

Talent Expansion in Science and Technology: An Urban Partnership TEST:UP

California State University Fullerton, Mount San Antonio College, Santa Ana College
Program

National Science Foundation - Science, Technology, Engineering, and Mathematics Talent
Expansion Program (STEP): Total Award: \$2,500,000 over Five Years

Current: \$2,007,499 for Four Years

Contingent: \$492,501 for Year Five

Overall Goals

Increase the number of STEM transfers to four-year universities and colleges

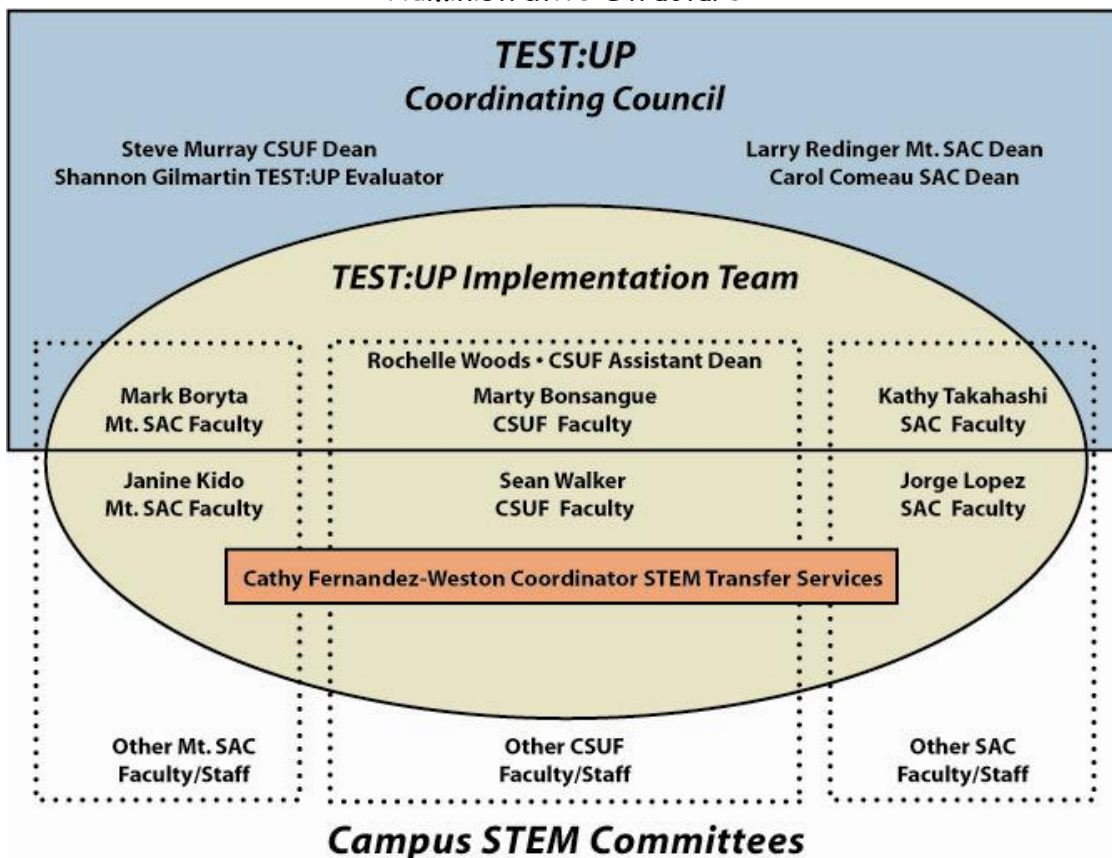
Increase the number of STEM AA degrees and baccalaureates

Focus

Enhance STEM academic advisement and student engagement

Increase student success in entry-level mathematics and the science courses

Administrative Structure



TEST:UP Strategies and Programs

Strategy 1: Improve counseling, guidance and mentoring opportunities and improve information and knowledge of STEM careers for Mount San Antonio College and Santa Ana College STEM students and potential STEM students

Coordinator for STEM Transfer Student Services (Cal State Fullerton): Full-Time CSUF Position; Travel to partner colleges to provide advisement for STEM students, work with faculty and half-time counselors to implement study campaigns, assist with students at risk, and organize presentations and events

STEM Counselors/Advisors (Mount San Antonio College and Santa Ana College): Half Time Counselors/Advisers at each college; provide advisement for STEM students, work with faculty and CSUF Coordinator for STEM Transfer Student Services to implement study campaigns, assist students at risk, and organize presentations and events

Web Sites and Video Presentations (Mount San Antonio College and Santa Ana College): Improve web site information content and linkages to STEM academic programs, articulations with four-year institutions, events, career tracks, internships, and research opportunities

Strategy 2: Develop support networks, including facilities and programs to develop learning communities, for STEM students at Mount San Antonio College, Santa Ana College, and Cal State Fullerton

Peer Group Program for Transfers (Cal State Fullerton): Hiring of peer advisers as peer mentors to oversee learning communities made up of incoming CSUF transfer students majoring in mathematics, the sciences, and other STEM fields; special orientation and advisement events for these new CSUF transfer students

Faculty Mentoring Programs (Mount San Antonio College and Santa Ana College): Mentoring of non-STEM majors with promise or interest in mathematics, the sciences, and STEM careers; visits to research labs, career days, professional seminar presentations

Science Resource and Study Centers (Mount San Antonio College and Santa Ana College): development and improvement of science resource and study centers, including tutoring, access to specimens, books, maps, computer resources

Strategy 3. Improve student engagement and learning in pivotal mathematics and science introductory discipline courses

Development and Implementation of Supplementary Instruction (Academic Excellence) Workshops (Mount San Antonio College and Santa Ana College; Cal State Fullerton): implement Supplementary Instruction workshops associated with selected, key math and science courses using peer facilitators; work to establish a regional collaborative to provide a forum for discussing approaches and determine best practices that improve student success in these courses

Tutoring Programs (Mount San Antonio College and Santa Ana College): using peer tutors, expand tutoring programs and homework assistance in improved science resource and study centers; work with faculty, the Coordinator for STEM Transfer Student Services, and Counselors to encourage students to seek tutoring assistance

Strategy 4. Develop a teaching intern program to improve the pedagogical and mentoring skills of Cal State Fullerton math and science graduate students interested in community college teaching careers

Teaching Intern Program (Cal State Fullerton, Mount San Antonio College, and Santa Ana College): place two Cal State graduate teaching interns each year with faculty mentors at both Mount San Antonio College and Santa Ana College where they will be hired as part-time faculty and given teaching assignments or serve as workshop facilitators; with additional funding, interns will spend time advising, counseling, and serving as mentors to students

Internal Advisory Committees

California State University, Fullerton

Dr. Ephraim Smith (Vice President, Academic Affairs) - Chair
Dr. Silas Abrego (Associate Vice President, Student Affairs)
Dr. Edgar Trotter (Acting Associate Vice President, Undergraduate Programs)
Dr. Paul De Land (Chair, Department of Mathematics)
Dr. Susamma Barua (Associate Dean, College of Engineering and Computer Science)
Dr. Robert Koch (Chair, Department of Biological Science)

Mount San Antonio College

Dr. Virginia Burley (Vice President, Instruction) - Chair
Dr. Debbie Boroch (Dean of Instruction)
Thomas Mauch (Associate Dean, Counseling)
Meghan Chen (Director, Learning Assistance)
Matt Munro (Mathematics)
Dr. Cindy Shannon (Biology)
Dr. Kenny Huang (Chemistry)

Santa Ana College

Dr. Norman Fujimoto (Vice President, Academic Affairs) - Chair
Dr. Micki Bryant (Dean of Counseling)
Jubal Hampton (Chair, Department of Biology)
Dr. Ted Yamada (Chair, Department of Chemistry)
Dr. Cher Carrera (Chair, Department of Mathematics)
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