Yu-Ju Kuo*, yjkuo@iup.edu, and Frederick Adkins. From assessment to a mathematics-focus NSF S-STEM program.

In preparing to write a NSF S-STEM proposal, data was collected to assess degree programs in the College of Natural Science and Mathematics at Indiana University of Pennsylvania. Our goal was to build a scholarship cohort focused on applied mathematics consisting of junior and senior undergraduates in science and mathematics and graduate students in the M.S. in Applied Mathematics program. In addition to demographic data and the number of graduates in specific degree programs, we tracked each student’s progress for 4 years starting Fall 2005. This allowed us to recognize that a retention issue occurs during students’ early college years. We also analyzed financial need distribution to determine amounts that would provide significant impact on retention and academic performance. After the scholarship cohort started in Fall 2010, we were baffled by the low number of minority applicants to the scholarship program. From further analysis we determined that the number of minority students meeting the financial need and GPA requirements was extremely low. This resulted in a modification of the application requirements for our renewal proposal. In this presentation, we will share our data and additional modifications to our S-STEM program resulting from program assessment. (Received September 24, 2012)