

Army Educational Outreach Program 2020-2021 UNITE – Request for Proposal (RFP)



Technology Student Association October 2019





Unite is a pre-collegiate summer program for talented high school students from groups historically underserved and underrepresented in science, technology, engineering, and mathematics (STEM).

An initiative of the Army Educational Outreach Program (AEOP), Unite is administered by the Technology Student Association (TSA). TSA is a member of the AEOP Consortium formed by the AEOP cooperative agreement award (W911SR-15-2-0001), a group of education organizations that oversee STEM programs designed to support the goals and mission of the AEOP. The lead organization for the consortium is <u>Battelle Memorial Institute</u>, a non-profit research and development organization with a strong commitment to STEM education.

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INTRODUCTION

The United States has long recognized that a scientifically and technologically literate citizenry is our nation's best hope for a secure, rewarding, and successful future. For over 50 years, the Army has supported a wide range of educational opportunities in STEM for our youth, college and graduate students, as well as our valued teachers.

Our nation's economy has greatly benefited from the technological achievements of the last century and is destined for greater achievements throughout the 21st century. The demand for STEM literate citizens has become increasingly high, and STEM talent is increasingly valuable and necessary, as it will continue to play a dominant role in all aspects of everyday life. For this reason, the Army created the Army Educational Outreach Program (AEOP), which provides a portfolio of Army STEM educational opportunities for the future generations of America's workforce and their teachers. STEM talent is essential to delivering innovative solutions for the nation, and AEOP is committed to engaging, inspiring, and attracting that next generation of STEM talent.

The AEOP is composed of competitions, unique experiences, internships, and teacher resources designed to spark inspiration, exploration, and achievement in STEM literacy and career development. From elementary school through college, students of all proficiency levels, interests, and social and economic backgrounds are encouraged to participate in real-world STEM experiences involving these important disciplines while also engaging with Army-sponsored mentors.

Unite, an initiative in the AEOP portfolio, is a pre-collegiate, academic, summer program for rising 9th through rising 12th grade students from groups historically underserved and underrepresented in STEM. The program is designed to encourage and help prepare students to pursue college-level studies and, ultimately, careers in engineering and related STEM fields.

Unite is administered by the Technology Student Association (TSA), a national non-profit organization of middle and high school students engaged in STEM. TSA was chartered in 1978, and since then over 2,000,000 students have participated in its program of activities. Members apply and integrate STEM concepts through competitive events, leadership endeavors, co-curricular activities, and related programs.

TSA is facilitating the Request for Proposal (RFP) process detailed herein to solicit entities to serve as 2020 and 2021 (a two-year cycle) Unite host sites.



UNITE – ANTICIPATED OUTCOMES

The Unite program is designed to give students the opportunity to:

- Gain a better understanding of the real-world applications of science, technology, engineering, and mathematics;
- Overcome negative attitudes and perceptions they may have about cultural, social, and other barriers to STEM studies and careers;
- Gain confidence in their ability to participate in engineering and other STEM activities;
- Engage in activities that promote collaboration and problem solving in a team environment; and
- Be better prepared to pursue engineering and STEM in college and, ultimately, in future careers.

The 2020-2021 Unite program should provide a summer experience for <u>rising 9th through rising 12th grade</u> <u>students</u>, in which they are exposed to academics and enrichment that will best help them achieve their goals of higher education and careers in STEM.

Options for configuring Unite (2020 and 2021) are suggestions only; host sites should develop their program in a way that best meets the needs of the individual site and its student participants:

- 1) Rising 9th grade students in 2020; rising 10th grade students in 2021 (returning and new, as necessary to meet enrollment numbers)
- 2) Rising 10th grade students in 2020; rising 11th grade students in 2021 (returning and new)
- Open enrollment, rising 9th through rising 11th grade students in 2020; rising 10th through rising 12th grade students in 2021 (returning and new)
- 4) Open enrollment, rising 9th through rising 12 grade students in both years of the program

2020-2021 UNITE – PROGRAM SPECIFICATIONS

This RFP and all information covered in this document are considered **certifications** and are binding on the part of the institution submitting a proposal. Therefore, the document submitted must be signed by both the designated Unite site director and an immediate supervisor at the submitting institution.

- 1. The Unite program at a site will operate on a two-year cycle. Selected sites will receive funding for one year, with the expectation for a second year of the same funding amount. The second year of funding is dependent on satisfactory performance in year one, approval of a site's planned program for year two, and TSA's receipt of program funding from the Army.
- 2. Unite funds can be used <u>only</u> to supplement, not supplant, an institution's existing summer STEM program in such a way that clearly benefits potential Unite participants.
- 3. The Unite program must be free to all participants. No application, registration, or other fees can be charged.



- 4. An institution's Unite program must last four to six weeks and can be residential or non-residential.
- Unite sites are responsible for recruiting and selecting Unite participants. Each site must enroll a <u>minimum</u> of 15 students. All students who participate in a Unite program must be U.S. citizens or permanent legal residents, <u>and</u> students must be from populations historically underserved and underrepresented in STEM areas. (Refer to **Participant Recruitment and Enrollment Guidelines/Requirements** [page 9] for clarification and additional details about this designation.)
- 6. Each Unite program must ensure that its enrolled students register on the Cvent platform and complete the AEOP student survey provided via link by TSA. Adults involved in the Unite program also should complete Cvent registration and complete the adult AEOP survey. Additionally, each program will promote/support student and adult participation in Unite phone interviews and/or focus groups, as requested by North Carolina State University (AEOP Consortium member responsible for evaluation) and TSA.
- 7. During a site's summer program, each site director must submit to TSA photos/videos and news stories that feature the program or participants; submissions will occur at the end of the second week of the program and then additional items with a site's annual final report.
- 8. Unite Site directors will participate in scheduled group conference calls or webinars, as designated by the Unite administrator. This participation will be in addition to individual site director/Unite administrator communications that may be arranged.
- 9. A representative from TSA, AEOP, or Battelle will make pre-arranged visits to each site during the summer program timeframe; as noted (#6, above) interviews and/or focus groups with Unite students and adult mentors may be scheduled with sites, as well.
- 10. Each student enrolled in Unite must receive a \$100-per-week stipend. The purpose of the stipend is to offset 1) income likely earned by a student had the student been employed during a site's Unite program, and 2) expenses for personal transportation and food costs (related to the program). A timeframe for disbursing the stipend to students is at the discretion of the site. Funding for the required stipend can come from the host institution's budget, from the Unite budget, or from another source.
- 11. TSA must be named as an additional insured (for the Unite program) on the selected institution's insurance policy, <u>OR</u> the institution must provide a signed certificate of liability insurance that guarantees coverage for all Unite participants for the duration of the site's program.
- 12. Pending approval of the site's proposal and submission of all signed documentation, TSA will send a formal notification of award to each Unite site.



13. Sites approved to receive a 2020-2021 Unite program award will receive funding in three increments, pending distribution of 2020-2021 Unite funding to TSA from the Army. Distribution of the third payment is dependent on TSA verification that all enrolled students have registered on Cvent and completed the AEOP student survey, and on the submission of a site's final report.

IMPORTANT DATES (year one of the two-year cycle)

December 6, 2019	2020-2021 Unite proposal submission deadline
January 17, 2020	Notification to sites of award (or non-award) status
July 13, 2020	Deliverable: Unite Site Data Summary due to TSA
May – August, 2020	Timeframe for 2020 Unite programs; Deliverable: photos/videos and news stories to TSA
May – September, 2020	Award payments (three – approximately mid-May, mid-July, and mid-September) to sites
August 17, 2020	Deliverable: Final report from each site due to TSA



PROPOSAL – FORMAT and INSTRUCTIONS

General Information about the Host Institution

Instructions: Input answers directly into the PROPOSAL document, expanding the number of pages of the proposal to no more than 20 pages (beginning with this page). Addendums may be included and are not considered part of the 20 pages.

1. Contact Information
Host institution:
Host institution postal address:
Indicate if the institution is designated as HBCU _____ or MI _____
Program Director name:
Program Director title:
Program Director phone:
Program Director email:
Alternate contact name:
Alternate contact phone:
Alternate contact email:
Funding payment recipient:
Funding recipient's postal address:

2. Schedule

Date program will begin: Date program will end: Program days and hours: General schedule of events/classes:

3. Description of Host Institution and Existing STEM Program

Credentials of host institution (1 paragraph):

Name and description of the institution's existing STEM program, including purpose, goals, and sources of funding (1-2 paragraphs; include website links, as applicable):

Explanation of how Unite funding will help supplement the existing STEM program in a beneficial way (1 paragraph):



2020-2021 UNITE Program Requirements

Unite program requirements are listed below. Please explain how your program, if awarded funding, will meet each requirement. Provide materials, such as marketing brochures, web links, application forms, photos, and samples of the curriculum, as applicable.

4. Marketing, Outreach, and Participant Recruitment and Enrollment

Guidelines/Requirements

The host institutions must:

- Reference Unite and AEOP (including the logo of each, provided by TSA) in marketing and Unite proaram literature.
- As part of program marketing, distribute AEOP materials (provided by TSA) to schools, other appropriate institutions, and students/parents.
- At the end of the second week and of the final week of the summer program, provide photos/videos and news stories to TSA for AEOP social media and marketing purposes.
- Enroll a minimum of 15 underserved* or underrepresented students in a Unite program. Host institutions must reach out to and encourage students who are academically motivated and considered to be underserved and underrepresented in STEM to apply for the Unite program. Host institutions are responsible for ensuring that all Unite participants are from underserved populations. Note: All participants must be U.S citizens or permanent legal residents.

* Underserved populations include low-income students; students belonging to race and ethnic minorities that are historically underrepresented in STEM (i.e., Alaska Natives, Native Americans, Blacks or African Americans, Hispanics, Native Hawaiians and other Pacific Islanders); students with disabilities; students learning English as a second language; first-generation college-bound students; students in rural, frontier, or other Federal-targeted outreach schools; and females in certain STEM fields (e.g., physical science, computer science, mathematics, or engineering).

AEOP's goal is to broaden participation of underserved populations in STEM and have diverse participation in AEOP's programs to reflect the nation's demographics. Evaluation criteria for Unite for selecting students who fit the definition of diverse include those who self-identify with two or more of the following:

Student qualifies for free or reduced-price lunch

Student is a racial or ethnic minority historically underrepresented in STEM (Alaska Native, Native American, Black or African American, Hispanic, Native Hawaiian or other Pacific Islander)

Student receives special education services

Student is learning English as a second language

Student is a first-generation college-bound candidate

Student attends a rural, frontier, or other Federal-targeted outreach school**

Student is a female interested in specific STEM fields (physical science, computer science, mathematics, or engineering)

**Criteria for selecting schools/programs for targeted outreach; schools/programs must meet two or more of the following:

60% or more of students/participants qualify for free or reduced lunch 10% or more receive special education services

60% or more of students are English language learners



- A. Describe how the institution will market to, recruit, and enroll underserved and underrepresented high school students (according to the criteria above); describe the types of materials and outreach media that will be used. (1-3 paragraphs)
- B. Describe the academic criteria (e.g., test scores, GPAs, recommendations) that will be used to recruit and evaluate students who wish to participate in the program. Include the minimum standards for these criteria. (1 paragraph)
- C. Should your institution receive Unite funding, what is your plan for tracking/following up with students once they have completed your Unite program? (1 paragraph)
- D. Using the chart that follows, indicate the estimated enrollment, by criteria, for your program. (More than one category may apply for student enrollment estimates.)

CRITERIA	NUMBER OF STUDENTS
Qualifies for free or reduced-price lunch	
Alaska Native	
Native American	
Black/African American	
Hispanic	
Native Hawaiian or other Pacific Islander	
Receives special education services	
Learning English as a second language	
First generation college-bound candidate	
Attends a rural, frontier, or other Federal-	
targeted outreach school	
Female interested in specific STEM fields	

Indicate TOTAL estimated enrollment:





5. Academic Setting

Guidelines/Requirements:

The host institution will provide a four-to-six week summer academic program that is integrated into an existing summer STEM program. The primary focus will be to provide rigorous academic coursework and hands-on activities that spark and sustain student interest in STEM and that will help prepare and encourage students to pursue college-level studies and, eventually, STEM careers. Classes should be taught by qualified high-school teachers or college instructors with experience and expertise in teaching high school students. Mentors/assistants should serve in roles that support STEM instruction, related activities, and efforts to inform students of the AEOP pathway of opportunities.

A. Describe how you will provide an academic setting appropriate for targeted students in the summer of 2020 and 2021. Correlate your program to the academic skills needed for student success in a college-level STEM/Engineering program. (1-3 paragraphs) Include:

- The specific goals of your program
- The program curriculum, including sample activities, schedules, etc.
- The plan for meeting the objectives/goals of your program

B. Provide a list of 2020 adult program team members, including the program administrator; professor(s)/instructor(s); teacher(s); classroom assistant(s); mentor(s), counselors; etc. Include a description of the responsibilities* of these individuals in your program. Also provide a brief (1-2 pages, total) summary of curriculum vitae/resumes/biographies and/or qualifications of the program staff.

Adult responsibilities could include, but are not limited to:

- Providing academic instruction and guidance for hands-on activities
- Providing assistance in academic and hands-on classroom activities
- Presenting or reinforcing information about the pathway of AEOP opportunities available to students
- Assisting in a career event(s) and field trips
- Securing an Army STEM professional or representative for a career event or classroom visit

C. Describe college prep sessions (which may include SAT/ACT test preparation) for students in your program in which they learn about preparing for college-level studies in STEM/Engineering. (1 paragraph)

D. Describe your plan for training the individuals who will work in your Unite program. (1 paragraph)

E. Describe how your institution will provide a safe and secure learning environment for students. (1 paragraph)



6. Compliance with AEOP/Unite/TSA Requirements Guidelines/Requirements:

- Sites will assist student participants in required Cvent registration, and will ensure Cvent registration for adults in the program.
- Sites will provide evaluation tools (surveys developed by North Carolina State University and provided to sites by TSA) to student and adult participants during the program. (Data from these evaluations and/or a summary of findings will be included in annual program and evaluation reports to the Army/AEOP.)
- Sites will participate in evaluation visits by TSA, AEOP, or Battelle representatives during the Unite program timeline and will help coordinate interviews and/or focus groups with Unite students and adult mentors at the site, as needed.
- Sites will educate students and parents/guardians about opportunities for student participation in the AEOP pathway, as well as ARMY/DoD educational and career opportunities. In particular, sites will promote participation in the AEOP's apprenticeships the Research & Engineering Apprenticeship Program (<u>REAP</u>), the High School Apprenticeship Program (<u>HSAP</u>), the Science and Engineering Apprenticeship Program (<u>SEAP</u>), and the Undergraduate Research Apprenticeship Program (<u>URAP</u>). Sites will also encourage Unite students to participate in the AEOP's Junior Science & Humanities Symposium (<u>JSHS</u>).
- Sites will host a career event(s) to enhance student awareness about STEM career opportunities, including capacities in which the Army, civil service agencies, business, and industry employ engineers. Career events may be supplemented with a visit to a local Army research institute, should there be one nearby, or classroom visits/presentations by an Army/DoD speaker. (NOTE: TSA is available to help with Army engineer speaker/representative resources and should be contacted early on with a specific request from a Unite program.)

A. Describe your plan for complying with evaluation requirements noted above. (1-3 paragraphs)

B. Describe steps you will take, including anticipated time frames, to inform/educate students and parents/guardians about AEOP/Army-funded programs and opportunities for high school and college students. (1 paragraph)

C. Describe how your institution plans to enhance student awareness of STEM career opportunities, per the information above (Army/DoD STEM professionals, speakers, local representatives from engineering/STEM-oriented industries, and/or civil service professionals). (1 paragraph)

D. Pending AEOP funding, efforts will be made to establish a Research & Engineering Apprenticeship Program (REAP) presence at locations selected as Unite sites. If your institution already has or will promote establishment of a REAP presence on campus, provide a brief statement



(1 paragraph) about how you will collaborate with REAP to help place qualified Unite alumni into that apprenticeship program.

7. Budget

Guidelines/Requirements:

- Anticipated total funding is about \$600,000 for nineteen 2020-2021 summer programs. (Point of reference: Program awards for 19 sites in the last funding cycle [2018-2019] ranged from \$17,000 to \$42,000, annually.) The exact amount granted to each program is not guaranteed.
- <u>Unite funds should be considered an add-on to the funding required to run an institution's existing</u> <u>summer STEM program</u>. Generally speaking, UNITE funds should be used to support the STEM components of the proposed program.
- Unite funds <u>may not be used</u> to fund transportation to and from the summer program, or for housing costs or meals/snacks; these costs should be funded from another source.
- Unite funding <u>may not be used</u> to fund administrators or administrative costs not directly tied to Unite or the implementation of the STEM aspects of the program.
- Unite funds <u>may not be used</u> to cover any overhead costs; these costs should be funded through the existing summer STEM program.
- Unite funds <u>may be used</u> to support the following: STEM instruction; STEM instructional materials/supplies; salaries for program facilitators (classroom assistants, coordinators, counselors, lab leads, etc.) whose work directly connects to STEM activities; and student stipends.
- Unite funds <u>may</u> also be used to pay for transportation to a STEM field trip and for a meal/snack while on that trip.

Using the chart that follows as a guide, provide a budget for the 2020-2021 Unite program. Identify and provide allocations for all funding sources, including Unite funds and in-kind donations. Include job titles and salary calculations. Also, provide an estimated "per participant" cost.



Budget Categories	Use of university funding that will help fund the Unite program	Use of Unite funds only
Program Director/Instructor(s)/Teacher(s)	\$	\$
Provide job titles and include salary calculations		
for each		
Program facilitators (classroom assistants, peer	\$	\$
mentors, coordinators, counselors, etc.)		
Provide job titles and salary information for each		
Instructional materials/supplies	\$	\$
Provide a breakdown of what will be purchased		
Transportation/meals for STEM field trips	\$	\$
Provide details about the transportation and		
meals that will be covered; include calculations		
Student Stipends	\$	\$
\$100 per student, per week; provide calculations		
Other	\$	\$
Include a breakdown of each expense		
TOTAL	\$	\$
Estimated Cost per Unite Student		

8. Submission of Proposals to TSA

- Proposals, reports, and other documents should be submitted electronically to Hillary Lee (<u>hlee@tsaweb.org</u>) with a cc to Rosanne White (<u>rwhite@tsaweb.org</u>) *no later than 5:00 pm, ET*, *Friday, December 6, 2019*.
- 2. Please indicate **2020-2021 Unite** in the subject line. You will receive an email from TSA confirming receipt of your proposal within 48 hours of the submission. If you do not receive this confirmation, please contact Hillary Lee by email or phone (888.860.9010).
- 3. Sites that submit a 2020-2021 UNITE proposal will receive notice of award or non-award on or about January 17, 2020.



9. Required Signatures

By signing below, the undersigned agree to the following statements:

- 1. We believe that all information contained in this proposal and attendant materials is accurate.
- 2. We will adhere to specified conditions and requirements, including deadlines for program data and reports.
- 3. We will ensure student Cvent registration and student completion of AEOP surveys; the same (Cvent registration and completion of adult surveys/assessments) will be expected of adults involved in Unite.
- 4. We will participate in evaluation visits by TSA/AEOP/Battelle representatives during our Unite program timeline.
- 5. If selected as a 2020-2021 Unite site, our institution will supply documentation to TSA that names TSA as an additional insured for the Unite program on the host institution's insurance policy, OR a signed certificate of liability insurance from the institution that guarantees coverage for all Unite participants for the duration of the program at the site.
- 6. We fully understand the consequence of failure to comply with any and all conditions and requirements.

Proposing Institution:

Signature
Proposed Unite Director

Date

Print name

Signature

Date Institution supervisor (other than the proposed Unite Director) Print name