

Shallowater T-STEM Academy T-STEM Renewal Application 2018-2019

Contents

Background
Contacts
Narratives
Download Assurances Signature Page

Background

District Affiliation

SHALLOWATER ISD

DC #: 152909 **Region**: 17

Mailing Address (Line 1):1100 AVE ${\sf K}$

Mailing Address (Line 2):

City, State, Zip: SHALLOWATER, TX 79363

School Affiliation

SHALLOWATER H S

CDC #: 152-909-001

Region:

Mailing Address (Line 1):1100 AVE ${\rm K}$

Mailing Address (Line 2):

City, State, Zip: SHALLOWATER, TX 79363

SHALLOWATER MIDDLE

CDC #: 152-909-041

Region:

Mailing Address (Line 1):1100 AVE ${\rm K}$

Mailing Address (Line 2):

City, State, Zip: SHALLOWATER, TX 79363

Academy Information

T-STEM Academy Name:

Shallowater T-STEM Academy

What grade level range will your academy serve in the 2018-2019 school year?

Grade Level	Number of Students		
6	118		
7	121		
8	146		
9	108		
10	115		
11	116		
12	102		

Contacts

Business Partner

Affiliation: Mr. DNA

Job Title: CEO and CSO

Full Name: Dr. Scot Dowd

Email: scotedowd@mrdnalab.com Phone Number: 806-789-7984

Superintendent

Job Title: Superintendent
Full Name: Dr. Kenneth Border
Email: kborder@shallowaterisd.net
Phone Number: 806-832-4531

Applicant

Job Title: Special Programs Coordinator

Full Name: Mrs. Leslie Griffis Email: lgriffis@shallowaterisd.net Phone Number: 806-832-4531

IHE Liaison

Affiliation: Texas Tech University

Job Title: OnRamps Program Coordinator

Full Name: Mrs. Stephanie Hart Email: Stephanie.Hart@ttu.edu Phone Number: 806-834-6648

Business Partner

Affiliation: Texas Tech Health Science Center

Job Title: Program Director
Full Name: Dr. Wade Redman
Email: wade.redman@ttuhsc.edu
Phone Number: 806-743-3254

IHE Liaison

Affiliation: South Plains College

Job Title: Dean of Continuing & Distance Education

Full Name: Mr. Ron spears

Email: rspears@southplainscollege.edu

Phone Number: 806-716-2503

Business Partner

Affiliation: X-FAB

Job Title: Information Technology Manager

Full Name: Mr. Bart Elliott Email: bart.elliott@xfab.com Phone Number: 806-747-4400

Narratives

Model Implementation

Which T-STEM model does the district intend to implement at this time? Within these models, there are variations. For this purpose campus is defined as a CDC number not a physical location.

Stand Alone Academy: Multiple Campuses - All students on the campus are enrolled in the T-STEM academy.

Endorsements

Identify the current endorsements that are offered:

- Science, Technology, Engineering, and Mathematics (STEM)
- Business and Industry
- Public Services
- Arts and Humanities
- Multi-disciplinary Studies

Industry Certificates

Identify all industry certificates offered to students.

Certificate	Description				
Microsoft Office Specialist Certification	Certified in Microsoft programs.				
QuickBooks Certification	Certified in Intuit Quickbooks				
Certified in Family and Consumer Sciences SeriesCertified in Hospitality, Nutrition, and Food Science	AAFCS				
Certified in Human Development and Family Studies	AAFCS				
CPR Certification	Cardiopulmonary resuscitation certification provides lifesaving skills that can help you respond to breathing and cardiac emergencies.				
AED Certification	Automated External Defibrillator trainin gprepares the individual for emergency cardiovascular situations.				
First Aid Certification	Allows certified individual to deliver care that someone needs while waiting for medical professionals to arrive.				

Level One Certificates

Identify all level one certificates offered to students.

Description		
Trained and certified through Texas Health and Human Services		

Level Two Certificates

Identify all level two certificates offered to students.

Shallowater T-STEM Academy // T-STEM // Renewal // lgriffis@shallowaterisd.net

Certification	Description		
Associates Degree	Associates Degree through		

Key Elements for Success

Provide a link to the job description, roles of design team, leadership team, and advisory board.

http://www.shallowaterisd.net/Content/130

Provide a link to your mission statement.

http://www.shallowaterisd.net/Content/130

Provide a link to the final, signed, and executed MOU.

http://www.shallowaterisd.net/1/Home

Provide a link to the academy's master schedules.

http://www.shallowaterisd.net/SHS/Content2/190

Provide a link to the academy's Student IGPs with CCRS and Performance Acknowledgement Plans.

http://www.shallowaterisd.net/SHS/Content2/190

Provide a link to the academy's written admission policy and enrollment application.

http://www.shallowaterisd.net/1/Home

Provide a link to the academy's written recruitment plan including a timeline of recruitment and enrollment events, and recruitment materials for distribution at feeder schools and other appropriate locations in the community

http://www.shallowaterisd.net/1/Home

Provide a link to the academy's description of instruction practices.

http://www.shallowaterisd.net/1/Home

Provide a link to the academy's STEM-focused extracurricular activities.

http://www.shallowaterisd.net/1/Home

http://www.shallowaterisd.net/Content/130

Provide a link to the academy's Senior Capstone Project description.

http://www.shallowaterisd.net/1/Home

Provide a link to the academy's Student Portfolio Plans.

http://www.shallowaterisd.net/SHS/Content2/190

Provide a link to the academy's Academic Literacy Plan.

http://www.shallowaterisd.net/SHS/Content2/190

Provide a link to the academy's Assessment strategy.

http://www.shallowaterisd.net/Content/130

Free-Response

Describe how the Academy will recruit, support, and retain highly qualified teachers.

Shallowater T-STEM Academy has implemented our Professional Development Plan based on student performance, parental needs assessment, staff needs assessment, and the short and long-term goals of our Academy. Addressed in this plan, is staff training on Project Based Learning (PBL), the use of various assessment tools/processes, enhanced technology use, and common rubrics and standards in our Professional Learning Communities (PLCs), staff retention, student retention through workshops with the ESC 17 Service Center and through the West Texas Consortium to ensure that all staff have the knowledge to incorporate PBL seamlessly and cross curricularliculy.

As knowledge in PBL grows, the PLC plan is ever changing with teacher teams forming common criteria to evaluate

student's work, integrating STEM, college and career readiness standards and 21st century skills. SISD teachers are

encouraged to further their knowledge base through externships and mentorships with industry partners. Shallowater includes fostering lasting relationships with community and industry partners as a top priority in staff trainings. Having this as the basis of our PLC allows our students more access into the working STEM world.

SISD common planning teams have developed common metric evaluations to determine each teacher's effectiveness, strengths, and weaknesses so that we are ever evolving for the good of students. Teachers have determined that the comparison allows them to seek advice or observe others to enrich the classroom experience.

Describe the current STEM	pathway	s available a	at the	academy.

Science, Technology, Engineering, & Mathematics (STEM) Endorsements: CTE: Science, Technology, Engineering and Mathematics

Mathematics

Science

Describe how strategic alliances with industry partners and IHEs will support the Academy. The description should include details regarding the role of each IHE, business, and/or community partnership; along with parent/family partnerships and communication conventions with the Academy.

Partnerships with MR. DNA, Texas Tech Health Science Center, X-Fab and local agriculture producers allow our students to have a range of STEM experiences and internships. We are in constant contact with these community partners and receive continuous feedback throughout the year on different programs offered at Shallowater T-STEM Academy. As SHS gathers data, we will continue to modify our approach to best meet the needs of our students. With input from our Industry partners and IHE's we modify class instruction to help our students be prepared for the future. This includes a focus on ever improving college and career ready prep classes. We focus on implementing PBL style learning in every class with an emphasis on college and careers in a global workforce. Shallowater T-STEM strives to provide key industry, business, and community partners to support STEM Academy efforts and give our students strategic alliances that will benefit them in the future. Shallowater T-STEM Academy has partnered with Mr. DNA to give students a hands-on view of DNA synthesis that would otherwise only be available to upper graduate students. Mr. DNA is allows student's monitored use of equipment to perform advanced research for their science fair projects. Texas Tech Health Science Center has partnered with SHS to allow students to view first year medical student's classes, apply for internships, and work in the laboratory on research projects. SHS students have also visited the Eye Bank and Cancer Research Center.

Describe the Academy's work-based and contextual learning in the curriculum.

Through constant feedback from industry partners and IHE's, Shallowater T-STEM Academy strives to provide real-life and relevant experiences to prepare students for both college and the workforce. Industry and real-life examples are incorporated into all aspects of education and make the work in this academy applicable to the future experiences for our students. Approximately 75% of Shallowater T-STEM classrooms are equipped with smartboard technology. Shallowater T-STEM implements PBL learning in all classrooms and uses technology in a literate and relevant manner for 21st century skills. PBL also provides opportunities for students to express their learning through reading, writing, speaking, and presenting. Texas Tech University and Region 17 continue to assist with STEM curriculum and culturally relevant instructional materials.

Describe the STEM-focused extracurricular activities (field experiences, clubs, and competitions) offered to students.

Shallowater T-STEM students participate in FIRST Robotics, Intel Science and Engineering Fair, Rocketry Competitions, Science Bowl, Texas Alliance for Minorities in Engineering Contests, Early Dedication to Medical Education Internships, High School Aerospace Scholars programs, National Youth Leadership Forums in Medicine, as well as other leadership activities through Student Council, FFA, FCCLA and Skills USA competitions. Moreover, our students actively participate in summer intership work with Texas Workforce Commission.