



2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant Letter of Interest (LOI) Application Due 11:59 p.m. CT, July 12, 2022

NOGA ID [Redacted]

Authorizing legislation **General Appropriations Act, Article III, Rider 86, 87th Texas Legislature**

This LOI application must be submitted via email to competitivegrants@tea.texas.gov.

The LOI application may be signed with a digital ID or it may be signed by hand. Both forms of signature are acceptable.

TEA must receive the application by **11:59 p.m. CT, July 12, 2022**.

Application stamp-in date and time

Grant period from **August 31, 2022 to April 30, 2024**

Pre-award costs are **not** permitted for this grant.

Required Attachments

- Excel workbook with the grant's budget schedules (linked along with this form on the TEA Grants Opportunities page)

Amendment Number

Amendment number (For amendments only; enter N/A when completing this form to apply for grant funds): [Redacted]

Applicant Information

Organization CDN Campus ESC UEI #

Address City ZIP Vendor ID

Primary Contact Email Phone

Secondary Contact Email Phone

Certification and Incorporation

I understand that this application constitutes an offer and, if accepted by TEA or renegotiated to acceptance, will form a binding agreement. I hereby certify that the information contained in this application is, to the best of my knowledge, correct and that the organization named above has authorized me as its representative to obligate this organization in a legally binding contractual agreement. I certify that any ensuing program and activity will be conducted in accordance and compliance with all applicable federal and state laws and regulations.

I further certify my acceptance of the requirements conveyed in the following portions of the LOI application, as applicable, and that these documents are incorporated by reference as part of the LOI application and Notice of Grant Award (NOGA):

- LOI application, guidelines, and instructions
- Debarment and Suspension Certification
- General and application-specific Provisions and Assurances
- Lobbying Certification

Authorized Official Name Title

Email Phone

Signature Date

Shared Services Arrangements

Shared services arrangements (SSAs) are **not** permitted for this grant.

Statutory/Program Assurances

The following assurances apply to this program. In order to meet the requirements of the program, the applicant must comply with these assurances.

Check each of the following boxes to indicate your compliance.

- 1. The applicant provides assurance that the application does not contain any information that would be protected by the Family Educational Rights and Privacy Act (FERPA) from general release to the public.

- 2. The applicant provides assurance to adhere to all the Statutory and TEA Program requirements as noted in the 2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant Program Guidelines.

- 3. The applicant provides assurance to adhere to all the Performance Measures, as noted in the 2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant Program Guidelines, and shall provide to TEA, upon request, any performance data necessary to assess the success of the program.

- 4. The applicant will include AP CSP as part of the course catalog for the 2023-2024 school year by December 2022 and will go through the necessary district policies to obtain school board approval.

- 5. The applicant will identify, recruit, and onboard qualified teachers to receive professional development training and become certified to teach an AP CSP course.

- 6. The applicant will identify and select a professional development provider.

- 7. The applicant will promote the AP CSP course offering to all students.

- 8. The applicant will provide support necessary to ensure students successfully pass the AP CSP course.

- 9. The applicant will provide a way for students to take the AP CSP exam after course completion for free or at a reduced cost.

Summary of Program

Provide an overview of the program to be implemented with grant funds. Include the overall mission and specific needs of the organization. Describe how the program will address the mission and needs.

Planning, expanding capacity, implementing, and sustaining a strong computer science program in all our six comprehensive high schools falls within the realm of the Career and Technical Education (CTE) and Advanced Academics departments at Socorro Independent School District. In 2019-2020, an Advance Placement Computer Science Principles (AP CSP) course was first offered at three of our six comprehensive high schools (Eastlake, Socorro, Americas). Using a Project Lead The Way (PLTW) CS curriculum, high school teachers received certification to teach the course. This past school year (2021-2022), our other comprehensive high schools (Pebble Hills, Montwood, El Dorado) began offering the same curriculum. While course completion rates are acceptable, the success rate of students successfully passing the College Board AP exam is below Socorro ISD expectations. The mission of the Socorro Independent School District is to optimize our 47,000 students' academic, artistic, athletic, and interpersonal skills. To do this, we need to improve teacher professional development, provide additional course curriculum content, and resources.

Through this grant, Socorro ISD seeks to open a Computer Science pathway in each of the six campuses. The AP CSP course will be an integral part of the course sequence. We will continue to partner with PLTW for professional development, along with adding College Board AP workshops for our existing six AP CSP teachers. Six additional teachers will be recruited through a competitive application process. We will strive to increase student enrollment in the course, the pass rate of the AP CS exam, and the number of CS certifications to ensure that our large at-risk student demographics is prepared for the future.

TEA Program Requirements

1. Identify and describe the explicit need for grant funds to support an AP Computer Science Principles (AP CSP) course. How will this grant build capacity for the LEA? How will the LEA prioritize marginalized students in receiving access to the AP CSP course offering?

The Computer Science Pathway at Socorro ISD is in its infancy. Numerous needs exist to ensure sustainability of the pathway. Both students and teachers need to be recruited and provided opportunities and training to excel in this high-need discipline. Professional development currently offered for AP Computer Science Principles (CSP) is based solely on the Project Lead The Way (PLTW) online curriculum. Additional PD (College Board AP workshops) is needed for teachers so that students will be successful on the College Board AP exam. This will require funding for travel to College Board workshops, workshop costs, and PLTW PD costs. Replenishing of laptop computers is needed in CS classrooms. With 73.5% of our students classified as Economically Disadvantaged, 92% Hispanic, and 25% English Learners, our district realizes that the large majority of our students are marginalized and need to be recruited. We will begin this in middle school with the PLTW Gateway Innovators and Makers/App Creators course, Girls Who Code, and counselor support in recruiting students. " A Day of Computer Science " will be added with this grant. By improving recruitment and PD for teachers, more-targeted recruitment of students beginning in middle school, and adding a Computer Science Pathway at all comprehensive high schools, we will be poised to build capacity and success for the program.

TEA Program Requirements Cont'd

2. Describe how the LEA will select teachers to receive professional development to teach an AP CSP course. How will the LEA select teachers and ensure teacher commitment? How will the LEA ensure teachers have all the tools necessary to teach the AP CSP course successfully? Include how many teachers the LEA needs to provide the AP CSP course.

The six existing teachers who are currently teaching the AP CSP course will be automatically selected to attend the College Board AP workshops. All expenses will be paid through the grant. An additional six teachers will be selected through a competitive application process that will include a review of existing certifications, professional teacher evaluations, number of years teaching, experience teaching AP courses, and their resume. The application opportunity will be posted on the high school and district web pages. The application will include a statement of intent to complete PDs and willingness to teach the AP CSP course for at least two years. Through support from both PLTW and College Board, teachers should be prepared with the tools necessary to teach the AP CSP course successfully.

3. The LEA will identify and select a professional development provider. Describe the nature of the LEA/provider relationship. Which vendor will be the professional development provider for the LEA? When and how will this training occur?

Socorro ISD has a long and supportive partnership with Project Lead The Way (PLTW.org). Beginning with a \$2,500,000 Department of Defense Education Activity grant in 2013, Socorro ISD has utilized PLTW Professional Development. We will continue to use this PD and curriculum. Additionally, we will add College Board AP workshops for CSP educators. PLTW training is done online, while the College Board training will be in person. AP Workshop Key Takeaways are: Understand the Course, Plan the Course, Teach the Course, Assess Student Progress, Engage as a Member of the AP Community. Online resources will also be utilized.

TEA Program Requirements Cont'd

4. Describe the course curriculum for classroom instruction. List any curriculum, technology, and/or equipment required for the course.

Currently PLTW CSP curriculum is being utilized in each comprehensive high school. It is web based, each student and teacher log in to access instructional objectives, assignments, and projects. Teachers will complete the AP CSP training with College Board and utilize the standards provided in the training. Socorro ISD provides each student a laptop, this limits equipment needed. Curriculum will be web based.

5. Describe how students will be supported in selecting and succeeding in the AP CSP course. How does this course support the student's program of study or graduation plan? The LEA must include a plan for ensuring that students take and pass the AP CSP exam.

AP CSP will be an open enrollment course. Information will be provided to the campus counselors, teachers in the PLTW Engineering course(s) and in any recruitment night the campus offers. Student success will be monitored by teacher of record: 3, 6 & 9 weeks check points will be used to demonstrate learning objective was met. Respond to intervention will be done when student falls below a 75 average. Respond to intervention includes: meeting with student and informing him/her of the concern offer tutoring, calling home schedule a parent- teacher conference, when needed meet with counselor-student-teacher. Each meeting will be documented. This course falls under an elective for PLTW Engineering pathway.

AP CSP exam is scheduled for the Spring semester, students will be notified of the date they will report for testing. To assure that students are successful in the course and test teacher will schedule periodical review sessions and practice exams. Teacher will review the practice exam with the class.

TEA Program Requirements Cont'd

6. Describe the course evaluation procedure and outline student success measures. Describe how the LEA will ensure successful grant administration by measuring the following metrics: (a) Increase in the number of CTE completers taking an AP course; (b) Increase in participation and/or performance of students taking and/or passing the AP CSP exam; and (c) Increase in number of special populations and non-traditional students enrolled in an AP CSP course.

Career Technical Education provides students the opportunity to select up to 16 career clusters from which students can select their program of study.

Socorro ISD will continue to monitor the students enrolling in and completing th AP CSP course (by high school) the number of students taking the exam and pasing rate by school, number, by gender and special populations. Data from the students information system will be provided to the grant manager by the PEIMS office. College Board AP results will be provided to the Grant manager for comaprison. Currently the Computer Science Principals course is offered through the PLTW Engineering program of study.Comparison between the initial and final student enrollment of the course will demonstrate student completion of the course.

(a) To increase the number of students in the course teachers will recruit from within the PLTW Engineering pathway, counselors will assist in recruiting for the course and verifying that students are following the accurate program of study.

(b) Increase in participation and/or performance of students taking and/or passing the AP CSP exam;

Each campus will schedule AP testing, this allows students to be aware of the test ahead of time and prepare for the exam. Teacher of record will provide test preparation sessions that will allow students to review the content and complete practice exams.

(c) Increase in number of special populations and non-traditional students enrolled in an AP CSP course.

The course will be open enrollment, this allows any student to enroll in the course. Recruitment from middle school will be needed to inform students of this course, counselors will assist in informing students of this opportunity.

7. Describe how the LEA plans to implement and sustain the AP CSP course at each campus and how the course will continued to be offered beyond the grant.

Program sustainability is expected to be maintained through the Computer Science Pathway supported by CTE. AP courses are supported by Advanced Academics with funding provided within the existing departments. By adding another teacher at each campus, any turnover will be better dealt with. PLCs and district staff will support ongoing recruitment. Counselors will also be engaged in the recruitment process. Our anticipated greatest challenge is how to improve AP course pass rates with our marginalized student demographic where we continue to encourage all students to attempt the course and the AP exam. The course will be open enrollment, this allows any student to enroll in the course. Recruitment from middle school will be needed to inform students of this course, counselors will assist in informing students of this opportunity.

Goals, Objectives and Strategies

Describe the major goals/objectives of the proposed program. What activities/strategies will be implemented to meet those goals/objectives?

Socorro ISD major goal is to expand capacity, implement and sustain a strong Science Program in our High schools. Also, to improve AP course passing rates with our marginalized student demographic where we continue to encourage all students to attempt the course and the AP exam. The success rate of students successfully passing the College Board AP exam is below Socorro ISD expectations. The objective is for our students to provide a student pathway and meet workforce demand after graduating.

The Science Program courses will be implemented as part of a course sequence. To make this happen we will recruit 6 additional teachers through a competitive application process. Each teacher will possess at least 2 years of classroom experience, be committed to receiving ongoing professional development to teach AP CSP and be committed to teach AP CSP for at least 2 years upon selection.

The campuses will use Project Lead The Way (PLTW) CS curriculum, high school teachers will receive certification to teach these courses. We will continue to partner with PLTW for professional development, along with adding College Board AP workshops for our existing and new AP CSP teachers.

Budget Narrative

Describe how the proposed budget will meet the needs and goals of the program, including for staffing, supplies and materials, contracts, travel, etc. If applicable, include a high-level snapshot of funds currently allocated to similar programs. Include a short narrative describing how adjustments will be made in the future to meet needs.

We are seeking the maximum award of \$30,000.00. This amount will only cover a few items for our program. To continue the computer science program we are purchasing 30 laptops at approximately \$786.00 each for a total amount of \$23,580.00. We will also be providing College Board virtual professional development courses for 12 teachers at approximately \$326.00 per teacher and a total of \$3,912.00. Indirect cost will absorb the remaining amount of \$2,499.00. Providing the laptops and the additional training to the teachers will provide resources for the students to continue receiving course curriculum, content and resources to optimize our student academic, and interpersonal skills.

Unfortunately the grant funds will not be enough to fund any additional items such as supplies, travel or staffing. Adjustment will be made in the future depending on awarded amount and activities necessary to meet project goals. We will use best practices in administering a grant:

Continue seeking funds
Revisit grant program guidelines
Monitor activities and purchases

Appendix I: Amendment Description and Purpose (leave this section blank when completing the initial application for funding)

An amendment must be submitted when the program plan or budget is altered for the reasons described in the "When to Amend the Application" document posted on the [Administering a Grant](#) page. The following are required to be submitted for an amendment: (1) Page 1 of the application with updated contact information and current authorized official's signature and date, (2) Appendix I with changes identified and described, (3) all updated sections of the application or budget affected by the changes identified below, and, if applicable, (4) Amended Budget Request. Amendment Instructions with more details can be found on the last tab of the budget template.

You may duplicate this page

Amended Section

Reason for Amendment