Quality Enhancement Plan

2013-14 Summary Report
# Quality Enhancement Plan

## Table 1

**Fall 2013 and Fall 2014 Quality Enhancement Plan Overview**

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Fall, 2013</th>
<th>Year 1 Spring, 2014</th>
<th>Year 2 Fall, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>QEP Instructors using TBL</td>
<td>49</td>
<td>60</td>
<td>103</td>
</tr>
<tr>
<td>Course Sections</td>
<td>67</td>
<td>71</td>
<td>217</td>
</tr>
<tr>
<td>Students*</td>
<td>1513</td>
<td>1844</td>
<td>5076</td>
</tr>
</tbody>
</table>

*Duplicated Head Count

## Table 2

**QEP Participants by College**

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Fall, 2013</th>
<th>Year 2 Fall, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>QEP Instructors using TBL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allied Health</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Business</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Engineering</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Medicine</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Nursing</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Computing</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>49</strong></td>
<td><strong>103</strong></td>
</tr>
</tbody>
</table>
### Table 3

**Dr. Michaelsen Workshop Participants**

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summer, 2013</td>
<td>Summer, 2014</td>
</tr>
<tr>
<td>Instructors</td>
<td>33</td>
<td>95</td>
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<tr>
<td>Visitors</td>
<td>0</td>
<td>14</td>
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</table>

### Table 5

**Dr. Michaelsen Workshop Participants* by College**

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summer, 2013</td>
<td>Summer, 2014</td>
</tr>
<tr>
<td>Allied Health</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>Business</td>
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<td>2</td>
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<tr>
<td>Continuing Education</td>
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<td>2</td>
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<tr>
<td>Education</td>
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<td>17</td>
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<tr>
<td>Engineering</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Medicine</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Nursing</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Computing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
<td><strong>95</strong></td>
</tr>
</tbody>
</table>
Team Based Learning is a collaborative learning strategy based on......

<table>
<thead>
<tr>
<th>Application Activities:</th>
<th>Application of content using based on 4 S’s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significant problem</td>
</tr>
<tr>
<td></td>
<td>Same problem</td>
</tr>
<tr>
<td></td>
<td>Specific choice</td>
</tr>
<tr>
<td></td>
<td>Simultaneous reporting</td>
</tr>
</tbody>
</table>

| Backward Design:       | Developing course-level student learning outcomes and working backward |

| Peer Evaluation:       | Team members evaluate each other’s performance |

| Readiness Assurance:   | Application does not begin until students have mastered content as evidenced by “iRAT” and “tRAT” assessments |

| Strategically Formed Teams: | Teams are purposefully designed |
Why Use Team-Based Learning?

- Research Proven
- Improves Critical Thinking and Content Acquisition
- Engagement and Collaboration
- Improves marketability
From “Sage on the Stage,” disseminating information

To “Guide on the Side,” asking open-ended questions to promote thinking skills
Changes the Role of the Student

From “Sit and Get,” learning at lower cognitive levels (Remembering, Understanding, Applying)

To “Active Participant,” in the learning process, learning at higher levels (Analyzing, Evaluating, Creating) to become critical thinkers.
“To begin with the end in mind means to start with a clear understanding of your destination.

It means you know where you’re going...so the steps you take are always in the right direction”

Wiggins & McTighe, 2002
Lesson Framework—Backward Design

Course-Level Student Learning Outcome

Unit Student Learning Outcomes

Content

Units
Preparation
Application
Other Assessment(s)

Units
Preparation
Application
Other Assessment(s)

Units
Preparation
Application
Other Assessment(s)

Units
Preparation
Application
Other Assessment(s)

Units
Preparation
Application
Other Assessment(s)

Wiggins & McTighe
Lesson Design

Student Learning Outcome(s)

Unit

Preparation

Activities:

(i.e. Lecture, Guest Speaker, PPT.)

In-Class:

Readiness Assurance
1. Individual test
2. Team test
3. Appeals
4. Corrective Instruction

Out-of-Class: (FLIPPED)

Reading (Voice-PPT., PPT., Web Resources, Videos)

Application Activities

Simple

Team Work
Application Activities
- Case Study or Scenarios with embedded problems and decision points...
  Using 4-S
  - Significant Problem
  - Same Problem
  - Specific Choice
  - Simultaneous Reporting

Complex

Team Work
Continue pattern as long as desired

Other Assessment(s)

CULMINATING PROJECT
EXAM:
Individual or Group

Activities:

Homework Reading (Flipped PPT., Web Res., Videos)

Homework Reading (Flipped PPT., Web Res., Videos)

Review

Unit covers 2-3 weeks

Michaelsen & Fink
Support—Collegial Coaching & Professional Development

Collegial Coaching

★ Learning Walks

PD Sessions

★ Connecting SMART Board Technology and Team-Based Learning
★ Course Design Using Team-Based Learning
★ Creating Voice-Over PowerPoint Presentations
★ Crafting Multiple-Choice Questions that Promote Critical Thinking
★ Designing Application Activities Using Case Studies and Scenarios
★ Developing Student Learning Outcomes that Promote Critical Thinking
★ Flipping Your Classroom
★ Introduction to Team-Based Learning
★ Reciprocal Questioning to Increase Understanding
★ Using CATME to facilitate Peer Evaluation
★ Using iClickers for Point Spreading
★ Using TestMaker to Align tRATs with IF-ATs
Support—Discretionary Funds

$300 awarded each semester to support the QEP.

(Post-its, Easel Pad Paper, File Folders, File Box, Sharpie, Travel, Registration Fees, iPads, etc.)

- $300 Workshop allocation or payment
- $300 Fall allocation
- $300 Spring allocation
- $300 Summer allocation

Unused funds may be banked.
Support--Credentialing

- Certificate of Team-Based Learning Pedagogy
- Quality Enhancement Plan Certificate of Collegial Coaching
- Quality Enhancement Plan Professional Development Fellow
- Letter of Commendation from Dr. Johnson
- QEP Educator of Distinction
2014


Johnson, Pam (2014). The Impact of Team-Based Learning on Undergraduate Nursing. Sigma Theta Tau Region 8 Conference, Indianapolis, IA.


Styron, R.A. QEP Year One: The impact of Team-Based Learning on Critical Thinking, Collaboration, and Persistence. 2014 South Alabama Teaching and Learning Conference, Mobile, AL.


Younce, A., Horton, H., Smith, K., (2014). Backing into Team-Based Learning. Team-Based Learning Collaborative Annual Conference. Fort Worth, TX.
2013

Estis, Gordon-Hickey, Gubler, & Stanfield (2013). Enhancing Teamwork, Critical Thinking, & Problem-Solving Through Team-Based Learning. Seminar presentation at the American Speech Language Hearing Association Convention, Chicago, IL.


Palanki, S. (2013). Team-Based Learning in a Senior Chemical Engineering Class. University of South Alabama Teaching and Learning Conference, Mobile, AL.


2012


Creel, A. Garmon, D. (2014). Creation of AGEMSS TBL Technology Classroom. Alabama Preventative Health and Health Services Block Award. ($25,000)


Support--Celebration of Success

🌟 Fall Ice Cream Social Luncheon Celebration of Success

🌟 QEP Spring Awards’ Reception
Quality Enhancement Plan

PLAN---
Re-Plan Project Delivery and Make Modifications as Indicated by Data Collected

EVALUATE---
Collect and Analyze TBL Project Data

ACT---
Implementation of TBL Project

Implementation of TBL Project Pilot

Collect and Analyze TBL Pilot Data

Review of Student Data Leading to Development of the QEP Topic

Development of TBL Project Plan
Critical Thinking—SLO Target Mastery Report

<table>
<thead>
<tr>
<th>Domain</th>
<th>Met</th>
<th>Not Met</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying</td>
<td>499</td>
<td>51</td>
<td>550</td>
</tr>
<tr>
<td>Analyzing</td>
<td>633</td>
<td>103</td>
<td>736</td>
</tr>
<tr>
<td>Evaluating</td>
<td>302</td>
<td>233</td>
<td>535</td>
</tr>
<tr>
<td>Creating</td>
<td>535</td>
<td>58</td>
<td>593</td>
</tr>
<tr>
<td>All Domains</td>
<td>1969</td>
<td>445</td>
<td>2414</td>
</tr>
</tbody>
</table>

45 100-600 level sections
Critical Thinking—California Critical Thinking Skills Test

<table>
<thead>
<tr>
<th>Construct</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Induction</td>
<td>F=8.30, p=.01</td>
</tr>
<tr>
<td>Deduction</td>
<td>F=16.98, p=.00</td>
</tr>
<tr>
<td>Analysis</td>
<td>F=6.88, p=.01</td>
</tr>
<tr>
<td>Inference</td>
<td>F=15.31, p=.00</td>
</tr>
<tr>
<td>Evaluation</td>
<td>F=11.22, p=.00</td>
</tr>
<tr>
<td>Interpretation</td>
<td>F=7.94, p=.01</td>
</tr>
<tr>
<td>Explanation</td>
<td>F=7.61, p=.01</td>
</tr>
<tr>
<td>Overall</td>
<td>F=16.28, p=.00</td>
</tr>
</tbody>
</table>

Percentile

- QEP: 29%
- Non QEP: 27%

n=52 for QEP, n=49 for Non QEP
I examine the strengths and weaknesses of my views on topics and issues.

I analyze an idea, experience, or line of reasoning in depth by examining its parts.

I connect my learning to societal problems or issues.

<table>
<thead>
<tr>
<th>Question</th>
<th>Significance</th>
<th>Cognitive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>I examine the strengths and weaknesses of my views on topics and issues</td>
<td>F=8.04, p=.01</td>
<td>Evaluating</td>
</tr>
<tr>
<td>I analyze an idea, experience, or line of reasoning in depth by examining its parts</td>
<td>F=2.90, p=.00</td>
<td>Analyzing</td>
</tr>
<tr>
<td>I connect my learning to societal problems or issues</td>
<td>F=10.89, p=.00</td>
<td>Analyzing</td>
</tr>
</tbody>
</table>
Collaboration—Pre/Post Test

Collaboration

<table>
<thead>
<tr>
<th>Question</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I ask questions or contribute to course discussion in other ways</td>
<td>F=14.71, p=.00</td>
</tr>
<tr>
<td>I ask other students to help me understand course materials</td>
<td>F=7.57, p=.01</td>
</tr>
<tr>
<td>I explain course material to other students</td>
<td>F=13.67, p=.00</td>
</tr>
<tr>
<td>I prepare for exams by discussing or working through course materials</td>
<td>F=3.92, p=.05</td>
</tr>
<tr>
<td>with other students.</td>
<td></td>
</tr>
<tr>
<td>I work with other students on course project or assignments.</td>
<td>F=26.35, p=.00</td>
</tr>
<tr>
<td>I give course presentations in groups (not just PowerPoint presentations)</td>
<td>F=4.36, p=.04</td>
</tr>
<tr>
<td>I participate in a learning community or some other formal program</td>
<td>F=8.32, p=.01</td>
</tr>
<tr>
<td>where groups of student take two or more classes together.</td>
<td></td>
</tr>
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</table>

Pre Test: n=718  
Post Test: n=699  

5.3% increase in collaboration between Pre Test and Post Test.
Final Grades

# of Students

<table>
<thead>
<tr>
<th>Grade</th>
<th>QEP</th>
<th>Non-QEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>717</td>
<td>543</td>
</tr>
<tr>
<td>B</td>
<td>541</td>
<td>256</td>
</tr>
<tr>
<td>C</td>
<td>161</td>
<td>162</td>
</tr>
<tr>
<td>D</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>D</td>
<td>42</td>
<td>71</td>
</tr>
<tr>
<td>F</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Grades Significance:

QEP/Non-QEP F=17.19, p=.00

QEP n=1489
Non-QEP n=1089

100-600 level sections
Persistence—Course Withdrawal Rate (100-400 Level)

- QEP: 3.6% (n = 42, 39 sections)
- Non-QEP: 7.8% (n = 65, 35 sections)

Significance: \( F = 17.41, p = .00 \)
Q2/3.1 Use of TBL strategies has helped increase student critical thinking skills.

Q3/3.2 Use of TBL strategies has helped increase student collaboration.

Q4/3.3 Use of TBL strategies has helped increase student engagement.

*Items taken from the Baylor College of Medicine Value of Teams Survey

Scale
5= Strongly Agree
4= Agree
3= Neutral
2= Disagree
1= Strongly Disagree

n = 51
Data Summary--Faculty Satisfaction Responses

Faculty Satisfaction Survey*

What is the most beneficial aspect of Team-Based Learning?

- Class Preparation: 29%
- Student Engagement: 25%
- Collaboration: 17%
- Critical Thinking: 17%
- Subject Matter Mastery: 12%

n = 31
Q1
TBL helped increase my understanding of course material.

Q5/11
tRAT (Team test) discussions allowed me to correct my mistakes and improve understanding of concepts.

Scale
5= Strongly Agree
4= Agree
3= Neutral
2= Disagree
1= Strongly Disagree
What is the most beneficial aspect of Team-Based Learning?

- Collaboration: 32%
- CT and Deeper Understanding: 33%
- Increased Communication / Engagement: 10%
- Incentive to Prepare for Class: 9%
- Immediate Feedback: 1%
- Improved Grades: 6%
- Peer Support: 6%
- Real-World / Application Based Learning: 3%

n=512
What is the least beneficial aspect of Team-Based Learning?

- Collaboration: 35%
- Not Enough Lecture: 15%
- Deeper Understanding: 9%
- Too Much Preparation for Class: 8%
- Critical Thinking: 1%
- Inconvenient Location: 1%
- Lower Grades: 1%
- Peer Evaluations: 2%
- Course Objectives Unclear: 1%
- Self-Taught: 9%
- Tried to Cover Too Much Content: 6%
- Assessment: 12%

n=443
Conclusions—Success

Relative to Critical Thinking

★ 82% of Mastery Targets established by Instructors were met.

★ Mean scores were 2.7% higher on the post-test as compared to the pre-test.

★ There were statistically significant pre- and post-test differences in student scores for the evaluating and analyzing domains.

★ Students cited critical thinking, problem-solving and deeper understanding as the most beneficial aspects of Team-Based Learning on the student satisfaction survey.

★ The scores of items pertaining to deeper understanding and problem-solving were higher than the mean score for all items on the student satisfaction survey.

★ The “TBL strategies increased critical thinking” item score was higher than the mean score on the faculty satisfaction survey.

★ The percentile and mean scores of the California Critical Thinking Skills Test (CCTST) were higher for students enrolled in QEP classes as compared to those who were not.

★ There were statistically significant differences in all CCTST constructs between QEP and non-QEP student scores (Induction, Deduction, Analysis, Inference, Evaluation, Interpretation, Explanation).
Conclusions--Success

Relative to Collaboration

- Mean scores were 5.3% higher on the post-test as compared to the pre-test.
- There were statistically significant differences in all items pertaining to collaboration when comparing pre and post-test scores.
- Collaboration was cited as the 2\textsuperscript{nd} most beneficial aspect of Team-Based Learning on the student satisfaction survey.
- The “TBL strategies increased collaboration” item score was higher than the mean score on the faculty satisfaction survey.

Relative to Engagement

- The “TBL strategies helped increase student engagement” item score was higher than the mean score on the faculty and student satisfaction surveys.

Persistence

- Student withdrawals from Non-QEP courses (7.8\%) were twice as high student withdrawals from QEP courses (3.6\%).
- There was a statistically significant difference in student withdrawals when comparing QEP and non-QEP courses.
Conclusions—Growth Areas and Recommendations for Improvement

Growth Areas—Critical Thinking
★ Mean scores increased, but there was no significant differences at several cognitive levels

Recommendations for Improvement
★ The QEP Director and Instructors will continue to support the change process from passive learning focused on low-level thinking skills to active learning focused on high-level thinking skills.
   ★ Rationale: This is a dramatic paradigm shift that will take time to realize.

Growth Area—Collaboration
★ Students cited collaboration as the least beneficial aspect of Team-Based Learning.

Recommendations for Improvement
★ The QEP Director will distribute a 10 minute video pertaining to TBL post on the USA QEP website for use at the beginning of the semester by faculty along with materials regarding the importance of collaboration.
   ★ Rationale: The video and materials will help students understand TBL.
Growth Area—Collaboration

Teamwork indicators scored below the mean score for all items.

Recommendations for Improvement

Instructors will use CATME peer evaluation diagnostics.

Rationale: Use of information provided by the CATME system will help students better understand the aspects related to collaboration by identifying areas in need of improvement and providing tips that could be utilized.

The QEP Director will modify student satisfaction survey to better collect data regarding challenges of collaborative strategies.

Rationale: Questions that capture specific information pertaining to the number of RATs and application activities, along with team size and formation, will provide diagnostic information when monitoring fidelity of implementation.
Conclusions—Growth Areas and Recommendations for Improvement

Growth Areas—All Goals

Faculty indicated the implementation of TBL was not easy.

Recommendations for Improvement

- The QEP Director will create whole and small group blogging opportunities to increase communication and coaching.
  - **Rationale:** Blogging would provide a communication and coaching mechanism for professors along with a platform to share resources and upload classroom videos.

- The QEP Director stock TEAM USA classroom with easel pads, markers, post-its notes to reduce transportation problems to the classroom.
  - **Rationale:** Keeping supplies stored in the TEAM USA classroom will prevent instructors from having to bring items from across campus.

- The QEP Director will develop college-based faculty incentives
  - **Rationale:** Faculty need departmental-level support

- The QEP Director and QEP Instructors will develop online delivery strategies.
  - **Rationale:** Many QEP courses are blended with a substantial online component. Additionally, as the QEP grows, online delivery strategies must be developed and taught.
The QEP Director and QEP Instructors will increase mentoring/coaching.

**Rationale:** Mentoring and coaching are essential when implementing a new instructional strategy

The QEP Director and Instructors will revamp Professional Development to include sessions pertaining to the following:

- The use of the CATME system to facilitate peer evaluation;
- The use of iClickers to facilitate iRATS and provide immediate feedback;
- The use of computerized tRATS to facilitate team testing and improve efficiency without use of IF-AT forms;
- The use of online delivery strategies to improve access of Instructors to sessions and utilization of TBL strategies;
- A new summer format to improve access of Instructors.

**Rationale:** Improved professional development will improve ease of TBL implementation.
Conclusions--Growth Areas and Recommendations for Improvement

Growth Areas—All Goals

Several fidelity of implementation indicators scored below the mean score for all items.

Recommendations for Improvement

The QEP Director will include items regarding number of RATS, application activities and team construction on the Faculty Satisfaction Survey.

**Rationale:** This additional data will facilitate analysis of critical TBL components and support personalize to specific needs. It will also facilitate mentoring/coaching and the creation of relevant professional development.

The QEP Director and Professional Development Presenters will develop face-to-face and online TBL refresher sessions pertaining to using/covering content paradigm, student involvement in grade weights, connecting RATs with application activities, the 4S’s, and timely feedback.

**Rationale:** This action will facilitate mentoring/coaching and the creation of relevant professional development sessions.
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