

# **Designing a Program to Support Underrepresented (UREP) Students in Mathematics and Computer Science (Workshop)**

Stacie S. Nunes, Ph.D.

Assistant Professor, Physics Department, State University of New York (SUNY)  
at New Paltz, New Paltz, New York, USA nunes@newpaltz.edu

## **Abstract**

In this workshop participants will begin to develop a plan for a program to increase the graduation rate of UREP students that could be successful at their home institution. We will begin with a presentation about a program at SUNY New Paltz that has gained support campus-wide and from both, New York State (CSTEP) and the federal government (NSF LSAMP and CSEMS,) for this purpose. The AC<sup>2</sup> Program has been successful in supporting UREP minority and economically disadvantaged students interested in majors in science, engineering, computer science and mathematics since 1986. The presentation will focus on a set of clearly defined objectives and activities that are designed to meet these objectives, as well as the management plan and collaborations that support the program's success. Participants in the workshop will define their target population, set objectives, identify activities, and consider possibilities for collaboration and funding mechanisms to support the activities. This workshop is meant to provide useful discussion for individuals interested in programs ranging in scope from small individual efforts within a department to wider ranging efforts.

## **Introduction**

In this workshop the goal is for each participant to begin to develop a plan for a program to increase the graduation rate of UREP students that can be successful at their home institution. The definition of UREP will be left open to the interpretation that is relevant to each institution. The workshop can be useful to a wide range of individuals from faculty or staff members looking for a way to make a difference within a department to a dean or director who is considering a program with a wider institutional scope.

We will begin with a short presentation about the AC<sup>2</sup> (AMP/CSTEP Community) program that has been developed and implemented at the State University of New York (SUNY) at New Paltz. SUNY New Paltz is a primarily undergraduate campus located in the Hudson Valley of New York. The AC<sup>2</sup> Program has served economically disadvantaged and traditionally UREP students with interest in majors in STEM (science, technology, engineering, and mathematics) since 1986. This program incorporates "Best Practices" learned from first hand experience and from the experiences of our collaborators in the state-wide and national networks with which we interact: the NSF (National Science Foundation)-funded SUNY Alliance for Minority Participation (LSAMP) and the New York State funded Collegiate Science and Technology Entry Program (CSTEP.) The SUNY New Paltz AC<sup>2</sup> program integrates academic support and enrichment components designed to meet the needs of students as they move through the different stages of the student experience. There is a strong focus on acclimation and academic success in the first two years and career and graduate school preparation in the latter two years.

The key objectives of the New Paltz program include:

- fostering a supportive community of faculty, staff, and students,
- providing access to role models and mentoring,

providing academic support focused on strengthening basic skills and knowledge early in the undergraduate experience,  
providing career development programming that “grows” with the students,  
recognizing success,  
providing some means to ease the financial burdens of students.

All activities of the program are designed to provide these elements and are assessed based upon how well they do this. We will give examples of programming that address each of these key objectives. We will also present the management scheme and funding sources for this program as well as collaborations, both on and off campus, that help us to achieve our goals.

After the presentation participants will be divided up into groups of individuals with similar resources and/or similar goals. In these groups participants will work on plans for their individual departments, schools or campuses. The plans will include defining the target population, selecting key objectives for the program, identifying activities, and considering possibilities for collaborations and funding to support the activities. There will be opportunities for the group to share ideas at different stages in the development of the plans.