SACSCOC & QEP

Fun Facts to Know and Tell

Math Multiplies Opportunities

SACSCOC Visit on Tuesday

- 8:45 AM – 10:30 AM — Barrow & Forsyth Campus Site Visits
  - The team will split up to visit these two campuses. The visit will primarily consist of a site walk-through. The team is also likely to talk with campus leadership, instructors, staff, and students. (The Visiting Team selected the campuses to visit and chose not to visit all campuses.)
- 2:45 PM – 3:15 PM — Oakwood Campus- Meet with Leadership Team
- 3:15 PM – 4:15 PM — Oakwood Campus- Meet with QEP Design Teams
- 4:15 PM – 5:15 PM — Oakwood Campus- Meet with specific individuals (The visiting team will let us know the names of those with whom they would like to meet before November 4)

SACSCOC Visit on Wednesday

All meetings on Oakwood Campus

- 8:30 AM – 10:30 AM —Meet with specific individuals (The visiting team will let us know the names of those with whom they would like to meet before November 4)
- 8:30 AM – 10:30 AM — Meet with QEP Selection/Design/Implementation Teams
- 10:45 AM – 12:00 PM — Focused Group Discussions pertaining to the QEP
- 12:15 – 1:30 PM (Two Luncheon Meetings with: representatives from State Board & student representatives)
- 1:30 PM – 3:00 PM — Meet with QEP Team as needed
- 2:00 PM – 3:00 PM — Meet with President

SACSCOC Visit on Thursday

- All meetings at Legacy Lodge at Lake Lanier Islands
- 8:30 AM – 9:30 AM — Exit Conference with Leadership Team and QEP Design Team

What is a QEP?

A QEP is a carefully designed course of action that reflects and affirms an institution's commitment to enhancing the quality of higher education.

A QEP:

- Identifies key issues that emerge from assessment
- Focuses on learning outcomes
- Is within the institution's capability
- Mobilizes broad-based involvement of the College's constituencies
- Identifies and assesses measureable and meaningful goals

How Did We Choose MMO?

How Did We Choose MMO?

Faculty and Staff	Students	Boards of Directors and Trustees	Alumni, Advisory Committee and Community
• Topic Selection Team • Design Team • Implementation Team • Faculty Focus Groups • Faculty Surveys • Newsletters • Logo Contest • Updates at Faculty & Campus Meetings • Direct Emails • Faculty Training • QEP Website	• Student Focus Groups • Student Representative on Topic Selection Team • Topic Selection Survey • Logo Contest • Student Government Association (SGA) Meetings • SGA Provided IPad Logo Contest Inventive • Newsletters • Campus posters with QR Code to QEP Website • Varied Promotional Items / Gifts • Trivia & Raffles at Campus Picnics	• Special Presentations to both Boards by Topic Selection Committee Chair • Dialogue introduced to promote the QEP • Reviewed Focus Group Results • Topic Selection Vote • Updates from President • QEP Website • Social Media Updates via Twitter and Facebook	• Social Media Updates via Twitter and Facebook • Topic Selection Survey at Advisory Committee Meetings • Alumni Representation in QEP Meetings and Discussions • Newsletter Updates • QEP Website • Updates at Advisory Committee Meetings

How Did We Choose MMO?

- A SWOT analysis conducted by the QEP Topic Selection Team showed multiple areas of need which were narrowed to eight areas:
    - Communication Skills
    - Writing Skills
    - Distance Education
    - First-Year Experience
    - Math Skills
    - Reading Skills
    - Study Skills
    - Technology

How Did We Choose MMO?

We asked the program advisory boards, the Local Board, the Foundation, Faculty, Staff and Students,

"What do **you** think Lanier Tech should choose as its **QEP** topic?"

How Did We Choose MMO?

Stakeholders ranked the topics in the following order:

1. Communication Skills
2. Reading Skills
3. First-Year Experience
4. Math Skills
5. Technology
6. Writing Skills
7. Study Skills
8. Distance Education

How Did We Choose MMO?

The QEP Topic Selection Team narrowed the topics down to the Fabulous Four:

- Communication Skills
- Reading Skills
- First Year Experience
- Math Skills

How Did We Choose MMO?

- Next, the team looked at a range of institutional data:
  - Student Learning Outcomes
  - TCSG Data Center Reports (KMS)
  - Complete College Georgia Reports
  - A locally developed “Killer Course Report”

How Did We Choose MMO?

- What we learned from **Student Learning Outcomes:**
  - Students have consistent problems with reading and following directions
  - Faculty have difficulty accurately assessing student learning simply because many students don't finish key assignments
  - Applied math skills within occupational courses are a recurring weakness

Math Skills was the most frequently cited problem

How Did We Choose MMO?

- Here's what we learned from **TCSG Data Center Reports** (KMS):
  - Most of our students are non-traditional (25 or older)
  - 38% need Learning Support
  - We're not doing a good job of getting students in to Learning Support when they enroll

How Did We Choose MMO?

- Here's what we learned from the **Killer Course Report**:
  - When ranked by pass-rate percentage, 15 of the 25 courses with the lowest pass rate were general education or learning support classes
    - Of these, 9 were MATH courses
  - When ranked by raw number of stops, 16 of the 25 courses with the highest number of stops were general education and learning support courses
    - Of these, 7 were MATH courses

How Did We Choose MMO?

Based on everything we learned, the Topic Selection Team presented the following list to the Leadership Team:

- Communication Skills
- First Year Experience
- Math Skills

The LTC Leadership Team selected **Math Skills** as the focus for our Quality Enhancement Plan!

How Did We Choose MMO?

The **QEP Design Team** took over from the Topic Selection Team in September 2014.

The first major effort: FOCUS GROUPS!

- 22 student focus groups
- 5 faculty focus groups

An experienced non-LTC facilitator was hired to lead the sessions

How Did We Choose MMO?

Here's what we learned:

Students said:

- I do not like the online component.
- MyMathLab was horrible.
- Everyone is very frustrated with this model.

Faculty said:

- It is not effective.
- It was something we were forced into doing.
- It sucks royally.

How Did We Choose MMO?

Here's what we learned:

Students have VERY strong feelings about Math:

- Anxious
- Overwhelmed
- Stressed

Students believe this anxiety comes from not being well prepared:

- Not having a good foundation
- Not understanding the basics
- Don't have fundamentals

How Did We Choose MMO?

Here's what we learned:

Computer Based Instruction isn't working!

- Lack of instruction
- Not receiving attention or direction from the teacher
- Looking at a computer screen is not helpful

How Did We Choose MMO?

Here's what we learned:

We analyzed the Fall 2014 MATH 0090 Student Summary

- Very few students complete their Learning Support requirement in a single term
- Degree students average 2.9 semesters to finish Learning Support
- Diploma students average 1.7 semesters to finish Learning Support

What Does the Literature Say?

The data we looked at raised a number of questions...

- What causes LTC students to fail to move through the math program?
- How can we help them complete the program?
- What role does delivery mode play?
- How can we design the curriculum to best meet the learning needs of this population of students...

Clearly, we needed a **Librarian!**

What Does the Literature Say?

Here's what we researched:

- Delivery Modes
- Affective Factors
- Enhanced Tutoring
- Alternative Teaching Methods
- Placement Testing
- Professional Development

What Does the Literature Say?

Here's What We Learned from the Research:

- Delivery Modes
  - Students taking math via Computer Based Instruction:
    - Have a higher withdrawal rate
    - Have less interaction with the instructor than needed
    - Rarely utilized tutoring services
    - Have lower grade point averages

What Does the Literature Say?

Here's What We Learned from the Research:

- Affective Factors
  - Anxiety prevents students from doing well in math courses
  - Math anxiety is a significant element that makes up a student's level of self-worth and math self-concept
  - If the instructor can help the student get past the "road-block" of math anxiety, then the student will be more successful in learning
  - Math classes with embedded study-skills components can have a significant impact on student success

What Does the Literature Say?

Here's What We Learned from the Research:

- Enhanced Tutoring Services
  - Tutoring works when there are trained tutors and intentionally designed tutoring programs
  - Tutoring is more successful when the sessions are frequent and monitored
  - Tutors need intensive and ongoing training
  - Expenses are recouped in the long run
  - Students have both higher pass rates and re-enrollment rates when they receive tutoring

What Does the Literature Say?

Here's What We Learned from the Research:

- Alternative Teaching Methods
  - Face to Face Interaction with instructor
  - Using manipulatives in the classroom
    - Manipulatives are hands-on learning tools that aid in problem solving and facilitate abstract learning

What Does the Literature Say?

Here's What We Learned from the Research:

- Professional Development
  - Helping Math Teachers be better Math Teachers
  - Sustained benefits for faculty after receiving training
    - Motivation to apply the content of the training
    - Increased professional value
    - Opportunities to connect with their peers
    - A deepened commitment to student learning

What Does the Literature Say?

Here's What We Learned from the Research:

- Placement Testing
  - TCSG is transitioning from its current placement test, COMPASS, to Accuplacer
  - Accuplacer is a system wide replacement
  - Current literature indicates that Accuplacer is a good predictor of student success in developmental math courses
  - COMPASS will no longer be available after 2016

What Does the Literature Say?

Questions?

So What's The Plan?

Based on what we learned, the Team defined the **purpose** of Lanier Tech's QEP:

"The purpose of Lanier Tech's QEP is to increase student learning in the mathematics Learning Support program such that students complete their Learning Support requirements in a timely way and emerge with the skills and attitudes necessary for success in college-level mathematics courses."

So What's The Plan?

The Team then broke the purpose statement down into four **goals**...

1. Decrease the number of semesters necessary for students to satisfy their Learning Support requirements
2. Increase the percentage of students who pass their required college-level math courses on the first attempt
3. Improve student learning in LTC's math Learning Support courses
4. Improve students' ability to apply mathematical skills in occupational courses

So What's The Plan?

To achieve these goals, the Team developed three major **strategies**...

1. Redesign instructional delivery of the math Learning Support courses
2. Enhanced tutoring services
3. Targeted professional development activities

So What's The Plan?

Strategy 1: **Course Redesign**

- All traditional delivery
- Co-requisite courses addressing math anxiety, study skills, and other outcomes in the affective domain
  - For diploma students: MATH 0090A + MATH 1012A
    - Math skills outcomes such as calculations and formulas are covered in MATH 1012A, and MATH 0090A helps the students with attitudes and skills needed to succeed in math
  - For degree students: MATH 0090B + MATH 0090Q
    - MATH 0090B is LTC's Learning Support pre-algebra and basic algebra course. Learning Support students who need algebra also take MATH 0090Q, which covers math anxiety, math self-concept, study skills, etc.

So What's The Plan?

Strategy 1: **Course Redesign**

What's your role in Strategy 1?

Remember Goal 4: "Improve students' ability to apply mathematical skills in occupational courses"

Program faculty will work with Math faculty to develop occupation-based problems and skills to be incorporated in MATH 1012A and MATH 0090B.

So What's The Plan?

Questions?

So What's the Plan

Strategy 2: **Enhanced Tutoring**

- Math Success Centers will be built on the Oakwood and Forsyth Campuses
- LTC will hire two Math Success Center Coordinators and three tutors
  - The three tutoring positions may be split among several people to better cover day/evening students and students at Barrow and Dawson
  - Success Center Coordinators will also tutor students
  - Success Center Coordinators will train the math tutors
  - Tutoring staff will use TEAMS to communicate with faculty and keep records of tutoring delivered

So What's The Plan?

Questions?

So What's the Plan?

Strategy 3: **Training & Professional Development**

- Expert training for math faculty on teaching:
  - Affective domain learning outcomes
  - Assessing student learning and progress for affective outcomes
  - Use of manipulatives in the classroom
  - Alternate teaching strategies
- Expert training for math tutors
- Supplemental TEAMS training for Math faculty and tutors
- Advisement training

You Said Advisement Training?

- New students vs. students already in Learning Support
  - For spring 2016 pilot, only new students will be advised to enroll in the redesigned courses
  - By fall 2016, all Learning Support students will be migrated to the redesigned courses
- Interpreting placement scores

You Said Advisement Training?

Questions?

Institutional Capability

Lanier Tech has committed significant resources to making our QEP a success.

	AY 2015-16 Prep Years	AY2017 1st Year	AY2018 2nd Year	AY2019 3rd Year	AY2020 4th Year	AY2021 5th Year	5-Year Total
Personnel	$100,570	$215,860	$215,860	$210,860	$210,860	$210,860	$1,164,870
Consulting	$17,500	$17,000	$0	$0	$0	$0	$34,500
Facilities	$800	$0	$0	$0	$0	$0	$800
Software	$0	$200	$200	$200	$200	$200	$1000
Inst. Materials	$6,500	$1,000	$1,000	$1,000	$1,000	$1,000	$11,500
Marketing	$21,000	$11,000	$1,000	$1,000	$1,000	$1,000	$36,000
Travel/Conf.	$7,600	$10,100	$6,550	$6,550	$6,550	$6,550	$43,900
Assessment	$1000	$0	$0	$0	$0	$0	$1000
Miscellaneous	$495	$495	$495	$495	$495	$495	$2970
Total	$155,465	$255,655	$225,105	$220,105	$220,105	$220,105	$1,296,540

Institutional Capability

LTC will put in place key personnel to oversee the QEP through its successful completion

- Math Success Center Coordinators and Tutors
- QEP Director
  - Permanent position
  - Will teach a reduced load of math Learning Support classes
  - Will prepare and present reports analyzing progress
  - Point-of-contact on the QEP for students, faculty, staff and community

Communication Plan

Let’s get excited about the QEP!

Our goal for communication:

To keep all Stakeholders informed about the progress of the QEP in an on-going, timely and accurate way.

Communication Plan

Step 1: Create a Slogan

The QEP Design Team suggested ideas for the slogan. Here are a few favorites:

- Do the Math!
- Sail into the Future with Math
- All Hands on Math
- Choose Your Math Path

The QEP Design Team voted…

Math Multiplies Opportunities

was the winner!

Communication Plan

Step 1: Create a Logo

- A College-wide contest was held in Spring, 2015. 17 students submitted logo ideas based on the slogan, Math Multiplies Opportunities.
- The entire LTC Community was invited to vote. Nearly 600 votes were cast. Here were some of the popular choices:

Communication Plan

Our logo winner:

Ilse Hayakawa, Radiologic Technology Student

Thank you **SGA** for sponsoring the prize –

an IPad Mini!

Math Multiplies Opportunities

Communication Plan

Across the College Communication:

- The QEP Webpage
- Flyers
- Table tents
- Social Media Posts
- The QEP Newsletter – MMO Monthly
- Dr. Perren's 5 Things
- Student Monthly Newsletter
- Promotional Items
- Fall Festival Candy Corn Raffle
- Computer labs default desktop background

QEP Implementation Timeline

October 2015:

- Across the College Communication Plan implemented
- Textbooks identified for new Learning Support classes
- Focus Group and Survey Questions Developed
- Math Learning Support Advisor Training

QEP Implementation Timeline

October 2015:

- Pilot Courses added to spring, 2016 schedule
- Pilot Courses added to Banner for Open Registration Day
- Hire Math Success Center Tutors
- Hire QEP Director

QEP Implementation Timeline

October 2015:

- Coordinate with program faculty to develop first set of occupation-specific application problems
- Training for Math Faculty
- Review QEP with all faculty and staff at Institute Day!

QEP Implementation Timeline

November 10 – 12, 2015

SACS-COC Visit

November 16, 2015

QEP Implementation Begins!

QEP Implementation Timeline

Spring 2016 Highlights

Pilot Courses at Forsyth and Oakwood Campuses

Tutoring Center Grand Opening

On-going Efforts for College-wide Communication

Collection of Feedback via Focus Groups and Surveys

Refresher Advisor Training

QEP Implementation Timeline

Fall 2016 – Spring 2021 Highlights

All Math Learning Support classes will migrate to redesigned model

On-going Efforts for College-wide Communication

Collection of Feedback via Focus Groups and Surveys

Refresher Advisor Training

QEP Implementation Timeline

Questions?

Assessing the Plan

- Goal 1: Decreasing time to complete Learning Support
  - BANNER reports
- Goal 2: Increasing first-time pass rate for college-level math courses
  - BANNER reports
- Goal 3: Improving learning in math LS classes
  - Math SLOs
- Goal 4: Improving math skills in program courses
  - Program SLOs

Assessing the Plan

- Strategy 1: Leaning Support Redesign
  - Intervention 1: Traditional Delivery
    - SLOs
    - BANNER Reports: Course completion rates
    - Revised, math-specific course evaluations
    - Faculty and student focus groups

Assessing the Plan

- Strategy 1: Leaning Support Redesign
  - Intervention 2: Co-requisite Courses with Affective Content
    - Abbreviated Math Anxiety Scale (AMAS)
    - Betz-Hacket Mathematics Self-Efficacy Scale
    - Self-Description Questionnaire (SDQIII)
    - SLOs

Assessing the Plan

- Strategy 1: Leaning Support Redesign
  - Intervention 3: Occupation-based Application Problems
    - Program SLOs

Assessing the Plan

- Strategy 1: Leaning Support Redesign
  - Intervention 4: Alternative Teaching Strategies
    - Math SLOs
    - Faculty and Student Focus Groups

Assessing the Plan

- Strategy 2: Enhanced Tutoring Services
  - Math Success Center Usage Logs
  - Math Success Center Satisfaction Surveys

Assessing the Plan

- Strategy 3: Training & Professional Development
  - Satisfaction Surveys
  - Faculty Focus Groups

The End!