New Mexico State University
Broadening Participation Initiatives

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New Mexico Alliance for Minority Participation

New Mexico AMP is a partnership representing the state’s public two- and four-year colleges and universities, including leading minority-serving institutions serving American Indian students. New Mexico AMP is aligned with other programs in New Mexico that share a common vision, resulting in a statewide network that has become part of the fabric of higher education in the state.

PROGRAM OBJECTIVES

1. Increase the number of STEM students transferring from 2-year to 4-year institutions.
2. Refine and incorporate student research and professional development activities designed to increase the number of STEM graduates as well as increase the motivation, performance, and progression of talent students in B.S. degree programs and in preparation for graduate studies.
3. Provide direct student support to enable students to attain academic year and summer enrichment activities without unnecessary loss of income.
4. Increase URM STEM graduates to 655 per year by 2018, representing a 10% increase over the 568 degrees awarded in 2010-2011, including a contribution of 10% or more from transfer students.
5. Demonstrate a 10% increase in the progression of undergraduate students to graduate school entry.
6. Maintain and continue to build meaningful partnerships with colleges and universities, school systems, government agencies, national laboratories and centers, industry, private foundations, and STEM professional organizations to support student development and success.

PROGRAM ACTIVITIES

- Faculty mentorship programs
- Professional development workshops
- Networking opportunities
- Student and Faculty Poster Sessions
- Pre-Ph.D. Workshops
- STEM Club, Field Trips, and Service Opportunities

ECONOMIC IMPACTS

New Mexico AMP has facilitated educational achievement and development through state-level efforts, leadership development, institutional programming at partner colleges and universities, and individual student support. Collectively, these efforts have realized significant benefits for New Mexico. The following analyses are drawn from the 2009 inflation-adjusted dollars and are presented for a single year.

Direct Impacts

- Based on an increase in STEM graduates (253 in 1993/94), the following assumptions and calculations were made:
  1. STEM degrees to underrepresented minorities increased by a total of 3,415 degrees after factoring out the baseline of 253 degrees per year over the Wellness of the program.
  2. Based on the Census Bureau’s 2009 American Community Survey, the differential for STEM versus Non-STEM occupations was $23,105.
  3. Using NMSU alumni data as a reasonable estimate, we assume that 50% of STEM graduates reported in (1) above will re-remain in New Mexico.
  4. The Labor Force Participation Rate of college graduates Ages 25 to 53 in New Mexico is 0.828, based on the 2009 report referenced in (2) above.
  5. By subtracting the differential of $23,105, we estimate that STEM graduates generating in New Mexico had $33,633,455 in higher earnings than would have been the case without the STEM degrees. The earnings of STEM graduates who remained in the state of New Mexico are not included in this conservative estimate.

Indirect Impacts

Using IMPLAN Pro Version 3 economic modeling software, it is estimated that an additional 265 jobs resulting from the higher earnings of STEM graduates, producing $4,311 in labor income in the state.

SUSTAINABILITY: NMSU Teaching Academy, Leadership and Mentoring

- Advancing Leaders Program
- Internship and fellowship opportunities
- Strengthened leadership activities and presentations
- Involvement related to leadership and understanding how NMSU works
- Increasing the number of faculty members in our state’s top STEM programs
- Project addressing a campus-wide issue
- Peer mentoring program for faculty
- Increase connection among people with a positive orientation to mentoring
- Include gender and ethnic equity issues in events

SUSTAINABILITY EFFORTS

- The NMSU College of Engineering implemented a college-wide Freshman Year Experience program in Fall 2014 based on the outcomes of the New Mexico AMP Integrated Learning Communities (ILC) project, a major activity of the previous Carnegie Foundation for the Advancement of Teaching Creating Community and Research and Practice in Science, Technology, Engineering, Mathematics and Computing (C3) Council.
- The outcomes of the ILC project have led to the establishment of a STEM Workforce Work Group, which is charged with developing strategies for recruiting and retaining underrepresented minority students in STEM.
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NMSU ADVANCE/PAY

Research findings over the past 20 years have documented the need for institutional transformation in academia to bring about diversity at all levels of the U.S. science and engineering workforce. In recognition of the slow pace at which women’s representation among STEM faculty was increasing, the National Science Foundation-funded ADVANCE program was established in 2001. New Mexico State University (NMSU) is committed to maximizing the number of woman faculty positions within the ADVANCE program. To disseminate these successes, a $5.9 million award, Partnerships for Academic Excellence, Implementation, and Development (PAID) seeks to bring about faculty diversity in STEM by building an Alliance for Faculty Diversity (AFD) among the three Ph.D.-granting institutions in New Mexico (NMSU, UNM, and a national laboratory). PAID is a five-year funded project to provide a training pipeline for students and postdocs. NMSU will disseminate to alliance members the materials and practices effective at increasing representation, participation, and advancement of underrepresented faculty in academic science using retreats, distance delivery, and face-to-face meetings.

PROGRAM OBJECTIVES

1. Increase knowledge of diversity issues and strategies
2. Monitoring supports and strategies
3. Promotion and tenure issues
4. Leadership training
5. Institutions and sustainable grassroots structure for faculty development training
6. Student and faculty diversity committees
7. Sustainable grassroots committees at each institution
8. Annual Department Heads Retreats to promote diversity leaders within the ranks
9. Provide a pipeline to STEM careers for diverse students
10. Faculty and student training
11. Participation in the professoriate

PROGRAM ACTIVITIES

- Faculty Diversity Committees
- Institutional faculty diversity committees to coordinate diversity initiatives with administration to institutionalize successful strategies.
- Mentoring
- Intended outcomes of mentoring:
- Research production
- Publications, presentations, grant applications
- Students
- Mentors
- Mentees
- Annual Department Heads Retreats to promote diversity leaders within the ranks
- Extend opportunities for underrepresented faculty to present research, engage at national and international conferences
- Postdoc and student training
- Participation in the professoriate
-Balance and multi-generation faculty
- Mentor’s colleagues

NMSU is committed to broadening participation in STEM through a variety of initiatives. The Carnegie Foundation for the Advancement of Teacher has recognized NMSU’s commitment to community impact. In 2015, the foundation selected NMSU to carry its Community Engagement Classification. NMSU is one of 361 colleges and universities nationwide — and the only one in New Mexico — to carry that designation. It acknowledges NMSU’s partnerships around the community, across all disciplines, from work in rural communities to highly specialized scientific research.

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