



2020-2021 Lone Star STEM Cycle 3 Year 1
Letter of Interest (LOI) Application Due 11:59 p.m. CT, September 7, 2020

NOGA ID

Authorizing legislation

US Department of Ed Federal Grant P.L. 114-95 IV ESSA EDUCATION INNOVATION AND RESEARCH
84.411B

Application stamp-in date and time

This LOI application must be submitted via email to loiapplications@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, September 7, 2020**.

Grant period from **October 1, 2020 - August 31, 2021**

Pre-award costs permitted from **September 30, 2020**

Required Attachments

1. Excel workbook with the grant's budget schedules (linked along with this form on the TEA Grants Opportunities page)
2. Applicants must submit the additional attachments as detailed in the Required Attachment section on p. 6 on the Program Guidelines found on [TEA's Grant Opportunities](#) page.

Amendment Number

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

Applicant Information

Organization **LA JOYA ISD** CDN **108912** Campus **THELMA ECHS** ESC **1** DUNS

Address **801 N COLLEGE DRIVE** City **LA JOYA** ZIP **78560** Vendor ID **76-6001550**

Primary Contact **VICTOR RODRIGUEZ** Email **V.RODRIGUEZ@LAJOYAISD.NET** Phone **956-222-5387**

Secondary Contact **GUADALUPE CHAVEZ** Email **G.CHAVEZ@LAJOYAISD.NET** Phone **956-451-0858**

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 **DR. GISELA SAENZ** Title **SUPERINTENDENT OF SCHOOLS**

Email **G.SAENZ2@LAJOYAISD.NET** Phone **956-323-2005**

Signature  Date **9/7/2020**

Shared Services Arrangements

☐ Shared services arrangements (SSAs) are permitted for this grant. **Check the box below if applying as fiscal agent.**

- ☐ The LEA or ESC submitting this application is the fiscal agent of a planned SSA. All participating agencies will enter into a written SSA agreement describing the fiscal agent and SSA member responsibilities. All participants understand that the "Shared Services Arrangement Attachment" must be completed and signed by all SSA members, and submitted to TEA before the NOGA is issued.

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 program funds will supplement (increase the level of service), and not supplant (replace) state mandates, State Board of Education rules, and activities previously conducted with state or local funds. The applicant provides assurance that state or local funds may not be decreased or diverted for other purposes merely because of the availability of these funds. The applicant provides assurance that program services and activities to be funded from this LOI will be supplementary to existing services and activities and will not be used for any services or activities required by state law, State Board of Education rules, or local policy.
- ☒ 2. 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.
- ☒ 3. The applicant provides assurance to adhere to all the Statutory and TEA Program requirements as noted in the 2020-2021 Lone Star STEM Cycle 3 Year 1 Program Guidelines.
- ☒ 4. The applicant provides assurance to adhere to all the Performance Measures, as noted in the 2020-2021 Lone Star STEM Cycle 3 Year 1 Program Guidelines, and shall provide to TEA, upon request, any performance data necessary to assess the success of the program.
- ☒ 5. The applicant provides assurance that they accept and will comply with [Every Student Succeeds Act Provisions and Assurances](#) requirements.
- ☒ 6. The applicant assures they understand that 2020-2021 Lone Star STEM Cycle 3 Year 1 applicants cannot request to be placed in the treatment or control group and should apply with the intent to complete the treatment requirements outlined in the LOI.
- ☒ 7. The applicant assures that the district plans to develop or expand a computer science or cybersecurity Program of Study.
- ☒ 8. The applicant assures the T-STEM blueprint components and artifacts as described in the Program Guidelines will be followed.

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.

The Budget requested is \$50,000. The proposed budget is intended to meet the needs and goals of the program.

40% of the budget is being allocated to account 6400 (Professional Development) and 60% of the budget to 6300 (Supplies and Materials).

Assigning 40% of the budget to Professional Development will ensure teacher(s) receive certification in Cyber Security. This Professional Development is part of the program and will safeguard continuity of implementation of the project by ensuring the campus has a teacher fully certified to teach Cyber Security courses once the program is fully developed.

60% of the budget, \$30,000, has been allocated in 6300 (Supplies and Materials).

The supplies and materials funds will be utilized to expand the existing Computer Science pathway to ensure it includes postsecondary credit as well as to ensure it provides the students with the real life work related-life experience needed to ensure a well rounded educational program in Computer Science.

During the planning year the budget will be reviewed and revised if needed by the Leadership team to ensure all program goals are being implemented and the planning year requirements are met. Budget expenditures will be reviewed by Campus Principal on a monthly basis and appropriate adjustment will be made if necessary.

In order to maximize grant funding, no indirect costs were allocated to the grant. This will ensure that 100% of the grant funding is utilized for program activities that will further implementation of the Computer Science program and development of the Cyber Security program.

All program funds will be utilized to supplement, not supplant, program services.

Statutory/Program Requirements

1. What type of College Career Readiness School Model (CCRSM) is the campus currently? (T-STEM, P-TECH, ICIA, or ECHS) If not a CCRSM, what model do you plan to operate during the Implementation Year?

Thelma Salinas STEM Early College High School is a stand-alone early college high school that serves students grades 9th through 12th and is open for enrollment to all La Joya ISD students.

Thelma Salinas STEM Early College High School will follow a College Career /Readiness Model of ECHS, connecting high school students to career and college programs that deliver a rigorous curriculum and training while providing advanced academic opportunities for students.

Students at Thelma Salinas STEM Early College High School earn a high school diploma and have the opportunity to earn an Associates Degree in Computer Science or up to 60 college hours during their high school years (9th through 12th) at no cost to their families.

All required MOU's with IHEs are in place as it was a requirement when the campus applied for ECHS designation.

Statutory/Program Requirements, (cont.)**2. What CCRSM designation does your district plan to pursue through the Lone Star STEM grant?**

The CCRSM designation that Thelma Salinas STEM Early College High School will follow / continue to implement during the Lone Star STEM grant will be that of ECHS where students can earn a high school diploma and an associate degree or up to 60 college credit hours during their high school enrollment in grades 9-12.

The school will continue to implement enrollment policies where open enrollment is accessible to all students at no cost to the students and all students will have the opportunity to earn an Associates Degree or up to 60 college credit hours.

Through the 2020-2021 Lone Star STEM Cycle 3 Year 1, program, Thelma Salinas STEM Early College High School seeks to expand the Computer Science program and develop a Cyber Security component to be promoted within the Computer Science pathway. Required MOUs with Institutions of Higher Education are in place and will be reviewed and updated, as needed, to ensure all programs of study are covered.

3. What process and information was used to determine which pathway was selected for the 2020-2021 Lone Star STEM Cycle 3 Year 1 grant? Please include any relevant labor market data or documentation.

The Leadership team at Thelma Salinas STEM Early College High School met with the La Joya ISD Academies Director, the Grant Development Director and the current Computer Science teacher from Thelma Salinas Early College High School.

The team discussed information regarding students' current enrollment trends, demographics, present and past enrollment requests and based on that data determined that in order to better serve the current and future students at Thelma Salinas STEM Early College High School, the appropriate pathway to select for this project was to enhance the Computer Science program while also seeking to develop a Cyber Security program that would be promoted through the Computer Science pathway.

Data Reviewed: Labor market data obtained from the Texas Workforce Commission (<https://texaslaboranalysis.com/RegionalOccupationalProfile>) The the Regional Occupational Profiles for which labor market data was reviewed were:

- 1) Computer Network Support Specialists,
- 2) Computer Occupations (All Others) and
- 3) Network and Computer Systems Administrators.

Wage analysis and Employment Projections were some of the key points reviewed regarding the career opportunities that could be obtained through the Computer Science pathway in the Lower Rio Grande Valley area.

As per Texas Workforce Commission Labor Market Analysis data, in the Lower Rio Grande Valley area, have an earning potential of Computer Network Support Specialist \$38,216 entry wage, \$48,783 average annual wage and up to \$54,067 Experienced Computer Occupations (all Others) \$44,889 entry wage, \$69,287 average annual wage and up to \$81,487 experienced Network and Computer Systems Administrators \$47,270 entry wage, \$64,883 average wage and \$73,690 experienced.

Statutory/Program Requirements, (cont.)

4. Describe plans for creating strategic alliances with industry partners and IHEs. What is the anticipated role for each IHE, business, and/or community partnership?

Thelma Salinas STEM Early College High School has strong partnership alliances with Institutions of Higher Education (IHEs).

La Joya ISD currently holds partnerships with The University of Texas Rio Grande Valley (Letter of Support attached) and South Texas College. These two institutions are the largest institutions in the area providing higher education instruction to students in the Lower Rio Grande Valley.

Thelma Salinas STEM Early College High School students are able to earn an Associates Degree / dual enrollment credit, at no cost to their families, while attending high school thanks to the alliances formed with these two institutions.

Through this program, 2020-2021 Lone Star STEM Cycle 3, our alliances with University of Texas Rio Grande Valley will become stronger (see letter of support). "UTRGV enthusiastically supports faculty and students from La Joya ISD participating in your Lone Star STEM Academy Cycle 3 Year 1 Grant program design. UTRGV is committed to collaborate with La Joya ISD with any marketing recruitment, enrollment, persistence, and completion efforts for your program. UTRGV has a long history of successful collaboration with numerous faculty and administrators at La Joya ISD and we look forward to the continuous collaborative impact with this grant opportunity. " Additionally, Thelma Salinas STEM Early College High School will form an alliance with the La Joya ISD Technology Department. The La Joya ISD Technology Department will be instrumental in providing students with real-life work experience and PBL exposure.

Having strong partners in education will surely ensure the 2020-2021 Lone Star STEM Cycle program is a success as we strive to expand the Computer Science program and develop a Cyber Security program that will be promoted through the Computer Science pathway. Additionally, Campus Leadership will continue to pursue additional alliances with business located within the community that directly connect with the Computer Science & Cyber Security pathway.

5. Identify the type of advanced courses (dual credit/AP/IB) currently implemented on the campus. Has the district identified what postsecondary credit will be available to students through the computer science, cybersecurity, and engineering programs?

La Joya Independent School District, in partnership with South Texas College (STC), has identified course work that students can take and thus obtain postsecondary credit.

The type of advanced course work consists of programming courses that students can take while enrolled in high school.

Students pursuing their Associates in Computer Science via Dual Enrollment classes obtain postsecondary credit at other Universities and Colleges with whom South Texas College has articulation agreements. Moreover, two courses which are part of the Associates in Computer Science are also part of the Bachelors of Technology with emphasis on Cyber Security at South Texas College. Postsecondary credit for students taking Dual Enrollment Computer Science courses is given to students entering an Engineering program at The University of Texas Rio Grande Valley

Some of the advanced courses and dual enrollment courses currently offered at Thelma Salinas STEM Early College High School include:

Environmental Science AP	Calculus AB/AP	Calculus AB DE	Pre Calculus DE
Prin ED & Training DE	Anat & Phy DE	Spanish 2313 DE	Spanish 2315 DE
Intro to Engineering DE	Eng Graphics DE	World History AP	US History AP
English 3 AP	English 3 DE	English 4 AP	English 4 DE
Human Geography AP	Music Appreciation DE	Economics AP	Chemistry AP
COSC 1301 DE	COMP ORG 2425 DE	PROG FUND DE	COMP PROG DE
Psychology DE	Sociology DE	Statistics DE	

Statutory/Program Requirements, (cont.)

6. Describe any planned STEM-focused informal activities (field experiences, clubs, competitions, summer STEM camp, etc.) that will be offered to students, whether they are offered by the school or by a community partner.

In order to ensure students are prepared for post-secondary education as well as prepared to enter the workforce, if they so choose, upon earning an high school graduation and earning an Associates in Computer Science (or 60 college hours), La Joya ISD will implement a rigorous preparation plan to prepare the students for college, maintain and increase program retention, completion as well as college transition rates.

All participating students will partake on an instructional program that will prepare them socially, emotionally as well as provide them with the hands-on learning experiences needed to success upon transition to college.

Due to current COVID-19 restrictions, program of study and activities will have to be carefully planed and modified to include in-person as well as virtual interaction to ensure student and staff safety.

- Activities and experiences that will enhance student learning will include, but are not limited to:
- STC Summer Camps in Cyber Security, Robotics, Programming and Coding
 - Field Experience: Networking, Computer Services both via Technology Department Partnership and Business Partnerships
 - STC’s STEM Conference
 - UTRGV’s High School Programming Contest (HSPC)

Statutory/Program Requirements (Cont.)

7. Describe the Academy's plans for implementing an interdisciplinary approach to learning where academic concepts are coupled with real-world experiences through Project or Problem Based Learning (PBL) and/or Engineering Design Challenges that are offered regularly throughout the school year. Please include how the Academy will support and develop teachers in offering this, including considerations for scheduling, professional development, and structures for cross-disciplinary collaboration.

Thelma Salinas STEM Early College High Schools currently offers an Associates Degree in Computer Science.

Thelma Salinas STEM Early College High School leadership team (Principal; Scheduler, Counselor) intend to implement a rigorous interdisciplinary approach to learning, that will include providing real-world experiences through Project Based Learning.

The plan to implement includes improving and expanding the current Computer Science Program by expanding the opportunities that are currently offered to the students by implementing an approach that will provide students with opportunities to obtain real life experience in the following expertise:

- Networking : setting up Wireless router sand PSquared Software
- Programming Assignments using Databases
- Mobile Apps that target and solve real world problems.

Students will complete PBL projects by collaborating with the La Joya ISD Technology Department and other business partners to gain hands-on experience.

The La Joya ISD Technology Department provides services to over 4,000 employees and it includes services in areas that cover networking, cyber security, as well as programming. Students will be able to obtain a well rounded internship experience while completing PBL assignments that are directly linked to the Computer Science and Cyber Security pathway. These activities will provide students with hands on experience that will expand their knowledge beyond just the programming realm. The current Computer Science instructor at Thelma Salinas STEM Early College High School will be provided with professional development opportunities that will enhance his already vast knowledge in order to provide the most updated instruction to our students (Cyber Security certification).

8. Describe how the district plans to recruit, retain, and support historically underrepresented populations in STEM (e.g, females, economically disadvantaged, at-risk, etc...).

Thelma Salinas STEM ECHS has an admission policy to identify, recruit and enroll the subpopulation of at-risk students (as defined by PEIMS), including, but not limited to, students who are limited English proficiency, students with disabilities, students who have failed a state administered assessment and are historically underrepresented in college courses (first generation college students, economically disadvantaged students, White, African American, Hispanic, Native American). Enrollment decisions shall not be based on state assessment scores, discipline history, teacher recommendation or essay.

9. Does the applicant plan to develop or extend an engineering program as well as a computer science or cybersecurity program?

We plan on using program resources to expand the current Computer Science program which currently allows students to receive an Associates Degree in CS from partner IHE's as well as develop and promote Cyber Security through CS pathway.

10. Does the applicant have at least one teacher certified to teach computer science?

Yes.

11. Does the applicant have at least one teacher certified to teach cybersecurity?

No. However, La Joya ISD has identified a teacher to take the necessary courses to complete Cyber Security Certification.

Equitable Access and Participation

Check the appropriate box below to indicate whether any barriers exist to equitable access and participation for any groups that receive services funded by this program.

- ☒ The applicant assures that no barriers exist to equitable access and participation for any groups receiving services funded by this program.
- ☐ Barriers exist to equitable access and participation for the following groups receiving services funded by this grant, as described below.

Group <input type="text"/>	Barrier <input type="text"/>
Group <input type="text"/>	Barrier <input type="text"/>
Group <input type="text"/>	Barrier <input type="text"/>
Group <input type="text"/>	Barrier <input type="text"/>

PNP Equitable Services

Are any private nonprofit schools located within the applicant's boundaries?

☐ Yes ☐ No

If you answered "No" to the preceding question, stop here. You have completed the section. Proceed to the next page.

☐ Yes ☐ No

If you answered "No" to the preceding question, stop here. You have completed the section. Proceed to the next page.

5A: Assurances

- ☐ The LEA assures that it discussed all consultation requirements as listed in Section 1117(b)(1) and/or Section 8501(c)(1), as applicable, with all eligible private nonprofit schools located within the LEA's boundaries.
- ☐ The LEA assures the appropriate Affirmations of Consultation will be provided to TEA's PNP Ombudsman in the manner and time requested.

5B: Equitable Services Calculation

1. LEA's student enrollment	<input type="text"/>
2. Enrollment of all participating private schools	<input type="text"/>
3. Total enrollment of LEA and all participating PNPs (line 1 plus line 2)	<input type="text"/>
4. Total current-year program allocation	<input type="text"/>
5. LEA reservation for direct administrative costs, not to exceed the program's defined limit	<input type="text"/>
6. Total LEA amount for provision of ESSA PNP equitable services (line 4 minus line 5)	<input type="text"/>
7. Per-pupil LEA amount for provision of ESSA PNP equitable services (line 6 divided by line 3)	<input type="text"/>
LEA's total required ESSA PNP equitable services reservation (line 7 times line 2)	<input type="text"/>

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