

The Alliance for the Advancement of Teaching and Learning

FY16 Actual:	\$151,100
FY16 Post Cut:	\$150,200
FY17 Appropriation:	\$147,400
FY17 Post Cut:	\$140,000
FY 18 Request:	\$140,000

The mission of the **Alliance for the Advancement of Teaching and Learning** is to contribute to the academic success of children and youth by drawing on cultural and linguistic diversity, enacted through collaborative partnerships.

Executive Summary

The Alliance staff consists of one research faculty member (RPSP funds 1FTE). Alliance staff coordinates outreach and extension efforts at NMSU, while providing a means through which superintendents and district personnel can collaborate with university programs, community and state agencies and Regional Educational Cooperatives. Since its inception, the Alliance has responded to the needs of member districts by focusing on instructional leadership, reading, literacy, mathematics, mental health, data analysis, parent engagement, and evaluation.

The structure of The Alliance has shifted from a member framework to

servicing all districts interested in partnering with NMSU. The revised focus of The Alliance is two-fold. First, The Alliance staff will continue to support and foster the growth of Educators Rising by supporting the Educators Rising state office in order to increase the pipeline of teachers in New Mexico. Second, The Alliance will support STEM Outreach at NMSU by providing research capacity and grant writing to existing programs and interested districts. The creation of the NMSU College of Education STEM Outreach Alliance Research (SOAR) Lab will serve this purpose.

The new staffing structure includes 6 student employees who work with existing STEM Outreach programs at NMSU. As part of the new STEM School in the College of Education, The Alliance staff and the SOAR Lab will provide undergraduate and graduate students with opportunities to conduct, publish and present relevant research on the impacts of NMSU STEM Outreach efforts.



The Purpose of The Alliance

1. To **impact teacher recruitment** by leading the Educators Rising NM initiative that is currently being implemented in 30+ schools with a 5-year goal of having the Educators Rising NM program established in 100 schools by 2020.
2. To **increase partnerships** with existing NMSU STEM Outreach Programs, school districts, community agencies and Regional Education Cooperatives to support STEM Education in New Mexico.
3. To **increase the research and funding capacity** of the College of Education with the establishment of the NMSU SOAR Lab. Through SOAR, the Alliance will be coordinating and collaborating on research initiatives of currently funded STEM Outreach projects while seeking additional funding for product development, student recruitment and retention, teacher education, and the recruitment of teachers through Educators Rising NM.



The Alliance: Educators Rising and the SOAR Lab

Impact Teacher Recruitment Throughout NM and Increase ALLIANCE Partnerships

New Mexico currently has a need for teachers, especially bilingual teachers, SPED teachers and teachers in rural areas. The enrollment in teacher preparation programs at NMSU and throughout NM has been decreasing for 10 years.

In an effort to reverse this enrollment trend and to support high school students who have a desire to pursue education as a career, The Alliance staff secured funding (\$75,000 from Cooperative Education Services) and held an Educators Rising Planning Conference from June 24-26, 2015 with 4 representatives from teacher preparation programs (NMSU, WNMU, DACC and San Juan) , 5 central office administrators (Roswell, Cuba, Las Cruces, Alamogordo, and Grants), and 31 teachers from 20 districts including BIE. The teachers

developed a 5-year plan with the ultimate goal of having a recognized Career and Technical Pathway for Teaching available in 100 high schools in NM by 2020. In February of 2016, NMSU hosted the first Educators Rising NM Student conference with nearly 100 high school students and 45 other participants. In June of 2016, there were 22 representatives from NM at the National Educators Rising Conference in Boston, MA. The second conference will take place in February of 2017.

Support STEM and Research at NMSU with the SOAR Lab

The Alliance started the STEM Outreach Alliance Research Lab in the fall of 2016 in order to increase the research capacity in the College of Education. NMSU currently has numerous STEM Outreach programs that support K-12 students and teachers. Students participate in Math

Lab, Young Women in Computing, STEM Outreach after school and summer programs, and the Pre Engineering Programs (PREP) to name a few. Teachers participate in Mathematically Connected Communities, Scientifically Connected Communities, Math Lab, Project Lead the Way, and DISSECT. Many of these programs focus on outreach and do not have the capacity to do impact research. The SOAR lab has increased the research capacity for interested programs so that dormant data and new data is being collected, analyzed, and disseminated through publications and presentations. This will lead to an increased capacity in additional funding and will close the existing outreach-research loop in order to determine the impact of the programs.

Increase Potential External Funding and Build Research Capacity in the College of Education

The Alliance staff has already increased the earning potential of NMSU and the College of Education. Since joining The Alliance staff on September 1, 2014, Dr. Trujillo has helped secure the following funding:

\$50,000 UPenn MSI TEP Program study

\$3,000,000 NSF Math Snacks Pre-Algebra

\$75,000 Cooperative Education Services-Educators Rising support

\$30,000 NMPED Educators Rising support

\$79,000 NMHED MC2 Teacher Leader Cadre

\$299,995 NSF Metacognition and Engineering

\$79,000 NMPED CTE/STEM Professional Learning Conference

Summary of Expected Outcomes/Accomplishments

1. Establish Educators Rising NM as a recognized Career Technical Organization in 100 schools by 2020. This will provide a pathway for high school students in NM to become teachers in NM, which will increase the number of qualified teachers trained and teaching in NM.
2. Increase the research capacity and the dissemination of findings for currently successful STEM outreach programs like MC2, SC2, which impact hundreds of teachers and thousands of students each year through the SOAR Lab.
3. Increase the number of Alliance districts from 19 to 50 by 2020 thus impacting the visibility of NMSU throughout NM which will have a positive impact on student enrollment and graduation rates in the college of education.
4. Increase the funding potential of faculty and staff in the College of Education by offering grant-writing expertise of Alliance staff members.

