

**Executive Summary for *The Success Equation*:  
A Model for Enhancing Student Learning in Gateway Mathematics and Statistics Courses  
University of South Florida St. Petersburg**

For its Quality Enhancement Plan (QEP) the University of South Florida St. Petersburg (USFSP) has developed *The Success Equation: A Model for Enhancing Student Learning in Gateway Mathematics and Statistics Courses*. *The Success Equation* is founded on three key elements: 1) a structured mathematics curriculum supplemented by innovative computer-assisted drill and practice modules which provide opportunities for poor performing students to improve performance on examinations until reaching a score that facilitates passing the course; 2) specialized pedagogical training for faculty and mathematics tutors; and 3) specialized support from the USFSP Academic Success Center.

*The Success Equation* has established a robust assessment and reporting plan with multiple direct and indirect measures of success, and a continuous cycle for data collection, analysis, and reporting. Student learning will be documented and measured by performance on three fundamental student learning outcomes (SLOs) imbedded within the university's general education quantitative gateway courses (College Algebra, Finite Mathematics, and Statistics), and also on specified course-level outcomes for these courses. The general education outcomes specify that students will demonstrate the ability to: (1) estimate and apply arithmetic, algebra, geometry, and statistics appropriately to solve problems, and an awareness of the relevance of these skills to a wide range of disciplines; (2) represent and evaluate mathematical information numerically, graphically and symbolically; (3) comprehend mathematical arguments, formulas, and graphical representations, and use these to answer questions, understand the significance of the results and judge their reasonableness. For the additional course-level outcomes, the mathematics faculty identified additional SLOs specifically tailored for each course which are mapped to critical assignments in examinations as well as a common final examination.

Additionally, *The Success Equation* seeks to: (1) decrease the number of students receiving Ds, Fs, and Ws in these gateway mathematics courses; (2) improve performance on a nationally-normed measure of quantitative literacy (the ETS Proficiency Profile); (3) minimize mathematics anxiety (with Mathematics Anxiety Rating Scale: Short); and (4) increase perceived knowledge of mathematics (measured via the National Survey of Student Engagement). Lastly, the *Success Equation* has four administrative goals: (1) adequacy of key personnel; (2) adequacy of resources; (3) faculty and tutor development and training; and (4) continuous communication and feedback with campus community.

Institutional accountability for the management and implementation of the QEP rests with the Vice Chancellor for Academic Affairs (VCAA). The QEP Director is responsible for day-to-day management and for ensuring that all elements of the plan are on track. The QEP Director will communicate with the Dean of the College of Arts and Sciences in whose college all of the target courses reside and the Director will be asked to provide annual review information to the CAS Dean for faculty who is participating in the project

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