The University of South Florida St. Petersburg’s mission is to “inspire scholars to lead lives of impact.” In support of that mission, the first of USFSP’s core values is student-centered success. Administrators, faculty members, staff, and students worked together to assess institutional data and determine the focus of the QEP; to support student success in the gateway math courses. These general education courses can be obstacles to student success and may have an impact on student choice of majors, retention, and persistence to graduation. The resultant QEP, The Success Equation: A Model for Enhancing Student Learning in Gateway Mathematics and Statistics Courses provides for structured mathematics curricula supplemented by innovative, computer-assisted learning tools, pedagogical training for mathematics and statistics faculty members and tutors, and specialized support from Student Success Center (SSC). The three general education quantitative courses with highest enrollment participate in the QEP: MAC1105—College Algebra, MGF1106—Finite Mathematics, and STA2023—Introductory Statistics I.

The academic goals of the QEP are:

1. Improve student learning as measured by the General Education Quantitative Student Learning Outcomes (SLOs);
2. Decrease the number of students earning Ds, Fs, or withdrawing (DWFs) from the gateway mathematics and statistics courses;
3. Minimize math anxiety in the gateway mathematics and statistics courses;
4. Improve student performance on nationally normed measure of quantitative literacy measured via the ETS Proficiency Profile;
5. Increase student self-perceived knowledge of mathematics measured via the National Survey of Student Engagement (NSSE).

A new instructional strategy called Jam, Quest, ReQuest, intended to reduce math anxiety and increase learning, forms the foundation of the QEP. In this strategy, course content is chunked into two week units. Each unit is followed by a Quest, a short formative assessment using open answer format. Graded Quests are returned to students during the next class meeting, providing timely feedback for optimal learning. Jams are student-led review and cooperative learning sessions, held prior to each Quest. Students reap the benefits of highly teachable moments as they clarify the material and gain confidence. Jams contribute to a safe learning environment where questions are welcome and confusion is accepted as part of the learning process. After each Quest, outside of class time, students are encouraged to address their mistakes and learning gaps by seeking tutoring at the SSC, working with faculty members, or using the study tools in MyMathLab and the text. Students then have the option of taking one ReQuest for each Quest, prior to the next biweekly in-class Quest, regardless of their score on the in-class Quest. Each ReQuest covers the same key concepts as the corresponding Quest, using unique questions, not simply the “old” questions with “new” numbers. Students
take ReQuests using MyMathLab in a proctored setting. Paper ReQuests are available for those students who feel uncomfortable with computer based assessment. MyMathLab scores the online ReQuests automatically and provides immediate results to students and instructors. Paper ReRequests are scored by the course instructor. Students earn the higher of the Quest and ReQuest scores. There is no penalty for a lower score.

**General Education Quantitative Student Learning Outcomes**
M1: Students will determine appropriate mathematical and computational models and methods in problem solving, and demonstrate an understanding of mathematical concepts.
M2: Students apply appropriate mathematical and computational models and methods in problem solving.
M3: Students will demonstrate the ability to accurately calculate and solve arithmetic, algebra, geometry and statistical problems.
M4: Students will demonstrate the ability to represent, comprehend, and evaluate quantitative problems numerically, graphically, symbolically, in a tabular way and/or in a written argument.

**Questions from Math Anxiety Survey-Revised (MAS-R) (Bai, Wang, Pan, Frey, 2009)**
Please respond to each statement using this scale:
1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 =Agree, 5= Strongly Agree

1. I find math interesting. Your response: ______
2. I get uptight during math tests. Your response: ______
3. I think that I will use math in the future. Your response: ______
4. My mind goes blank and I am unable to think clearly when doing my math test. Your response: ______
5. Math relates to my life. Your response: ______
6. I worry about my ability to solve math problems. Your response: ______
7. I get a sinking feeling when I try to do math problems. Your response: ______
8. I find math challenging. Your response: ______
9. Mathematics makes me feel nervous. Your response: ______
10. I would like to take more math classes. Your response: ______
11. Mathematics makes me feel uneasy. Your response: ______
12. Math is one of my favorite subjects. Your response: ______
13. I enjoy learning with mathematics. Your response: ______
14. Mathematics makes me feel confused. Your response: ______

**References**

