



STEM Learning Center

Annual Stakeholder Report

December 2014

Major Outcomes for 2014:

- ▲ *Received* official 'Center' designation from the UA.
- ▲ *Added* an additional focus area to our priorities: Expand and support the use of research-based approaches to STEM instruction at the UA.
- ▲ *Received* new funding from Central Administration and additional funding from the College of Science. We continue to receive annual funding support from the Colleges of Science, Education and Engineering.
 - \$50,000 per year for three years from the Provost's office for operational expenses
 - \$25,000 per year for three years from the VPR's office for staffing
 - \$15,000 per year for three years from the COS Dean's Office for staffing
- ▲ *Hired* a .50 FTE Assistant Director of Research & Evaluation, Michelle Higgins.
- ▲ *Partnered* in the national 100Kin10 Network, which is dedicated to providing America's classrooms with 100,000 excellent STEM teachers by 2021. Through this partnership, the UA STEM Learning Center has received over \$600,000 in funding from Freeport-McMoRan Copper and Gold Foundation to continue and expand the Teachers in Industry STEM teacher retention and development program.
- ▲ *Cultivated* partnerships with a range of school districts, including Tucson Unified School District and Amphitheater School District, to combine University and K-12 expertise in order to create more effective educational programming. To date these partnerships have served 7,000 students, 45 schools and provided professional development for 51 teachers.
- ▲ *Created* a coordinated process for supporting grant requests among University faculty across UA Colleges including Agriculture and Life Sciences, Education, Engineering, Optical Sciences, Pharmacy, Science, and Social and Behavioral Sciences. The SLC and the Office of Research and Discovery are working collaboratively on a number of grant proposals for the University. Since its inception, the Center has either consulted on or designed the broader impact, education or evaluation sections of more than 35 grants submitted to numerous agencies including the National Science Foundation, the U.S. Department of Education, and National Aeronautics and Space Administration. Our current portfolio of work in this area includes nearly 20 grant proposals that are in various stages of development, with requested funding ranging from \$200K to \$24million.
- ▲ *Developed* the Southern Arizona STEM Workforce Network that includes more than 46 university, community, public sector, business leadership and educational partners. Network participants work

collaboratively to improve STEM teaching and learning and to develop and retain the highest quality STEM workforce with a goal of creating a robust STEM education pathway that begins with Pre-K education and extends through elementary, high school and college.

- ▲ *Produced* the Southern Arizona STEM Workforce Supply and Demand Report – original research that is being mined for solutions such as the streamlined and standardized collective internship model that will facilitate and support the hiring of STEM interns at the University of Arizona, Pima Community College and local high schools.
- ▲ *Hosted* STEM events that brought partners together and provided visibility:
 - The ‘How it’s Made Arizona: Tucson Manufacturing Block Party’, which connected businesses and educators with students and parents
 - The ‘MathCounts’ Competition for Arizona middle school students
 - Professional Development sessions for STEM teachers at the Tucson Festival of Books
 - The ‘STEM Internship Business Forum’, hosted by President Hart and Mayor Rothschild, to announce and launch a streamlined process for businesses to hire STEM interns at UA, PCC and local high schools
- ▲ *Provided consultations and assistance* to UA faculty and community STEM educators on:
 - Outreach
 - Field trip planning
 - Program planning
 - Professional development
 - Proposal writing
- ▲ *Partnered* with UA faculty and community STEM educators on:
 - Grant proposals
 - STEM education projects
 - Workshops and conference sessions for the Arizona Science Teachers Association and the Arizona Center for Afterschool Excellence
- ▲ *Participated* on advisory committees of local STEM education, community and government initiatives, which resulted in broadening our network of Southern Arizona STEM stakeholders.
- ▲ *Contracted* with consultants to assist us with developing an ‘Identity Package’ for the SLC, to include a logo, tagline, and high level messaging to better communicate the purpose and function of the SLC to the Southern Arizona and UA communities.
- ▲ *Received* financial support from Sanofi Corporation and the COS Dean’s office to hire an MIS graduate student for a summer internship. A Phase I website will be launched early this spring, which will include a searchable database of UA STEM Resources, a calendar of UA STEM events, tools and best practices in STEM Education (i.e. links to current research, useful websites, models, etc.) and information about the services offered by the SLC.