

SUNY LSAMP's Role in Institutional Transformation

Increasing UREP STEM Research and Scholarship

Last year, the Stony Brook-based National Center for Inclusive Education (sponsored by SUNY LSAMP and SUNY AGEP) in collaboration with the National Academy of Engineering CASEE PEER set up a research team consisting of the CASEE PEER, the SUNY LSAMP Project Director and Project Coordinator, the External Evaluator and a prominent sociologist. The group is conducting a study that examines how UREP STEM students make the choice to continue on to graduate school, the quality of the graduate experience and the choices to continue on to the professoriate. The project will include focus groups with UREP and all undergraduates and graduate students, interviews with students, faculty and administrators, a survey of current research in this area, and collaboration with current projects addressing similar or related issues. In addition, we will examine the barriers and support needed to implement key support activities in order to provide a model for the delivery and administration of support services and will identify the various factors, attitudes and experiences that lead UREP STEM students to graduate school and on to the professoriate in order to integrate those practices that help increase the number of students entering the pathway to graduate school (see details in the Evaluation Report below.)

Leadership on UREP STEM Issues

This year the Regional Director, Henry Teoh won the Archie Lacey Award at the New York Academy of Sciences and gave a talk about UREP STEM issues that highlighted the accomplishments of SUNY LSAMP. In addition, the host department (Department of Technology and Society, Stony Brook) for SUNY LSAMP was nominated to join The National Academy of Engineering Center for the Advancement of Scholarship in Engineering Education (CASEE) as a research affiliate partly because of the work done by these programs. Faculty and staff from the program have taken leadership roles at the local, state and national level. They have been actively involved in relevant professional organizations including NAMEPA, WEPAN and ASEE. SUNY LSAMP staff have been actively involved in the planning of the regional ASEE meeting that took place in October 2005. On individual campuses, data and program components of SUNY LSAMP and SUNY AGEP are being used by researchers to help them apply for NSF grants in many directorates and for REU supplemental funding.

SUNY LSAMP has been a leader for institutional transformation of our Alliance Institutions

It has made a broad impact throughout the Alliance through new program design, curricular reform, assistance in getting funding for many diversity initiatives, promoting institution efforts on the state and national level and much more.

- Key components developed by SUNY LSAMP have been incorporated into the existing course structure. For example, an enrichment component in physics and chemistry at Buffalo State are now "regular" courses.

- SUNY LSAMP has been at the forefront of broad efforts to increase UREP STEM scholarship and research through the Center for Inclusive Education. This effort is supported through university staffing, space and resources.
- SUNY LSAMP staff and faculty have played a key role in the successful preparation of applications for funding for SUNY AGEP, several CSEMS programs and other key federal and state programs including Ronald McNair, CSTEP and STEP.
- SUNY LSAMP has increased STEM faculty and department involvement with UREP students through research placements, involvement in new grants, involvement in support services and involvement in SUNY LSAMP program implementation and evaluation.
- SUNY LSAMP has acted in a leadership role on campuses to help increase programs for UREP STEM students through increasing REU supplements and providing technical assistance on UREP STEM issues, data and program design for new proposals.
- SUNY LSAMP has made support of UREP STEM students a high funding priority for individual campus development efforts. For example, the Binghamton College of Engineering got funds from BAE and Kodak and Stony Brook got funds from Citicorp specifically to serve the SUNY LSAMP students.
- SUNY LSAMP has played a key role in the development of new courses and majors. This can be seen in the new Chemistry Learning Community at Old Westbury and the new major in Technological Systems Management at Stony Brook.
- SUNY LSAMP has taken a leadership role in providing support services for all students. Examples of this are the tutoring program developed by LSAMP that was used for all students at both University at Buffalo and Binghamton and adaptation of the SUNY LSAMP research model for all students at New Paltz.
- The Alliance has taken a leadership role in improved STEM pedagogy. For example, at New Paltz and Buffalo, Alliance faculty has helped make key changes in physics and chemistry gatekeeper courses.
- Working with SUNY AGEP, the Alliance has helped make significant changes in the recruitment of UREP STEM students into graduate school.
- SUNY LSAMP has used local funding to pay for all the evaluation costs. In addition, it has broadened the scope of the external evaluator to look at broad issues affecting all UREP STEM students.

0

From:
Sent:

dferguson@notes.cc.sunysb.edu
Thursday, October 12, 2006 3:54 PM