

Northwest-Shoals Community College

Strengthening Mathematical Foundations Through Innovative Teaching

QEP Executive Summary

The purpose of the Northwest-Shoals Community College (NW-SCC) Quality Enhancement Plan (QEP), Strengthening Mathematical Foundations Through Innovative Teaching, is to increase student learning by creating a best practices environment of teaching and by equipping faculty with the knowledge, skills, and abilities to engage students in active learning. The framework and focus of this plan will be integrated into the developmental math program. As ideas are piloted and proven successful, it is believed that innovative teaching methods can be replicated into other areas of the curriculum; therefore, professional development opportunities related to innovative teaching strategies and student learning will be afforded to all faculty.

This plan is an outgrowth of conversations between College constituencies, faculty, administration, staff, and students. As a result of these conversations, a number of issues were identified as worthy of consideration; however, as the issues were narrowed, *innovative teaching* emerged as the focal point to improve student learning. One of the initiatives of the most recent NW-SCC Strategic Plan was to move toward becoming a learning-centered college; therefore, the concept of innovative teaching seemed an ideal means to begin to accomplish the initiative of a learning-centered college. Ultimately, faculty, staff, students, community and administration established consensus that the project was relevant and achievable.

In addition to the gathering of substantive input from the College community at large, the components of the plan are derived from a study of the literature regarding innovative teaching strategies, specifically those used in the area of developmental math, and from a review of educational best practices that promote active and engaged learning. Essential to the overall project is an assessment plan that uses multiple measures of learning outcomes associated with innovative teaching methods compared to traditional teaching methods. Assessment of student learning gains *within* courses will also be conducted. In addition, the students' perceptions regarding their attitudes toward math will be assessed.

Actions which are required to execute, assess and revise the plan will be woven into the College's existing comprehensive planning and evaluation procedures. The plan consists of two goals:

Goal 1: To increase student learning in developmental math courses by redesigning courses to include innovative and engaging teaching strategies.

Goal 2: To improve faculty knowledge, skills, and use of innovative pedagogy as learning facilitators by providing additional professional development opportunities.

Identified outcomes are linked to each goal to guide the implementation of the project.

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