



NMSU STEM Outreach Center  
New Mexico State University  
1220 Stewart St. O'Donnell Hall 136  
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## 2019-2020 GISD and NMSU Spaceport Partnership Project Components



Southern New Mexico  
Engineering, Mathematics and Aerospace Academy  
**SNM SEMAA**



"Inspiring the next generation of explorers...as only SNM SEMAA can!"

### **Southern New Mexico Science, Engineering, Mathematics, and Aerospace Academy (SNM SEMAA) Academic Year and Middle School Summer Camps**

SNM SEMAA (Southern New Mexico Science, Engineering, Mathematics, and Aerospace Academy) utilizes the unique resources of our community to engage historically underrepresented youth in activities in the fields of science, engineering, mathematics, and technology. The goals of SNM SEMAA include: academic enrichment, K-12, through an after school, inquiry-based science, mathematics, and engineering curriculum in 8-10 week sessions; summer institutes, career awareness programs; successful transition from middle school to high school and high school to post-secondary programs; professional development for teachers, and partnerships with parents that consist of building strategies for communicating and enhancing their child's education. The nature of the program is such that, once a child joins the SEMAA family, they will continue participating until they graduate from high school.

SNM SEMAA's program has been offered through many GISD schools for over eighteen years. Our program has documented success in that the students continue with us year after year and their science participation and achievement in their academic day has increased. Looking at the accountability issue, the SNM SEMAA students have scored higher on their NM standardized test scores than students who are not in SNM SEMAA.

We are proposing support for summer and academic year funding so that we can increase the participation of the students in our summer institutes. All curricula for these institutes integrate science, technology, engineering, and mathematics (STEM) to promote problem solving, critical thinking, and the application of the STEM concepts learned.

Summer Camps will be held in the SEMAA STEM Learning Lab, Foreman Engineering Complex, Room 213, in Las Cruces, NM. The camps change from year to year; therefore we have children who choose to continue with STEM outreach. During the academic year SNM SEMAA offers an after school program in GISD Elementary and middle schools.



## Project GUTS

Project GUTS (Growing Up Thinking Scientifically) is an afterschool program for middle school graders who are motivated students and have an interest in science and computer technology. Students learn to make their computer models and analyze the data they generate. Project GUTS members also enter their projects into the NM Supercomputing Challenge by forming a team and writing a report on their findings from conducting scientific experiments using their computer model. The Project GUTS approach is designed to:

- **Attract** students by making science and computing relevant and dynamic,
- **Prepare** students for future endeavors in STEM and computing fields,
- **Retain** student interest by offering open ended challenges,
- **Assess** how teachers' participation in Project GUTS impacts how they think about and teach STEM and computing in the classrooms, and
- **Enhance** existing partnerships for program sustainability

The Project GUTS Professional Development sessions are geared towards preparing teachers to facilitate this program in their respective schools. Teachers partake in full day workshops to go through the curriculum with the STEM Outreach Center GUTS facilitator. The PD helps teachers to overcome any fear or uncertainty about how well they can carry out the afterschool programs and help them to develop pedagogical skills to accommodate the variety of students they will encounter in their classroom. Teachers are supported in implementing the Project Guts curriculum through follow-up support.

**AMENDMENT #9 to Agreement No. 2010-GISD-10 Between THE GADSDEN INDEPENDENT SCHOOL DISTRICT and THE REGENTS OF NEW MEXICO STATE UNIVERISTY**

WHEREAS, both parties agree, this subcontract is amended as follows: ARTICLE I – Scope of Work New Mexico State University, (NMSU), will perform the Scope of Work for this agreement under the direction of Dr. Susan Brown and Wanda Bulger-Tamez, NMSU employees as outlined in Attachment A: Scope of Work ARTICLE II – Compensation. The work to be performed under the Agreement is on a cost-reimbursable basis whereby Gadsden Independent School District, (GISD), allocates the amount of \$59,100 as outlined in attachment B: Budget. The term of this amendment will be for the period of July 1st, 2019 through June 30th, 2020. Each of the 2 programs will be billed separately by unique fund numbers. All other terms and conditions remain unchanged.

IN WITNESS THEREOF, the parties have caused these presents to be executed, or caused them to be executed by their duty authorized officer, in duplicate, on the dated indicated below.

By an Authorized Official of:

THE BOARD OF EDUCATION  
OF THE GADSDEN  
INDEPENDENT SCHOOL  
DISTRICT

\_\_\_\_\_  
**Travis Dempsey, Superintendent  
Gadsden Independent School  
District**

\_\_\_\_\_  
Date

By an Authorized Official of:

THE BOARD OF REGENTS OF  
NEW MEXICO STATE  
UNIVERSITY

\_\_\_\_\_  
**Alisha Giron, Director  
Office of Grants and Contracts-  
NMSU**

\_\_\_\_\_  
Date

## Attachment A

### **NMSU STEM Outreach Center Scope of Work**

1. Provide professional development GISD teachers participating in as SEMAA instructors for after-school and summer programs
2. Provide SEMAA after school programs and summer camps for GISD students grades 6-8.
3. Provide stipends for teachers, instructional assistants and coaches participating in Project GUTS/Super Computing professional development.
4. Submit interim progress reports for the Fall and Spring semesters outlining the professional development, project activities, and student programs offered at each participating school. Th report will include the number of teachers and students that participate each semester.

## Attachment B:

### TOTAL Budget for GISD/ 2019-2020

#### SEMAA Academic Year and Summer Camps

STEM Outreach GA/Specialist	\$ 4,000.00
SEMAA Teacher Stipends	\$ 20,000.00
Teacher Stipends Summer camps	\$ 3,000.00
SEMAA curriculum kits	\$ 2,000.00
Educational Supplies-Replenish SEMAA kits, outreach activities at NMSU AEL, Family Events, and summer camps	\$ 5,000.00
Professional Development	\$ 1,000.00
Printing-certificates, invites, surveys, applications, flyers	\$ 500.00
In state travel-site visits to schools	\$ 600.00
<b>TOTAL:</b>	<b>\$ 36,100.00</b>

#### Project GUTS

Project GUTS Teacher stipends	\$ 12,000.00
STEM Outreach GA/Specialist	\$ 2,500.00
Roundtables	\$ 3,000.00
Professional Development for coaches	\$ 2,500.00
Travel for school sites visits and for Statewide Kickoff professional development	\$ 3,000.00
<b>TOTAL:</b>	<b>\$ 23,000.00</b>

**Total for all programs: \$ 59,100.00**

#### Budget Justification

**Graduate Assistants/Specialists:** The STEM Outreach Center staffs Graduate Assistants and specialists with expertise in STEM content and curriculum. The staff design and facilitate professional development, provide follow-up support for teachers, and ensure instructional kits are of the highest quality resources aligned to New Mexico STEM Ready Standards.

**School Session and Summer Camps Instructors:** We always have certified teachers teaching the after school sessions as well as the summer camps. They will attend professional development opportunities before the sessions/camps begin in order to be comfortable with the curriculum. They also will be on the

team to design the themes and curriculum for the camps, as well as updating the academic year curriculum.

**Educational Supplies:** Every summer the camps are different and we need state of the art tools order to make sure to engage all students. STEM subjects student-centered, and problem-based; STEM subjects mean action, applying concepts in an interactive manner. Each kit (large tub) of resources that each SEMAA teacher receives throughout the academic year cost approximately \$500.00 to build and \$175 to replenish. Kits are complete with all the materials teachers need.

**Postage/Office Supplies/Printing/Copying:** We will be sending out acceptance letters to all participants. We print out hand-outs, lab sheets, certificates, and other items necessary to implement the summer camp curriculum as well as the sessions throughout the academic year.

**Travel:** Travel funds are allocated for staff to visit school sites and provide follow-up support to teachers. Teachers will also attend regional conferences and professional development offered by the Project GUTS state organization.