

Title of QEP: *Soar with M.E. (M.E. = Mathematics Excellence): A Plan to Enhance Student Learning in Basic and Intermediate Algebra*

Institution: Dyersburg State Community College (DSCC)

Contact: Dr. Kay Patterson, Dean of Arts and Sciences (patterson@dsc.edu)

Executive Summary: DSCC's QEP focuses on the enhancement of student learning in the critical, high-risk areas of Basic and Intermediate Algebra in the Developmental Studies Program. Large numbers of students are required to enroll in these courses based on inadequate ACT or ACT COMPASS scores. Unfortunately, these two courses act as gatekeepers for a number of individuals seeking the associate degree.

Selection of Topic: Initially, the SACS Leadership Team prepared a plan to allow all DSCC employees to provide input into the selection of a QEP topic through participation in focus groups that reviewed college data related to student learning. In the data on high-risk courses and high enrollment courses, Basic and Intermediate Algebra stood out as the two courses in which enhancement of the learning process could affect the greatest number of DSCC students.

Strategies for Enhancing Achievement in Basic and Intermediate Algebra at DSCC:

The QEP provides a unique opportunity to focus on two courses, Basic and Intermediate Algebra, which have presented major difficulties to students in the acquisition of their educational goals. As a first step in the process of developing the QEP, the members of the Mathematics Department participated in an Academic Audit that required faculty to work together to closely examine the strengths and weaknesses of the department. In addition, faculty spent much time researching best practices and participating in faculty development activities related to improving student success in the mathematics classroom. The following strategies are being utilized to enhance student learning in these essential courses:

- customized personal learning plans
- prescriptive remediation as necessary
- two hours of classroom lecture
- two laboratory hours of computerized supplemental instruction
- a flex hour during which students receive additional instruction on targeted topics
- workshops focusing on reading in mathematics, test-taking strategies, study skills, test anxiety, time management, and learning preferences/styles

A pilot study in Prealgebra laid the foundation for implementation in Basic Algebra in fall 2008, with implementation in Intermediate Algebra scheduled for spring 2009.

Assessment: The QEP is being assessed through the following means:

- Pre- and posttesting to determine value added by each course.
- Evaluation of student success (grades of C or better) in each course.
- Evaluation of student success in subsequent mathematics courses.