Preservice Computer Science Teacher Education Grant Program.

At such time, as any article resulting from work under this grant is published in a professional journal or publication, two reprints of the publication should be sent to the Maryland Center for Computing Education, clearly labeled with appropriate identifying information.

7. COPYRIGHTS

Unless otherwise provided by the terms of the grant, when copyrightable material is developed in the course of or under the Preservice grant, the grant recipient is free to copyright the materials or permit others to do so.

If any copyrightable materials are developed in the course of, or under this grant program, they shall have a royalty-free, non-exclusive, and irrevocable right to reproduce, publish, or to otherwise use and authorize others to use the work for state or federal government purposes.

8. FEDERAL REGULATIONS

Non-Discrimination Statutes and Regulations

This grant and any program assisted thereby are subject to the provisions of Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and the regulations issued pursuant thereto by the U.S. Department of Education (45 CFR Part 80). No person on grounds of race, color, national origin, or handicap shall be excluded from participation or be denied benefits of or be otherwise subjected to discrimination under this grant. In addition, no person on the basis of sex, gender, or sexuality shall be excluded from participation in the project in compliance with Title IX of the Education Amendments of 1972 (20 USC 1681-1686). Further, by acceptance of this award, the grant recipient assures the Commission and the U.S. Department of Education that it will comply with section 504 of the Rehabilitation Act of 1973 (29 CFR Part 84) and the implementing regulations (45 CFR Part 84). No person

on the grounds of age shall be excluded from participation in the project as defined by the Age Discrimination Act (412 USC 6101 et seq.) and the implementing regulations (45 CFR Part 90).

Forms are included in the Appendix for sub-awardees and must be completed and returned by October 14, 2023, in order to have PSCST grant award funds released by MCCE to the grant sub-awardees.

APPENDICES

A. PROPOSAL FORMS

Cover Sheet

Maryland Preservice Computer Science Teacher Education Program Grants Round 3

Email in entire proposal to mcce@usmd.edu by 4:00 pm by Friday, September 30, 2022
Email the budget as a separate spreadsheet

Lead Applicant Institution: _____

Lead Applicant Institution DUNS #: _____

Title of Project: _____

Partnership Members: IHE (division preparing educators): _____

IHE (computing division): _____

Any partner LEA(S) _____

Other partnership members: _____

Content Area(s) of Project: _____

Funds Requested: \$ _____

Value of Match Provided (Funds, In-Kind, etc.): \$ _____

Project Director(s): _____

Campus Telephone: _____ FAX Number: _____

E-mail: _____

Campus Mailing Address: _____

Grants Office Contact, Name & Title (post award): _____

E-mail address: _____ Phone number: _____

Campus Mailing Address: _____

Finance or Business Office Contact, Name & Title (post award): _____

E-mail address: _____ Phone number: _____

Campus Mailing Address: _____

Certification by Authorizing Official (V.P. level or above):

Name: _____ Title: _____

Signature:

Abstract

Maryland Preservice Computer Science Teacher Education Program Round 3 Grant

Email document to mcce@usmd.edu by 4:00 pm on September 30, 2022.

Lead Institution: _____

Project Title: _____

In 250 words or less, describe (for an “educated general audience”) your project activities: (This may be reproduced as is or edited by the Maryland Center for Computing Education staff for inclusion in reporting, press releases and other publications describing the grant program).

BUDGET REQUEST SUMMARY
MCCE: Preservice Grant Program

Email in MS excel format to dogrady@usmd.edu

Project Title: _____

Lead Institution Name: _____

Reporting Period xx/xx/xx – yy/yy/yy

	Column 1	Column 2	Column 3
	SOURCE OF FUNDS		
	Grant Funds Requested	Institution Match Funds	Other Funds **
A. Salaries & Wages			
<i>Professional Personnel</i>			
List each by name and title			
1			
2			
3			
4			
Other Personnel (job type & # of each)			
6			
7			
Total Salaries & Wages	0	0	0
B. Fringe Benefits			
C. Travel			
D. Participant Support Costs			
1. Stipends			
2. Tuition			
3. Subsistence***			
4. Other (specify)			
Total Participant Costs	0	0	0
E. Other Costs			
1. Materials and Supplies			
2. Consultant Services			
3. Computer Services			
4. Marketing and Outreach			
5. Other (specify)			
Total Other Costs	0	0	0
F. Total Direct Costs (A thru E)	0	0	0

*Include all grant-funded expenses, including for sub-contracts, in this column. Identify cooperating organizations, agencies, institutions, LEAs etc., and funds requested for them (through project sub-contracts) on separate page(s); use the column 1 for requested funds, use column 2 for your institutional match funds, if any and use 3 column for any outside funds from a partner, community organization, etc.

** If any of these parties, or another agency, is committing funds or in-kind donations for this project, indicate the specific breakdown and explanation of such funds for each on a separate sheet, while putting the totals for appropriate categories here.

Sample Budget Narrative and Justification

Maryland Preservice Computer Science Teacher Education Program

Lead Institution: _____

Project Title: _____

(These partial examples are provided only to demonstrate the format for the budget narrative. Provide as many sheets of paper as needed to provide justification for each line item of the budget summary.)

A. Salaries & Wages

Professional Personnel:

- a. Column 1: Dr. Jill Smith, the project director, will spend 12.5% of her time in project activities during the 2022-23 academic year. Maryland State University requests for this time only the amount it will cost the university to pay an adjunct to replace Dr. Smith in one course. Request = \$5,000
- b. Column 2: The University will contribute the difference between the \$5,000 requested and 12.5% of Dr. Smith's 10-month annual salary as an in-kind cost share valued at \$7,500.
Match = \$2,500

Other Personnel:

- a. Administrative Assistant (1): Request = $\$1.00/\text{hour} \times 5 \text{ hours/week} \times 78 \text{ weeks} = \$4,680$
(Assistant's time not included as an indirect cost; time is scheduled for grant work)
Column 2: Assistant's fringe benefits contributed as match:
 $5 \text{ hrs./wk.} \times 78 \text{ weeks} \times 33\% \text{ benefits rate} \times \$12/\text{hr.} = \$1,544.40$
- b. Database programmer (1); no request;
Column 2: Maryland State Univ., the lead institution, will provide release time for a database programmer to help develop and maintain a database for the project:
Match = $\$29/\text{hr.} \times 2 \text{ hrs./wk.} \times 26 \text{ wks.} = \$1,404$

B. Fringe Benefits

Fringe benefits for the project manager's spring semester release time are calculated at 33% of prorated salary. Request = $\$12,250 \times .335 = \$4,103.75$

C. Travel

Travel for project director to three cooperating LEAs for outreach and recruitment.
Request = 56.5
cents per mile $\times 10 \text{ trips} \times 60 \text{ miles/trip} = \339

D. Participant Support Costs

1. Stipends:

20 faculty participants @ \$300/day for 2 Saturday working sessions in fall and spring
Request = $\$300 \times 2 \text{ days} \times 20 \text{ participants} = \$12,000$
Institution Match = $\$300 \times 2 \text{ days} \times 20 \text{ participants} = \$12,000$

2. Tuition:

The grant will pay tuition reimbursement costs for each participant

Column 3, Other funds = $\$193/\text{credit} \times 3 \text{ credits} \times 10 \text{ participants} = \5.790

E. Other Costs

Other: Materials and Supplies for 6 Saturday faculty workshops

Request = $\$10 \text{ per participant} \times 6 \text{ days} \times 40 \text{ participants} = \$2,400$

STATEMENT OF ASSURANCES

The Applicant hereby assures and certifies that it will comply with the regulations, policies, guidelines, and requirements as they relate to the proposal, acceptance, and use of state funds for this project. Also, the Applicant assures and certifies:

1. It possesses legal authority to apply for the grant; an official act of the applicant's governing body has been duly adopted or passed, authorizing filing of the proposal, including all understandings and assurances contained therein and directing and authorizing the person identified as the official representative of the proposal and to provide such additional information as may be required.
2. It will provide equal access to its programs of pre-service, in-service, and other professional development for all eligible program participants, taking into account barriers that may exist based on gender, race, ethnicity, national origin, disability, or age.
3. It will comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d) prohibiting employment discrimination where discriminatory employment practices will result in unequal treatment of persons who are or should be benefiting from the grant-aided activity.
4. It will enter into formalized agreement(s) with any local education agency or agencies (LEAs) named in the proposal in the area(s) of proposed service, as well as with other partners.
5. It will give the Maryland Center for Computing Education (MCCE) or an auditor, through any authorized representative access to and the right to examine all records, books, papers, or documents related to the grant.
6. It will comply with all requirements imposed by MCCE and any State or Federal sponsoring agency concerning specific requirements of law and other administrative requirements.
7. It will expend funds to supplement and not supplant state funds.
8. It will participate in any statewide needs assessment or evaluation as required.

Institution

Signature of Authorized Institutional Authority

Name and Title, Printed

Date

B. FINAL REPORT FORMS & TABLES

Final Report Maryland Preservice Computer Science Teacher Education Program

Grant # and Project Title #:	
PI:	
Submitted By:	Reporting Period:

Please attach additional sheets for your responses. Address all questions and add any other information you think pertinent. The budget should be provided in spreadsheet format.

1. Narrative

- a. Refer to your accepted proposal. List the project goals and objectives and any other related milestones indicated in your initial proposal. For each one, indicate how the project progressed in meeting those objectives. Indicate how this assessment was made (evaluator’s report, data sources, etc.) Use the Final Project Evaluation Rubric if applicable.
- b. Please include answers to the following questions:
 - i. Did the project start on time? If not, please discuss why.
 - ii. Has the project recruited the projected number of participants? If not, please discuss the difference.
 - iii. What are the greatest challenges and/or key issues faced by the project? How will the project address these?
 - iv. What went well and could be shared with other state programs?
 - v. How will you build on this work going forward?

2. Participant Information

- a. Complete the Final Participant Contact Hours table (on the next page). Put the number and the type of participant together in the appropriate column(s). A contact hour means time higher education faculty spent with the professional development recipients in an activity; it does not include teacher preparation time. Contact hours refer to participant hours, not project staff hours, and should be calculated **per participant**—do not multiply by the number of participants. Note: Contact hours are calculated based on participant time, not project staff time; contact hours are per participant (do not multiply by the total number of participants).
Additional Note: If faculty are the participants in a workshop, you are delivering internally, then please list them as participants in that experience.

3. Budget

- a. Include your original and final budgets and include a narrative on any anomalies or changes made during the project.

Final Participant Contact Hours (Required)

Grant Number and Project Title: _____

Lead Institution: _____

Reporting Period: _____

Event description / Dates / Type of Participants	Those who participated			Those who did not
	No of Participants	Contact Hrs. Per Participant	Credits Earned by # & Type)	Who did not participate and why?
Other: _____				
Total Participants by program				

MCCE Preservice Computer Science Grant Program

FINAL BUDGET SUMMARY REPORT (Excel)

Grant Number _____ and Project Title _____

Lead Institution

Reporting Period x-x

	column 1	column 2	column 3	column 4	column 5	column 6
A. Salaries & Wages	GRANT	GRANT FUNDS	INSTITUTION MATCHING FUNDS	INSTITUTION MATCHING FUNDS	OTHER FUNDS ¹	UNEXPENDED TITLE II FUNDS ²
Professional Personnel						
List each by name and title	BUDGETED Expenditures	ACTUAL Expenditures	BUDGETED Expenditures	ACTUAL Expenditures		UNSPENT Balance
1						
2						
3						
Other Personnel (list by job category & note # of each)						
6						
7						
Total Salaries and Wages	0					
B. Fringe Benefits						
C. Travel						
D. Participant Support Costs						
1. Stipends						
2. Tuition						
3. Subsistence						
4. Other (specify)						
Total Participant Costs	0					
E. Other Costs						
1. Materials and Supplies						
2. Consultant Services						
3. Computer Services						
4. Recruitment						
5. Other (specify)						
Total Other Costs						
F. Total Direct Costs (A through E)						

¹ If any of these parties, or another agency, committed funds or in-kind donations for this project, indicate the specific breakdown and explanation of such funds for each on a separate sheet, while putting in the totals for appropriate categories

² MCCE encourages subgrantees to expend all funds awarded in accordance with the approved budget. Project directors should work with their finance offices to ensure that funds are used for their intended purposes. HOWEVER, any unexpended funds should be returned

Signature of Finance Officer: _____

Name & Title of Finance Officers (printed): _____

Date: _____

Final Project Evaluation Rubric

The evaluation is organized into two categorical areas:

Area 1: Changes in Participant Content Knowledge

Area 2: Changes in Participant Pedagogical Knowledge and/or Teacher Practice

In each area, we ask for three types of information: the type of study conducted, the measurement instrument used, and the general trend of the evaluation results.

To complete this survey, please determine which of the listed choices best fits how you measured your project goals and objectives for each of the categories. If how you measured the goals and objectives fits into more than one category within a single question, please count it within *each* appropriate category. Since this likely will result in some evaluation measurements being counted multiple times, the sum of the responses will most likely be greater than the total number evaluation measures.

As much as possible, please try to use the categories outlined in the survey to classify each of your evaluation goals and objectives.

Thank you for your time and effort!

Area 1: Changes in Participant Content Knowledge

Directions: Select your choice by putting an “X” next to the phrase which best describes your project evaluation method.

Type of Study Conducted	
<i>Type of Study</i>	
Descriptive	
Correlational	
Post-intervention comparisons only	
Pre-post comparison, within participant group	
Pre-post comparison to another group (normative, quasi-experimental, randomized control trials (RCT), etc.)	

Measurement Instrument Used	
<i>Measurement Instrument</i>	
Did not measure changes in teacher content knowledge	
INDIRECT measures: Anecdotal or narrative evidence of changes in PD content area knowledge (survey, interview, structured observation, document analysis, etc.)	
<ul style="list-style-type: none"> • Participant-reported • Based on external observations or analysis 	
DIRECT measures:	
<ul style="list-style-type: none"> • Project-developed/adapted instrument measuring changes in SPECIFIC PD content area knowledge • Project-developed/adapted instrument measuring changes in BROAD PD content area knowledge • Published instrument (established reliability and validity) measuring changes in PD content area knowledge • Commercial or state-developed standardized instrument (or archived data from such instruments) measuring changes in PD content area knowledge 	

General Trend of Evaluation Results	
<i>Trend of Results: Changes in Teacher Content Knowledge</i>	
Substantial INCREASE (>3 S.D.)	
Moderate INCREASE (2-2.9 S.D.)	
Slight INCREASE (1-1.9 S.D.)	
NO reliable change in teacher content knowledge (0-0.9 S.D.)	
Slight DECREASE (1-1.9 S.D.)	
Moderate DECREASE (2-2.9 S.D.)	
Substantial DECREASE (>3 S.D.)	

Additional comments on Area 1: Changes in Participant Content Knowledge:

Area 2: Changes in Participant Pedagogical Knowledge and/or Teacher Practice

Type of Study Conducted	
<i>Evaluation Strategy</i>	
Descriptive	
Correlational	
Post-intervention comparisons only	
Pre-post comparison, within participant group	
Pre-post comparison to another group (normative, quasi-experimental, randomized control trials (RCT), etc.)	

Measurement Instrument Used	
<i>Measurement Instrument</i>	
Did not measure changes in teacher pedagogical knowledge and teacher practice	
INDIRECT measures: Anecdotal or narrative evidence of changes in pedagogical knowledge and/or Teacher Practice (survey, interview, structured observation, document analysis, etc.)	
<ul style="list-style-type: none"> Participant-reported 	
<ul style="list-style-type: none"> Based on external observations or analysis 	
DIRECT measures:	
<ul style="list-style-type: none"> Project-developed/adapted instrument measuring changes in PD-SPECIFIC pedagogical knowledge 	
<ul style="list-style-type: none"> Project-developed/adapted instrument measuring changes in BROAD pedagogical knowledge 	
<ul style="list-style-type: none"> Published instrument (established reliability and validity) measuring changes in pedagogical knowledge 	
<ul style="list-style-type: none"> Commercial or state-developed standardized instrument (or archived data from such instruments) measuring changes in pedagogical knowledge 	
<ul style="list-style-type: none"> One-time direct observation in teacher's classroom documenting changes in teacher practice 	
<ul style="list-style-type: none"> Multiple, systematic direct observations in teacher's classroom documenting changes in teacher practice 	

General Trend of Evaluation Results	
<i>Trend of Results: Changes in Teacher Pedagogical Knowledge and/or Teacher Practice</i>	
Substantial INCREASE (>3 S.D.)	
Moderate INCREASE (2-3 S.D.)	
Slight INCREASE (1-2 S.D.)	
NO reliable change in teacher content knowledge (0-1 S.D.)	
Slight DECREASE (1-2 S.D.)	
Moderate DECREASE (2-3 S.D.)	
Substantial DECREASE (3+ S.D.)	

Additional comments on Area 2: Changes in Participant Pedagogical Knowledge and/or Teacher Practice: