Island TIME: Transition Into Math Excellence

Florida Keys Community College
Quality Enhancement Plan presented to the Southern Association of Colleges and Schools
2009-2015
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Island TIME: Transition Into Math Excellence
A Quality Enhancement Plan (QEP) for Florida Keys Community College

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FKCC QEP Purpose Statement
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SECTION I: PREFACE

FKCC Quality Enhancement Plan Philosophy

Florida Keys Community College believes all students, especially developmental-level students, deserve a quality education and innovative learning experience. By focusing on active learning and student engagement, FKCC enhances the student learning experience. FKCC’s commitment to a student-centric learning environment promotes opportunities for students to attain academic, personal, and professional goals. This philosophy statement forms the basis for the QEP and is consistent with the FKCC Mission Statement.

Florida Keys Community College Mission

Florida Keys Community College is an open-access, educational institution dedicated to serving the intellectual, diverse, cultural, and occupational needs of the Florida Keys as well as the global community. The college is committed to student-centric academic programs and services, workforce development, continuing education, diverse partnerships, electronically delivered instruction, and sustainable practices that prepare students for personal success and responsible citizenship.

FKCC QEP Purpose Statement

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FKCC discovered through data analysis that more than 63% of its students entering college for the first time had test scores indicating a need for developmental courses in mathematics. The data further uncovered areas for additional concern: only 39% of our students in Basic Math (Developmental Math I), on average, were successfully completing the course and advancing to Introduction to Algebra (Developmental Math II). Of those students, more than half were withdrawing from their courses, and some even from their degree programs, before their successful completion of Introduction of Algebra. In short, many FKCC students were abandoning their education before they ever got started.

To respond to this critical instructional need at FKCC, the College developed a QEP in developmental mathematics in support of the college’s mission and strategic plan. The decision to focus on developmental mathematics as FKCC’s QEP topic was the result of data analysis and broad-based input from students, faculty, staff, and members of the community. The topic selection process began with campus-wide education sessions to introduce the concept of a QEP—its purpose, its importance, and its potential impact on improving student learning and success at our college. Subsequently, all members of our community were invited to formulate topics for consideration with support, guidance, and data from FKCC staff. Developmental education prevailed as the chosen focus/topic after a campus-wide vote from a roster of proposed topics. FKCC’s faculty further analyzed placement test and course assessment data, course and degree completion rates, overall student performance and success data, anecdotal evidence from faculty, students and advising services. As a result, the faculty focused the topic to developmental mathematics after it became clear that students were having the most difficulty with developmental math courses and that it was hindering their ability to move into credit courses and therefore earn a degree at FKCC. In order to improve student learning in developmental mathematics, the FKCC Math faculty are redesigning the developmental mathematics courses, currently taught in a traditional lecture/homework/testing model, and “re-branding” developmental math courses as pathways to enhance student success. With that in mind, goals, outcomes, and assessment measures have been established to assist in the development and evaluation of the QEP:

GOAL #1: Improve Student Performance in Mathematics

Context:
By providing a redesigned developmental mathematics curriculum that includes computer-assisted and individualized lessons, active and collaborative learning strategies, and a technologically-enhanced environment as identified in the research of student success through engagement, the college will experience the following:

1.1. By spring term 2015, Developmental Math I student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results* of the intervention group in Key West to that of the control groups in the upper- and middle-keys centers, will increase by 20%.

1.2. By spring term 2015, Developmental Math II student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results*
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

The purpose of FKCC’s Quality Enhancement Plan (QEP), *Island TIME: Transition Into Math Excellence*, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

1. By spring term 2015, student math-related anxiety levels in Developmental Math I, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%.

1. By spring term 2015, student math-related anxiety levels in Developmental Math II, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%.

* Adjustments will be made to the pre- and post-test measures to include a breakdown of major concepts/components that measure specific student learning outcomes. This item by item analysis will be completed and included in the plan results.

**GOAL #2: Improve Retention Rates of Students in Developmental Mathematics Courses**

**Context:**

With differentiated advising, self-paced instruction with one-on-one assistance, improved student performance in developmental mathematics, and the overall re-branding of developmental mathematics courses to include a positive community-wide shift in the reputation of developmental mathematics at FKCC, the college will experience the following:

2.1. 11% increase in progression rates in Developmental Math I by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates after intervention is established.

2.2. 16% increase in progression rates in Developmental Math II by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates of Key West students after intervention is established.

2.3. 12% increase in persistence rates in Developmental Math I by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.

2.4. 14% increase in persistence rates in Developmental Math II by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.
FKCC QEP Executive Summary

FKCC QEP Purpose Statement

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The decision to focus on developmental mathematics as FKCC’s QEP topic began as the result of data analysis and broad-based input from students, faculty, staff, and members of the community. Led by the FKCC QEP Leadership Team, a group composed of students, faculty, administration and staff, the QEP topic selection process began with campus-wide education sessions to introduce the concept of a QEP—its purpose, its importance, and its potential impact on improving student learning and success at our college. Subsequently, all members of the FKCC community were introduced to the QEP Topic Selection Rubric the QEP Leadership Team had created and would use to select a topic and invited the FKCC community to formulate topics for consideration with support, guidance, and data from the FKCC staff.

Upon receipt of the QEP Topic Proposals, the proposals were placed online and the community was allowed to vote for the topic they believed to be the most pressing learning issue. The QEP Leadership Team then reviewed and scored the top five proposals according to the rubric. The topic proposal that earned the highest score was The Retention of First Year Remedial and At-Risk Students; however, the faculty and QEP leadership team knew that the College needed a more focused QEP topic in order to successfully design, develop, implement and measure a plan to increase student learning at FKCC.

Taking a closer look at FKCC’s first year remedial and at-risk students, the FKCC faculty and QEP Topic Selection Committee discovered through data analysis that more than 63% of FKCC’s students entering college for the first time had test scores indicating a need for developmental courses in mathematics. The data further uncovered areas for additional concern: only 39% of our students in Basic Math (Developmental Math I), on
average, were successfully completing the course and advancing to Introduction to Algebra (Developmental Math II). Of those students, more than half were withdrawing from their courses, and some even from their degree programs, before their successful completion of Developmental Math II. If the majority FKCC’s students were placing in, taking and yet not successful in developmental math courses, students could not proceed to the required credit courses necessary for their programs of study and therefore could not complete their degrees. It became abundantly clear that many of FKCC’s first-year students, the majority of which take developmental math, abandon their education before they ever really get started because they were not successful in developmental math. The fact that FKCC students’ struggle with math deters them from proceeding to targeted, college-level courses is a serious cause for alarm for FKCC as it negatively impacts the number of program completers and degrees the institution grants each year and therefore impacts the College’s ability to meet its mission. As a result, the FKCC faculty and QEP Topic Selection Committee identified developmental math as the critical area to improve student learning at the College.

To respond to FKCC’s critical need to improve student learning in mathematics, FKCC developed a Quality Enhancement Plan (QEP) that centers specifically on developmental mathematics and supports three goals within the college’s strategic plan. As such, the purpose of Florida Keys Community College’s QEP, Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
The primary drivers of these strategies are a redesign of developmental mathematics courses from a traditional, instructor-centered mode to an updated, student-centered, self-paced and technologically-assisted approach of instruction to improve student learning and the “re-branding” of developmental math courses institution-wide as pathways to enhance student success—as opposed to daunting obstacles. With that in mind, goals, outcomes, and assessment measures have been established to assist in the development and evaluation of the QEP:

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In support of the above goals and strategies, FKCC has developed a budget and allocated necessary resources – both physical and fiscal – to support the success of the focused attention to improve student learning in developmental mathematics.

FKCC’s faculty-driven QEP incorporates broad-based participation in each of the project’s 6 phases with attention to student involvement; faculty development and support; human, physical and financial resources; data collection and analysis; assessment measures; and continued improvement to the plan to meet its goals, outcomes and student learning outcomes. The institutional investments made in this QEP speak to FKCC’s
commitment to the improvement of student learning in developmental mathematics. FKCC’s QEP organizational structure, resources and overall support also allow for the College’s continued advancements to the plan to achieve FKCC QEP goals in improving success and skills in developmental math.

**College Profile and Student Demographics**

Since its establishment in 1965, Florida Keys Community College has proudly served the diverse and changing higher education, workforce, and enrichment needs of Monroe County, Florida. The county, a region of some 1,034 square miles that is 220 miles in length, consists primarily of a chain of small islands that stretch from the southern tip of Florida’s mainland peninsula to the island city of Key West.

Our main campus, located in Key West, is situated waterfront overlooking the Gulf of Mexico. We also have centers in the Middle and Upper Keys, which are located in Marathon and Tavernier, respectively; both centers operate from joint-use facilities in conjunction with local high schools. Our close proximity to the water enables us to offer unique specialty programs such as diving, underwater port security, marine environmental technology and marine engineering.

FKCC offers a two-year Associate in Arts degree, designed for university-transfer, as well as several Associate in Science degrees and certificates that support the workforce needs of local businesses and organizations. As a member of the Florida College System, FKCC maintains articulation agreements with Florida’s
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Florida Keys Community College serves a diverse student population of 2,035 students among three locations in Monroe County. The average age of our students is 34.6. The total student population is comprised of 63% traditional age students, 24 years and under, and 37% non-traditional age students, 25 years and older (see Figure 1).

**Figure 1: FKCC College Wide Enrollment by Age (Spring 2011)**

![Enrollment by Age](image)

The ethnic composition of our school is predominantly Caucasian/Non-Hispanic, 56.8%, and Hispanic, 12.1%, although 23.6% are not reported. Black/Non-Hispanic students represent 5.3% of the total enrollment and American Indian and Asian/Pacific Islanders account for another 2.2% (See Figure 2). Student headcount by gender reflects 58.1% female and 40.8% male.
SECTION II: OVERVIEW OF FKCC’S QEP

Definition of a QEP and What It Means to FKCC

A QEP is a course of action for institutional improvement that addresses one or more issues contributing to quality enhancement of student learning. The Southern Association of Colleges and Schools (SACS), FKCC’s accrediting organization, notes in its Handbook for Reaffirmation of Accreditation that "student learning is at the heart of the mission of all institutions of higher learning...Developing a QEP as a part of the reaffirmation process is an opportunity and an impetus for the institution to enhance overall institutional quality and effectiveness by focusing on an issue or issues the institution considers important to improving student learning" (2004: 21). The QEP must emerge from the institution’s current planning and evaluation processes and must be compatible with college’s strategic plan. The QEP should not be seen as an "add-on" but rather it should become an integral part of the institution and its activities.

FKCC QEP Purpose Statement

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The SACS Commission on Colleges (COC) requires that an institution seeking reaffirmation of accreditation, such as FKCC, prepares a Quality Enhancement Plan that, according to *The Principles of Accreditation: Foundations for Quality Enhancement*, “includes a process that identifies key issues emerging from institutional assessment, focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution, demonstrates institutional capability for the initiation, implementation and completion of the QEP, includes broad-based involvement of institutional constituencies in the development and proposed implementation of the QEP, and identifies goals and a plan to assess their achievement” (2004:7).

The faculty, students, staff and community of Florida Keys Community College see the QEP as an opportunity to not only improve student learning and support its institutional mission but to also work collaboratively, creatively and effectively in service to our constituents and as a point-of-pride for the institution. FKCC sees its participation in its QEP as much more than a localized effort to improve student learning. In addition to supporting our own students in the achievement of their personal and professional goals, FKCC believes that the successful initiation, implementation and completion of its QEP is a contribution to national educational excellence and the promotion of our students to live and compete in a global economy and culture.

**Relevance of the QEP to FKCC’s Mission and Strategic Planning**

The uniqueness of FKCC’s student body is always be at the heart of strategic planning for the College and its instructional programs and improvements. Concurrent with our strategic planning cycle, FKCC incorporated its QEP into this process to ensure that institutional human, physical, and financial resources were available to commit to a successful QEP project for the improved learning and overall educational experience of our students. Much like the College’s general strategic planning process, planning for our QEP began in 2009 with our academic and executive leadership guiding informal discussions and collaborations between FKCC’s family of students, faculty, staff, and community members focused on improving the quality of education and

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student learning at FKCC. Since then, FKCC’s QEP has transformed into a focused and rigorous project that works with our strategic plan and is led by a broad-based group of FKCC constituents dedicated to meeting the needs of our diverse students.

When FKCC first started planning for the QEP, discussions centered on the unique demographics of the student body and their diverse educational needs. In addition to the broad range of ages, races and types of students represented at FKCC, many of our students place into at least one developmental course, if not many, and therefore do not come to us “college-ready.” In fact, increasing our efforts to improve first year remedial and at-risk students’ learning emerged early on as a potential QEP topic. Instead of diving into their credit and degree-track courses, most of our remedial or developmental students begin their academic careers at FKCC honing the academic skills and habits necessary to succeed in college when students already thought that they had come to us prepared to focus exclusively on their degrees. Many developmental students, therefore, are disappointed; and it is this disappointment that sets the tone on the start of their college careers at FKCC. In addition to the negative attitude most of our students have regarding their having to take developmental courses, our developmental students are also faced with the reality that it will take more time and money to complete their degrees since these developmental students are required to pass and complete the developmental courses in which they placed, and that do not count toward their degrees, before they can take their required credit courses. While most FKCC students will agree that our developmental faculty and courses equip our students with the essential skills and habits needed to earn their college degree, it is clear that our students are frustrated by this predicament.

It is also clear that FKCC had found an instructional area – developmental studies (English, Writing, and Mathematics) - on which we needed to concentrate to not only improve the student experience but to also improve student learning. Ensuring student success in their developmental courses is critical to getting students
on track to earning their degrees in a timely and cost-effective manner. However, taking on the suite of developmental courses on as the topic for FKCC’s QEP was far too obtuse a task.

Looking at student placement, attitude, performance, and retention data for FKCC’s three developmental courses, the College discovered that 63% of all FKCC developmental studies students were enrolled in developmental math. A closer look at data showed that most developmental math students are anxious about learning math, that our students’ entry test results in math were 60.63%, below the Florida College System statistics, and that many students that struggled in their first math course at FKCC ended up failing or dropping the course only to have to repeat it later or, even worse, dropping out of college all together because of the high levels of frustration and poor levels of success our students had in their developmental math classes. Digging deeper, the QEP Leadership Team found that these instances were further backed up by anecdotal evidence shared by students, faculty, and advising staff. By July, 2010, FKCC had determined the very critical instructional area that desperately needed attention to improve student learning – developmental mathematics.

**Strategic Planning Inclusion**

During the 2010-11 year, FKCC created a performance measure for adopting a QEP that effectively enhances student learning. This performance measure supported FKCC’s Institutional Goal 1, to uphold a student-centered environment that promotes excellence in teaching and effective learning, as well as Strategic Objective Two, which is to ensure quality education and student learning through effective assessment measures. FKCC was successful in accomplishing this performance measure through its process for selecting a QEP topic and completion of a series of tasks that supports the QEP development.

Because the QEP topic selection and design process were successfully initiated during the 2010-11 year, the performance measures related to the QEP for this 2011-12 year have become more specific and link into additional strategic objectives and institutional goals:

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Institutional Goal 1: Uphold a student-centered environment that promotes excellence in teaching and effective learning

- Strategic Objective 1: Encourage and support quality education through innovation in content, services and delivery methods
  - Performance Measure: Refine and implement a comprehensive Quality Enhancement Plan
- Strategic Objective 2: Ensure quality education and student learning through effective assessment measures
  - Performance Measure: Engage Mathematics faculty in establishment and evaluation of QEP performance measures
- Strategic Objective 3: Develop a systematic and integrated approach to student persistence and success
  - Performance Measure: Create plan to track performance of QEP students

Institutional Goal 3: Foster a sustainable, healthy, and productive organizational environment focused on achieving the college’s mission

- Strategic Objective 11: Establish a culture of continuous improvement and integrity
  - Performance Measure: Submit QEP proposal with an implementation date of Spring 2012

The first three performance measures are the responsibility of the Instructional Division with supervision from FKCC’s provost. They will be fulfilled during the 2011-12 year, with the exception of the second performance measure, which is ongoing through 2013. The fourth performance measure is the responsibility of the Student Affairs and Accreditation Division and will be fulfilled by the Dean of Student Affairs and Accreditation during this 2011-12 year.

Unit Planning Inclusion

More specifically, the units that comprise the divisions within the institution also conduct planning that is documented into annual unit plans. These plans contain unit goals and objectives that correspond to and support FKCC’s Institutional Goals and Objectives. The 2011-12 plan for the Provost’s unit contains an objective for QEP implementation that supports Strategic Objective One. The Math and Sciences unit has developed an objective for aligning its priorities with the QEP that also corresponds to Strategic Objective 1. The plan for the Dean of Student Affairs and Accreditation’s unit includes a QEP development objective that supports Strategic Objective 11.
FKCC clearly demonstrates its commitment to QEP development and implementation through its institution-wide and multi-tiered planning processes. This practice assists the institution in maintaining its focus for enhancing student learning in developmental mathematics, as well as its ability for achieving its mission and vision.

**FKCC QEP Leadership**

In response to this conclusion, the QEP Leadership Team worked with FKCC’s Accreditation Leadership Team and focused its attention and refined the QEP purpose to improve student success in developmental mathematics. They defined two goals:

1. **Performance** – success will be measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test results of the intervention group.
2. **Transfer/Retention** – achievement measured by enrollment in the targeted, credit-level, “gate keeper course,” Intermediate Algebra (MAT 1033)

**Table 1. Accreditation Leadership - July 2010**

<table>
<thead>
<tr>
<th>Accreditation Leadership Team</th>
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<tbody>
<tr>
<td>Dr. Larry Tyree</td>
<td>President</td>
</tr>
<tr>
<td>Dr. Randy Charles</td>
<td>Provost</td>
</tr>
<tr>
<td>Brittany Snyder</td>
<td>Business Administration Faculty</td>
</tr>
<tr>
<td>Dr. Erika Mac Williams</td>
<td>Dir. of Accreditation &amp; Assessment</td>
</tr>
<tr>
<td>Michael McPherson</td>
<td>Dir. of Academic Affairs</td>
</tr>
<tr>
<td>Bryan Gilchrist</td>
<td>Dir. of Information</td>
</tr>
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QEP Leadership & Participation

The QEP Leadership Committee consisted of broad college community participation including diverse faculty, staff, and students. The QEP Leadership Committee Members were appointed by the then-Provost, Dr. Charles, and the President, Dr. Tyree based on the individuals’ familiarity with developmental math classes, as well as individual members’ skill sets and perspectives their positions lent to the project.

<table>
<thead>
<tr>
<th>Introduction/ Selection of QEP Topic</th>
<th>Faculty</th>
<th>Administration</th>
<th>Students</th>
<th>Staff</th>
<th>Board/Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Selected members of the faculty participated in the QEP Leadership Team and Topic Selection Committee introduced the concept of a QEP to the FKCC community</td>
<td>-Selected members of the administration participated in the QEP Leadership Team and Topic Selection Committee introduced the concept of a QEP to the FKCC community</td>
<td>-Two students participated in the QEP Leadership Team and Topic Selection Committee introduced the concept of a QEP to the FKCC community</td>
<td>-Selected members of the staff participated in the QEP Leadership Team and Topic Selection Committee introduced the concept of a QEP to the FKCC community</td>
<td>-All members of FKCC’s Board of Trustees participated in the Topic Selection Committee’s introduction of the concept of a QEP to the FKCC community</td>
<td></td>
</tr>
<tr>
<td>-All faculty participated in the QEP introductory</td>
<td>-All administration participated in the QEP</td>
<td>-Several students worked in groups to propose a QEP topic</td>
<td>-All staff participated in the QEP introductory</td>
<td>-5 members from Business Program Community Advisory Board participated in the Topic Selection Committee’s</td>
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**QEP Design and Development**

- All full-time math faculty assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee and positions as assigned on sub-committees
- Other faculty members from different disciplines at FKCC assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee and positions as assigned on sub-committees

- Selected administrators assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee and positions as assigned on sub-committees
- Selected students assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee

- Selected staff members assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee and positions as assigned on sub-committees

- One FKCC Trustee member assisted in the design and development of the QEP through their participation on the QEP Design and Development Committee and positions as assigned on sub-committees
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

| QEP Implementation | -All math faculty (full and part time) assisted in the implementation of the QEP through their participation on the QEP Implementation Team | -Students participated in the implementation of the QEP through:  
- The Student Government Association (SGA) added a Student QEP Liaison position to their elected executive board who will serve on the QEP Implementation Team and report back to the QEP ad-hoc committee  
- SGA created a student QEP ad-hoc committee of 4 student representatives | -All FKCC Trustees participated in the implementation of the QEP through monthly provost updates  
- The Florida Keys Education Foundation – funding of Island TIME and Student Success Center “Wish List” items for the duration of the project  
- Baby’s Coffee – corporate sponsorship of Island TIME Student of the Month |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-The majority of FKCC’s administrators assisted in the implementation of the QEP through their participation on the QEP Implementation Team</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Several full and part-time instructors assisted in the implementation of the QEP by re-designing and teaching the re-designed developmental math courses</td>
<td></td>
</tr>
</tbody>
</table>

It is important to note that student involvement in FKCC’s QEP is most apparent in the Topic Selection and Implementation phases. As FKCC compared its QEP progress and constituent make up with that of other institutions, it was evident that it needed more student involvement in the design and development phases of the QEP. In response to this finding, our QEP Implementation Phase was planned with an increased attention to

**FKCC QEP Purpose Statement**
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FKCC's QEP, Island TIME: Transition Into Math Excellence

student involvement. During the Fall, 2011 semester, the QEP Coordinator worked with Math Faculty to identify past and present developmental math students to participate in the QEP, resulting in two new student members of the QEP Implementation Team. In addition, the QEP Coordinator worked with FKCC’s Student Government Association (SGA) to create a QEP Student Liaison position within its executive board to serve as a QEP Implementation Team Member and participate in its weekly meetings. This liaison position also requires serving on an ad-hoc Student QEP Sub-Committee to the QEP Implementation Team that will be responsible for the student awareness of the QEP’s program Island TIME housed in the Student Success Center.

History of the Primary QEP Committees

The QEP Leadership Committee consisted of the following members: Brittany Snyder (Chair-faculty), Michael McPherson (administrator), EJ Miller-Laino (faculty), Suzy Park (advising), Juana Careaga (Learning Resource Center), and Jillian Manzer (adjunct faculty and administrator). Quillan Arico was added to the team as a student representative on January 15, 2010. Additional members were added that included Patricia Silcox (faculty), Melissa Nicholas (faculty), Candace Pringle (faculty), and Robin Jernigan (student).

The role of the chair of the committee was to guide the team, provide input into to the development of the plan, develop a timeline, and identify subcommittees and their responsibilities. Faculty members, Candace Pringle, EJ Miller-Laino, Patricia Silcox, and Melissa Nicholas were tasked with collaborating with Jillian Manzer, Administrator/Adjunct Faculty, and Michael McPherson, Academic administrator, on developing measurable goals and objectives for the QEP plan. Students Quillan Arico and Robin Jernigan helped to drive the focus of the plan related to students’ perceptions and experiences with mathematics in college.

FKCC QEP Purpose Statement

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Table 3: QEP Leadership Team Roster

<table>
<thead>
<tr>
<th>QEP Leadership Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brittany Snyder</td>
</tr>
<tr>
<td>Michael McPherson</td>
</tr>
<tr>
<td>EJ Miller-Laino</td>
</tr>
<tr>
<td>Suzy Park</td>
</tr>
<tr>
<td>Juana Careaga</td>
</tr>
<tr>
<td>Jillian Manzer</td>
</tr>
<tr>
<td>Quillan Arico</td>
</tr>
<tr>
<td>Robin Jernigan</td>
</tr>
<tr>
<td>Pat Silcox</td>
</tr>
<tr>
<td>Melissa Nicholas</td>
</tr>
<tr>
<td>Candace Pringle</td>
</tr>
</tbody>
</table>

On August 13, 2010, the founding Leadership Team was disbanded and replaced by the QEP Design and Development Team. This new committee was chaired by Frank Wood (faculty) and was tasked with taking the selected QEP topic and developing and writing a QEP plan. The team consisted of the following members:

Table 4: QEP Design and Development Team Roster

<table>
<thead>
<tr>
<th>The Design and Development Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSON</td>
</tr>
<tr>
<td>Frank Wood</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

In August of 2011, the QEP transitioned to the Implementation Team for execution and subsequent evaluation.

The QEP Implementation Team is responsible for the overall implementation of the college’s QEP, including the plan’s variety of instructional programs and the Student Success Center (SSC). The team, constructed of the broad-based participation of FKCC faculty, staff, and students and led by the QEP Coordinator, focuses on student awareness and engagement, campus-wide marketing, faculty and staff professional development, data collection and analysis, assessment, and financial resources and support as they relate to and ensure the success of the QEP.

### Table 5: Implementation Team Responsibilities

<table>
<thead>
<tr>
<th>QEP Implementation Team</th>
<th>Responsibilities</th>
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</thead>
<tbody>
<tr>
<td>Gavin McKeirnan</td>
<td>QEP Coordinator</td>
</tr>
<tr>
<td></td>
<td>Project Manager, QEP Implementation Committee Chair</td>
</tr>
<tr>
<td>Susan Carroll</td>
<td>Lead Developmental Math Faculty, Key West Campus</td>
</tr>
<tr>
<td></td>
<td>Instructor, Subject area expert</td>
</tr>
<tr>
<td>Susan McClellan</td>
<td>Math Faculty, Key West Campus</td>
</tr>
<tr>
<td></td>
<td>Instructor, Subject area expert</td>
</tr>
<tr>
<td>John Majewicz</td>
<td>Math Faculty, Key West Campus</td>
</tr>
<tr>
<td></td>
<td>Instructor, Subject area expert</td>
</tr>
<tr>
<td>Marjorie Rodriguez</td>
<td>Adjunct Math Faculty, Key West Campus</td>
</tr>
<tr>
<td></td>
<td>Instructor, Subject area expert</td>
</tr>
<tr>
<td>Jillian Manzer</td>
<td>Adjunct faculty &amp; Administration</td>
</tr>
<tr>
<td></td>
<td>Editing support</td>
</tr>
<tr>
<td>Brittany Snyder</td>
<td>Provost</td>
</tr>
<tr>
<td></td>
<td>Project Sponsor</td>
</tr>
</tbody>
</table>
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank Wood</td>
<td>QEP Development Chair</td>
<td>Guidance and Leadership</td>
</tr>
<tr>
<td>Bryan Gilchrist</td>
<td>Director of Information Technology</td>
<td>Technological resources</td>
</tr>
<tr>
<td>Erika MacWilliams</td>
<td>Dean of Student Affairs, Director of I.E. &amp; Assessments</td>
<td>Assessment and editing support</td>
</tr>
<tr>
<td>Michael McPherson</td>
<td>Director of Academic Affairs</td>
<td>Assessment support</td>
</tr>
<tr>
<td>Amber Ernst-Leonard</td>
<td>Director of College Relations</td>
<td>Marketing and Publicity campaign</td>
</tr>
<tr>
<td>Mary Martin</td>
<td>Assistant Director, Marketing</td>
<td>Development of marketing materials, signage</td>
</tr>
<tr>
<td>Linda MacMinn</td>
<td>Director of Institutional Research</td>
<td>Data Analysis and Information</td>
</tr>
<tr>
<td>Jean Mauk</td>
<td>Vice President, Business and Finance</td>
<td>Budget</td>
</tr>
<tr>
<td>Doug Pryor</td>
<td>Director Purchasing and Plant Operations</td>
<td>Facilities</td>
</tr>
<tr>
<td>Nicole Gerrard</td>
<td>Academic Advising</td>
<td>Coordination of Advising Strategies</td>
</tr>
<tr>
<td>Barbara Reis</td>
<td>Adjunct Math Faculty, Middle and Upper Keys campuses</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Tom Charette</td>
<td>Adjunct Math Faculty, Key West Campus</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Monica Mayock</td>
<td>Adjunct Math Faculty, Key West Campus</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Steve Balmes</td>
<td>Adjunct Math Faculty, Key West Campus</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Christine Ledwith</td>
<td>Adjunct Math Faculty, Upper Keys Campus</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Alex Terpos</td>
<td>Adjunct Math Faculty, Middle Keys Campus</td>
<td>Subject area expert</td>
</tr>
<tr>
<td>Gwen Oglesby</td>
<td>SGA QEP Liaison</td>
<td>Current Student, past developmental math</td>
</tr>
</tbody>
</table>

**FKCC QEP Purpose Statement**

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FKCC’s QEP, Island TIME: Transition Into Math Excellence

**Development of FKCC’s QEP and the Selection of its Focus**

**The Broad-Based Involvement to Select the QEP Topic**

The choice to focus on developmental mathematics as a QEP topic was the result of broad-based input from FKCC students, faculty, staff, and members of the community. The QEP selection process started in November, 2009 with the formation of the QEP Leadership Team (see Table 3). At that time, the focus of the Team was directed toward campus-wide education relating to reaffirmation and the QEP, specifically the QEP topic selection process. In November of 2009, six orientation sessions were conducted to give the community members a synopsis of SACS and the QEP process. These sessions were followed up in February of 2010 with focus groups. The focus group sessions conducted by the Team’s QEP Topic Selection Committee helped community members create a QEP proposal. Invitations were sent to students, faculty, staff and community members to attend the focus group meeting and announced that there would be a $500 prize to the person (See Appendix A) who submitted the topic the QEP Selection Committee chose. Posters were also displayed around campus advertising the events.

During the focus group sessions, attendees were given background information on the purpose of a QEP, were informed of the QEP Topic Selection Process (see Figure 4), and were given some preliminary data. Attendees were also invited to solicit more data they might require to support their QEP idea. Attendees were given a Topic Selection Worksheet and Rubric (see Appendix B and C) that the Topic Selection Committee would

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use to select the QEP’s topic.

**Figure 4: FKCC’s Topic Selection Process**

Two follow up meetings were held in March, 2010 to help Topic Selection participants refine their Topic Submission complete the Topic Selection Worksheet and attain more information to support their proposals. All participants of the focus groups were invited to attend the follow-up sessions. This process resulted in 9 QEP Topics being submitted by the FKCC Community.

**Potential QEP Topics Identified by FKCC Faculty, Students and Staff**

- Improving Education through Art and Cultural Enrichment
- Self-awareness and Inner Knowledge
- Improving Success Rates of Students with Disabilities
- Improving Education through Computer Literacy and Applied Educational Technology
- Improving Retention Rates through Mentoring/Improving Adult Education through Video Lectures
- Success through Retaining and Monitoring Students
- Improving Writing Skills across the Curriculum
- First Year Retention of Remedial and At-Risk Students

**Topic Selected and Refined, Goals Identified**

**First Year Retention of Remedial and At-Risk Students** was selected as a QEP focus as determined through constituents’ votes from the choices identified from the list above. While the focus selected addressed
“remedial” students, the College, in an effort to alleviate the negative connotations associated with the term, refers to this population as “developmental students.” In July of 2010, the QEP Leadership Team Members looked at its information on FKCC’s developmental students, particularly the students’ performance and retention rates in developmental reading, writing and mathematics courses. The Team compared this information to other community colleges within the state of Florida. This revealed that the number of FKCC’s students completing the highest level of developmental math fell far below the state average in performance (see Figure 5) and that the “success” rate of developmental students in math were far below the success rate of development students in either reading or writing (see Figure 6).
Figure 5: College Prep Math Success Accountability Report

Figure 6: College Prep Success Report: FKCC Math, Reading and Writing

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Given FKCC’s size and limited resources, the Team determined that the scope of developmental studies was too large for our institution to avail the resources necessary to improve all development studies. Further review of retention data of all developmental students, interviews with developmental faculty and students, anecdotal information from Advising Services Staff, pointed to the area of developmental math as the development area of greatest need. As a result, the Team identified developmental math students were at the most at-risk while demonstrating the most potential for success within FKCC’s developmental population. The Team was therefore narrowed the scope to a subject area that would most benefit our students and fulfill our mission: developmental math.

After further communications with FKCC students and faculty in regards to the College’s instructional enhancement needs and the collection and analysis of data on FKCC’s First Year Students’ performance and retention, it became clear to the QEP Leadership Team that developmental mathematics was a critical instructional area in which the College needed to improve its efforts. The selection of Developmental Mathematics as FKCC’s QEP Topic, now refined to a succinct, feasible, and measureable project, was further supported by the Math Faculty’s anecdotal evidence. Because math courses were often referred to by our students as “The Dream Killers,” the Math Faculty relayed that developmental math classes are the critical courses essential to the completion of the degrees and certificates our students seek at FKCC. This vividly illustrated that math was a major obstacle for the overall success of our students.

Data Analysis of FKCC’s Developmental Math Students

FKCC’s student enrollment in developmental education courses for reporting year 2010 was 830 students, cumulatively. The enrollment represents College Preparatory Reading I & II, College Preparatory English, Basic Mathematics (Developmental Math I) and Introduction to Algebra (Developmental Math II). The developmental mathematics enrollment for Basic Mathematics and Introduction to Algebra represents 63% of
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

Figure 7: Preparatory Enrollment by Discipline

Figure 8: Entry Level [math] Test Failure

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As evidenced in the data sets below, there are very good arguments for selecting developmental mathematics as our primary target for focused improvement.

Student performance in developmental mathematics, as represented by grade distribution, shows that 67% to 69% of students received a grade of C or better in Basic Math and Intro to Algebra respectively, making them eligible to progress to the next level (Tables 6 and 7).

### Table 6: Student Enrollment in Basic Mathematics (Academic Year 2010)

<table>
<thead>
<tr>
<th>MAT 0002-Basic Math</th>
<th>TERM</th>
<th>A.  201010</th>
<th>B.  201020</th>
<th>C.  201030</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRADE</td>
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<td>201010</td>
<td>201020</td>
<td>201030</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td></td>
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<td>3</td>
<td>46</td>
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<tr>
<td></td>
<td></td>
<td>24.2%</td>
<td>23.6%</td>
<td>25.0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td>25</td>
<td>17</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.2%</td>
<td>30.9%</td>
<td>50.0%</td>
<td>25.1%</td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td>27</td>
<td>7</td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.8%</td>
<td>12.7%</td>
<td>8.3%</td>
<td>18.3%</td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.1%</td>
<td>5.5%</td>
<td>8.3%</td>
<td>7.3%</td>
</tr>
<tr>
<td>F.</td>
<td></td>
<td>27</td>
<td>3</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.8%</td>
<td>5.5%</td>
<td>0.0%</td>
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<tr>
<td>FN.</td>
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<td>3</td>
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<tr>
<td></td>
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<td>0.0%</td>
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<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
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<td></td>
<td>0.0%</td>
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<td>0.0%</td>
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</tr>
<tr>
<td>W.</td>
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<td>7</td>
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<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.6%</td>
<td>12.7%</td>
<td>8.3%</td>
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<tr>
<td>Total</td>
<td></td>
<td>124</td>
<td>55</td>
<td>12</td>
<td>191</td>
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<tr>
<td>Percent</td>
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<td>100.0%</td>
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</tr>
</tbody>
</table>

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FKCC’s QEP, Island TIME: Transition Into Math Excellence

Table 7: Student Enrollment in Introduction to Algebra (Academic Year 2010)

<table>
<thead>
<tr>
<th>GRADE</th>
<th>201010</th>
<th>201020</th>
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<th>201110</th>
<th>Total</th>
</tr>
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<td>17.1%</td>
</tr>
<tr>
<td>B.</td>
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<td>13</td>
<td>2</td>
<td>4</td>
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<td></td>
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<td>15.4%</td>
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<tr>
<td>C.</td>
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<tr>
<td></td>
<td>0.0%</td>
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<tr>
<td>F.</td>
<td>1</td>
<td>5</td>
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<td>0.0%</td>
<td>7.7%</td>
<td>0.0%</td>
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</tr>
<tr>
<td>W.</td>
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<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>6.9%</td>
<td>7.7%</td>
<td>6.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>58</td>
<td>13</td>
<td>29</td>
<td>105</td>
</tr>
<tr>
<td>Percent</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Data on student progression from Basic Mathematics (MAT 0002) to Introduction to Algebra (MAT 0024) show roughly 71% of the students enrolled actually did progress to the next level of mathematics, and a total of 17 students in Basic Mathematics and Introduction to Algebra repeated at least one course from the Fall 2010 semester (see Table 8). Additionally, FKCC students’ pass rates for these developmental courses are well below the Florida College System average. These statistics, while not deleterious, are alarming enough to warrant intervention.
Table 8: Developmental Math Statistics Fall 2010

### Fall 2010 MAT 0002 Students

<table>
<thead>
<tr>
<th></th>
<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Success Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(grade C or better) Number</td>
<td>15</td>
<td>0</td>
<td>48</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>0</td>
<td>64</td>
<td>84</td>
</tr>
<tr>
<td><strong>Success Rate</strong></td>
<td>75%</td>
<td>N/A</td>
<td>75%</td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retention Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(enrolled in Spring 2011, any credit course) Number</td>
<td>13</td>
<td>0</td>
<td>44</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>0</td>
<td>64</td>
<td>84</td>
</tr>
<tr>
<td><strong>Retention Rate</strong></td>
<td>65%</td>
<td>N/A</td>
<td>69%</td>
<td>68%</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Progression Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(enrolled in MAT 0024C in Spring 2011) Number</td>
<td>7</td>
<td>0</td>
<td>38</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>0</td>
<td>48</td>
<td>63</td>
</tr>
<tr>
<td><strong>Progression Rate</strong></td>
<td>47%</td>
<td>N/A</td>
<td>79%</td>
<td>71%</td>
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<table>
<thead>
<tr>
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<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Persistence Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(unsuccessful in MAT 0002 in Fall 2010, re-enrolled in Spring 2011) Number</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>0</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td><strong>Persistence Rate</strong></td>
<td>0%</td>
<td>N/A</td>
<td>13%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Success Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(successfully completed MAT 0002) Number</td>
<td>7</td>
<td>0</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Fall 2010 and successfully completed Total</td>
<td>7</td>
<td>0</td>
<td>38</td>
<td>45</td>
</tr>
<tr>
<td>MAT 0024C Spring 2011 Course Success Rate</td>
<td>100%</td>
<td>N/A</td>
<td>63%</td>
<td>69%</td>
</tr>
</tbody>
</table>

### Fall 2010 MAT 0024C Students

<table>
<thead>
<tr>
<th></th>
<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Success Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(grade C or better) Number</td>
<td>14</td>
<td>11</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>12</td>
<td>64</td>
<td>97</td>
</tr>
<tr>
<td><strong>Success Rate</strong></td>
<td>67%</td>
<td>92%</td>
<td>55%</td>
<td>62%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Upper Keys Center</th>
<th>Middle Keys Center</th>
<th>Key West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retention Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(enrolled in Spring 2011, Number</td>
<td>12</td>
<td>9</td>
<td>50</td>
<td>71</td>
</tr>
</tbody>
</table>

**FKCC QEP Purpose Statement**

The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
FKCC’s QEP, Island TIME: Transition Into Math Excellence

The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Enrollment</th>
<th>FKCC Pass Rate</th>
<th>State Pass Rate</th>
<th>FKCC Withdraw Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 0002</td>
<td>Dev. Math</td>
<td>117</td>
<td>53%</td>
<td>*NR</td>
<td>11%</td>
</tr>
<tr>
<td>(2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 0024C</td>
<td>Intro to Algebra</td>
<td>39</td>
<td>46%</td>
<td>52.12%</td>
<td>41%</td>
</tr>
<tr>
<td>(2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 0002</td>
<td>Dev. Math</td>
<td>104</td>
<td>54%</td>
<td>*NR</td>
<td>9.6%</td>
</tr>
<tr>
<td>(2006)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 0024C</td>
<td>Intro to</td>
<td>36</td>
<td>50%</td>
<td>52.99%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table 9: FKCC & STATE OF FLORDIA: A LONGITUDINAL DEVELOPMENTAL MATH COMPARISON

FKCC QEP Purpose Statement
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
<th>Credits</th>
<th>Pass Rate</th>
<th>Pass Rate</th>
<th>*NR</th>
<th>Non-Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Algebra</td>
<td>96</td>
<td>65%</td>
<td>*NR</td>
<td></td>
<td>13.5%</td>
</tr>
<tr>
<td>2007</td>
<td>MAT 0024C Intro to Algebra</td>
<td>45</td>
<td>22%</td>
<td>52.96%</td>
<td>15.6%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>MAT 0024C Intro to Algebra</td>
<td>38</td>
<td>55%</td>
<td>51.73%</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>MAT 0024C Intro to Algebra</td>
<td>82</td>
<td>58%</td>
<td>55.49%</td>
<td>9.8%</td>
<td></td>
</tr>
</tbody>
</table>

*NR = Not Reported

**Definitions within the Context of the QEP**

In reviewing literature regarding best instructional practices, how students learn, and the utilization of technology as a means of instructional delivery, the committee recognized the need to define the critical components of the QEP in order to facilitate common understanding. By defining the major constructs, all stakeholders can share a unified meaning of the key goals, objectives, and strategies. After studying numerous QEPS from different institutions, thematic similarities related to goals and strategies for developmental mathematics, interventions, goals, and strategies became clear. As such, FKCC’s definitions are extended from the QEPs of colleges with similar topics, such as Northwest-Shoals Community College, Bevill State Community, and Stephen F. Austin State University.

For the purpose of this QEP,

**FKCC QEP Purpose Statement**
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
Student Engagement represents several critical features of collegiate quality.

- The first is the amount of time and effort students put into their studies (time on task) and other purposeful activities.
- Attitude and motivation
- Interactive and collaborative learning, including interaction with faculty.
- How the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning (NSSE, 2010).

Active Learning for the purpose of this QEP includes the creation of a learning environment that is interactive, which requires students to be responsible for construction of their own understanding of math concepts through interactive experiences of solving problems, spending significant time on the experiences, and, when needed, receiving the assistance of others including instructors, tutors, and peers. As an education technique, this method places less emphasis on transmitting information and more on developing students’ skill and involving students in higher order thinking.

Self Paced Learning is defined as providing students opportunities to engage in controlling the rate at which students are acquiring new information.

Computer Assisted Instruction (CAI) is defined as the utilization of publisher provided software in tandem with instructor and math lab tutors assisting.

Student Centered Learning includes active learning, collaboration, individualized instruction, self-paced learning and teacher as facilitator. A student centered focus will also provide immediate, relevant and individualized feedback to students.

Gateway Course for the purpose of this QEP is MAT 1033, Intermediate Algebra. It is through this course that all developmental math students must pass in order to enter into College Algebra.
- **College-level Targeted Courses** refers to college-level, three-credit mathematics courses such as College Algebra or Statistics, that often are prerequisites for many core and advanced classes required for successful degree and/or certificate completion.

- **Persistence** is defined as students who retake and pass a developmental math course after failing or withdrawing from the same course.

- **Progression** is defined as students who pass developmental math courses and continue on towards the next developmental math course within the sequence or on to college level math.

- **Traditional Learning** refers to face-to-face instruction conducted synchronously in a classroom that is conducted for a set amount of time in which the all members of the class are expected to progress at a similar pace. Generally the instructional method used for traditional learning is a lecture based “chalk and talk.”

- **Developmental Math I/MAT0014** refers to the new state-mandated developmental math course formerly known as Basic Math/MAT0002.

- **Developmental Math II/MAT0028** refers to the new state-mandated developmental math course formerly known as Introduction to Algebra/MAT0024C.

- **Student Attitude** refers to students’ anxiety toward mathematics.

### A Review of Relevant Literature

Best practices to enhance student success are documented in numerous respected journals and educational resources. The QEP sub-committee charged to research best practices for FKCC’s topic was comprised of members from faculty and student advisement. Their review of the relevant literature was based on numerous respected scholarly sources and on the work of peer colleges who have faced similar challenges.
The purpose of our review was to identify strategies for the successful implementation of the QEP and determine benchmarks for our own success.

A Documented Student Need

Research continues to show that a significant number of students start college unprepared for a college-level mathematics course (National Center for Educational Statistics, 2003). Without intervention, only 10% will graduate, and with appropriate assistance, up to 40% of those beginning college in developmental programs will earn a degree (Brittenham et al., 2003). Community colleges now serve over one-third of our nation’s postsecondary students each year. Unfortunately, as enrollment in these colleges has increased, students’ success rates have not kept pace. One of the major barriers for academically underprepared students is the need to pass non-credit developmental math classes. (Weissman et al., 2011).

What happens to those students who enroll in developmental education? Do they complete the sequence of developmental courses, do they enroll in college-level courses, and are they successful in those courses? According to National Educational Longitudinal Study data, 68 percent of students pass all of the developmental writing courses in which they enroll, and 71 percent pass all of the reading courses. Students have much less success with math courses—only 30 percent pass all of the math developmental courses in which they enroll (Attewell, Lavin, Domina, & Levey, 2006).

According to research conducted by Bailey, Jeong, and Cho, “There is mounting evidence that following the traditional sequence of developmental education courses is hindering community college students from progressing to college-level coursework and ultimately earning a credential.” (Bailey, Jeong, and Cho, 2010 p.) Their analysis of Achieving the Dream data on success in developmental math shows that …”33 percent of those referred to math remediation completed their sequence of developmental education.” (Bailey, Jeong and Cho, 2010 p.5) In this group, 42% did not complete college credit within three years of beginning their first semester of developmental math.
Best Practices in Developmental Mathematics

According to a recent study of institutions participating in Achieving the Dream, a national initiative to improve community college student success, more than half of all students were referred to developmental math, with 19 percent of the students directed to courses three levels below college-level math (Bailey, Jeong, & Cho 2010). It is these students—the ones furthest behind in math—who are least likely ever to advance into classes for college credit. Only 10 percent of this group made it past the sequence of developmental math to complete even one college-level credit-bearing course.

Blackner (2000) argued that: “The agrarian calendar and factory method of bringing students to the institution and working with them in large groups is still the most common form of instruction” (Blackner, p. 69-70)). In the traditional classroom, students receive a standardized curriculum in a prescribed amount of time. All students, regardless of mathematical background, motivation or any other factors, are placed into a classroom where the pace and depth of instruction is set by the instructor. Because there is, in most cases, a single instructor, it is difficult if not impossible to structure the instruction to meet the individual needs of each student’s learning and achievement. The 2011 Brief, Innovations in Developmental Math, provided a wealth of information regarding new developments and best practices in teaching developmental mathematics at Community Colleges. The brief noted that:

“For many community college students, the traditional course delivery model (students attend a semester-long lecture class several times per week) does not lead to success in developmental math. Students’ academic weaknesses do not divide neatly into 15-week semesters. Many developmental math students failed or never took college-prep math courses in high school; others are older adults returning to the classroom after significant time away from a classroom setting. As a result, colleges are redesigning course formats to help developmental learners more quickly acquire math skills and transition into credit-bearing programs. Innovative redesign models include accelerated classes, self-directed learning labs, online and other technology-rich learning models, course modules that “chunk”
material into manageable parts, and contextualization, the teaching of math with examples and applications from the student’s degree focus or career interests. These models serve as possible responses to the developmental math quagmire in which many students and colleges find themselves. “ (Le, Roger, and Santos, 2011 p. 3).

Boylan and Saxon (1999) as well as other researchers have examined the positive effects of developmental courses on student success. As noted in the Quality Enhancement Plan of Northwest-Shoals Community College, Boylan and Saxon concluded that successful developmental education should meet the following criteria:

- Students who complete remedial requirements do so within a reasonable amount of time (less than one year).
- Students who complete remedial courses also pass college-level courses in the same or similar subject areas.
- Students who successfully complete remedial courses achieve GPAs comparable to students who were not required to take remedial courses.
- Students who took remedial courses were retained over time.

The primary purpose of developmental courses is to enhance learners’ skill levels in order to remove known barriers to success in college-level coursework. This purpose can be measured by tracking student success in developmental courses through the first college-level course in the same subject area; thus, one of our goals is to increase students’ success in developmental math courses.

**Student Engagement-promoting success through engagement**

This QEP defines student engagement as inclusive of student attitude and motivation, active and collaborative learning, and institutional utilization of resources that support students. Research indicates (Boylan et al 2008, Notting, 2007, Chickering, 1987, Bonwell and Sutherland, 1996) that student engagement is
influenced and effected by students’ attitude, motivation, instructional strategies and institutional support resources.

Students’ attitude towards and motivation in mathematics may well affect their success in developmental math courses. As cited by Boylan et al’s 2008 research on students’ attitudes towards learning mathematics “Bloom (1976) estimates that as much as 25% of student performance is determined by affective characteristics.” (Boylan et al., 2008, p. 1) Furthermore, student’s attitudes and beliefs towards mathematics influence their performance. (Nolting 2007) According to researcher and math instructor, A. Perry, (2004) “Approximately 85% of this author’s students who take introductory mathematics classes claim to feel at least mild math anxiety, according to surveys administered during the first week of the semester.”(Perry, 2004 pg 1)

In the context of the research, what is math anxiety? The generally accepted definition of math anxiety is:

“The inability by an otherwise intelligent person to cope with quantification, and more generally, mathematics. When confronted with a math problem, the sufferer has sweaty palms, is nauseous, has heart palpitations, and experiences paralysis of thought.” (Malinsky, Ross, Pannells, & McJunckin, 2006 p. 274)

“Paralysis of thought” due to anxiety inhibits student’s ability to think clearly when presented with a math problem. Studies conducted on student performance in math supports that a student’s anxiety towards math negatively impacts their performance in math. (Ashcroft, 2009, Hembree, 1990) The research consistently demonstrates that student’s attitudes towards math shows positive correlations between math anxiety, negative feelings towards success in math, as well as motivation. (Ashcroft and Moore, 2009) Thomas-Browne’s quasi-experimental study further supports this notion of math anxiety’s effect on attitude and performance. Thomas-Browne discovered that as student’s levels of math anxiety increased, their attitudes and motivation towards learning math decreased. (Thomas-Browne, 2009) If students possess an anxiety towards mathematics as well as negative feelings towards learning mathematics, then, as the literature suggests, they will not be
motivated to succeed and actively participate in math courses. Recognizing that students’ attitude (level of anxiety) towards math is a barrier to their engagement in and success in the subject, this QEP will address students’ attitude towards math by decreasing their level of anxiety.

**Active Learning: Providing opportunities for self paced instruction**

Another component of student engagement and motivation is through the inclusion and expansion of active learning opportunities in the classroom. One key strategy identified in the literature is through expanding opportunities for students to control and accelerate their learning. Edgecombe’s working paper defines accelerated learning as “the reorganization of instruction and curricula in ways that facilitate the completion of educational requirements in an expedited manner” (Edgecombe 2011, p. 4). Evidence supporting accelerated learning in developmental courses shows an increase in retention and time on degree completion. Recent research suggests that the faster students progress toward a credential, the more likely they are to complete college. (Bowen, Chingos, & McPherson, 2009). Edgecombe purports that within accelerated developmental courses, the scheduling of courses and instructional activities also guide and prepare students for further academic pursuits that are in line with typical college level courses. He argues that “It is grounded in the view that developmental education should prepare students for success in subsequent coursework through exposure to rigorous performance standards and practice in skills and habits associated with consistently high academic achievement. The accelerated structure complements this reframing of developmental education teaching and content and acknowledges the complicated lives of many students by purposefully reducing the time required to complete these academic requirements” (Edgecombe 2011, p.6).

Edgecombe’s research includes a review of the various models of accelerated developmental instruction which include compressed courses, paired courses, the elimination of courses, modular based courses as well as the development of new or modified courses that incorporate significant curriculum redesigns and replace one or more classes at the developmental or college level. These strategies affords students the opportunity to control the rate at which they acquire new information.
Active Learning: Instructional Strategies

Bonwell and Sutherland (1996) suggest that an active learning strategy versus passive learning provides students with the ability to “internalize, understand, and remember material learned through active engagement in the learning process” (Bonwell and Sutherland, 1996 p. 3). Therefore, to further support student success, an inclusion of active learning strategies should be a component of an effective developmental program. Bonwell and Eison define active learning as “instructional activities that involve students in doing things and thinking about the things they are doing” (Bonwell and Eison, 1991 p.19). The author’s research suggests that faculty efforts to incorporate new instructional strategies are key as well as the support and recognition by administration of their efforts. Additionally, their research supports the need for active learning strategies as opposed to solely relying on traditional lecture.

Recognized educational leaders and theorists, Chickering and Gamson, Ericksen, Cross, and Astin inform us that students need to be actively involved in their education and not “passive recipients of instruction” (Chickering et al., 1987 p. 20).

Ueckert and Gess-Newsome (2008) note that “Active learning recognizes that individuals have to engage with the content and with others, unveil prior ideas, make connections between ideas, and construct new knowledge from their experiences.” Reflecting on this notion, we can see that the current use of traditional lecture may not be as effective as active learning. Active learning includes instructional activities such as collaboration, skillful questioning and application of new knowledge to previously learned concepts. These activities connect to our affective and cognitive abilities and skills. Traditional lecture based courses do not inherently incorporate these strategies. Lecture is passive by nature, and the issue is that “it is contrary to what we know about both learning and the generation of scientific knowledge” (Ueckert & Gess-Newsome 2008, p. 48).

Chickering et al. recognize the challenges in implementing active learning as it does not align to traditional higher education teaching methods, lecture, as well as facing the lack of incentive to change.
Furthermore, the authors identify what they call “noticeable gaps in the practice of higher education” (p. 21). These include gaps between teaching and learning, between teaching and testing, and between educational research and practice, as well as how faculty teach versus how they should be teaching (Cross, 1988).

Recommendations for implementing active learning strategies based on significant research include the following:

- Visual based instruction
- Supportive classroom environment
- Computer assisted instruction
- Cooperative learning
- Peer teaching

**Computer-Assisted Instruction (CAI)**

A frequently researched and successful strategy for active learning includes computer-assisted instruction. Computer-assisted instruction produces students with a higher retention rate and an increased rate of enrollment in higher math courses once completing their CAI course successfully (Cartnal, as cited in Golfin et al., 2005). This statement is characteristic of a significant body of research that supports the high value given to the use of computer-assisted instruction in mathematics.

CAI provides students with the benefits of individualized instruction, learning mastery and active learning opportunities that have been shown to be effective in the developmental classroom (Southeast Kentucky Community and Technical College, 2006). Furthermore, Ironsmith and Eppler’s 2007 research purports that instant feedback, afforded by the use of publisher provided software, allows students to utilize this information to continue to progress and master the task at hand.

As a result, computer-assisted instruction nurtures students’ ability to become independent learners and to assume the primary responsibility of improving their performance in mathematics courses by trying different learning strategies (McCabe, 2003). As recognized by Sosa et al, 2010, Frederickson et al 2005, and Gonzalez...
and Birch, 2000, computer assisted instruction provides students the opportunity to exercise control over the pace in at which they receive and absorb new information and spend more time on tasks. Furthermore, publisher provided software programs support instant feedback that is problem or activity specific. (Sosa et al, 2010) Ancillary supports such as computerized tutoring, as noted by Boylan and Saxon (1998) provides the students with more learning in less time, increased success in post-tests, and improved perceptions and attitudes toward learning.

In support of the Goals of the QEP and in line with the defined components of student engagement as referenced in this QEP, computer assisted instruction promotes active learning and thus the student is further engaged in the content and learning of mathematics. This is because computer assisted instruction by its very nature requires active engagement from the student compared to traditional passive, lecture based instruction. (Sosa et al, 2010)

Furthermore, numerous studies support the successful implementation of computer assisted instruction and its positive effects on student learning in mathematics. Studies of 17 high schools using CAI discovered increased student achievement in pre-algebra and algebra courses. (Barrow, Markman, and Rouse, 2009) Longitudinal research by Kulik and Kulik as cited by Sosa et al., found that students using computer assisted instruction outperformed students enrolled in lecture based instruction only. (Sosa et al, 2010) Research at Onondaga Community College in Syracuse, NY, indicates that students enrolled in developmental math courses utilizing computer assisted instruction had course pass rates 20% higher than students in traditional lecture math courses. (Testone, 2005)

Recognizing the positive effect of active learning strategies and computer assisted instruction, FKCC’s QEP strategies will include multiple opportunities for active learning, as well as self paced and individualized instruction through the utilization of computer assisted instruction.
**Enhancing Student Engagement: Institutional Utilization of Resources to Support Students**

There are other factors that affect student success in developmental courses that reach beyond the principles of active learning strategies. Another hallmark of student engagement is an institution’s utilization of resources to support student success. Case studies focused on the assessment, advising, placement of students in developmental education programs, as well as faculty instructional strategies provides further insight into the successes and continued challenges that colleges and universities face. Safran and Visher (2010) focused on how students are tested for college level courses, the degree to which students prepare for the exams, how the results are interpreted for advisement and the degree to which test results are used to inform instruction. Their case confirms other studies in developmental education that strongly suggest that effective advising and placement tests impact students. Additionally, cognitive assessments typically were not aligned to instruction. Initial assessments solely measured cognitive abilities and not affective traits in students. Safran and Visher indicate the overarching problems in the assessment and placement of developmental students were:

“...the score requirements across the college’s revealed inconsistency in the standard of college readiness as well as in the boundaries defining various levels and types of skill deficiency. We also observed firsthand the high-stakes nature of the placement tests, which measure narrow sets of skills at a single (and potentially problematic) point in time. Further, we consistently heard from college faculty that the placement tests are regarded as irrelevant to instruction. Finally, we noted that the colleges tend to have inconsistent processes for developing and revising policies and practices related to assessment and instruction” (Safron & Visher, 2010, p. 14.).

Hollis’ advice based on work completed with non-traditional students mirror’s other research based practices. Hollis’ research informs us that non-traditional students that typically require developmental education often do not complete a postsecondary education. In recognition of the importance of evaluating student’s affective attributes, Hollis states “with changing demographics and the students’ need for
remediation, academic advisors need to be cognizant of the nuances in working with this population” (p.31).

Hollis recommends a comprehensive academic advising plan for developmental students that includes:

- Supportive advising that encourages self-efficacy
- Careful planning of courses
- Coaching through difficult times or set backs
- Assisting the student in developing a network of support with faculty and tutorial services

Furthermore, Boylan’s 2009 work on developmental students points out the affective aspect of typical developmental education students. The research suggests that there are other factors to consider when assessing this population for appropriate placement. College placement tests can assist in identifying students’ level of competence in math, reading and writing; however, we must also consider other factors in students’ placement and success through developmental programs that include “attitude toward learning, motivation, autonomy, willingness to seek and accept help, desire to affiliate with peers or instructors, or willingness to expend effort on academic tasks.” Extending this idea into the academic advising process with developmental students, Boylan (2009) suggests that “It is reasonable to assume that placement of developmental students could be improved if colleges and universities utilized multiple variables in assessing and advising their incoming students” (Boylan 2009, p.15).

Based on significant research on the cognitive and affective behaviors of developmental students, Boylan has developed an advising model for developmental education students titled “Targeted Interventions for Developmental Educations Students (T.I.D.E.S). The T.I.D.E.S. model proposes specific steps for integrating research based practices into the academic advisement of development students. According to Boylan, the following steps should be incorporated:

- taking an inventory of available campus and community courses and services,
- developing student profiles to determine the types of services that might be helpful to students with various characteristics,
assessing individual students’ skills and characteristics,

- advising students using this assessment information and plan interventions,
- delivering targeted interventions according to the plan,
- monitoring students and evaluating their progress, and
- revising the targeted interventions as necessary.

Miller and Murray’s research on advising the developmental population provides in-depth reflection on evidenced based research on the needs of developmental students. Miller and Murray conclude that the work done by Tinto (2004), Boylan (2001) and McGillin (2003) support the need for focused academic advising and support services. For developmental students that are not prepared for the rigors of college level work, additional strategies that infuse skills to build resilience, effective course placement and sufficient support services to ensure success. Tinto, Boylan and McGillin’s research purports that schools should be providing developmental programs that focus on three major strategies:

- lays the groundwork' for success with effective academic advising;
- provides content and structure e.g., pre-college basic skills courses, tutoring, and topical workshops;
- develops resilient students who, despite sometimes improbable circumstances, can succeed.

Additionally, Miller and Murray remind us that research conducted by Tinto (2004) “maintains that campuses support the development of resilient students -- and thus enhance retention and graduation - when they provide effective academic advising.” They highlight how Tinto sees advising as a major component of the academic, social, and personal support programs necessary to help students meet their learning needs” (Miller & Murray, 2005 p.1 ). Therefore improved advising methods are incorporated into this QEP.

Support services for developmental students can incorporate advising support as a means of ensuring success and engagement. Visher et al (2010) conducted an analysis of support services within developmental math programs at South Texas College. The report provides an analysis of a mentoring project supporting developmental students. The authors conclude that mentoring students enrolled in developmental math and/or
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

attending school part time offers a positive impact on the success of this population. Mentoring initiatives in the program included supportive advising, ensuring student awareness of various support services and an “early alert” system when students were at risk of failing. Most notable in the results of the analysis of the mentoring program are:

- The program succeeded in increasing the number of students who used the Center for Learning Excellence, a campus resource that provided tutoring and other forms of academic support.
- The program led to a 15% decrease in the number of students withdrawing from their math course before the end of the semester.
- Part-time students were less likely to withdraw from and demonstrated a 13% increase in passage rates compared to the control group.

We can see that reviews of best practices in developmental education provide consistent affirmation of the need for well planned advising, multiple assessments and support services as well as leadership support, collaboration, financial support, and cognitive and affective assessments coupled with supportive and personalized academic advising, formative evaluation of the program, and “rigorous faculty hiring requirements” (Boylan & Saxon 2006). It is also noted that best practices included rigorous professional development programs for faculty and adjuncts as well as practices that promote student engagement and active learning strategies to help ensure the success of all students. As such, part of the QEP includes revision of advising practices, professional development opportunities for advisors and faculty, that addresses active learning, computer assisted instruction, and strategies for advising developmental students.

In support of our goals, and to guide the development of our plan, FKCC embarked on a thorough investigation and review of the literature on developmental math, active learning strategies, affective influences on math success and best practices in student support services. As a result of this process, the findings from the literature review informed FKCC’s development of its QEP and strategies to be utilized to improve student
learning in developmental mathematics. We better understand the factors that contribute to student’s success and retention in developmental mathematics.

Reflective of the evidence presented in the literature review, the strategies for FKCC’s QEP, Island TIME include:

- Enhancing student engagement through active learning strategies
  - Providing opportunities for collaborative learning
  - Providing opportunities to accelerate learning through individualized instruction
  - Utilizing computer assisted instruction to support active learning and motivation
  - Decreasing math anxiety through collaboration with FKCC Psychology Instructors
- Enhancing student support services through modifications in academic advising
- Providing professional development for faculty and staff implementing these new strategies

**SECTION III:
ISLAND TIME: TRANSITION INTO MATH EXCELLENCE**

**Introduction to Island TIME**

Based on broad-based participation from FKCC constituencies, extending the QEP into its strategic planning process, a review of relevant literature and best practices, visits to other colleges, and an analysis of institutional data, the QEP Topic Selection Committee presented enhanced student learning in developmental mathematics as the focus of the Quality Enhancement Plan. The topic was approved by the FKCC Board of Trustees, as well as the President.

The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and...
to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement. To accomplish this, the QEP will focus on two goals supported by eight outcomes. The goals of the QEP are directly related to the college’s mission and strategic plan.

The QEP is positioned to focus on analyzing and using the best practices and instructional strategies that will provide developmental students the best opportunity to learn. These strategies include re-design of the courses and the student experiences, as well as modification of instructional delivery.

QEP Goals, Outcomes, and Student Learning Outcomes

Two goals will be targeted, and success will be evaluated by measuring eight projected outcomes that are derived from those goals. The goals and outcomes that provide the framework for the QEP have been assigned to responsible personnel, have been designated a timeline, and have been allocated a budget for implementation. As such, the following pages describe the Florida Keys Community College Quality Enhancement Plan supported by additional best practices as noted by relevant literature.

**GOAL #1: Improve Student Performance in Mathematics**

**Context:**
By providing a redesigned developmental mathematics curriculum that includes computer-assisted and individualized lessons, active and collaborative learning strategies, and a technologically-enhanced environment as identified in the research of student success through engagement, the college will experience the following:

1.5. By spring term 2015, Developmental Math I student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results* of the intervention group in Key West to that of the control groups in the upper- and middle-keys centers, will increase by 20%.

1.6. By spring term 2015, Developmental Math II student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results* of the intervention group in Key West to that of the control groups in the upper- and middle-keys centers, will increase by 20%.

1.7. By spring term 2015, student math-related anxiety levels in Developmental Math I, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%.
1.8. By spring term 2015, student math-related anxiety levels in Developmental Math II, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%.

* Adjustments will be made to the pre- and post-test measures to include a breakdown of major concepts/components that measure specific student learning outcomes. This item by item analysis will be completed and included in the plan results.

GOAL #2: Improve Retention Rates of Students in Developmental Mathematics Courses

Context:
With differentiated advising, self-paced instruction with one-on-one assistance, improved student performance in developmental mathematics, and the overall re-branding of developmental mathematics courses to include a positive community-wide shift in the reputation of developmental mathematics at FKCC, the college will experience the following:

4.1. 11% increase in progression rates in Developmental Math I by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates after intervention is established.

4.2. 16% increase in progression rates in Developmental Math II by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates of Key West students after intervention is established.

4.3. 12% increase in persistence rates in Developmental Math I by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.

4.4. 14% increase in persistence rates in Developmental Math II by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.

In FKCC’s redesign of courses in order to increase overall success in developmental math and improve retention, the consideration of best practices, as well as other college’s approaches to developmental math QEPs, has been extremely helpful in developing our own plan. Our study of developmental math QEPs at other institutions has revealed that despite the numerous studies that reviewed, analyzed, and evaluated methodologies of math instruction and showed that student-centered modes of instruction are proven to be the most successful, the traditional method of mathematics instruction, a teacher-centered approach, is the primary choice of most math educators.

FKCC QEP Purpose Statement
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
Frank Wood and Nicole Gerrard, QEP Development Team members, visited Northwest Shoals Community College in Alabama and Northeast Mississippi Community College to learn of their approaches to their developmental math QEPs, and to see how, specifically, the Emporium Model, a student-centered, self-paced, and computer-assisted method of instruction, was used to teach developmental mathematics. Based on the experience and lessons learned of other developmental mathematics QEPs that focused on a transition to the Emporium Model of instruction, the following activities comprise the processes necessary to complete our developmental math QEP at FKCC. With those considerations in mind, the following sections address the plan to achieve Goals No. 1: placement of students, redesign of courses, and assessments of strategies.

**Student Placement into Developmental Math at FKCC**

As noted earlier, 63% of FKCC’s new students test into developmental math. Prior to 2011, FKCC used the College Placement Test (CPT) to test and place students. The requirements were as follows:

<table>
<thead>
<tr>
<th>Test Code</th>
<th>Test Name</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPTA</td>
<td>College Placement Test <em>Arithmetic</em></td>
<td>56 &amp; below MAT 0002-Basic Arithmetic/ MAT 0018 Developmental Math I</td>
</tr>
<tr>
<td>CPTE</td>
<td>College Placement Test <em>Elementary</em></td>
<td>98 &amp; above MAC 1105; MGF 1106; MAC 1114</td>
</tr>
</tbody>
</table>

**Florida College Placement Test (CPT)**
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

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<table>
<thead>
<tr>
<th>Algebra</th>
<th>72-97</th>
<th>MAT 1033*; STA 2023**</th>
</tr>
</thead>
<tbody>
<tr>
<td>71 &amp; below</td>
<td>MAT 0024/ MAT 0028 Developmental Math II</td>
<td></td>
</tr>
</tbody>
</table>

* Intermediate Algebra, ** Statistics

**MAT 0024C - Introduction to Algebra Learning Outcomes**
- Apply the order of operations to evaluate algebraic expressions, including those with parentheses and exponents.
- Simplifies an expression with integer exponents.
- Factor polynomial expressions (GCF, grouping, trinomials, and difference of squares).
- Solve linear equations in one variable using manipulations guided by the rules of arithmetic and the properties of equality.
- Solve application problems involving geometry (perimeter and area with algebraic expressions).

**MAT 0002 - Developmental Math I Learning Outcomes**
- Perform operations with integers (with applications).
- Perform operations with fractions (with applications).
- Perform operations with decimals (with applications).
- Simplify algebraic expressions involving one variable (2x + 5x).

As of the summer of 2011, the State of Florida Department of Education mandated a change in placement testing for developmental studies. This directive replaced CPT with PERT, Post-secondary Education Readiness Test. PERT is aligned by Florida faculty to the Post-secondary Readiness Competencies (PRC) in mathematics set by the State. These competencies have been determined by the state to be essential to student success and prior to enrolling in MAT 1033 (Intermediate Algebra). The test features 30 questions: 25 operational items which will serve as the basis of the student’s placement score and 5 field test items to continuously enhance the operational test bank. Each test question is aligned with a PRC per the test blueprint. All items have been approved and aligned by Florida faculty and culminate in summary scaled scores ranging from 50 – 150. The score interpretation and placements are as follows:
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Scores</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERT</td>
<td>123 - 150</td>
<td>MAT 1105 (College Algebra)</td>
</tr>
<tr>
<td></td>
<td>113 - 122</td>
<td>MAT 1033 (Intermediate Algebra)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STA 2023 (Statistics)</td>
</tr>
<tr>
<td></td>
<td>96 - 112</td>
<td>MAT 0024C (Intro to Algebra)</td>
</tr>
<tr>
<td></td>
<td>50 - 95</td>
<td>MAT 0002 (Basic Math)</td>
</tr>
</tbody>
</table>

Students who place into Basic Math (MAT0002) or Intro to Algebra (MAT 0024C) at FKCC will now experience re-designed courses with a student-centered approach to, or the Emporium Model of, instruction based on best practices in order to increase student comfort, competence and overall success in math, and their success in college-level courses.

**Island TIME Courses:**

**Developmental Math I and Developmental Math II Course Redesign**

Based on the positive reports by the National Center for Academic Transformation (NCAT), schools are successfully transitioning to the Emporium Model for teaching developmental mathematics. According to the NCAT website (2011), by redesigning introductory mathematics courses, NCAT’s partner institutions have found that the Emporium Model has consistently produced spectacular gains in student learning and impressive reductions in instructional costs. NCAT draws attention to four college and universities/colleges that have experienced this transformation: Cleveland State Community College, Louisiana State University, the University of Idaho, and the University of Alabama. Our QEP Design Team found the University of Alabama effort (also evidenced in the Northwest Shoals Community College’s initiative) to be especially relevant. As such, FKCC will pattern the course redesign methods used by the University of Alabama and Northwest Shoals Community College.

The QEP Implementation Team is currently redesigning Developmental Math I (MAT 0002) and Introduction to Algebra (MAT 0024C) in order to meet the goals set forth in our QEP and to improve the overall

FKCC QEP Purpose Statement

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success of our developmental math students. Approximately 63% of all students new to FKCC place in a
developmental math course. Students who have performed poorly in FKCC’s current developmental math
classes report high levels of dissatisfaction with the courses’ design and often need to repeat the course several
times to succeed. We have learned from our research and firsthand experience that a student’s initial college
math course plays a key role in establishing either a successful or a problematic transition from high school to
college.

Modeled in part on the Math Emporium at Virginia Tech, the course redesign involves the development
of a student-centered, computer-assisted, self-paced tutorial course that allows the individual student to focus
precisely on his or her questions and difficulties. Through its diagnostic and record-keeping functions, the course
software will provide quick feedback to students, instant assessment of skills competencies, and a steady flow of
information to the instructors and tutors. The interactive nature of the new teaching and learning process will
require students to be active participants rather than passive observers.

A small pilot program conducted during the spring 2000 semester at the University of Alabama indicated
that students spend more time working on problems, do better on exams, and show a greater persistence to the
final exam, findings that agree with results achieved at Virginia Tech. The D/F rate for students in the computer-
based sections of Intermediate Algebra was 27 percent, well below the 43 percent rate for students in the
traditional version of the course. Furthermore, on all four of the regular exams, the computer-based students
outperformed the "regular" students. Ninety-one percent of the students in the pilot program evaluated the
student-centered, computer-assisted approach as superior to a traditional delivery of the course.

FKCC will assess the impact of course redesign on learning in several ways. Perhaps the easiest and most
definitive measure will be student performance: semester grade averages and grade distributions. Periodic
satisfaction surveys will also be administered to students to measure both general student attitudes toward
math and toward the student-centered, computer-assisted approach to learning. Student performance in
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

Virginia Tech’s implementation also noted that this model is designed for active, student-directed learning since the student chooses how to learn the material. The absence of a routine classroom procedure encourages students to take more initiative and responsibility. Interactive tutorials provide individualized feedback for students to direct their learning. The Math Emporium’s tutors, who guide rather than instruct, point students toward appropriate resources and strategies. At the same time, comprehensive data collection allows teachers to adjust instruction as the course proceeds on the basis of continuously monitored performance and to deliver individualized suggestions and active help where appropriate. In this way, the system offers a personalized dimension that cannot be maintained in the old format.

A variety of learning materials, accessible at all hours, together with the in-person help available at the Math Emporium, will allow student and teacher to match learning and teaching styles. The computer-based practice, quizzes, and testing systems provide instant feedback (including customized suggestions) and the opportunity for multiple attempts at assessments. Computer-assisted exercises and quizzes provide a natural, interactive introduction to current computational methods. Active, student-directed learning, with prompt and ample feedback, will promote the specific goals of increasing understanding and developing core skills. In addition, content and skills will be retained and used more successfully as the student moves on to other courses in mathematics and related fields. The electronic system also allows students to rebuild and extend their understanding of algebra later on, when it is encountered in another course.

**FKCC’s Student Success Center**

The Student Success Center (SSC) Location sub-Committee to the QEP Development Team explored various options to host the computer-enhanced classroom and laboratory needed for the successful implementation of Island TIME.
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

Implementation of the Emporium Model for developmental math instruction. Ultimately, the highly-coveted ocean-view instructional space that was previously used for a discontinued continuing education program was identified and selected as the location of FKCC’s SSC. Located on the second floor of the Key West Campus’s Tennessee Williams Fine Arts Center, this area will provide space that is both highly functional and comfortable for student success. The state-of-the-art facility with the best view on campus, along with plans for a hospitality kiosk and the installation of an inspirational mural by an emerging artist and alumnus, will encourage student attendance at the SSC.

The primary space is divided into two distinct spaces that are separated by a transparent wall. First, the SSC Classroom with 25 individual computer stations will serve as the area for class meetings for the Island TIME courses: Basic Math and Developmental Math II, while the adjacent second space, the SSC Laboratory with 15 individual computer stations, will serve as the area for Island TIME student testing and homework completion. The foyer that leads to the SSC has glass double doors over which signage communicating “FKCC Student Success Center, Home of Island TIME” has been installed.

**Island TIME Advising: Academic Advising Redesign**

**Preparing Students for Island TIME: Revised Advising Protocol for Developmental Math Students**

The MetLife Awards publication (2010) notes an emerging strategy for improving outcomes is to create systems of support services to help developmental math students as they move through traditionally structured courses. Many of the most successful community college systems target a specific student population; offer ongoing support over an extended period; and blend instructional, programmatic, and student support services (Epper & Baker 2009). These holistic, “whole student” strategies align academic affairs and student affairs, two organizational units that have not historically worked in tandem. Two particularly successful and replicable
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

approaches are those at Delaware County Community College in Pennsylvania and Chaffey College in California.

FKCC’s student engagement component will focus on strategies to improve and redesign processes in which students interface with FKCC faculty, staff, and fellow students regarding developmental mathematics. As noted in the review of relevant literature, academic advising and support services have been shown to have an impact on the success and persistence of developmental students. As such, re-engineered FKCC processes include a myriad of student touch points: prospective student meetings, advising sessions, testing sessions, and re-engineered instruction. For example, the FKCC Student Advisement Center professionals are developing a student success-centered process that includes use of a consistently positive vocabulary and tone of presentation when introducing the concept of math placement testing, results reporting, and placement to students. The goal is to create an atmosphere where developmental math classes are viewed by students as “tools for success” and not “punishments for failures.”

Revising the protocol and methods for the academic advisement of developmental math students is an integral part of the QEP plan. Research based best practices in advising academically underprepared students recommend the use of techniques such as intrusive advising, encouraging self efficacy through the awareness of campus support services, understanding students’ affective needs, and positively discussing developmental programs and their benefits, as well as assisting students in planning their course of study. Recommended ancillary courses, such as college success courses that help to prepare students for the rigors of college work, are also strongly suggested in students’ educational plans.

Implementing an early alert system for students at risk of failure is another well documented and successful strategy for institutions to implement for developmental students. Additionally, academic advising departments should adopt consistent advising methods and common scripts to be used in discussing college placement scores, appropriate course placement.
FKCC Advising Practices before Island TIME

The current practices of advising developmental students, prior to the implementation of the QEP in developmental math, guide students to appropriate developmental math courses upon completion of an accepted college placement test, known as P.E.R.T. (Florida’s Post-secondary Education Readiness Test), ACT, or SAT. Advisors assist the students in interpreting college placement test results and explaining the required developmental courses that must be accomplished in order to be enrolled in college-level mathematics. Advisors are encouraged to provide students with information on complimentary tutoring services as well as using their instructors for additional assistance outside of the classroom. Tutoring services currently offered are through virtual software programs such as Smartthinking and MyMathLab. Personal tutoring is also offered through peer and faculty members in the ISLE, FKCC’s Interactive Student Learning Environment. Information regarding the aforementioned resources is communicated verbally to students and in writing through informative pamphlets and flyers.

For students that may be at risk of failure, the advising department collaborates with the Instructional administration and faculty in identifying students at risk of failing during the first three weeks of the semester. Students are identified as being at risk are those whom have not attended class, not completing homework, and/or failing assessments. A formal letter, the Midterm Progress Report, is mailed to these students informing them of their status and recommending that they seek a meeting with an advisor or faculty member to remEDIATE their status. Copies of the letter are maintained on student’s files. Students who choose to respond to the mid-term progress letter are scheduled to meet with an academic advisor and discuss what their challenges in current class are, how to address them and plan to continue or to withdraw from the course. For students that do not respond, there is no further action taken by the advising department.
FKCC Advising Practices with Island TIME

Through the inclusive research and design processes of the QEP, FKCC’s Student Advisement Center recognizes the need to enhance our approach to advising developmental studies students, as well as implementing strategies identified in the relevant literature. The Student Advisement Center is collaboratively working to re-design current methods of advising that incorporate research-based best practices. The re-design will also incorporate a collaborative revision with the marketing department to include positive language in college placement testing brochures, detailed information about the new ways that math is going to be taught with Island TIME themes, located in the new Student Success Center.

Revision of methods of advising developmental studies students will include the following research-based strategies:

1. **Develop a common language and script for advisors to use:**
   a. Explain purpose of the college placement test and reference student’s individual score results. Score page will have descriptive information on Island TIME (Transition into Math Excellence) (See Appendix D)
   b. Develop a script to be used by all advisors when working with developmental studies students that clearly and positively describes the Island TIME and the program’s home, the Student Success Center (SCC) (see Appendix E)
   c. Positively describe the benefits of learning math in the SCC

2. **Provide comprehensive information on campus and community resources**
   a. Develop a comprehensive informational packet that outlines college tutoring services, both the ISLE and virtual services.
b. Include copy of student handbook - outlines services, departments, contact information, academic calendar, academic progress policies.

c. Include newly revised testing brochures that explain testing scores and reference Island TIME in the Student Success Center.

d. Offer students tours of the Student Success Center.

3. Revise advising methods to include intrusive advising.

a. Develop an educational plan with student to include at least one academic year of courses. (See the Appendix of this document)

b. Include SLS 1401, College Survival Skills, for the first semester. SLS 1401 provides students with skill building in time management, self efficacy, study habits, and planning.

c. Provide a “welcome to Island TIME” letter and e-mail to students enrolling in developmental math courses through Banner Relationship Management. (See an example in the Appendix)

d. Through the use of an existing student recruitment/retention software application, Banner Relationship management, create automated and personalized phone and e-mail campaigns for students identified as being at risk for failure within the first three weeks of the semester. Factors for failure include non attendance, non participation in Student Success Center and homework, failure on assessments, and incomplete modules.

e. Collaborate with QEP coordinator and math faculty in intrusively advising students.

The Island TIME Advising Plan

Through the use of existing resources and collaborating with other departments, the Academic Advising Department will have the ability to broaden its reach and actively monitor the progress of our students enrolled in developmental math courses.
The Advising staff will assess its strategies through the means identified in Island TIME Assessment (starting on page 90) and improve strategies as necessary. Through the Advising staff’s usage of currently-available technology such as the Banner Relationship Management (BRM) System, the Advising Team and other departments directly-related to the QEP will document interactions with students, communications, and student outcomes. Data from MyMathLab, Smartthinking, and Student Success Center will be aggregated into reports that will be used for communication with students and measuring student success.

Although FKCC’s advising plan is utilizing new strategies to advise developmental math students including intrusive advising, the Advising staff recognizes that some students may still Withdraw or Fail. In an effort to capture information on how the department could have served these students better, Advising staff will reach out to students through phone calls and e-mails to ascertain what the barriers were to their success and how the Advising staff can better meet their needs.

**Island TIME Attitude: Addressing Student Anxiety**

Through its investigation of strategies to improve student learning in math, FKCC discovered in its review of relevant literature as well as in its local investigation of developmental math students that student attitude or, more accurately, anxiety toward mathematics is a critical obstacle to students’ success and retention in developmental math courses. As a result, FKCC included the decrease of student anxiety in Developmental Math I and II as objectives for its QEP goal to improve student performance and created an instrument to collect baseline data of developmental students’ anxiety toward math in the Fall 2011 Term and before the start of its developmental math courses redesign. According to the administration of the Attitude Survey at the beginning of the Fall 2011 Term, students scored an average of 3.5 and 3.4 in Developmental Math I and Developmental Math II, respectively, out of a scale of 6 with 6 being Extremely Anxious toward Math and 1 being Very
Comfortable with Math. These results show that FKCC’s developmental math students, on average, lean towards anxiety of math. The Attitude Survey will be administered again at the end of the course to continue to complete the collection of baseline data in measuring FKCC developmental math students’ anxiety before the intervention and course redesign of developmental math courses.

In addition to the instrument developed to measure student anxiety, FKCC intends to collaborate with its psychology faculty to create a comprehensive plan to address student anxiety in math, including the study of developmental math student focus groups, individual consultations with psychology faculty, anxiety relief workshops and other tools, to address its goal to increase student performance in developmental math through decreasing student math anxiety levels. This plan once completed, will become another means of measuring FKCC’s progress on its goal to improve student performance in math.

**Island TIME: Faculty and Staff Professional Development Plan**

**Introduction**

A professional development plan is in place to provide for the necessary training/professional development of the faculty and staff at FKCC. This includes, but is not limited to the Developmental Math Faculty, Student Success Center Math Tutors/Lab Assistants, Academic Advising and the QEP Coordinator. The purpose of the Student Success Center is to instruct and support developmental math students enrolled in Island TIME courses. By providing associated FKCC employees with the tools and instruments necessary to make this occur, the professional development plan aids in the success of the students and subsequently, the QEP.

During and after the initial professional development plan has run its course, on-going assessments of professional development will provide a basis for direction of future professional development offerings. Such assessments will include surveying of faculty and staff who provide instruction and support in the SSC, students
who have participated in SSC coursework and support functions that provide ancillary services to both students and faculty/staff. Additionally the utilization of focus groups comprised of stakeholders in the SSC and QEP processes will be realized through QEP Planning committee and other associated activities. This will allow for a robust picture to develop of the current needs of the SSC and the QEP processes respectively.

**Training Goals**

Goals identified in the needs analysis include:

1. Develop training topics that can be delivered via face-to-face training to meet the needs of a diverse (and dispersed) faculty.
2. Create a training calendar and communicate the calendar in advance to allow instructors to plan their attendance.
3. Provide hands-on navigating skills in MyMathLab including: logging in, navigating course content and common tools: settings for email, tests, quizzes, homework, and grade book.
4. Provide hands-on editing skills in MyMathLab and an understanding of how to use basic course tools.
5. Provide hands-on skills in the course grade book.
6. Provide advanced principles and techniques of the quiz, test, and homework tools.
7. Provide academic advising training with a focus on developmental students

The *Training and Workshops* section lists the workshops that will be developed and delivered by staff in 2011. Each workshop was developed with the instructor’s/lab assistant availability in mind. Other workshop topics will be offered throughout 2011 semesters as they are developed.

The *Development Plan and Training Goals Completion* sections of this plan are continuously updated as progression is made towards this plan’s stated goals.

**Professional Development Opportunities:**

The Professional Development opportunities offered below are not meant to be an exhaustive listing, but do capture what is currently in place to provide for the professional development of our employees involved with the Student Success Center and the overall QEP goals. While not serving as a comprehensive listing, the opportunities represent a commitment on behalf of the college and staff to meet the needs of the students and
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

Faculty/Staff/Math Tutors/Lab Assistants:

- New hire orientation for SSC
- Updates and Issues Training once per semester for new and existing
- College Planning Days
- College Conference Days
- Guest Presenter: Crystal Ingle, Northwest Shoals Community College, QEP Overview and Math Faculty Training on QEP/Emporium Model of Teaching
- Math Department In-Services
- The Partnership for the Assessment of College and Career Readiness (P.A.R.C.C): Postsecondary Engagement Meeting sponsored by Achieve in collaboration with the Division of Florida Colleges, will be held on October 12, 2011 in St. Petersburg, Florida
- Florida Developmental Education Association Membership
- 2012 National Association for Developmental Education (NADE) Conference (February 22-25, in Orlando, Florida

Advising Staff:

- Pearson My Math Lab webinar (10/11/11)
- Student Affair work studies & Ambassadors workshop (10/27/11)
- National Career Pathways Network Annual Conference (10/13/11 & 10/14/11)
- NACADA Academic Advising webinar (10/21/11)
- NACADA Academic Advising to Assess your Advising Program webinar (11/4/11)
- Critical Advising at Open Admissions (3/29/12)
- NACADA Advisor Training @ 2012 Region 4 Conference (3/11/12 – 3/13/12)

*All professional development opportunities will be open to participants regardless of their designation as faculty, staff, advising staff, etc.
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.

### Training and Workshops

<table>
<thead>
<tr>
<th>MyMathLab Basics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
</tr>
<tr>
<td>1 hr</td>
</tr>
<tr>
<td>1 hr</td>
</tr>
</tbody>
</table>

### Development Plan

<table>
<thead>
<tr>
<th>Training/Workshop</th>
<th>Organizational Need (link to unit goals/strategic goals)</th>
<th>Timeline/Frequency</th>
<th>Resources Needed</th>
<th>Developer’s Notes</th>
</tr>
</thead>
</table>
| MyMathLab Basics  | Provide MyMathLab support through training              | Once a semester beginning October 2011 | ● Computer Lab  
● MyMathLab account for all participants | Need to create a training course. This will be accomplished by the meeting date. |
| Developmental Math Course Design in MyMathLab | Provide MyMathLab support through training | Once a semester beginning October 2011 | ● Computer Lab  
● MyMathLab account for all participants  
● Training shells and content  
● Design document | |
The purpose of FKCC’s Quality Enhancement Plan (QEP), Island TIME: Transition Into Math Excellence, is to enhance student learning by improving student performance in developmental mathematics courses and to promote student transition to and success in targeted college-level courses. The focus of the re-designed experience of developmental mathematics instruction will be active learning and student engagement.
Island TIME Awareness: Marketing Island TIME and the Student Success Center

Marketing Plan Overview

The QEP marketing plan features a comprehensive marketing mix of elements designed to generate awareness of, and communicate resulting successes related to, the new developmental math initiative, Island TIME – Transition Into Math Excellence, and its operational headquarters, the Student Success Center.

The target groups for this plan include all members of the FKCC population, including current and potential students, faculty, staff, administrators, and the Keys community, at large. The structure and timeline for promotional activities were strategically developed to build increasing levels of awareness and understanding among each target group. Initial focus will be given to activity on the Key West Campus, as that is the location for the pilot group; however, focus will expand to the Middle and Upper Keys Centers. Promotional efforts will initially highlight key dates, including the “Grand Preview” of Island TIME and the Student Success Center, the SACS onsite visit, and the “Grand Opening” and launch of the program. Island TIME will continue to be a featured program at FKCC; reports on the curricula, student success, and progress reports will be an ongoing focus of communication.

Creating the Program “Brand”

Distinct branding for both the program, Island TIME, and the place, the Student Success Center (SSC), are required to communicate their purpose and benefits to our students. The Island TIME logo was created by an FKCC student as part of an assignment for a graphic design class. Nine strong logo
submissions were considered; however, the winning logo, which captures the spirit of both the program and FKCC’s island location, was the Development Team’s clear choice.

A separate logo for the SSC, depicting upward motion and progress, will be used along with the Island TIME logo in promotional materials, as well as physical signage on campus. A series of SSC logo-style arrows will be used to creatively lead students to the SSC via a path painted on the ground from key points on campus.

**GOAL 1: GENERATE AWARENESS**

*Generate awareness and build excitement about Island TIME among college community, including students, employees, members of FKCC boards, and the community, at-large.*

- **Communicating from the inside-out**: Ensure that internal audiences (employees and members of FKCC boards) are knowledgeable about the Island TIME program and its intended benefits for our students, and encouraged to be ambassadors of the program by sharing with external audiences.
  - Include regular coverage in President’s Friday Reports, which is disseminated to all employees, Board of Trustees, and FKCC Foundation Board of Directors (ongoing)
  - Feature a presentation on Island TIME/SSC at two college-wide employee meetings: Faculty/Staff Planning Day and Conference Day (Fall 2011)
  - Feature a presentation on Island TIME/SSC at a Board of Trustees meeting (October 2011)
  - Distribute Island TIME/SSC “Quick Notes”/desk tents to employees, Board of Trustees, and FKCC Foundation Board of Directors to reinforce comprehension of the program and to facilitate their subsequent promotion to students and community members.

- **Reaching Students**: Build awareness of, interest in, and excitement about Island TIME and its home, the SSC, among all students, beginning with a campaign in Fall 2011.
o Add an SSC page (under “Current Students”) and a QEP page (under “Academics”) to the FKCC website.

o Announce and promote Island TIME through the monthly electronic student newsletter “Voices,” posters (all FKCC locations), slideshow on the lobby television, student emails, printed and electronic course schedules, and the college’s Facebook page.

o QEP Coordinator gives “five minute pitches” about Island TIME/SSC to targeted developmental-level classes.

o Disseminate Island TIME informational brochures and “Afraid of Math?” rack cards in Advising Services (all FKCC locations), the SSC, and the Library.

o Engage students in “What TIME is it?” contests to win Island TIME and SSC-themed prizes.

o Encourage Student Ambassadors to engage prospective and current students in discussions about Island TIME.

- Community Awareness: The college will promote Island TIME, and the new learning opportunities it opens to the community through local news and social media.

  o The President and other college representatives will discuss Island TIME and the SSC during interviews on local radio shows, including the widely-listened to “Morning Magazine.”

  o Submit news releases announcing key points and milestones to media outlets; post on the college’s Facebook page and website, as well.

  o Promote the new program via the course schedule (distributed college-wide) and paid advertisements within semestery campaigns.

  o QEP Coordinator presents at local civic organizations, including the Rotary Club of Key West.
GOAL 2: PROMOTE RESULTS

Communicate updates and progress of Island TIME program, as well as results and student success stories, to college community as a means to change attitudes about developmental math and garner support for the program, students, and college.

- **Internal Support:** Report on Island TIME’s impact on and benefits to our students to internal audiences (employees and members of FKCC boards) to share with their students and circles of influence.
  - Feature progress and highlights in President’s Friday Reports, which is disseminated to all employees, Board of Trustees, and FKCC Foundation Board of Directors (ongoing)
  - Showcase an Island TIME student under the “Focus on Students” portion at a Board of Trustees meeting (Spring 2011)

- **Student Buzz:** Generate buzz about the benefits of Island TIME to improve attitudes toward development math.
  - Incorporate Island TIME success data and student testimonials in promotions through the monthly electronic student newsletter “Voices,” posters (all FKCC locations), slideshow on the lobby television, printed and electronic course schedules, and the college’s Facebook page.
  - Continue:
    - QEP Coordinator gives “five minute pitches” about Island TIME/SSC to targeted developmental-level classes.
    - Disseminate Island TIME informational brochures and “Afraid of Math?” rack cards in Advising Services (all FKCC locations), the SSC, and the Library.
    - Encourage Student Ambassadors and Student Government Association officers to engage prospective and current students in discussions about Island TIME.
• **Community Pride:** The college will tout the accomplishments of Island TIME to the community it serves through local news and social media.
  - The President and other college representatives will discuss Island TIME during interviews on local radio shows.
  - Submit news releases announcing progress and success stories to media outlets; post on the college’s Facebook page and website, as well.
  - Continue to include promotion of the new program via the course schedule (distributed college-wide) and paid advertisements within semesterly campaigns.

### Island TIME Administration and Implementation

As FKCC’s QEP in developmental math is implemented and ideas are piloted and proven successful, we believe that innovative curricular, instructional, support, and assessment strategies in the high-risk courses of Developmental Math I and Developmental Math II 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.

While FKCC has implemented stop-gap measures, the primary goal of Island TIME is to allow the institution to focus and consolidate its collective efforts in tackling the problem of student success in developmental math. Increasing time-on-task, student engagement, on-going faculty training, and policies that make students more comfortable and successful are the key components of Island TIME. The flexibility of the QEP courses will provide students an alternative path to move through developmental math courses at a faster or slower self-governed pace with increased support systems for success. For many students, Island TIME courses will provide a cost-effective solution to receiving necessary assistance and reduce the time taken to reach graduation.
The second goal of Island TIME will institute a student-centered, self-paced, computer-assisted and overall more supportive learning environment for students. In addition to changing the environment in the classroom, this goal involves many areas of the College, including student and tutoring services. Demonstrating FKCC’s capability to initiate, implement, and assess our QEP; resource requirements are supported with recurring funds for professional development, decreased class sizes, marketing, and other activities outlined in the QEP budget. These resources will be available for the duration of the QEP and are designed to become part of operational resources for increased student learning. To achieve this goal, the QEP focuses on the following objectives:

- By spring term 2015, Developmental Math I student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results* of the intervention group in Key West to that of the control groups in the upper- and middle-keys centers, will increase by 20%.

- By spring term 2015, Developmental Math II student performance, measured by comparing college-wide test results collected prior to the intervention as well as pre- and post-test (MyMathLab) results* of the intervention group in Key West to that of the control groups in the upper- and middle-keys centers, will increase by 20%.

- By spring term 2015, student math-related anxiety levels in Developmental Math I, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%.

- 11% increase in progression rates in Developmental Math I by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates after intervention is established.

- 16% increase in progression rates in Developmental Math II by Spring term 2016. Progression rates will be measured by comparing 5-year progression data prior to introducing intervention with progression rates of Key West students after intervention is established.

- 12% increase in persistence rates in Developmental Math I by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.

- 14% increase in persistence rates in Developmental Math II by Spring term 2016. Persistence rates will be measured by comparing 5-year persistence data prior to introducing intervention with persistence rates of Key West students after intervention is established.
By spring term 2015, student math-related anxiety levels in Developmental Math II, measured with the survey instrument administered prior to intervention in Fall Term 2011 and the results will be compared to those who participate in the intervention as well as those in the control groups in the upper- and middle-keys centers, will be reduced by 15%. To reach these objectives, the QEP incorporates a major course redesign. This approach includes the transition/redesign of developmental math courses to a self-paced, technology driven method of mathematics instruction: The Emporium Model. Numerous studies and literature reviews over the past two decades support the positive impact of computer-assisted instruction (CAI), a key component in the Emporium Model, to enhance student learning.

Students who take developmental math courses will be taught in redesigned CAI courses which will be planned to engage students in more active learning strategies. The focus will shift from class seat time to content mastery which will afford students the time and assistance needed to achieve competency of the primary learning outcomes of the courses. Pedagogical modifications also include a flexible self-paced system of advancement through the developmental mathematics material, allowing those that master skills to move on and those needing remediation more time on task. Developmental mathematics material will be modularized into more manageable “chunks” of information to aid student learning and offer students a motivating sense of accomplishment as they progress through the new system. As a result, students should not only be successful in developmental coursework but subsequent math, as well as other courses which require math knowledge.

The Island TIME Plan also incorporates increased financial and human resources. The FKCC Student Success Center (SCC), featuring a start-of-the-art classroom as well as an extension of this learning environment, the homework and testing lab, will be staffed by our QEP Coordinator and two Math Tutors/Lab Assistants, three new positions FKCC has created in support of our QEP. Students will receive immediate feedback and frequent assessment from their instructors, the interactive classroom
software, and the Math Tutors. Additionally, students will have more one-on-one interaction with their instructors and math tutors. Instructors will be able to further differentiate their instruction to meet individual student needs and will carefully monitor student progress. Tutors will be able to assist instructors in identifying students likely to have difficulty with the new method of instruction and provide concentrated student support as needed.

Further, student engagement will be assessed and improved through a new attention to students’ attitudes toward mathematics. While FKCC’s traditional use of placement tests can assist in identifying students’ level of competence in math, the College will now consider other factors in students’ placement, comfort, and success in developmental mathematics, including pre- and post-tests, attitude surveys, assessments and tools that will measure motivation, willingness to seek and accept help, and their willingness to expend effort on academic tasks. Providing a flexible, comfortable learning environment staffed with knowledgeable and supportive educators in addition to re-designing developmental math courses and the advising plan for developmental students are the key components to Island TIME and FKCC’s QEP. Island TIME will address the traditional student notion that developmental math courses are “The Dream Killers” head on and relieve students of their math anxiety. Student participants in FKCC’s Island TIME developmental math program will benefit greatly from early success delivered in a positive learning community at the Student Success Center.
QEP PHASE 1: TOPIC SELECTION –
SOLICITING INPUT AND IDEAS FROM THE FKCC COMMUNITY

During Phase 1, the QEP Topic Selection Committee included a broad-based involvement of FKCC constituencies. The Committee consisted of broad-based representatives of FKCC’s student, faculty staff and Board of Trustees. FKCC’s QEP Topic Selection Committee was assigned the following tasks by the provost and the president:

1. Developing the means of initially publicizing the QEP to the college community and of soliciting suggestions for FKCC’s QEP. The QEP Topic Selection Committee discussed several approaches to soliciting input and how to inform the FKCC community. There were many suggestions with regard to having broad inclusion and the use of mediated communication such as web and print. Much of the time dedicated to phase one involved soliciting input and informing the FKCC community about the process.

2. Developing a proposal form for suggestions. The QEP proposal form was developed with regard to SACS guidelines for the QEP and examples from institutional plans recently implemented. The QEP Topic Selection Committee also administered a survey to the FKCC community to identify areas of need in assessing suggestions for FKCC’s QEP.

3. Setting timelines for collection and selection processes. The QEP Topic Selection Committee was given a semester--Spring 2010--in which to complete their tasks. Initial meetings established forums and
information meetings on the QEP overview. Concurrently, a proposal form was developed and disseminated to the FKCC community. As ideas were submitted, a needs assessment survey was administered and the information was compiled. The final charge of phase one involved the selection of several viable plans to be forwarded to the next phase of the QEP process.

4. Narrowing down the number of suggestions received to approximately 5 ideas. With data from the needs assessment survey and the development of a topic breakdown form, each QEP Topic Selection member was charged with creating a list of ten viable ideas. The ten ideas were then reviewed for logistical and financial feasibility as well as for how well each addressed the needs of FKCC. The final four ideas were selected based on the criteria established by SACS and the Committee’s topic breakdown form. These four ideas were then developed into formalized proposals.

5. Requesting more developed proposals for the topics, examining feasibility, best practices, student learning outcomes and means of assessment, and costs. The topic selected by the QEP Topic Selection Committee in Phase One was selected in July, 2010 for presentation to the FKCC Board of Trustees. It was also presented to the FKCC community at various forums in early Fall, 2010 to invite comment and participation.

### QEP PHASE 1 TIMELINE: QEP TOPIC SELECTION 2009-2010

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall, 2009</td>
<td>Convene Reaffirmation/QEP leadership team</td>
<td>QEP Leadership Team formed and key reaffirmation tasks identified and assigned.</td>
<td>President and Provost</td>
</tr>
<tr>
<td>January, 2010</td>
<td>Appointment of Topic Selection Comm.</td>
<td>QEP Topic Selection Comm. formed with broad representation</td>
<td>Provost</td>
</tr>
<tr>
<td>February, 2010</td>
<td>QEP Topic contest</td>
<td>Campus-wide notification</td>
<td>Brittany Snyder, faculty &amp; QEP Topic Selection</td>
</tr>
</tbody>
</table>
FKCC’s QEP, *Island TIME: Transition Into Math Excellence*

<table>
<thead>
<tr>
<th>Month, Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March, 2010</td>
<td>Six focus groups were held to provide QEP initiative to FKCC community.</td>
</tr>
<tr>
<td>March, 2010</td>
<td>Two follow-up meetings to assist in topic submission refinement.</td>
</tr>
<tr>
<td>May, 2010</td>
<td>FKCC community-wide vote for QEP topic.</td>
</tr>
<tr>
<td>July, 2010</td>
<td>Refinement of topic.</td>
</tr>
<tr>
<td>July, 2010</td>
<td>Frank Wood (faculty &amp; QEP Design and Development Team chair) attends SACCR meeting in Savannah, GA.</td>
</tr>
<tr>
<td>August, 2010</td>
<td>Topic Selection Comm. disbanded.</td>
</tr>
</tbody>
</table>

### QEP PHASE 2: DESIGN AND DEVELOPMENT OF ISLAND TIME

Once the topic of FKCC’s QEP—Developmental Math—had been selected by the QEP Topic Selection Committee, the QEP Design and Development Team started work on FKCC’s QEP Phase 2, given its charge by the president and provost in August 2010.

#### 1. Focusing/Refining the Topic: Spring Semester 2009

- The QEP Design and Development Team, made up of FKCC student, faculty and staff representation, held a meeting in January 2009 to discuss how the proposed QEP would align with FKCC’s mission and strategic plan.
- The Task Force examined QEPs from other institutions that focused on a similar topic.
2. Researching/Writing the Prospectus: Fall Semester 2009

- With help from the Office of Institutional Research and Accreditation, the Phase Two Task Force members held informational workshops to encourage faculty participation.

- Once the projects were selected, the Task Force divided into subcommittees to draft the key portions of the QEP prospectus:
  - Literature review and best practices
  - Student learning outcomes/program goals, Implementation, and Timeline
  - Assessment measures
  - Organizational structure and resources
  - Marketing and outreach

**FKCC QEP Phase 2 Timeline: Design and Development of Island Time 2010-2011**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>August, 2010</td>
<td>QEP Design and Development Team begins</td>
<td>Topic is further refined and interventions identified</td>
<td>QEP Design and Development Team</td>
</tr>
<tr>
<td>September, 2010</td>
<td>Faculty Development Seminar</td>
<td>Faculty meet to learn of QEP progress and ways for each to participate</td>
<td>QEP Design and Development Team Chair</td>
</tr>
<tr>
<td>September, 2010</td>
<td>QEP Topic is presented to FKCC Board of Trustees</td>
<td>Trustees voted unanimously to approved and support the FKCC QEP as described in the purpose statement.</td>
<td>QEP Design and Development Team Chair &amp; FKCC Board of Trustees</td>
</tr>
<tr>
<td>October, 2010</td>
<td>Faculty Development Session with FKCC trustee Dr. Antoinette Martin</td>
<td>Dr. Martin, a practicing psychologist, led this faculty seminar focused on the psychology of learning.</td>
<td>QEP Design and Development Team Chair &amp; Dr. Antoinette Martin</td>
</tr>
<tr>
<td>November, 2010</td>
<td>Design Team meet with Dr. Barbara Jones</td>
<td>Refinement of QEP design strategies</td>
<td>QEP Design and Development Team &amp; Dr.</td>
</tr>
<tr>
<td>Month</td>
<td>Event</td>
<td>Details</td>
<td>Contacts</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>January, 2011</td>
<td>FKCC’s QEP Design and Development chair and student services advisor visit other college’s</td>
<td>FKCC Design and Development Team members visit NE Mississippi Community College and NW Shoals Community in Muscle Shoals, AL</td>
<td>Frank Wood, faculty and Nicole Gerrard, Advising Services</td>
</tr>
<tr>
<td>February, 2011</td>
<td>Design Team and Development meeting</td>
<td>Discussion with Design and Development Team regarding the success of the Emporium Model with developmental math students</td>
<td>The Design and Development Team Chair</td>
</tr>
<tr>
<td>February, 2011</td>
<td>Design and Development Team meeting to divide specific design component responsibilities *see QEP Design and Development Leadership</td>
<td>QEP Design and Development sub-committees formed; tasks and timeline determined</td>
<td>Design and Development Team Chair &amp; Design and Development Team</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Math Lab location subcommittee tours campus to consider campus sites.</td>
<td>2nd floor of Tenn. Williams Theatre is selected and approved as Math Lab location</td>
<td>Lab subcommittee members</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Design and Development Team chair meets with Dir. Of Information Technology</td>
<td>Determine hardware, furniture, and infrastructure needs for new math lab</td>
<td>Design Team and Development Chair &amp; Dir. of Information Technology.</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Literature Review committee researches “best practices” to support QEP</td>
<td>Best Practices and related literature is synthesized for QEP document</td>
<td>Susan Bousom, nursing faculty and Nicole Gerrard, Advising Services</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Human Resources subcommittee meets</td>
<td>Human resources needs determined</td>
<td>John Majewicz - math faculty and Frank Wood, business faculty</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Marketing subcommittee meets</td>
<td>Determination of marketing plan and require resources</td>
<td>Alex Brylske, diving faculty and Frank Wood, business faculty</td>
</tr>
<tr>
<td>Month</td>
<td>Event</td>
<td>Description</td>
<td>Responsible Parties</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>April, 2011</td>
<td>Budget is created to support human and physical capital needed</td>
<td>Determination of costs for personnel, technology, professional development, and assessment</td>
<td>Frank Wood - faculty, Bryan Gilchrist – IT, and Brittany Snyder, VP of Business Services</td>
</tr>
<tr>
<td>May, 2011</td>
<td>Assessments and Outcomes subcommittee meets</td>
<td>Determine methods of competency-based and indirect measures of assessment</td>
<td>Susan McClellan, math faculty, and Jillian Manzer, Institutional Effectiveness and adjunct faculty</td>
</tr>
<tr>
<td>June, 2011</td>
<td>Post newly created position of QEP Coordinator</td>
<td>Applications received and interview scheduled</td>
<td>Human Resources and Provost</td>
</tr>
<tr>
<td>June, 2011</td>
<td>Appointment and meeting of Implementation Team, comprised of entire math faculty (including adjuncts) and selected members from the Design and Development Team</td>
<td>Achieve consensus on goals, outcomes, and measurement for QEP</td>
<td>QEP Design and Development Team Chair and Implementation Team</td>
</tr>
<tr>
<td>June, 2011</td>
<td>QEP Design and Development Team disbanded</td>
<td>Pass QEP work on to QEP Coordinator and QEP Implementation Team</td>
<td>QEP Design and Development Team Chair</td>
</tr>
<tr>
<td>July, 2011</td>
<td>QEP Coordinator hired</td>
<td>QEP Coordinator begins employment and assumes primary responsibility of QEP</td>
<td>Human Resources, Provost, and QEP Coordinator</td>
</tr>
<tr>
<td>August, 2011</td>
<td>QEP Design and Development Chair turns all QEP information and management over to QEP Coordinator and Implementation Team</td>
<td>QEP Coordinator develops project plan, re-energizes and re-focuses the QEP Implementation Team, assigns roles and responsibilities for QEP Project</td>
<td>QEP Design and Development Chair, QEP Coordinator, QEP Implementation Team</td>
</tr>
<tr>
<td>August, 2011</td>
<td>Weekly QEP Implementation Team Meetings Commence</td>
<td>QEP Implementation Team</td>
<td>QEP Coordinator</td>
</tr>
<tr>
<td>Date</td>
<td>Activity Description</td>
<td>Responsible Party</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Math pre and posttests created and administered to development math students in QEP Pilot Semester (Fall 2011)</td>
<td>Math faculty (primarily driven by developmental faculty)</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>New Faculty Orientation (3 sessions)</td>
<td>Provost and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Gather baseline data of developmental math students’ completion of targeted college-level courses</td>
<td>Dir. Of Institutional Research and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Marketing Campaign begins</td>
<td>QEP Coordinator and Marketing Committee</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Pre-test competency of developmental math students</td>
<td>Developmental math faculty and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Attitude toward Math Survey</td>
<td>Developmental math faculty and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>August, 2011</td>
<td>Secure needed computers, furniture, and infrastructure for math lab.</td>
<td>Dir. Of Information Technology and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>September, 2011</td>
<td>5-minute pitch to all classes about Island Time.</td>
<td>QEP Coordinator and selected faculty members.</td>
<td></td>
</tr>
<tr>
<td>September, 2011</td>
<td>Story about Island Time in “Voices” – FKCC’s monthly newsletter</td>
<td>“Voices” Editor and QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>September, 2011</td>
<td>Planning Day</td>
<td>QEP Coordinator</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Complete Date</td>
<td>Responsible Party</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------------</td>
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<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>September, 2011</td>
<td>Prepare Lab space</td>
<td>Transform Student Success Center, set up wiring and install computers.</td>
<td>Dir. Of Information Technology and QEP Coordinator</td>
</tr>
<tr>
<td>October 18, 2011</td>
<td>Conference Day with all faculty and staff; Professional Development for math faculty</td>
<td>Bring in guest speaker, well informed about Emporium Math and QEP, to provide overview for entire faculty and to work intensively with the math faculty.</td>
<td>Provost, QEP Coordinator and an inspirational educator.</td>
</tr>
<tr>
<td>October 20, 2011</td>
<td>Grand Opening of new Student Success Center</td>
<td>Give all FKCC community a first-hand experience with the SSC.</td>
<td>President, Provost, and QEP Coordinator, and all.</td>
</tr>
<tr>
<td>November, 2011</td>
<td>Public Relations campaign for QEP/Island TIME</td>
<td>City/county officials proclaim “Island TIME Day” and generates news stories/releases</td>
<td>QEP Coordinator and FKCC’s Public Relations Director</td>
</tr>
<tr>
<td>November, 15-17, 2011</td>
<td>SACS Onsite Visit</td>
<td>Present and hear recommendation regarding the QEP</td>
<td>ALL</td>
</tr>
<tr>
<td>November, 2011</td>
<td>Consider SACS recommendations and implement improvements.</td>
<td>QEP Implementation Team</td>
<td>QEP Coordinator, math faculty, Implementation Team</td>
</tr>
<tr>
<td>December, 2011</td>
<td>Post-test competency of Pilot Semester developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(Final Exam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December, 2011</td>
<td>Attitude toward Math Survey of Pilot Semester developmental math students</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
</tbody>
</table>
QEP PHASES 3 TO 6: IMPLEMENTING, ASSESSING, EXPANDING, AND IMPROVING ISLAND TIME

Island TIME Implementation Timeline

The QEP will be implemented between Spring, 2012 and Spring, 2015, as shown in the QEP Implementation Timeline by Task and Person Responsible. For each task, a person is assigned responsibility. While the majority of the QEP Implementation occurs in Years 1 through 5, there are some activities that can begin upon SACS approval (November 2011). Those items are indicated in the pre-planning year (Spring, and Summer, 2011).

Island TIME Organizational Staffing and Support

FKCC has sufficient staffing to ensure the success of the proposed QEP. The QEP Coordinator will be responsible for implementation and coordination of FKCC’s QEP. The QEP will also be supported by expertise from multiple offices, as shown in Exhibit 2 below. Exhibit 3 provides a description of each supporting office’s expertise and the service(s) that it will contribute to the QEP. The QEP Coordinator reports directly to the Provost.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2012</td>
<td>Island TIME Implementation Semester</td>
<td>FKCC’s Development Math faculty implement the Emporium Model for teaching mathematics</td>
<td>Math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2012</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2012</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>Month</td>
<td>Event</td>
<td>Action</td>
<td>Test and Note Scores</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>April 2012</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(Final Exam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(last week of class)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2012</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>August 2012</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(first day of classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 2012</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(first day of classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 2012</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(Final Exam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 2012</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(last week of class)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2013</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2013</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(first day of classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2013</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(first day of classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2013</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(Final Exam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2013</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td>Results</td>
<td>Responsible</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(last week of class)</td>
<td></td>
<td></td>
<td>Coordinator</td>
</tr>
<tr>
<td>June 3013</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
</tbody>
</table>

**FKCC QEP PHASE 4 TIMELINE: ASSESSING ISLAND TIME**  
2013-2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
</table>
| August 2013  
(first day of classes) | Pre-test competency of developmental math students | Test and note scores                                                   | Developmental math faculty and QEP Coordinator                               |
| August 2013  
(first day of classes) | Attitude toward Math Survey     | Pre-test all developmental math students’ attitudes toward math         | Developmental math faculty and QEP Coordinator                               |
| December 2013  
(Final Exam) | Post-test competency of developmental math students | Test and note scores                                                   | Developmental math faculty and QEP Coordinator                               |
| December 2013  
(last week of class) | Attitude toward Math Survey     | Post-test all developmental math students’ attitudes toward math        | Developmental math faculty and QEP Coordinator                               |
| January 2014 | Data evaluation                 | Consider implications of first semester using Emporium Model            | Provost, Developmental math faculty and QEP Coordinator                   |
| January 2014  
(first day of classes) | Pre-test competency of developmental math students | Test and note scores                                                   | Developmental math faculty and QEP Coordinator                               |
| January 2014  
(first day of classes) | Attitude toward Math Survey     | Pre-test all developmental math students’ attitudes toward math         | Developmental math faculty and QEP Director                                |
| April 2014  
(Final Exam) | Post-test competency of developmental math students | Test and note scores                                                   | Developmental math faculty and QEP Coordinator                               |
| April 2014 | Attitude toward Math            | Post-test all developmental math                                       | Developmental math faculty and QEP Coordinator                               |
FKCC’s QEP, Island TIME: Transition Into Math Excellence

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(last week of class)</td>
<td>Survey</td>
<td>students’ attitudes toward math</td>
<td>Coordinator</td>
</tr>
<tr>
<td>June 2014</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
</tbody>
</table>

**FKCC QEP PHASE 5 TIMELINE: EXPANDING ISLAND TIME 2014-2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>June - August 2013</td>
<td>Expand Island TIME to include the Middle and Upper Keys Centers</td>
<td>All developmental math students will benefit for the QEP initiative</td>
<td>President, Provost, Dir. Of Information Technology, Center Directors, math faculty, and QEP Coordinator</td>
</tr>
<tr>
<td>August 2014 (first day of classes)</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>August 2014 (first day of classes)</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>December 2014 (Final Exam)</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>December 2014 (last week of class)</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2015</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2015 (first day of classes)</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2015 (first day of classes)</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td>Results</td>
<td>Responsible</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>April 2015 (Final Exam)</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>April 2015 (last week of class)</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>June 2015</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
</tbody>
</table>

**FKCC QEP PHASE 6 TIMELINE: ENHANCING ISLAND TIME**

*Phase 6: 2015-2016*

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Results</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2015 (first day of classes)</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>August 2015 (first day of classes)</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>December 2015 (Final Exam)</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>December 2015 (last week of class)</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students’ attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2016</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2016 (first day of classes)</td>
<td>Pre-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>January 2016</td>
<td>Attitude toward Math Survey</td>
<td>Pre-test all developmental math students’ attitudes</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Data/Information</td>
<td>Responsible Party</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>April 2016</td>
<td>Post-test competency of developmental math students</td>
<td>Test and note scores</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(Final Exam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2016</td>
<td>Attitude toward Math Survey</td>
<td>Post-test all developmental math students' attitudes toward math</td>
<td>Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td>(last week of class)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2016</td>
<td>Data evaluation</td>
<td>Consider implications of first semester using Emporium Model</td>
<td>Provost, Developmental math faculty and QEP Coordinator</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Island TIME Assessment**

The Island TIME Assessment Team, chaired by the QEP Coordinator, has developed a comprehensive assessment plan for Island TIME. Both formative and summative data will be included in the plan assessment. While it is critical to review formative and summative data in the assessment of large-scale initiatives, it is also important that assessment not be perceived as an additional instructional task. As such, the QEP Coordinator, Island TIME Assessment Team, and the Office of Accreditation and Assessment will collaborate in collecting, analyzing, and scoring data. Instructors will only be asked to schedule time for the assessment to take place.

The assessment team will convene at appropriate intervals to review and analyze assessment data for the strategies as it comes available throughout the project period. The team recognizes that new ideas and initiatives may need time to produce meaningful results. As a result, the plan specifies a review of a minimum of two cycles of data before the team determines whether the strategies are on track or need adjustment. While the team has developed a structured process, adjustments may be necessary after data is analyzed.
<table>
<thead>
<tr>
<th>Assessment Questions</th>
<th>Type of Assessment</th>
<th>Assessment Methods</th>
<th>Frequency</th>
<th>Base Line Performance</th>
<th>First Assessment Results</th>
<th>Second Assessment Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>What effect does incorporating innovative and interactive learning strategies have on student learning in developmental math?</td>
<td>F</td>
<td>Pre-test/Post-test</td>
<td>First and last week of Developmental Math I (MAT 0014)</td>
<td>Fall, 2011 Pre-Test: 47.3</td>
<td>Fall 2011 Post-Test: TBD</td>
<td>Fall, 2011</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Pre-test/Post-test</td>
<td>First and last week of Developmental Math II (MAT 0028)</td>
<td>Fall, 2011 Pre-Test: 26.2</td>
<td>Fall, 2011 Post-Test: TBD</td>
<td>Spring, 2012</td>
</tr>
<tr>
<td>To what extent has the strategy increased student success in MAT 0014?</td>
<td>F</td>
<td>MAT 0014 Course Success Rate</td>
<td>Fall and Spring semesters</td>
<td>Fall, 2011 Success Rate</td>
<td>TBD</td>
<td>Spring, 2012</td>
</tr>
<tr>
<td>What effect does incorporating innovative and interactive learning strategies have on student anxiety in MAT0014?</td>
<td>F</td>
<td>Pre-test/Post-test</td>
<td>First and last week of Developmental Math I (MAT 0014)</td>
<td>Fall, 2011 Pre-Test: 3.4</td>
<td>Fall 2011 Post-Test: TBD</td>
<td>Spring, 2012</td>
</tr>
<tr>
<td>What effect does incorporating innovative and</td>
<td>F</td>
<td>Pre-test/Post-test</td>
<td>First and last week of Developmental Math II</td>
<td>Fall, 2011 Pre-Test: 3.5</td>
<td>Spring, 2012</td>
<td>Fall, 2012</td>
</tr>
</tbody>
</table>
The fact that the MAT0028 Pre-Test average is considerably lower than that of MAT0018’s results can be contributed to the fact that the majority of the content on the MAT 0028 Pre-Test was Algebra-based and many of the current MAT0028 students had not been introduced to this content in MAT0018. Before the course re-design of MAT0018, students were not exposed to pre- or basic algebra. The Island TIME re-design of MAT0018 includes exposure to pre- and basic algebra to better prepare students for MAT0028 in the future. As a result, we anticipate the MAT0028 Pre-Test scores to improve as early as the Spring 2012 Semester.

Course post-tests will administered at the end of the Fall 2011, semester and results will be added to the above table to complete our baseline data and to determine the overall success rate in developmental math courses in Fall 2011.
## Island TIME Assessment Plan

### QEP Goal 2: Improve Student Retention Rates – Study of Mathematics

<table>
<thead>
<tr>
<th>Assessment Questions</th>
<th>Type of Assessment</th>
<th>Assessment Methods</th>
<th>Frequency</th>
<th>Base Line Performance</th>
<th>First Assessment Results</th>
<th>Second Assessment Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Form/Sum</td>
<td>Direct/Indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retention rates for MAT 0018 students (Percentage of Fall MAT 0018 students who enroll in the subsequent term)</td>
<td>Fall semesters</td>
<td>Fall, 2011 Fall to Spring Retention rate of MAT 0018 students 68%</td>
<td>Fall, 2012 Fall to Spring Retention rate of MAT 0018 students TBD</td>
<td>Fall, 2013 Fall to Spring Retention rate of MAT 0018 students TBD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retention rates for MAT 0028 students (Percentage of Fall MAT 0028 students who enroll in the subsequent term)</td>
<td>Fall semesters</td>
<td>Fall, 2011 Fall to Spring Retention rate of MAT 0028 students 73%</td>
<td>Fall, 2012 Fall to Spring Retention rate of MAT 0028 students TBD</td>
<td>Fall, 2013 Fall to Spring Retention rate of MAT 0028 students TBD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Progression rates for students who successfully complete MAT 0018 (Percentage of Fall MAT 0018 students who enroll in MAT 0028 the subsequent term)</td>
<td>Fall semesters</td>
<td>Fall, 2011 Successful Completer Progression Rate of MAT 0018 71%</td>
<td>Fall, 2012 Successful Completer Progression Rate of MAT 0018 TBD</td>
<td>Fall, 2013 Successful Completer Progression Rate of MAT 0018 TBD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Progression rates for students who successfully complete MAT</td>
<td>Fall semesters</td>
<td>Fall, 2011 Successful Completer Progression</td>
<td>Fall, 2012 Successful Completer Progression</td>
<td>Fall, 2013 Successful Completer Progression</td>
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</table>

To what extent has the strategy increased the measure of student progress for MAT 0018 and MAT 0028?
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<tr>
<th></th>
<th></th>
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<th>Fall</th>
<th>Fall, 2011</th>
<th>Fall, 2012</th>
<th>Fall, 2013</th>
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<tr>
<td></td>
<td></td>
<td>Rate of MAT 0028</td>
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<td>67%</td>
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<td>TBD</td>
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<tr>
<td>F</td>
<td>D</td>
<td>Persistence rates for MAT 0018</td>
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<td></td>
<td></td>
<td>(Percentage of unsuccessful Fall MAT 0018 students who re-enroll in MAT 0018)</td>
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<td>Persistence rates for MAT 0028</td>
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<td>(Percentage of unsuccessful Fall MAT 0028 students who re-enroll in MAT 0028)</td>
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<td>Fall semesters</td>
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<td>Fall, 2011 Unsuccessful Student Persistence Rate for MAT 0018 students</td>
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<td>10%</td>
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<td>TBD</td>
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<td>Persistence rates for MAT 0028</td>
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<td>(Percentage of unsuccessful Fall MAT 0028 students who re-enroll in MAT 0028)</td>
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<td>Fall semesters</td>
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<tr>
<td></td>
<td></td>
<td>Fall, 2011 Unsuccessful Student Persistence Rate for MAT 0028 students</td>
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<td></td>
<td></td>
<td>41%</td>
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<td>TBD</td>
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<td>TBD</td>
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</tbody>
</table>

To what extent has the strategy increased student success in the next level math course?

- **MAT 0028 Course Success rate for student progressing from MAT 0018**
  - Fall semester: Fall, 2011 69%
  - Spring, 2012 TBD
  - Fall, 2012 TBD

- **Course Success Rate in MAT 1033 for students who successfully complete MAT 0028**
  - Fall semester: Fall, 2011 80%
  - Spring, 2012 TBD
  - Fall, 2012 TBD

- **Course Success Rate in STA 2023 for students who successfully complete MAT 0028**
  - Spring semester: Spring, 2011 80%
  - Spring, 2012 TBD
  - Fall, 2012 TBD
SECTION IV: MANAGEMENT AND SUSTAINABILITY OF THE QEP

Organizational Structure

The management and sustainability of the QEP will require a significant investment of human, physical, and financial resources by Florida Keys Community College. To this end FKCC has made a strong commitment to the success of the QEP by allocating sufficient employees and budget to oversee and implement the project successfully.

The responsibility for the implementation and success of the QEP belongs to the College President. He has assigned oversight of the initiative to the Provost. The Provost in turn has tasked the QEP Coordinator to provide direct management and coordination for the project. The QEP Coordinator will be responsible for the coordination of the project as a whole, will manage the project budget, supervise the lab assistants and tutors, will direct the activities of the various departments and personnel involved in the initiative, and will provide regular reports on project progress to the President and Provost. Detailed position descriptions for Island TIME personnel are included in the Appendix. An organizational chart highlighting project personnel is located on page 96.
Financial Resources and Budget 2010-2016

Florida Keys Community College is committed to providing the required human, financial, and physical resources to ensure that the implementation and assessment of the QEP are successful. Although state budget funding has dropped in recent years, FKCC has made the commitment to allocate existing resources to this very important project. The college has been very innovative in adjusting to declining state revenues as well as a declining local student population. Personnel costs and the purchase of 40 computers for the FKCC Student Success Center are the major portions of the budget and were covered from reallocation of existing institutional resources.

Facilities play an important role in fulfilling the College’s mission. The College places great emphasis on the aesthetics, condition, and maintenance of facilities and grounds, and on the availability of adequate space to house the programs and activities of the college. Following this premise, existing ocean-view classrooms and offices have been re-purposed to become the new Student Success Center. The Capital Improvement Program, intended to meet the needs of the College and its students as the vehicle for provisioning adequate and appropriate facilities through renovation, remodeling, and new construction, was implemented for this endeavor. Capital Improvement Fee and Student Technology Fee revenues, which are assessed to all students including the QEP participants, are used as the funding source for the project and include information technology enhancements and furniture. These revenue streams will be used for any remodeling required in the future and further IT enhancements including computer refreshment.

The remaining expenses for personnel and supplies will be funded via a combination of state funding and tuition and fees from students attending the college. The Student Success budget will be incorporated into the overall college budget and be submitted each year as part of the College’s overall operating expense.
### Florida Keys Community College Estimated QEP Budget for 2010-2016

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<td><strong>Personnel Expenses</strong></td>
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<tr>
<td>QEP Chair</td>
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<tr>
<td>QEP Coordinator</td>
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<td>Lab Assists/Tutors</td>
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<td></td>
<td>41,600</td>
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<td><strong>Operational Expenses</strong></td>
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<td>Computers</td>
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<td>48,416</td>
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<td>76,833</td>
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<td>Battery Back-Ups</td>
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<tr>
<td>48 Port Network Switch</td>
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<tr>
<td>IT Enhancements (projectors, smart boards)</td>
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<tr>
<td>Electrical/Cabling/Power Poles</td>
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<td>3,400</td>
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<td>Paint/Renovation</td>
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<td>1,900</td>
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<tr>
<td>Furniture</td>
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<td>38,000</td>
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<td>Marketing</td>
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<td>1,000</td>
<td>1,000</td>
<td>16,000</td>
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<tr>
<td>Travel/Conference (Training)</td>
<td>2518</td>
<td>2,500</td>
<td>1,500</td>
<td>3,000</td>
<td>2,500</td>
<td>2,500</td>
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<td>Professional Services (Training)</td>
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<td>2,500</td>
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<td>2,500</td>
<td>11,000</td>
</tr>
<tr>
<td>Materials/Supplies</td>
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<td>2,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>13,000</td>
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<tr>
<td>Total Estimated Operational Exp.</td>
<td>64,000</td>
<td>9,000</td>
<td>35,500</td>
<td>9,500</td>
<td>9,000</td>
<td>184,171</td>
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</tr>
</tbody>
</table>
Information Needed to Complete the Plan

Florida Keys Community College recognizes its QEP as a living, breathing plan that will continue to improve in order to meet its goals and our students’ needs. Using an iterative and incremental process that will continue to identify and address needs as the plan is piloted in Spring 2012, the QEP Implementation Team has already identified several items needed to complete the plan. These include:

- Inclusion of End of Course Survey Information in Developmental Math Courses that Informed the QEP Topic Selection
- Baseline Data and Assessment of Island TIME’s Marketing Plan
- Baseline Data and Assessment of Island TIME’s Advising Plan
- Adjusted Assessment of Island TIME Courses to include Performance Post-Test Results and Student Learning Outcomes for Component Scores
- Adjusted Assessment of Island TIME Courses to include Attitude Post-Test Results
- Island TIME Attitude Plan and Assessment
- Institutional Policy and Procedure for Developmental Math Course Progression Process that include the Accelerated and Extended Learning Opportunities of Developmental Math Courses
- Faculty Management of Accelerated and Extended Learning Opportunities in Redesigned Developmental Math Courses

While the QEP Implementation Team continues its work on the QEP, its implementation and is currently addressing the above items for their inclusion in, the items listed above are not currently available in a format that can be included in this plan. Progress has been made on each of the items, however, and the QEP Implementation Team continues to work on these items for their inclusion in the plan’s next draft. A summary of improvements to this existing plan will be provided with the QEP’s next draft.
SECTION V: REFERENCES


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Anxiety and Academic Performance in Undergraduate and Graduate Students. Journal of Educational Psychology,
97(2), 268-274. doi:10.1037/0022-0663.97.2.268


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Retrieved from: EBSCO host


SECTION VI: APPENDIX

Appendix A: QEP Focus Group Flyer

Do you have an idea to improve student learning at Florida Keys Community College? Now is your chance to let your voice be heard and make a direct impact on education. FKCC is in the process of developing a Quality Enhancement Plan (QEP), which is a five-year plan that focuses on improving a single issue concerning student learning.

We need your thoughts, ideas, and involvement. That’s why we’ve decided to hold a contest. The winning proposal will be selected by the QEP Leadership Team and will be awarded $500.

To kick-off the contest, group meetings will be held for community members throughout the Keys. In these sessions, attendees will have the opportunity to learn more about the QEP, look at institutional data and get an overview of the QEP topic selection process.

<table>
<thead>
<tr>
<th>QEP Focus Group Meetings</th>
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<tbody>
<tr>
<td>Wednesday, February 17th: 7:00-8:00 p.m. in RmC121</td>
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<tr>
<td>Thursday, February 18th: 11:00-12:00 noon in RmC233</td>
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<tr>
<td>Friday, February 19th: 2:30-3:00 p.m. in Rm C233</td>
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<tr>
<td>Monday, February 22nd: 4:00-5:00 p.m. in Rm C233</td>
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<tr>
<td>Tuesday, February 23rd: 12:00-1:00 p.m. in Rm C115/Video Conference Rooms in the Middle and Upper Keys</td>
</tr>
</tbody>
</table>

We look forward to your participation. If you have any questions, please contact Brittany Snyder at 305-809-3233 or Michael McPherson at 305-809-3280.
## Appendix B: QEP Proposal Rubric

Quality Enhancement Plan  
Rubric for Evaluating Proposals

Reviewer: ________________________

<table>
<thead>
<tr>
<th>Score</th>
<th>Item</th>
<th>Comments</th>
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</thead>
</table>
|       | **Was a specific problem identified?**  
0 – Does not identify a problem that impacts student learning/learning environment  
4 – Problem is stated only in general terms as to how it would impact student learning/learning environment  
8 – Problem is specific and clearly identifies how it would impact student learning/learning environment | |
|       | **Project Rationale -- Why should this project be selected?**  
0 – Contains no statement of rationale  
2 – Rationale is stated only in general terms  
4 – Rationale is specific  
6 – Rationale is specific and provides a convincing case for the project | |
|       | **Data source supporting problem is indicated.**  
0 – No data source sited  
2 – Data source sited that vaguely identifies the problem  
4 – Data source sited that clearly identifies the problem | |
|       | **Were one or more strategies/activities identified that would address the problem?**  
0 – No strategies addressed  
2 – One or more strategy/activity addressed that would vaguely impact student learning/learning environment  
4 – One or more strategy/activity addressed that would clearly impact student learning/learning environment  
6 – One or more strategy/activity addressed that would clearly impact student learning/learning environment and result in the expected learning outcome | |
<table>
<thead>
<tr>
<th>Score</th>
<th>Item</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Are all resources needed to complete the QEP clearly identified?</strong>&lt;br&gt;0 – One or more resource categories not completed&lt;br&gt;2 – All resource categories completed</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Were the QEP outputs clearly identified?”</strong>&lt;br&gt;0 – No outputs identified&lt;br&gt;2 – One or more output identified but there is no clear link to how they relate to the problem and outcomes&lt;br&gt;4 – One or more output identified that establish clear links to problem and outcomes</td>
<td></td>
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<tr>
<td></td>
<td><strong>Were the QEP outcomes clearly identified?</strong>&lt;br&gt;0 – No outcome are provided&lt;br&gt;2 – One or more outcome is provided, but outcomes are vague.&lt;br&gt;4 – One or more outcome is provided that clearly links to the learning problem identified</td>
<td></td>
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<tr>
<td></td>
<td><strong>Support/acceptance at FKCC:</strong>&lt;br&gt;0 – Based on the discussion/justification provided, this proposal has a low potential for gaining widespread support and acceptance at FKCC&lt;br&gt;8– Based on the discussion/justification provided, this proposal has a high potential for gaining widespread support and acceptance at FKCC</td>
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<td><strong>Rapid deployment/timeline:</strong>&lt;br&gt;0 – Based on the discussion/justification provided, this proposal has a low potential for being able to provide meaningful results within five years.&lt;br&gt;8 – Based on the discussion/justification provided, this proposal has a high potential for being able to provide meaningful results within five years.</td>
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<td><strong>Point Total:</strong></td>
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## Appendix C: QEP Topic Development Sheet

### QEP Topic Development Sheet

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<th>Name:</th>
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<td>Phone Number:</td>
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<tr>
<td>Email:</td>
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</table>

**Identify Learning Obstacles:** What is the major problem/need impacting the quality of student learning at FKCC? (Think in terms of curriculum, pedagogy, and/or learning environment. Be specific!)

**Problem:** Identify a specific problem.

**Rationale:** Why would solving this problem be important to FKCC?

**Data:** What data source do you have to document this problem?

**Strategies/Activities:** What will the college do to address the problem/need identified above in order to achieve the expected outcomes? List at least one specific strategy/activity that needs to be implemented to address the problem.

- Strategies/Activities 1:
- Strategies/Activities 2:
- Strategies/Activities 3:
- Strategies/Activities 4:
- Strategies/Activities 5:

**Required Resources:** What are specific staffing, funds, facilities, equipment and admin support needs, required costs to address the problem/need identified? (Please include estimated costs and fill out all categories. If category is not applicable, please put N/A)

- Staffing:
- Funds:
- Facilities:
- Equipment:
- Library /Learning Resources:
- Administrative Support:

**Outputs:** If resources are provided and strategies/activities implemented, what products will be produced in terms of numbers of faculty trained, courses developed or revised, students involved, etc.?

- Output 1
- Output 2
- Output 3
- Output 4
- Output 5

**Examples:**
- All faculty will receive “Writing Across the Curriculum” training.
- A new English course will be developed which will incorporate critical thinking into the curriculum.
- All freshmen will attend 1 credit new student orientation class.
### Outcomes:

If the college adequately addresses the problem(s) and produces the expected Outputs in the QEP, what difference will it make in terms of student learning at the completion of the QEP implementation? Be specific and identify indirect (graduation, retention, job placement, licensure passing and other rates or measures) as well as direct measures (pre-post test results, peer comparisons, portfolio assessment, rubric assessment, and objective or criterion tests). Outcomes must be measurable!

<table>
<thead>
<tr>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
<th>Outcome 5</th>
</tr>
</thead>
</table>

**Examples:**
- 70% of students tested will score above the national mean on the CPT.
- 80% of English 1101 students will achieve an average score of 3.5 or higher on the reading rubric.
- 10% improvement in students’ critical thinking skills as measured by the Critical Assessment of Thinking Test (CAT).

### QEP Focus

Based on the information described above, identify your QEP topic by completing the following sentence. The purpose/focus of the QEP (Your title) is to ______. Use 1 to 3 clear, specific and measurable action verbs to describe the improvement or enhancement focus of the topic.

---

### Appendix D: Math Course Summary

**MAT 0002 - Basic Mathematics**
2.000 Credits

**Description:**
(Does not carry college credit). Designed for entering students with low scores mathematics placement. The course will teach all the arithmetic skills necessary for basic algebra. The topics will include whole numbers, fractions, decimals, percents, measurements, area, perimeter, volume, operations with integers, simple equations, and formulas. A scientific calculator (TI 30 or equivalent) is required.

**Learning Objectives:**
1. Recognize place value, add & subtract whole numbers
2. Round & estimate basic arithmetic expressions
3. Multiply & divide whole numbers
4. Problem solve, learn exponents, square roots & order of operation.
5. Introduction to fractions
6. Adding & subtracting unlike fractions and mixed numbers
7. Problem solving, exponents, order of operations
8. Decimal notation, order & rounding
9. Add & subtract decimals
10. Divide decimals
11. Proportions, % & fractions
12. Solving % problems using equations & proportions
13. Applications of %
14. Interest and problem solving
15. Learning lines, angles, plane figures & solids
16. Calculate perimeter, area & volume
17. Calculate volume
18. Pythagorean theorem, congruent & similar triangles
19. Define real numbers and subsets of them
20. Add & subtract real numbers
21. Multiply & divide real numbers
22. Simplifying expressions

MAT 0024C - Introduction to Algebra
3.000 Credits

Description:
(Does not carry college credit.) Algebra is the study of how variable quantities relate to each other. Students learn how to use the three most common kinds of mathematical relationships (linear, quadratic and exponential) to solve real problems. The graphing calculator is used throughout to illustrate the students' work in linear, quadratic, and exponential models. Extensive use of the graphing calculator also reduces the emphasis on memorized mathematical procedures and allows the student to focus on discovering how mathematical models solve real problems and allow us to make predictions about complex situations involving many variables. The students still use a procedure based textbook to learn the basic algebraic principles: signed number, equation solving, systems of equations, polynomials, factoring, rationals, radicals, quadratics, etc. However, the goal of the course involves a much higher order of thinking...the analysis and synthesis of math models and the evaluation of those models.

Learning Objectives:
1. Symbols, exponents, order of operations, adding real numbers,
2. Subtracting, multiply & dividing real numbers simplifying expressions
3. Properties of equalities
5. Graphing linear equations
6. Equations and slopes of lines
7. Graphing inequalities in 2 variables
8. Learning exponents and scientific notation
9. Adding & subtracting polynomials
10. Multiplying and special products of polynomials Dividing polynomials.
11. Determining greatest common factors Factoring trinomials
12. Learning about perfect square trinomials
13. Problem solving quadratic equations
14. Learning rational expressions Adding and subtracting rational expressions
15. Solving equations with rational expressions Simplifying complex fractions
16. Simplifying radicals
17. Adding,, subtracting, multiplying & dividing radicals
MAT 0018 - Developmental Mathematics I
3.000 Credits
Note: replaces MAT 0002 – Basic Math, Spring 2012
Description:
Topics include: whole numbers; integers; fractions; decimals; decimals and percents; geometry; pre-algebra.
Learning Objectives:
1. Perform operations on whole numbers (with applications, including area and perimeter)
2. Perform order of operations including absolute values
3. Evaluate exponents with whole numbers
4. Perform operations with integers (with applications)
5. Perform operations with fractions (with applications)
6. Simplify fractions
7. Perform operations with decimals (with applications)
8. Convert among percents, fractions, and decimals
9. Solve application problems involving geometry (circumference of circle, perimeter of polygons, area of triangle, parallelograms, circle)
10. Compare magnitude of real numbers
11. Classify sets of numbers
12. Identify and apply the properties of real numbers
13. Identify place value and round whole numbers
14. Write the prime factorization of a number
15. Evaluate exponents with integers
16. Evaluate absolute value expressions
17. Identify place value and round decimals
18. Solve percent equations with applications
19. Convert units of measurement within same measurement system
20. Set up and solve ratios and proportions with simple algebraic expressions
21. Solve linear equations involving the addition and multiplication property of equalities
22. Define variables and write an expression to represent a quantity in a problem
23. Simplify algebraic expressions involving one variable (2x + 5x); evaluate algebraic expressions (e.g., find value of 3x when x=2)
24. Solve formulas with given values
25. Graph an inequality on a number line

MAT 0028 - Developmental Mathematics II
3.000 Credits
Note: replaces MAT 0024C - Introduction to Algebra, Spring 2012
Description:
Topics include: exponents and polynomials; factoring; radicals, rationals; linear equations; graphing.
Learning Objectives:
1. Applies the order of operations to evaluate algebraic expressions, including those with parentheses and exponents
2. Simplifies an expression with integer exponents
3. Add, subtract, multiply, and divide polynomials; division by monomials only. (does not include division by binomials)
4. Solve quadratic equations in one variable by factoring
5. Factor polynomial expressions (gcf, grouping, trinomials, difference of squares)
6. Graph linear equations using table of values, intercepts, slope intercept form
7. Solve linear equations in one variable using manipulations guided by the rules of arithmetic and the properties of equality
8. Solve literal equations for a given variable with applications (geometry, motion \([d=rt]\), simple interest \([i=prt]\))
9. Simplify radical expressions - square roots only
10. Adds, subtracts, and multiplies square roots of monomials
11. Convert between scientific notation and standard notation
12. Solve application problems involving geometry (perimeter and area with algebraic expressions); identifies the intercepts of a linear equation
13. Identify the slope of a line (from slope formula, graph, and equation)
14. Solve multi-step problems involving fractions and percentages (include situations such as simple interest, tax, markups/markdowns, gratuities and commissions, fees, percent increase or decrease, percent error, expressing rent as a percentage of take-home pay)
15. Solve linear inequalities in one variable and graph the solution set on a number line
16. Rationalize the denominator (monomials only)
17. Solve application problems involving geometry (pythagorean theorem)
18. Recognize proportional relationships and solve problems involving rates and ratios
19. Simplify, multiply, and divide rational expressions
20. Add and subtract rational expressions with monomial denominators
21. Convert units of measurement across measurement systems

MAT 1033 - Intermediate Algebra
3.000 Credits

Description:
This course reviews and extends many of the topics in basic algebra. The student will solve real-world problems through linear and quadratic function modeling. A graphing calculator is required for this course.

Learning Objectives:
1. Solving linear equations and inequalities
2. Solve compound inequalities, absolute value equations and inequalities
3. Solve equations and inequalities in one variable
4. Study linear equations and inequalities in two variables, graphs and systems of equations in two variables and functions
5. Perform arithmetic operations with polynomials
6. Factor polynomials.
7. Perform arithmetic operations with rational expressions and solve equations that have them
8. Simplify radical expressions and solve equations containing them
9. Solve equations with rational expressions, solve quadratic equations
Appendix E: Mathematics Attitude Survey

Name
Date

Mathematics Attitude Survey

CONFIDENTIALITY CLAUSE: Your name is being used only to match data for statistical analysis. It will not be used for any other purpose.

Each of the statements on this survey expresses a feeling that a particular person has towards mathematics and engineering. There are no right or wrong answers. You are to express, on a six-point scale, the extent of agreement between the feeling expressed in each statement and your own personal feeling. The six points are:

Very Strongly Agree (VSG),
Strongly Agree (SA),
Agree (A),
Disagree (D),
Strongly Disagree (SD),
Very Strongly Disagree (VSD)

You are to circle the letter which best indicates how closely you agree or disagree with the feeling expressed in each statement.

Please mark only one answer, do not choose “in-between” categories.

1. Mathematics is very interesting to me and I enjoy my math courses.
   VSA  SA  A  D  SD  VSD

2. My mind goes blank, and I am unable to think clearly when doing math.
   VSA  SA  A  D  SD  VSD

3. I feel a sense of insecurity when doing math.
   VSA  SA  A  D  SD  VSD

4. Mathematics makes me feel uncomfortable, restless, irritable, and impatient.
   VSA  SA  A  D  SD  VSD

5. I approach math with a feeling of hesitation, resulting from a fear of not being able to do math.
   VSA  SA  A  D  SD  VSD

6. Mathematics is a course in school which I have always enjoyed studying.
   VSA  SA  A  D  SD  VSD

7. It makes me nervous to even think about having to do a math problem.
   VSA  SA  A  D  SD  VSD

8. I feel a definite positive reaction to mathematics; it’s enjoyable.
   VSA  SA  A  D  SD  VSD

9. If I am confronted with a new mathematical situation, I can cope with it because I have a good background in mathematics.
   VSA  SA  A  D  SD  VSD
10. I get flustered if I am confronted with a problem different from the problems worked in class.
VSA SA A D SD VSD

11. I do not attempt to work a problem without referring to the textbook or class notes.
VSA SA A D SD VSD

12. I can draw upon a wide variety of mathematical techniques to solve a particular problem.
VSA SA A D SD VSD

13. I do not feel that I have a good working knowledge of the mathematics courses I have taken so far.
VSA SA A D SD VSD

14. I believe that if I work long enough on a mathematics problem, I will be able to solve it.
VSA SA A D SD VSD

15. I have forgotten many of the mathematical concepts that I have learned.
VSA SA A D SD VSD

16. I learn mathematics by understanding the underlying logical principles, not by memorizing the rules.
VSA SA A D SD VSD

17. If I cannot solve a mathematics problem, at least I know a general method of attacking it.
VSA SA A D SD VSD

18. Mathematics problems are a challenge; solving problems provides satisfactions similar to those of winning a battle.
VSA SA A D SD VSD

19. Problem solving fascinates me.
VSA SA A D SD VSD

20. I have more confidence in my ability to deal with mathematics than in my ability to deal with other academic subjects.
VSA SA A D SD VSD

21. Mathematics classes provide the opportunity to learn values that are useful in other parts of daily living.
VSA SA A D SD VSD


Appendix F: Coordinator, QEP - Summarized Job Description

Job Title: Coordinator, Quality Enhancement Plan (QEP)

GENERAL DESCRIPTION: The Coordinator of the Quality Enhancement Plan (QEP) is a full-time position. The purpose of FKCC’s QEP is to enhance student learning in developmental mathematics by ensuring a successful transition and completion of college-level targeted courses. The focus of the interventions is student engagement and active learning strategies. This position is a professional position with duties and responsibilities established in accordance with State Board of Education Rules and Board of Trustees policies. Hours will
vary according to scheduling needs. This position maintains a 37.5 hour work week and reports to the Provost.

**ESSENTIAL JOB DUTIES:**

1. Provides leadership and supervision to involved personnel, in the collection, analysis, interpretation and evaluation of data and make recommendations for Program improvement.
2. Responsible for evaluating student learning and objective achievement and providing feedback.
3. Manages and maintains the Mathematics lab and all the operations involved in the quality services offered there.
4. Manages and maintains required office hours to provide assistance to students and communication with administration.
5. Selects appropriate materials and equipment for discipline and program use, and ensures proper care and safety in their use.
6. Adheres to and enforces the administrative policies and procedures of the College.
7. Collaborates with the Project Coordinator to evaluate progress, including collecting data and reporting results.
8. Maintain records of all aspects of the activity for evaluation purposes.
9. Works with other Faculty to evaluate and revise existing courses and to develop new courses.
10. Assists in implementing College policies, objectives and functions in accordance with the College Mission Statement.
11. Participates and assists with SACS accreditation efforts as assigned by supervisor.
13. Responsible for keeping current in the discipline or program areas taught.
14. Participates in staff and committee work.
15. Attends college-wide academic and staff meetings and official functions.
16. Maintains good relationship with community agencies and groups and participates as appropriate.
17. Required to attend spring Graduation/Commencement ceremony.
18. Other related duties as assigned.

(These essential job functions are not to be construed as complete statement of all duties performed. Employees will be required to perform other job related marginal duties as required.)

**KNOWLEDGE SKILLS AND ABILITIES:**

- Ability to manage projects and budgets with specified goals, objectives and timelines.
- Understanding and commitment to Equal Access/Equal Opportunity.
- Advising and teaching experience preferred
- Ability to maintain effective working relationships with other employees and the public
- Excellent written and verbal communication skills
- Excellent organizational skills with the ability to multitask
- Knowledge of College mission, policies, procedures and services.
- Ability to commit to continued effort to stay current in program area.
- Strong student orientation and ability to work with a diverse student population.
- Proficient in the use of technology.
FKCC’s QEP, Island TIME: Transition Into Math Excellence

- Ability to manage programs, and resources effectively.
- Ability to plan, budget, and evaluate activities.
- Ability to supervise part-time lab personnel.

**EDUCATION AND QUALIFICATIONS:**

- Master’s Degree from an accredited college or university in discipline, student services or related field preferred. Bachelor’s degree required.
- Three (3) years leadership experience in a post secondary institution preferred.
- Three (3) years experience that demonstrates knowledge of curriculum, learning assessments and faculty and staff training.
- Advising or teaching experience with at-risk students.
  (A comparable amount of training, education or experience can be substituted for the minimum qualifications.)

**Appendix G: Faculty, Mathematics - Summarized Job Description**

**Position:** Faculty, Mathematics

**GENERAL DESCRIPTION:**

The Faculty, Mathematics position is a full-time, 10-month Faculty position. This position is an instructional position with duties and responsibilities which are established in accordance with State Board of Education Rules and Board of Trustee policies. Teaching assignment will include developmental and college entry level mathematics courses, college level courses, as well as providing tutoring services to enable students to better master basic math skills, engage in mathematics problem solving, and to think critically and analytically. Hours will vary according to class schedules. Faculty maintains a 37.5-hour week. This position reports to the Department Head.

**ESSENTIAL JOB DUTIES:**

1. Plans, organizes and instructs assigned courses to promote student success.
2. Maintains required office hours to provide assistance to students and communication with administration.
3. Responsible for evaluating student learning and objective achievement and providing feedback.
4. Selects appropriate materials and equipment for discipline or program use, and ensures proper care and safety in their use.
5. Assists the Department Head with the Math Lab, including tutoring and maintenance of lab.
6. Monitors students’ progress and provides additional testing or academic counseling in mathematics whenever possible.
7. Coordinates with other math instructors regarding students who are not making satisfactory progress and need assistance in math to design an effective program of remediation.
8. Assists Department Head with maintaining and upgrading the computer math software.
9. Assists in providing security and management of the math lab.
10. Adheres to and enforces the administrative policies and procedures of the College.
11. Works with other Faculty to evaluate and revise existing courses and to develop new courses.
12. Assists in implementing College policies, objectives and functions in accordance with the College Mission Statement.
13. Participates and assists with SACS accreditation efforts as assigned by supervisor.
14. Participates in Institutional Planning and Budget process.
15. Responsible for keeping current in the discipline or program areas taught.
16. Participates in staff and committee work.
17. Attends College-wide academic and staff meetings and academic official functions.
18. Maintains good relationships with community agencies and groups and participates as appropriate.
19. Attends spring Graduation/Commencement ceremony.
20. Additional duties as assigned.

(These essential job functions are not to be construed as a complete statement of all duties performed. Employees will be required to perform other job related marginal duties as required.)

KWONLEDGE, ABILITIES AND SKILLS:
- Ability to deliver high quality instruction in a range of math courses.
- Ability to commit to continued effort to stay current in program area.
- Knowledge of College mission, policies, procedures and services.
- Strong student orientation and ability to work with a diverse student population.
- Proficient in use of technology (computers and Texas Instrument graphic calculators).
- Ability to manage programs and resources effectively.
- Ability to plan, budget, and evaluate activities.
- Ability to relate successfully to faculty, staff, students and the community.
- Excellent oral and written communication skills.
- Ability to handle multiple projects simultaneously.

EDUCATION and QUALIFICATIONS:
- Master’s degree in discipline or Master’s degree in any field with 18 graduate semester hours of prefix specific coursework in field.
- Doctorate preferred.
- Three (3) years teaching experience at the community college level or higher is preferred.
- Three (3) years work experience in field is preferred.
- Understanding and commitment to Equal Access/Equal Opportunity.
- Experience with or willingness to develop distance-learning classes.

Appendix H: Student Success Center Lab Assistant/Math Tutor – Summarized Job Description

Job Title: Student Success Center (SSC) Lab Assistant/Math Tutor

GENERAL DESCRIPTION:

The SSC Lab Assistant/Math Tutor at FKCC is a full-time position responsible for performing a variety of instructional support activities in the SSC, including administering assessments and providing tutoring in
developmental mathematics courses. Work is performed under the supervision of the Coordinator of the Quality Enhancement Plan.

**ESSENTIAL JOB DUTIES:**

- Tutors students in developmental mathematics courses offered at FKCC, including assisting students in developing and implementing individualized study plans; tutoring students on an individual or small group basis; and tutoring students in specific course material
- Meets with instructors as necessary to obtain course information that will assist in effective tutoring
- Monitor’s individual student progress
- Maintains files of assessment and administers and scores assessments taken by student when appropriate.
- Provides security for all assessments and equipment assigned to the FKCC Student Success Center.
- Explains the process and assists students in using tutorial computer system.
- Maintains individual student usage records to determine forms of assessments taken.
- Maintains check-in system for students in the SSC and collect usage data for both.
- Works with faculty to preview and install mathematics software.
- Is responsible for operation of all computers/printers and related equipment in SSC.
- Prepares reports on SSC usage and/or operations as well as maintaining an updates inventory equipment list. Schedules special class meetings/workshops in the SSC.
- Adheres to established safety and health procedures and practices for the purpose of providing injury and illness prevention for self and others.
- Assists with supervision of college work study students in the SSC.

(These essential job functions are not to be construed as a complete statement of all duties performed. Employees will be required to perform other job related marginal duties as required.)

**KNOWLEDGE, ABILITIES AND SKILLS:**

- Ability and willingness to work a flexible schedule including daytime, evening, and weekend hours.
- Ability to communicate ideas along with being able to ask and answer questions
- Thorough knowledge of subject matter
- Possesses an enthusiasm for learning
- Ability to communicate with and appreciate diverse cultural and ethnic backgrounds
- Ability to maintain confidentiality
- Cooperative, patient attitude
- Computer skills

**EDUCATION AND QUALIFICATIONS:**

- Associate Degree in Mathematics or equivalent.
- Sixteen hours of college mathematics including College Algebra, Trigonometry and Calculus I, II, and III or their equivalent.
• Nine hours of computer science courses, or equivalent.
• Experience with graphing calculators, mathematics application software, and maintaining and installing computer hardware and software.
  (Education, experience and other training may be substituted for the minimum qualifications.)

**Appendix I: Director, Institutional Research – Summarized Job Description**

**Job Title:** Director, Institutional Research

**GENERAL DESCRIPTION**
The Director, Institutional Research provides leadership for and development of a comprehensive program of institutional research and evaluation activities to maximize institutional effectiveness. The Director is responsible for; the systematic and inclusive analysis of academic and administrative programs and College operations including strategic planning, accreditation and enrollment trends, and required internal and external reports and surveys. This position reports to the Vice President, Administrative and Financial Services.

**ESSENTIAL JOB DUTIES:**
1. Oversees the collection, management, integration, analysis and reporting of data for the College’s institutional reporting.
2. Designs, develops and implements components of the College’s executive management information system and institutional effectiveness measures.
3. Works with the Director, Institutional Effectiveness to design, develop and implement student outcomes surveys analyzing student responses to services and programs and other concerns as they arise.
4. Analyzes enrollment data for program development and purpose.
5. Works closely with the Institutional Effectiveness division.
6. Provides institutional data, analysis and support for program review, assessment and strategic planning.
7. Provides leadership for the completion, accuracy and timeliness of state, federal and SACS reporting.
8. Directs the preparation of external and internal research as it relates to and supports strategic and annual planning.
9. Performs the duties of State Reports Coordinator and all associated activities:
   a. First contact between college and the Community College Technical Center MIS
   b. Collects and/or coordinates data for submission
   c. Maintains reporting tools/resources
   d. Responds to ad-hoc reporting requests
   e. Maintains FKCC information on the Florida Community Colleges Directory
   f. Disseminates information provided by the offices and/or agencies of the FDOE
   g. Functions at the IPEDS Reports Coordinator
10. Participates in efforts, activities and responsibilities with regards to SACS accreditation and reaffirmation.
11. Researches current findings, policy and procedure changes as well as monitors computer applications relating to analysis and graphic display.

12. Utilizes appropriate statistical software to analyze and interpret research data, as suitable to the individual position. Maintains and troubleshoots problems with various statistical software tools.

13. Interfaces with the other departments and divisions within the College to facilitate information flow and assists in identifying and structuring research needs.

14. Produces institutional assessment reports as needed, including but not limited to: enrollment, retention, graduation, faculty productivity etc.

15. Designs and/or develops specific databases for collection, tracking, and reporting of research data, as appropriate to the position.

16. Required to attend spring Graduation/Commencement ceremony.

17. Participates in committees as assigned.

18. Other duties as determined by specific objectives and/or as assigned by the Vice President, Administrative and Financial Services.

(These essential job functions are not to be construed as a complete statement of all duties performed. Employees will be required to perform other job related marginal duties as required.)

**KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of the use of SQL to query large databases.
- Ability to analyze and troubleshoot technical problems.
- Ability to convey complex information to others clearly and concisely.
- Ability to complete a variety of tasks simultaneously.
- Ability to communicate both verbally and in writing.
- Strong customer service skills.

**EDUCATION AND QUALIFICATIONS:**

- Bachelor’s degree from an accredited institution in educational research or related field.
- Three (3) years of related experience. Experience in institutional research at the post-graduate level preferred.

(A comparable amount of training, education or experience may be substituted for the above minimum qualifications)