

STEM Education Associates Current & Relevant Evaluations:

2019 - current

The NSF Robert Noyce Teacher Scholarship Program @ The University of Texas at El Paso partnered with the El Paso Independent School District to transform schooling and teaching in tandem. In this a low socioeconomic, urban region of Texas on the U.S. border with Mexico, the UTEP interdisciplinary faculty collaborate with secondary schools integrating project-based learning into science, technology, engineering, and mathematics classrooms with the New Tech Network. The project focuses on improving recruitment and retention of STEM teachers, designing and refining coursework in field-based teaching experiences, and creating and disseminating knowledge about how to best prepare STEM teachers in minority settings.

2019-2021

NSF-REU NMSU-UTEP Collaborative Immigration and Border Community Research Experience for Undergraduates. New Mexico State University and the University of Texas at El Paso, via summer programs, provided university students from across the nation with social science research methodology training, and collaborating with local community groups that were addressing the impacts of immigration policy. Using Community Based Participatory Research methodology, the student research teams examined the contradictions between national policies and local social conditions, addressing a significant gap in the social science literature about immigration policy and civil rights in the US-Mexico border region.

2019-2021

NSF S-STEM Increasing the Success of Low-Income, Academically Talented Students in Engineering at New Mexico State University. The program provided scholarships to engineering students along with support structures: quality mentoring with faculty and professionals, placement in relevant internships, successful recruitment and retention methods, and extra-curricular workshops and social gathering, graduating some 47 engineers during the five years.

2019-current

Minority Science and Engineering Improvement Program (Department of Education) -- University of Texas at El Paso's Developing Software Engineering Leaders of Tomorrow. Interdisciplinary team of faculty implement coursework and experiences to develop the professional skills needed for tomorrow's computing workforce, based in existing literature arguing the need for leadership skills to meet a globalized economy populated with knowledge workers. Project seeks to improve academic and professional outcomes of Hispanic computer science undergraduate students, in particular Hispanic women, through augmentation of their set of professional skills. Program also supports the pedagogical and professional growth of faculty, especially computer science faculty and learning assistants who are preparing the nations computer workforce.

2017-2021

NSF S-STEM University of Texas at El Paso Broadening Participation in Engineering: A Qualitative Study on Latina/o Persistence In and Beyond the Degree. This ethnographic study involved in-depth interviewing some 27 students at two stages in their university program with one interview after they entered the workforce. The purpose was to understand the factors contributing to Latinx successful trajectories in engineering and to further understand institutional conditions that facilitate and/or constrain Latinx undergraduate students' experiences in undergraduate education and transitioning into the workforce or graduate school.