Army Educational Outreach Program
2016-2017 UNITE – Request for Proposals

Technology Student Association
October 2015
UNITE is a pre-collegiate summer program for talented high school students from groups historically underrepresented and underserved 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 provide and/or oversee STEM programs designed to support the goals and mission of the AEOP. The lead organization for the consortium is Battelle Memorial Institute, 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.

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 12th grade students from groups historically underrepresented and underserved 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 RFP process detailed herein to solicit entities to serve as 2016-2017 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 2016-2017 UNITE program will provide a summer experience for rising 9th through 12th grade students in two consecutive years*. Students will receive continued support and advancing enrichment designed to best help them achieve their goals of higher education and careers in STEM.

*The options below for two consecutive years of UNITE (2016 and 2017) are suggestions only; host sites should develop their two year program in a configuration that best meets the needs of the individual site and its student participants:

1) Rising 9th grade students in 2016; rising 10th grade students in 2017 (returning and new, as necessary to meet enrollment numbers)
2) Rising 10th grade students in 2016; rising 11th grade students in 2017 (returning and new)
3) Open enrollment, rising 9th through 11th grade students in 2016; rising 10th through 12th grade students in 2017 (returning and new)
4) Open enrollment, rising 9th through 12 grade students in both years of the program

2016-2017 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, all documents submitted must be signed by both the UNITE site director and an immediate supervisor at the submitting institution.

1. The UNITE program 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 - pending submission and approval of a site’s Program Proposal for year two, and TSA’s receipt of program funding from the Army. The site’s two-year target population will be designated and served by the site (see the suggested options for configurations above).

2. UNITE funds can be used only to supplement, not supplant, an institution’s existing summer STEM program in a way that clearly benefits potential UNITE participants.
2016-2017 UNITE – PROGRAM SPECIFICATIONS - continued

3. The UNITE program must be free to all participants. No application, registration, or other fees can be charged.

4. Sites will be responsible for recruiting and selecting UNITE participants.

5. Each UNITE site must enroll a minimum of 15 students. The program must last four to six weeks and can be residential or non-residential.

6. Students who are enrolled in UNITE must be from underserved and underrepresented populations in STEM. Please refer to Participant Recruitment and Enrollment Guidelines/Requirements (pages 9-10) for clarification and additional details about this designation.

7. All students who participate in a UNITE program must be U.S. citizens or permanent legal residents.

8. Each site awarded funding will assist in student registration using the Cvent application, and in student and adult participant evaluation surveys and phone interviews, as established through Battelle and TSA.

9. A representative from TSA, the AEOP, or Battelle will make pre-arranged visits to each site during the summer program timeframe; interviews and/or focus groups with UNITE students and adult mentors may be scheduled for 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, AND/OR the institution must provide a signed certificate of liability insurance that guarantees coverage for all UNITE participants for the duration of the program at the site.

12. Pending approval of the site’s proposed program and submission of all signed documentation, TSA will send formal notification of award to each UNITE site.

13. Sites approved to receive a 2016-2017 UNITE program award will receive funding (in increments, TBD) pending distribution of 2016-2017 UNITE funding to TSA from the Army.
IMPORTANT DATES

December 16, 2015         Proposal submission deadline
January 22, 2016          Notification to sites of award (or non-award) status
March 1, 2016             Deliverable: Promotional/application/registration materials due to TSA
July 15, 2016             Deliverable: UNITE Site Data Summary due to TSA
May – August, 2016        Timeframe for 2016 UNITE programs
May – September, 2016     Award payments (three separate; dates TBD) to sites
August 19, 2016           Deliverable: Final report due to TSA
General Information about the Host Institution

Instructions: Please 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:
Indicate if the institution is designated as HBCU _____ or MI _____
Program Director name:
Program Director title:
Institution mailing address:
Institution URL:
Program Director phone:
Program Director fax:
Program Director email:
Alternate contact name:
Alternate contact phone:
Alternate contact email:
Financial Director name:
Financial Director mailing address:

2. Schedule
Date program begins:
Date program ends:
Program days and hours:
General schedule of events/classes:

3. Description of Host Institution and Existing STEM Program
Credentials of host institution (1-2 paragraphs):
Name of the existing STEM program, how long it has been in existence, and sources of funding:
Purpose and goals of the program (1 paragraph):
Overall description of the program (1-2 paragraphs/one page), including website links, where needed:
Explanation of how UNITE funding will help supplement the existing program in a beneficial way (1-2 paragraphs):
2016-2017 UNITE Program Requirements

UNITE program requirements are listed below. Please explain how your program will meet each requirement, responding to each section thoroughly. Please provide materials, such as marketing brochures, web links, application forms, photos, and samples of the curriculum, as applicable.

4. Program Marketing and Outreach
Guidelines/Requirements:

Host institutions will:

- Reference AEOP, UNITE, and TSA (including the logo of each) in marketing and general program literature
- Provide materials about the program to TSA for the AEOP website
- Educate students (and parents, when possible) about additional AEOP opportunities
- Request and receive approval from TSA for all marketing materials prior to distribution
- Incorporate and distribute AEOP and TSA materials as requested by TSA
- Provide information to TSA for social media purposes

A. Describe how your institution will market and promote the Army-funded UNITE program to eligible students (as described in this document). Include information about target audiences and the types of materials and media you will use.

5. Participant Recruitment and Enrollment
Guidelines/Requirements:

Host institutions will reach out to and encourage students who are academically motivated and are considered to be underserved and underrepresented in STEM to apply for UNITE. Host institutions are responsible for ensuring that all UNITE participants are from underserved populations. Note that all participants also must be U.S citizens or permanent legal residents.

To be considered underserved and underrepresented, UNITE students must meet two of the criteria listed below:

- Student self-identifies as qualifying for free or reduced lunch
- Student self-identifies as a minority historically underrepresented in STEM (Alaskan Native, Native American, Black or African American, Hispanic, Native Hawaiian or other Pacific Islander)
- English is a second language for the student
- Student is a potential first-generation college-bound student (parents did not attend college)
- Student attends a rural or frontier school or a school/program selected for Federal-targeted outreach (see criteria below)
Criteria for selecting schools/programs for targeted outreach; schools/programs must qualify for 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 you will recruit (and enroll) students who meet the criteria above. Include sample materials you will use.

B. How will you encourage 2016 participating students to return for the 2017 summer program? If you are unable to return all students, how will you recruit new, qualified students in 2017 to fill empty slots?

C. If your site receives UNITE funding, what is your plan for tracking/following up with students once they have completed the program?

D. Describe academic criteria (e.g., test scores, GPAs, recommendations) that you will use to recruit and evaluate students who wish to participate in your program. Include the minimum standards for these criteria.

E. Using the chart below, indicate the estimated enrollment for the UNITE program at your site.
### Estimated UNITE Student Enrollment

<table>
<thead>
<tr>
<th>Qualifies for free or reduced lunch</th>
<th>MALE</th>
<th>FEMALE</th>
<th>Total # of students</th>
<th>Indicate grade level(s) in school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska Native</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation college-bound student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural, frontier, or Federal-targeted outreach school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (describe):</td>
<td></td>
<td></td>
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</tbody>
</table>

### 6. 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 help prepare and encourage students to pursue college-level studies and, eventually, engineering and STEM careers. Classes will 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 the STEM instruction and activities of the program.

A. Describe how you will provide an academic setting appropriate for targeted students in the summer of 2016 and returning (and new) students in the summer of 2017. Correlate the program to the academic skills needed for student success in a college-level STEM/Engineering program. For both years, include:
   - The specific goals of your program
   - Your UNITE program curriculum, including sample activities, schedules, etc.
   - Your plan for meeting the objectives/goals of your UNITE program

B. Provide a list of 2016 program team members, including the program administrator; professor(s)/instructor(s); teacher(s); classroom assistant(s); mentor(s), counselors; etc. Include a brief (1-2-pages, total) summary of curriculum vitae/resumes/biographies and/or qualifications of each member identified as program staff.

C. Describe the role of any mentors (academic and activities assistants/peer coaches, etc.) in your program. Include brief (general) descriptions of their responsibilities, which could include:
   - Providing assistance in academic and hands-on classroom activities
   - Presenting or reinforcing information about the pipeline of AEOP opportunities available to students.
   - Assisting in a career event(s)
   - Securing an Army STEM professional or representative for a career day or classroom visits

D. Describe your college prep workshops (which may include SAT/ACT test preparation) for students in which they learn about preparing for college-level studies in engineering or STEM.

E. Describe your plan for training the individuals who will work in your UNITE program.

F. Describe how your institution will provide a safe and secure learning environment for students.

7. Compliance with AEOP/UNITE/TSA Requirements

Guidelines/Requirements:
   - Sites will assist student participants in their registration using the Cvent application.
   - Sites will assist in administering evaluation tools (IRB forms, surveys) – developed by Battelle and provided by TSA, during the program – and are encouraged to incorporate assessments of student learning into the program. Data and/or summary of findings from site-designed student learning assessments will be supplied to TSA and Battelle upon request for inclusion in annual evaluation reports.
• Sites will participate in evaluation visits by TSA, the Army, or Battelle during the UNITE program timeline and will help coordinate interviews and/or focus groups with UNITE students and adult mentors at the site.

• Sites will educate students and parents about opportunities for students to participate in the pipeline of AEOP programs, as well as ARMY/DoD educational and career opportunities. In particular, sites will promote participation in the AEOP’s high school apprenticeships – the Research & Engineering Apprenticeship Program (REAP), the High School Apprenticeship Program (HSAP), and the Science & Engineering Apprentices Program (SEAP) – for UNITE participants’ rising 12th grade summer. Sites will also encourage UNITE students to participate in the AEOP’s Junior Science & Humanities Symposium (JSHS).

• 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. The career event 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 contacting Army engineer speakers/representatives.)

A. Describe your plan for incorporating/implementing assessment tools into the program.

B. Describe steps you will take, including anticipated dates, to inform/educate students and parents about AEOP/Army-funded programs and opportunities for high school and college students.

C. Describe how your institution plans to coordinate with an Army STEM professional or representative to host and/or participate in a career event that will increase UNITE student awareness about Army/DoD STEM career opportunities. This career event should include providing an Army engineer speaker (whenever possible), local representatives from engineering/STEM-oriented industries, and/or civil service professionals during the career event and/or in classroom visits.

D. Pending funding, efforts are being made to establish a Research & Engineering Apprenticeship Program (REAP) presence at locations selected as UNITE sites. If your host institution already has or will promote establishment of a REAP presence on campus, provide a brief plan for how you will collaborate with REAP to place qualified UNITE alumni into that apprenticeship program.

8. Budget
Guidelines/Requirements:

• Anticipated total funding is about $281,000 for approximately ten 2016-2017 summer programs. (Point of reference: Program awards for ten sites in the last funding cycle [2014-2015] ranged from $17,000 to $45,000.) The exact amount granted to each program is not guaranteed.
UNITE funds should be considered an add-on to the funding required to run the existing summer STEM program. Generally speaking, UNITE funds should be used to support the STEM components of the proposed program.

UNITE funds **may not be used** 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 **may not be used** to fund administrators or administrative costs not directly tied to UNITE and/or implementation of the STEM aspects of the program.

UNITE funds **may not be used** to cover any overhead costs; these costs should be funded through the existing summer STEM program.

UNITE funds **may be used** 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 **may** also be used to pay for transportation to a STEM field trip and for a meal/snack while on that trip.
8. Budget - continued

Using the chart below as a guide, provide a budget for the 2016-2017 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.

<table>
<thead>
<tr>
<th>Budget Categories</th>
<th>Existing Summer STEM Program Budget</th>
<th>2016-2017 UNITE Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Administrator(s)/Site Director</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Provide job title and include salary calculation</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Instructor(s)/Teacher(s)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Provide job titles and include salary calculations for each</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Program facilitators (classroom assistants, peer mentors, coordinators, counselors, etc.)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Provide job titles and salary information</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Instructional Materials/Supplies</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Provide a breakdown of what will be purchased</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Meals/Transportation</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Provide details about the meals and transportation that will be covered; include calculations.</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Student Stipends</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>$100 per student, per week; provide calculations.</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Include a breakdown of each expense.</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Estimated Cost per UNITE Student</td>
<td></td>
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</tr>
</tbody>
</table>
9. Submission of Proposals to TSA

1. Proposals, reports and other required documents should be emailed to Hillary Lee (hlee@tsaweb.org) with a cc to Rosanne White (rwhite@tsaweb.org) no later than 5:00 pm, EST, Wednesday, December 16, 2015.

2. Please indicate 2016-2017 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).


10. 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 are accurate, and we will adhere to specified conditions and requirements. We fully understand the consequence of failure to comply with any and all conditions and requirements.

2. We will use surveys/questionnaires as established by the Battelle research team (this is in addition to any surveys or evaluations that the host institution wants to conduct). We will also participate in evaluation visits by TSA, the AEO, or Battelle during our UNITE program timeline.

3. We will respond to requests from TSA for 2016-2017 applicant and participant data, according to an established deadline, as determined by TSA.

4. If selected as a 2016-2017 UNITE site, our institution will supply to TSA: 1) documentation that names TSA as an additional insured for the UNITE program on the host institution’s insurance policy; AND/OR 2) 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.

Proposing Institution: _____________________________________________

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Print name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed UNITE Site Director</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Print name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution supervisor (other than UNITE Director)</td>
<td></td>
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</tbody>
</table>