

The Quality Enhancement Plan

Texas A&M University

Assessment Report
and Analysis of the Acceptability of the Plan
2002-2005

Executive Summary

Mission of the QEP

The mission of the QEP is to enhance undergraduate and graduate student learning by focusing on four learning themes: research, technology, internationalization, and diversity.

QEP Successes

The University can take pride in the efforts and intentions of the QEP since its inception in 2002. The QEP has succeeded in:

- ✓ Supporting the improvement of academic programs and the student learning environment within the four QEP themes at Texas A&M;
- ✓ Raising awareness of the need for purposeful and systematic reflection for improving student learning among faculty and staff; and
- ✓ Soliciting project proposals from all colleges and several academic support and student development units.

The Need to Refine the QEP Focus

Though the QEP has led the University in a positive direction, the *Assessment Report and Analysis of the Acceptability of the QEP* (2005) brings to light that the QEP will not meet the University's expectations as outlined by SACS 2003 criteria without further refinement. The assessment of the QEP reveals that clarity is needed in the goals of the QEP and in its clear connection to student learning outcomes. Additionally, a University-wide QEP Implementation Plan and coordinating Assessment Plan should be drafted to encourage the use of best practices and direct methods of identifying student learning with one refined theme.

The University adopted four themes for its QEP. As noted in the assessment of the QEP, some proposals tended to blend and combine themes without consistently relating to student learning. Refining the focus to one theme—Inquiry-Based Research Education of Undergraduates—will provide the framework for setting clear, well defined goals that relate to student learning and success as well as set the stage for a “carefully designed and focused course of action” for the University's QEP (SACS Handbook on Reaffirmation of Accreditation, 2003, p. 21).

University Support for QEP Refinement

The University's commitment to Vision 2020, the President's Task Force on Enhancing the Undergraduate Experience, the Council of Principle Investigators, and the Faculty Senate's Research Committee all point toward the need for the University to embrace Inquiry-Based

Research Education of Undergraduates to improve student learning and the undergraduate experience. In addition, the University's 2001 and 2003 National Survey of Student Engagement (NSSE) results show the University lagging behind its peer institutions in the area of undergraduate research. When the University refines the QEP focus to Inquiry-Based Research Education of Undergraduates, it meets the goals of Vision 2020 and the Task Force on Enhancing the Undergraduate Experience, as well as contributing to the applied research in learning that many colleges value.

Plan to Implement the QEP

The University's QEP Council, chaired by Dr. Martyn Gunn, Professor of Biochemistry and Biophysics, will work closely with the Office of Undergraduate Research to develop an Implementation Plan for the refined QEP. Dr. Bob Webb, Associate Dean for Undergraduate Research, will be key in providing leadership, vision, resources, and support for faculty members developing undergraduate research education and inquiry opportunities to enhance the student learning environment relative to the refined QEP.

Method to Evaluate the Effectiveness of the QEP

The QEP Council's primary guide for evaluating the QEP and complying with SACS is to demonstrate improved student learning. A University-wide outcomes-based assessment model, (e.g. Evidence Based Decision Making or EBDM), refined to meet emerging SACS criteria as well as disciplines' professional accreditation criteria, will guide the University's evaluation of the QEP in demonstrating improvement in Inquiry-Based Research Education of Undergraduates. This evaluation effort will be supported by Measurement and Research Services (MARS) and the Office of Institutional Assessment and Diversity (OIAD). Faculty and staff development for demonstrating improved student learning will be supported by the Center for Teaching Excellence (CTE), Student Life Studies (SLS), MARS, and OIAD.

What Does This Refined QEP Mean for Faculty?

Faculty will be able to articulate a clear definition of the University's QEP focus which is to improve Inquiry-Based Research Education of Undergraduates. For support in QEP implementation, the QEP Council will encourage faculty to work in conjunction with the Office of Undergraduate Research. For support in QEP assessment, the QEP Council will encourage faculty to inquire with MARS and OIAD. Faculty and staff Development will be supported by the CTE, SLS, MARS, and OIAD.

How Does This Refined QEP Benefit the University?

A refined QEP benefits the University's ability to meet its Vision 2020 Goals through maximizing the University's human and financial resources to support the QEP and comply with SACS criteria. Potential University benefits include:

- Refining the focus and implementation of undergraduate research at Texas A&M,
- Improvement in undergraduate research and inquiry at the University,

- Improvement of student learning through students' engagement in research and inquiry-based courses,
- Improvement of core curriculum learning through inquiry-based courses within each state-mandated knowledge area,
- Overall enhancement of the undergraduate experience.

Timely Action Items for Success

In the near future, the QEP Council, under the leadership of the Provost and with the support of the Dean's Council, should establish clear goals for the QEP with key indicators for success based on the refined focus of Inquiry-Based Research Education of Undergraduates. In addition, an action plan for funding the refined QEP is needed for the next academic year. In 2007, Texas A&M is required to submit a Five-Year Impact Report of the QEP to SACS, that will articulate its progress and the benefits to the student learning environment.

First submission of the QEP Assessment Report to the QEP Council—
October 6, 2005 (electronically submitted prior to meeting date)

Second submission of the QEP Assessment Report to the QEP Council—
November 16, 2005 (electronically submitted prior to meeting date)

Assessment Report and Analysis of the Acceptability of the QEP
Texas A&M University
Summer/Fall 2005

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Program Mission and QEP Activity Summary

Quality Enhancement Plan (QEP) Mission: To enhance undergraduate and graduate student learning by focusing on four learning themes: research, technology, internationalization, and diversity.

The QEP Council awards approximately \$100,000 in grants annually to support academic departments, student development programs, and academic support units in the development and assessment of undergraduate and graduate student learning outcomes, focusing on quality enhancement in four areas identified in Vision 2020:

- ✓ Research: Students should graduate from Texas A&M University able to analyze problems, formulate research questions, and progress toward answers to those questions within their field of study, modifying these answers as new knowledge dictates.
- ✓ Technology: Students graduating from Texas A&M University should be recognized as highly competent in the use of modern technology relevant to their chosen career paths.
- ✓ Internationalization: Students graduating from Texas A&M University will be able to function effectively in their chosen career fields in an international setting.
- ✓ Diversity: Students graduating from Texas A&M University should be able to function successfully in complex, diverse, social, economic, and political contexts.

The QEP is designed to integrate and support other evidence-based decision-making cycles, such as professional accreditation, program review, course assessment, and research grant proposals. It is an element of the broader campus initiative of Evidence-Based Decision-Making (EBDM).

Summary of Recommendations

The University can take pride in the efforts and intentions of the QEP since its inception in 2002. The QEP has been successful in soliciting project proposals from all colleges and several academic support and student development units; raising awareness of assessment among groups of faculty and staff; and supporting evidence gathering that has resulted in the improvement of academic programs and the student learning environment at Texas A&M.

Based on the assessment of the QEP thus far, recommendations from this report intended to provide the institutional leadership with information to make decisions about the future of the QEP follow:

- Further refine the focus of the QEP
- Develop a multi-level assessment approach through EBDM
- Provide an approved time line for the implementation and completion of the QEP
- Continue to conduct EBDM Workshops to promote EBDM Assessment Plans and Reports that assess the quality of student learning relative to the QEP focus.
- Assign the QEP to qualified individuals who will remain consistent during QEP Implementation and Assessment and work closely with the QEP Council and other related University committees which have relevance to the QEP focus.
- Monitor follow-up through the consistent collection of EBDM Assessment Plans and Reports which have relevance to the QEP focus.
- Clarify the role of the College QEP Councils to include the following responsibilities: informing colleagues of QEP activities, informing the University QEP Council of College assessment activities, reviewing QEP proposals prior to final submission, providing a venue for QEP Principal Investigators to share assessment results, and participating in University and national assessment conferences.

Introduction

This assessment report and analysis is divided into two sections. The first section of this report is from the QEP Assessment conducted during summer 2005 covering fall 2002 to summer 2005. The second section of this report is an analysis of the acceptability of the QEP based on questions put forth by the Southern Association of Colleges and Schools (SACS), Commission on Colleges (COC), to guide analysis of the extent to which the institution's QEP meets the four primary Indicators of Acceptability: focus, institutional capability, assessment, and broad based involvement.

These sections, taken together, are intended to measure the impact of the QEP at Texas A&M University so far, and to communicate the institution's work to date when analyzed using the COC guidelines.

SECTION 1

Statements of Goals and Outcomes

Four goals were established that frame the assessment of the QEP which took place in the summer of 2005. Related outcomes were articulated. The first identifying number of the outcomes represents the goal they were related to and the second number represents the outcome number. Five QEP assessment methods were used. The related outcomes are listed prior to the results from the five assessment methods in this assessment report section.

Goal 1: Faculty and staff actively participate in the QEP proposal solicitation process and in project implementation (for funded proposals).

OUTCOME 1.1: Approximately 15 academic programs and academic support units will be funded annually to assess the four QEP learning themes.

OUTCOME 1.2: Funded projects will be effectively implemented by faculty and follow-up reports will indicate results after one year.

OUTCOME 1.3: Proposals will be submitted from every college on campus.

Goal 2: QEP efforts result in improvement of student learning.

OUTCOME 2.1: Faculty members are able to articulate student learning outcomes which reflect the learning objectives implied by each QEP theme.

OUTCOME 2.2: QEP Reports articulate ways student learning will be improved based on the results of the funded project.

OUTCOME 2.3: Decisions made based on the results of QEP funded activities are later evaluated to ensure that the desired improvement of student learning is achieved.

OUTCOME 2.4: Student learning is enhanced in accordance with the four QEP learning themes.

Goal 3: As an element of the broader Evidence Based Decision Making (EBDM) initiative, QEP efforts help foster reflection on student learning (in undergraduate, graduate, research, and co-curricular programs) and a culture of assessment.

OUTCOME 3.1: EBDM plans include student learning outcomes that assess QEP learning themes.

OUTCOME 3.2: EBDM plans contribute to student learning and program evaluation by including a discussion of specific uses of assessment finding for courses/program improvement.

OUTCOME 3.3: Faculty and staff will understand how outcomes-based assessment activities funded by QEP fit within the larger EBDM initiative.

Goal 4: Administration of the QEP adds value to constituents (faculty and staff engaged in outcomes-based assessment and administrators who use the information) beyond the provision of funding.

OUTCOME 4.1: Appropriate resources and education for faculty and staff involved in QEP-funded activities will be available.

OUTCOME 4.2: The administrative structure of the QEP functions efficiently and effectively.

Methods of Assessment with Related Outcomes, Results, and Discussion

To date, five assessment methods have been employed. The timeline for the completion of the assessment methods was summer 2005, covering the period of fall 2002 to summer 2005. The intended audience for results of the QEP assessment includes faculty, co-curricular staff, department heads, college deans, university provost, university president, college and university QEP councils, and administrators of the QEP. In the following section of the report, QEP outcomes relevant to the results reported from the methods of assessment are listed.

- Method of Assessment 1: SUMMARY OF DATA (See Tables 1 and 2)
- Method of Assessment 2: ANALYSIS OF REPORTS (See Appendix A)
- Method of Assessment 3: FOCUS GROUP (See Appendix B)
- Method of Assessment 4: SURVEY (See Appendix C)
- Method of Assessment 5: TASK FORCE THEME ANALYSIS (See Appendix D)
- Method of Assessment 6: ANALYSIS OF GRADUATE STUDIES PROGRAM REVIEWS (See Appendix E)

METHOD FOR ASSESSMENT 1: SUMMARY OF DATA

The total number of proposals submitted and funded is summarized in table format, as well as the number of follow-up reports submitted one year after funding. Funded proposals are represented by department and college. These results are compared to the total number of degree programs by college.

Related Outcomes for Method of Assessment 1a: Summary of Data

OUTCOME 1.1: Approximately 15 academic programs and academic support units will be funded annually to assess the four QEP learning themes.

OUTCOME 1.2: Funded projects will be effectively implemented by faculty and follow-up reports will indicate results after one year.

METHOD FOR ASSESSMENT 1a RESULTS: SUMMARY OF DATA (See Table 1.)

Table 1: QEP Proposal Activity

QEP Cycle	Proposals Submitted	Proposals Funded	Follow-Up Reports Submitted
2002-2003	22	18	13
2003-2004	21	18	6
2004-2005	9	7	2
2005-2006	13	13	Due 10/1/06
TOTAL =	65	56	21

Discussion

Since its establishment in 2002, the QEP Council has approved 57 proposals originating from every college on campus as well as four Academic Support units and five Student Development units. Participation has been uneven for the past four QEP cycles, but on average is close to the goal of 15 funded programs each year.

The summary of data does reveal a shortfall in regard to follow-through on funded projects (Goal 1). In the 2002-2003 funding cycle, a proposal from Aerospace Engineering was funded but not completed because the Principal Investigator (PI) became involved in ABET activities. The following year, a project was funded but never completed because the PI's responsibilities were reassigned, and another project remains incomplete because of the death of the PI. In 2004-2005, a project was dropped because of the unexpected departure of the PI.

In many other cases, projects were implemented, but no follow-up report was submitted, making it difficult to evaluate the value and efficacy of QEP funded activities (see METHOD OF ASSESSMENT 2: Analysis of Reports Results below).

In summary, faculty seem adequately motivated to submit proposals for QEP funding, but the visibility and value of these assessment activities should continue to be improved, in part by enforcing the requirement to follow through and report on the results of funded activities.

OUTCOME 1.3: Proposals will be submitted from every college on campus.

METHOD FOR ASSESSMENT 1b: SUMMARY OF DATA (See Table 2.)

Funded proposals are represented by department and college. These results are compared to the total number of degree programs by college.

Table 2: QEP Participation (number of different programs within each college or academic-support unit assessed with QEP funding)

College/Unit (total # of departments)	2002-2003	2003-2004	2004-2005	2005-2006	Total
College of Agriculture & Life Sciences (15)	6	2	1	2	11
College of Architecture (3)	1	1	0	0	2
College of Education and Human Development (5)	2	0	1	0	3
College of Geosciences (4)	2	1	0	0	3
College of Liberal Arts (11)	2	2	0	3	7
College of Science (5)	2	4	0	2	8
College of Veterinary Medicine (5)	2	0	2	1	5
Look School of Engineering (11)	2	3	0	0	5
Bush School of Government and Public Service (4)	0	1	0	0	1
Mays Business School (5)	0	0	2	1	3
Academic Support Units	0	2	0	2	4
Student Development	0	2	1	2	5
TOTAL =	19	18	7	13	57

Discussion

To date, all colleges and several academic support and student development units have successfully submitted QEP proposals (Goal 1).

Related Outcomes for Method of Assessment 2: Analysis of Reports

OUTCOME 1.2: Funded projects will be effectively implemented by faculty and follow-up reports will indicate results after one year.

OUTCOME 2.2: QEP reports articulate ways student learning will be improved based on the results of the funded project.

OUTCOME 2.3: Decisions made based on the results of QEP funded activities are later evaluated to ensure that the desired improvement of student learning is achieved.

OUTCOME 2.4: Student learning is enhanced in accordance with the four QEP learning themes.

OUTCOME 3.1: EBDM plans include student learning outcomes that assess QEP learning themes.

OUTCOME 3.2: EBDM plans contribute to student learning and program evaluation by including a discussion of specific uses of assessment finding for courses/program improvement.

METHOD FOR ASSESSMENT 2: ANALYSIS OF REPORTS (See Appendix B)

The QEP follow-up reports were reviewed to answer the following questions:

- What is the quality of the QEP reports? (evaluation tool: Assessment Plan Criteria Checklist, Bresciani & Sabourin, 2002)

Analysis Outcome: The quality of the QEP reports reflects student learning outcomes when evaluating the reports with the Assessment Plan Criteria Checklist (Bresciani & Sabourin, 2002).

Analysis Results

The first significant finding in the analysis of QEP follow-up reports is the disproportionately low number of reports received (thirteen of the reports included in this analysis were submitted for the 2002-2003 year, ten reports received for 2004-2005 and 2003-2004, during which time a total of 44 proposals were funded), again indicating an alarming lack of follow-up on QEP funded activities (Goal 1). It is unclear until further investigation what percentage of the missing reports are due to the PI's simply failing to submit the necessary documentation and what percentage of the projects were not completed.

The quality of the reports that were submitted varied widely, but taken as a whole, they exhibited the following strengths and weaknesses:

Strength:

Use of results for the purpose of program improvement

Weaknesses:

Emphasis on program outcomes rather than student learning outcomes

Program outcomes not measurable or identifiable

Program outcomes not being adequately specific (two outcomes written as one)

Lack of direct or authentic means of assessment and comparable data

To answer the question of what is the quality of the QEP reports, the Assessment Plan Criteria Checklist (Bresciani & Sabourin, 2002) was used. Several of the criteria on the checklist did not apply to the reports. For example, none of the reports contained overall goals or objectives and thus could not be evaluated. In addition, only two reports provided a program mission which was linked to an overall college mission but not to the university mission. In evaluating the outcomes being assessed, twelve of the twenty-three reports provided learning outcomes that stated what the program or department intends for students to know, think, or do? The majority of the outcomes could be described as program outcomes. These program outcomes were mainly concerned with the development of assessment programs. Furthermore, four reports did not contain any outcomes, results, or decisions and recommendations made. An additional, five reports described outcomes and evaluation methods but did not contain any results or decisions and recommendations made.

In evaluating the remaining programs' outcomes, only seven provided outcomes that were not detailed and specific. Furthermore, these seven programs' outcomes were not all measurable and identifiable. For example, it was often seen that there was more than one outcome described. Five of the program outcomes were rated as not being meaningful in making decisions of how to improve the program. The evaluation of whether the outcomes collectively reflected the most important purposes of the program was unable to be computed due to that in the majority of the reports the program's mission and objectives or goals were not provided.

In terms of the assessment methodology described in the reports, the majority of the programs described multiple methods of assessment. Twelve of the fourteen programs used multiple methods to assess one or two outcomes and the remaining outcomes were evaluated using only one method. In addition, only seven programs reported using any direct methods of assessment. The majority of the programs described using mostly indirect methods in combination with a direct method of assessment. Furthermore, only five of the twelve programs evaluating student learning outcomes reported using any authentic means of assessment to do so. Three of the programs reported using assessment methods that were judged as being not appropriate for the outcome they were intending to measure. For example, several of the programs reported using grades on exams and percentage of students passing a course as assessment methods. In terms of using comparable data, only three programs reported doing so. One of the programs described the use of an experimental design by using random assignment and a control group to determine

whether the program outcomes were being met. The other two also used a “control” group although an experimental design could not be inferred from the description of their assessment process. All fourteen programs described assessment methodology that appeared feasible in terms of design, time and resources and appeared to reveal information that was suitable for program improvement. Five of the fourteen programs did not provide any criteria to determine whether the outcomes were successfully met. The criteria described for the most part appeared to be realistic.

In evaluating the results reported by the fourteen programs, five programs did not describe results that reflected adequate sampling of students from the program. It is important to note that several of the programs did not have results for all assessment methods described and thus decisions and recommendations were not available for those results. Four of the programs did not provide enough detail in their results to determine the extent to which the outcomes have been achieved. One program described results that were not derived from their identified assessment methods but from a different method. Furthermore, one program referenced a figure in their description of results which was missing from the report. Finally, one program had “xx” where numbers were supposed to be entered. The majority of the programs reported results that could be used for program improvement. In terms of the use of the results for informing decisions and recommendations for program improvement, all but two of the fourteen programs described recommendations and decisions made for program improvement.

For decisions and recommendations, only one of the fourteen did not adequately state the results to describe specific changes made as a result of assessment and report decisions and recommendations that were clearly reflective of the results of the assessment plan. In addition, it was clear from nine of the reports that the assessment would be ongoing. Several reported improvements made to their assessment process as result of their outcomes evaluation.

In summary, the strengths and weaknesses of each of the fourteen reports varied. An overall weakness though was the lack of student and learning outcomes. Furthermore, the use of direct means or authentic means of assessment and comparable data appeared to be lacking from these reports. In addition, weaknesses could be seen in many of the programs’ drafting of program outcomes such as not being measurable or identifiable and having two outcomes described in one. The strengths of these assessment reports though can be seen in the use of the results that are generated and their use for program improvement.

- [What is TAMU learning from these QEP reports about the 4 QEP themes: technology, research, diversity, and internationalization?](#)

[Analysis Outcome: TAMU is learning about its quality of student learning within four themes: technology, research, diversity, and internationalization.](#)

Analysis Results

It appears that students in at least four disciplines are being provided opportunities to engage in research, improve their technology skills, interact with others from diverse backgrounds, and improve their knowledge of concepts relating internationalization. However, the sample of

students represented in these results is too small to generalize to the TAMU population as a whole.

To address the question of what is TAMU learning regarding the 4 QEP themes was difficult to answer given these available reports. Only eleven of the twenty-three reports provided assessment information regarding student learning outcomes reflecting one or more of the QEP themes. The remaining reports provided results for program outcomes. Two of the twelve reports did not report any current results for their assessment of learning outcomes. The difficulty of responding to this question is further impacted in that only five programs used direct and authentic assessment to measure student learning and four of those five did not address learning outcomes related to one of the four QEP themes. One other program reported using grades and percentage of students passing courses as assessment methods. The remaining programs used indirect means such as interview of students (i.e. the interviews contained self-report questions), student and faculty surveys, and syllabus reviews as assessment methods. Furthermore, criteria for success were not identified in one of the reports for the learning outcomes given the preliminary nature of the assessment. Given the data available and the limitations described above, one must be very cautious in the interpretation of these results and how they relate to the QEP themes.

Direct and Authentic Means of Assessment Results for Themes:

For the theme of research, two student learning outcomes were reported as being met by the one program. Student learning outcomes in the area of research were assessed using a faculty designed rubric to assess students' honor theses. The following results support the accomplished outcome that students will be able to effectively conduct research and gain knowledge in their chosen topic area. It was found that all but eleven of the seventy-two students fell below the competent mark in their ability to review literature and use sources appropriately. Students' use of data was also highly assessed with only 15 of 72 students falling below the competent area. Forty-two students' ability in using data was assessed as being accomplished. Finally, students' analysis of data was also assessed highly with only 9 of the 72 students falling below the competent area and 45 students' ability assessed as being accomplished. Another learning outcome met was that of students being able to analyze the academic quality of information found in the web-based environment. As stated earlier it was found that all but eleven of the seventy-two students fell below the competent mark in their ability to review literature and use sources appropriately. As a result of these outcomes, several program decisions and recommendations were made. For example, it was recommended that the rubric to be used again to evaluate students' progress in accomplishing these outcomes and the addition of programs to support students' research such as a general meeting on using the library resources successfully.

Indirect Means of Assessment Results for Themes:

For the theme of research, several student learning outcomes were reported as being met in three of the four reports using indirect means of assessment. The results are as follows regarding the student learning outcomes for the theme of research. About half of the students in the one discipline interviewed (53%) reported they were not confident of their abilities in interpreting results and drawing conclusions from experiments. Although, 19% of the faculty surveyed

reported that 75% of their students were confident in doing so. Students and faculty in this discipline reported greater agreement in student's confidence to work independently and asking for help when appropriate. Students interviewed in another discipline reported gaining confidence in their ability to complete research, write and use technology following the completion of an undergraduate research thesis project. A review of syllabi in a third discipline revealed that 100% of the courses provided opportunities for students to learn and/or improve their problem solving and summarization skills. Seventy-five percent of the students from this particular discipline reported that their course experience improved their ability to do so in course-evaluations. The majority (60%) of students interviewed reported being confident in their ability to integrate classroom knowledge and laboratory skills to a research setting. Only 8% of faculty reported that more than 75% of their students were able to do so. Despite the small number of students (range 2-3) who had done so, the majority of students reported being confident in preparing both professional-style written and oral presentations on their laboratory research. Only 3% of faculty reported that more than 75% of their students are comfortable in doing so. Most students in one discipline sampled reported being confident in their ability to locate research papers but were less confident in evaluating them. Six percent of faculty reported that 75% of their students are comfortable in doing so. In another discipline, a review of syllabi revealed that eighty percent of the courses offered in the program provide opportunities for students to improve their skills in locating appropriate research sources. Furthermore, 75% percent of these students on course evaluations agreed that their skills were improved in accessing credible research resources despite only half of the students reported using the TAMU online resources.

As a result of these findings, several recommendations and program improvements have occurred in these two disciplines. For example, "An Introduction to Undergraduate Research" meeting has been created for faculty and students. Another example is the recommendation that students should be required to submit at least one journal article for publication. In addition, tutorials were developed to assist students located more credible resources and navigate TAMU library's online resources. Changes could also be seen in the assessment process such as in the working of questions and plans for different methods such as exit surveys, etc.

For the QEP theme of technology, only three of the reports using indirect means of assessment provided data. In addition, criteria for success were not provided for these technology learning outcomes. Most students (73%) reported in an interview they felt confident using the needed instruments and equipment in their discipline. Twenty-eight percent of faculty reported that at least 75% of their students were comfortable in doing so. For the student learning outcome of being able to retrieve and organize specific information from the chemical literature, 40% stated they were confident to very confident in obtaining and evaluating information from databases. Seventy three percent expressed the same level of confidence in obtaining and evaluating journal articles. Eleven percent of faculty reported that more than 75% of their students were comfortable in retrieving and organizing specific information from the chemical literature. For the student learning outcome of being able to deliver oral and written reports, most students reported never having to. Fifty-three percent of students interviewed were confident to very confident in their ability to give an oral presentation on their research. In one other discipline it was found in exit interviews and on a survey that students gained greater proficiency in the use of technology including the use of software to create professional presentations and graphics-

heavy research papers. Several recommendations for program improvement were generated from these results such as the development of evaluative criteria for research reports and oral presentations and rewriting of learning objectives for individual courses on syllabi.

For the QEP themes of diversity and internationalization, two reports assessed the ability of students to interact competently with both faculty and students from diverse backgrounds. One discipline reported that the majority of students stated that they felt very comfortable in working with students from other countries. Furthermore, almost half of the students reported that interactions with students from other countries occurred in their research group. Twenty-eight percent of the faculty reported that more than 75% of their students were able to function successfully in “complex, diverse, social, economic, and political contexts.” Results from another discipline revealed that 100% of the courses provided opportunities for students to interact with other students from a variety of backgrounds however students reported only taking advantage of some of those opportunities. More than half of the students in four of the six courses analyzed reported that these interactive exercises were good. Furthermore, 90% of the students reported that faculty and students were respectful of each other. An example recommendation that was put forward from these results includes increasing the number of interactive activities available to students in courses. In another program, students’ ability to demonstrate understanding of issues surrounding diversity and ethnic minority membership was assessed. Through the use of focus groups, it was found that although classes cover material relevant to diversity and ethnicity, it does not devote enough time directly to these issues to make a substantial difference in students’ understanding. It was also found that a sizable majority of students believe that the most important opportunities to learn about diversity and ethnicity come from interactions with other students outside of class.

Only one of the reports assessed learning outcomes for the internationalization theme. All learning outcomes were reported as having met the criteria for success. One of these outcomes was the ability of students to articulate concepts central to international affairs. A review of course syllabi revealed that 100% of all courses in the program provided opportunities for students to learn and increase their knowledge of international affairs. Furthermore, 90% of students strongly agreed in the course evaluations that the courses improved their ability to articulate this knowledge of concepts. Another outcome researched was the ability of students to analyze and evaluate different international perspectives and defend their conclusions. Similar results were found for this outcome as was found for the previous outcome. The final outcome assessed students’ ability to apply their knowledge gained about international affairs to their field of study. Results revealed that more than 80% of students anticipated being able to do so. Example recommendations made from these results include refining the literature used to advertise their program and the development of support materials for various courses.

In summary, it appears from these results that students in at least four disciplines are being provided opportunities to engage in research, improve their technology skills, interact with others from diverse backgrounds and improve their knowledge of concepts related to internationalization. In terms of being comfortable and reporting the ability to use basic research skills such as problem-solving, integrating and summarizing knowledge, only about half of the students surveyed reported being comfortable and confident in their ability to do so. Furthermore, only a small percentage of faculty surveyed reported that more than half of their

students were able to do so. In addition, students reported being somewhat comfortable in their ability to locate research resources and in preparing oral and written presentations of their research. For the themes of diversity and internationalization, students are reporting that they are provided and have functioned well in interactions with others from diverse backgrounds.

Furthermore, students have reported that they have improved in their ability to articulate knowledge about internationalization and anticipate being able to apply it their field of study. It is important to note that these results are from a very limited sample of students at TAMU and thus are very limited in their generalizability to the TAMU student population as a whole. More research is needed with a representative sample of programs from TAMU to address the question of what is TAMU learning regarding the 4 QEP themes of research, technology, diversity, and internationalization.

- Are any themes emerging in the assessment reports that would better identify the focuses?

Analysis Outcome: Focus of the four QEP themes is clarified through analysis of the QEP reports.

Analysis Results

Research: the ability of students to analyze and formulate hypotheses and research questions

Diversity: the interaction of diverse students and faculty

To address the question of whether there are any emerging themes in the QEP reports that would help identify the four QEP themes is difficult to answer given that only eleven of the programs assessed and reported results for learning outcomes that addressed the QEP themes. As stated earlier, the remaining programs assessed program outcomes. In reviewing the reports, similarities were apparent in the learning outcomes being assessed which may assist in identifying the learning themes. This could be seen, for example, in the theme of the research. Programs were often assessing students' ability to formulate research questions or hypotheses and summarize research. Many of the programs had additional outcomes addressing the research theme such as the ability to prepare both written and oral presentations of research or the ability to recognize and access appropriate outlets for research. There appeared to be much overlap between the research and technology themes. Two programs described outcomes for research and technology and did not designate which outcomes spoke specifically to which theme. Another program's technology outcomes addressed students' skills in using technology for research specifically, i.e. the ability to use technology in order to deliver oral and written presentations of research.

A similar overlap was also seen between the diversity and internationalization themes. Again, two programs described outcomes for diversity and internationalization and did not designate which outcomes spoke specifically to which theme. Other programs only assessed learning outcomes for diversity and not internationalization. A common outcome was that of students interacting with faculty and other students of diverse backgrounds, cultures, and perspectives.

Interaction may be considered a theme for the QEP theme of diversity. Other diversity or internationalization outcomes being assessed addressed students' articulate concepts of international affairs and their ability to apply that knowledge to their field of study.

In summary, two themes appear to emerge that help identify the QEP theme of research and diversity. For research, the theme appears to be ability of students to analyze and formulate hypotheses or research questions. For diversity, the theme appears to be the interaction of diverse students and faculty. However, it is important to note that these conclusions are very exploratory or preliminary given that they are drawn from the results of few reports. Further analysis of a more representative sample of QEP reports is needed.

- How many reports are course-based assessments verses program-based assessment?

Analysis Outcome: Course-based assessment will be meaningful based on the quality of student learning outcomes in the QEP reports.

Analysis Results

All reports indicated assessing program-based outcomes rather than course-based outcomes. This was determined by reviewing each report's outcomes, assessment methods and results. Each program provided results for an overall program using methods such as exit interviews and surveys. No program reported using methods of assessing student learning in the classroom context using course goals, objectives, and content to determine the degree of learning that took place.

- Can we determine how many students have been served by each evaluation?

Analysis Outcome: The number of students served by the QEP can be determined through analysis of QEP reports.

Analysis Results

The reports indicate numbers ranging from 66 to more than 3,000 students; however it is unclear whether the numbers reported is the number of students participating in the evaluation or the number of students thought to be served by the evaluation.

Only five (2003-2004) of the twenty-three programs indicated the number of students impacted or served by their evaluation. The numbers range from 66 to more than 3,000. In several cases, it is clear that the number reported reflects the number of students who participated in the evaluation such as by completing surveys. In the remaining reports, it is unclear whether the number reported is the number of students participating in the evaluation or the number of students thought to be served by the assessment. One report stated that 1200 students were served by their evaluation but hypothesized their evaluation would have a broader impact, that is a larger number of students served, given the program improvements resulting from the

evaluation which in turn would increase participation in the program. Due to the lack of clarity, the number of students being served by these evaluations is difficult to determine. Further clarification on what is meant by this to the principal investigators is needed.

Discussion

Thus, the analysis of reports reveals that the QEP has not been uniformly successful in helping faculty articulate ways that student learning will be enhanced by conducting assessment activities or that these improvements in student learning are later verified (Goal 2). In addition, the analysis suggests some evidence of learning in the areas of research, diversity, internationalization, and technology, but unfortunately the QEP follow-up reports collected to date are inadequate to draw broad conclusions about student learning in these areas at Texas A&M (Goal 3). Lastly, the analysis notes overlap in the outcomes for the themes of research and technology as well as diversity and internationalization, suggesting that perhaps the focus of QEP activities may be effectively reduced to two themes: diversity and research (see Appendix B).

Outcomes Related to Method of Assessment 3: Focus Group

OUTCOME 1.2: Funded projects will be effectively implemented by faculty and follow-up reports will indicate results after one year.

OUTCOME 2.2: QEP reports articulate ways student learning will be improved based on the results of the funded project.

OUTCOME 4.1: Appropriate resources and education for faculty and staff involved in QEP-funded activities will be available.

OUTCOME 4.2: The administrative structure of the QEP functions efficiently and effectively.

METHOD FOR ASSESSMENT (3): FOCUS GROUP (See Appendix B)

A small group of Principal Investigators (PI's) was assembled at a breakfast meeting on October 20, 2004, to provide feedback on the following questions. Participants were provided with the discussion questions the day before the breakfast. The format of the focus group was semi-structured with a moderator who phrased questions within the context of the conversation.

- How well was the intent and scope of the QEP communicated by the QEP Council?

Focus Group Outcome: The QEP was communicated to the larger University community—faculty, staff, students, board member, and administrators—through involvement with the development of the QEP and its refined focus.

- How did you learn about the QEP?

Focus Group Outcome: Participants learned about the QEP through colleagues and official University communication.

- How adequate was the support provided?

Focus Group Outcome: The support for QEP was helpful and beneficial.

- Did QEP improve the learning process?

Focus Group Outcome: The QEP had a measurable impact on the quality of student learning.

- How can the program be improved?

Focus Group Outcome: Participant can identify strategies and recommendations for QEP program improvement.

Focus Group Results

The focus group indicated that the intent of the QEP is well-communicated, but how it fits within the larger EBDM effort and its administrative structure was less clear. The participants felt that the QEP guidelines and examples were clear and they received good support from MARS.

Most participants reported learning about QEP from their deans, the Assessment Conference, or the Center for Teaching Excellence.

QEP Participants indicated that QEPC reporting structure is not clear—Who owns the QEP? Who leads the QEP? Who does the QEPC report to?

The focus group shared the following anecdotes of program improvement based on QEP activities:

- (1) a research rubric used in multi-section courses helped gather information on student learning
- (2) students were given the opportunity to stop and think about their ability to deal with conflicts in a team environment and their comments indicated learning has taken place
- (3) a requirement that students prepare learning portfolios provided the opportunity for students to reflect on their learning experiences

To improve the program, participants requested the following support:

- (1) assessment professionals to help with literature review and get assessment data published
- (2) an opportunity to partner with other faculty or assessment professionals to get data published

(3) knowledge of grant opportunities

Concerns were expressed about faculty buy-in, and participants noted that tailoring the language of assessment to various audiences is important. Money and an endorsement from the Provost's office were identified as incentives to participate.

The focus group provided anecdotal evidence that that QEP has led to program improvements (Goal 2) and that the leadership of the QEP program provides valuable support (Goal 4). However a more systematic collection of evidence would be necessary before concluding that the goals regarding the value of QEP activities and its administration are being met.

Outcomes related to Method of Assessment 4: Survey

OUTCOME 1.2: Funded projects will be effectively implemented by faculty and follow-up reports will indicate results after one year.

OUTCOME 2.1: Faculty members are able to articulate student learning outcomes which reflect the learning objectives implied by each QEP theme.

OUTCOME 4.1: Appropriate resources and education for faculty and staff involved in QEP-funded activities will be available.

OUTCOME 4.2: The administrative structure of the QEP functions efficiently and effectively.

METHOD 4: SURVEY (See Appendix C)

In March, 2004, the QEP Council's Executive Committee conducted a survey of 32 QEP Council members and 31 QEP Principal Investigators for the purpose of appraising the effectiveness of the QEP Council and the QEP program. The survey consisted of a total of seven qualitative questions, several of which were directed to Council members, and three of which were directed to Principal Investigators (there was overlap between these two groups; they answered all the questions).

Survey Results

Council members who responded to the survey understood the role of the Council to be:

- a) to implement QEP to improve student learning/programs through assessment
- b) to provide leadership to promote greater understanding of the needs of assessment across the university

Council members felt that the Council had made good progress in gaining visibility and faculty involvement, but that the benefits of QEP and assessment were still not widely understood by faculty. All respondents reported an increased interest and awareness of QEP and assessment, but also recognized that getting faculty involved and sustaining assessment efforts remain a

challenge. Pockets of success in doing so seem to be attributed largely to the support and leadership of individual deans and interested faculty.

Most PI respondents indicated that there is better but not widespread understanding of assessment among faculty, and about half of the respondents indicated that they have seen evidence of assessment embedded in teaching. The PI had had limited success inviting participation from colleagues.

Both the focus group and the survey reveal that there is not a widespread understanding about QEP and how it integrates with other assessment efforts and the larger EBDM initiative (Goal 3). This problem is exemplified in the case where a QEP-funded activity was not implemented because of ABET activities (Aerospace Engineering, 2002-2003). Possibly with better planning and understanding, these assessment responsibilities could have been complimentary.

Outcome Related to Method for Assessment 5: Task Force Theme Analysis

OUTCOME 2.1: Faculty members are able to articulate student learning outcomes which reflect the learning objectives implied by each QEP theme.

METHOD FOR ASSESSMENT (5): TASK FORCE THEME ANALYSIS (See Appendix D)

The QEP Assessment Task Force analyzed the learning outcomes of funded proposals to identify common themes.

Task Force Result

Members of the QEP Assessment Task Force analyzed the learning outcomes identified in the funded QEP proposals. The following is a summary of their responses:

Research – The learning objectives fall mainly into two groups: (1) an academic research theme and (2) an applied research theme.

Technology – Most learning objectives stress the use of computer technology. The breath of technologies implied by this theme needs to be better communicated.

Diversity – There is some overlap between diversity and internationalization. Learning objectives fall into two categories: (1) appreciation of diversity to function effectively in a team environment and (2) diversity as an important element to other skills (e.g., communication skills).

Internationalization – There is some overlap between internationalization and diversity. Learning objectives relate to the appreciation of international perspectives, international impact, and practical application of skills (e.g., foreign language skills).

The Task Force's theme analysis notes an overlap between the themes of diversity and internationalization, as did the analysis of the QEP follow-up reports. Again, this suggests that

four learning themes may not be distinct enough to be useful as separate thrusts for improvement of student learning.

Discussion

It is important for QEP leadership to re-evaluate the usefulness of focusing on four different learning themes to have an impact on the learning experience of students at Texas A&M (Goal 2).

Outcomes Related to Method of Assessment 6: Analysis of Graduate Studies Program Reviews

Goal 2: QEP efforts result in improvement of student learning.

OUTCOME 2.1: Faculty members are able to articulate student learning outcomes which reflect the learning objectives implied by each QEP theme.

OUTCOME 2.2: QEP Reports articulate ways student learning will be improved based on the results of the funded project.

OUTCOME 2.3: Decisions made based on the results of QEP funded activities are later evaluated to ensure that the desired improvement of student learning is achieved.

OUTCOME 2.4: Student learning is enhanced in accordance with the four QEP learning themes.

Doctoral Program Review Document Analysis

A total of 16 Doctoral Program Review self-study documents and external review team documents were analyzed, beginning in the academic year 2002-2003, the same academic year that the Quality Enhancement Plan (QEP) began. These documents were reviewed in relation to Goal 2, identified in the QEP Assessment Plan and Report. Goal 2 states, QEP efforts result in improvement of student learning. The analysis addressed the following questions:

- Were faculty members able to articulate student learning outcomes which reflected the learning objectives implied by each QEP theme (research, diversity, technology, internationalization)? (2.1)
- Did the reports articulate the ways student learning was to be improved based on the results of QEP funded projects? (2.2)
- Were the decisions that were made based on the results of QEP funded activities later evaluated to ensure that the desired improvement of student learning was achieved? (2.3)
- Was student learning enhanced in accordance with the four QEP learning themes? (2.4)
- Were there any emergent themes or issues related to the QEP?

The number of reports reviewed according to academic years follows: Six reports were submitted for the 2002 – 2003 academic year, five for the 2003 – 2004 academic year, and five for the 2004 – 2005 academic year.

Analysis Procedures

Due to the length of some of the documents, many over seven hundred pages, the process began with converting all documents into a more useable format for electronic scrutiny. All documents were scanned for key words related to the QEP themes (i.e. research, diversity, internationalization and technology) and words related to the process itself (i.e. objectives, outcomes, measurement, and assessment). Once the data had been surveyed, data bytes were identified and compiled into lists according to QEP themes and chronologically ordered according to years of review. Two independent judges then surveyed the documents and independently coded the data according to student learning outcomes as they pertain to the QEP themes. The two judges then met and discussed any points where opinions differed regarding associated objectives.

Outcome 2.1: Articulation of Student Learning Outcomes Reflective of QEP Themes

Research

The QEP theme of research is defined as:

“Students should graduate from Texas A&M University able to analyze problems, formulate research questions, and progress toward answers to those questions within their field of study, modifying these answers as new knowledge dictates.”

Based on the above definition, statements found in the documents that simply referred to research as a departmental goal or other related statements were not deemed to be a reflection of the QEP student learning outcome for research. Due to this parameter, less than half (n=7) of the documents had learning outcomes which reflected the research theme expressed in the QEP. Almost all of the statements that were believed to embody the QEP purposes were found in course syllabi that were included in some of the reports. However, only a small percentage of reports actually included full course syllabi for all courses offered by the department. Most reports included sample syllabi or only course descriptions (usually taken from the institutional course catalogue), which made it difficult to evaluate the departments holistically.

There were a total of thirteen learning outcomes stated reflecting the QEP theme of research. Again, it bears repeating that every document reviewed for this analysis listed issues regarding research, but not necessarily learning outcomes related to research. Some examples of statements that this analysis team felt accurately reflected the QEP research theme for student learning include:

- *“The student will demonstrate his/her understanding of and proficiency in the subject by being able to decompose the problem into a suitable number of parts for solution” - Aerospace Engineering, College of Agricultural and Life Sciences.*

- *“The student will demonstrate his/her understanding of and proficiency in the subject by being able to make a judicious evaluation as to whether the linearized **theory** is applicable to a particular situation” – Aerospace Engineering, College of Agricultural and Life Sciences.*
- *“Student research involvement should promote the development and integration of the full spectrum of research skills, including: identifying **research needs**; formulating **research questions**; developing a sound **design**; choosing or creating appropriate **procedures** and **measurement instruments**; carrying out **procedures, treatments, and interventions** with **fidelity**; **collecting, analyzing, and Interpreting data**; and presenting findings and conclusions cogently in both oral and print forums” – Educational Psychology, College of Education.*

As mentioned previously, to say that the majority of documents did not relate to the quality of student learning would be inaccurate, since most did. The problem however, was such that what was included in the documents were not learning outcomes related to the QEP research theme, and instead resembled departmental directives or statements. Some examples of statements that this research team felt did not constitute a learning outcome related to research include:

- *“Our students must perform high quality **research** to be competitive in academia.” – Department of Computer Science, College of Engineering.*
- *“Increase quality and quantity of **scientific research** produced by TAMU Department of Horticultural Sciences Ph.D. students” – Department of Horticulture, College of Agricultural and Life Sciences.*

In the external review documents there was one instance where reviewers made a statement that fell within the first objective (2.1) as it relates to research.

Technology

The QEP theme of technology is defined as:

“Students graduating from Texas A&M University should be recognized as highly competent in the use of modern technology relevant to their chosen career paths.”

The technology theme received the same critical analysis as did the research theme. Therefore, based on the above definition, statements found in the documents that simply referred to technology as a program outcome or other related statements were not deemed to be a reflection of the intended QEP technology outcome. As a result, there were two departments out of the sixteen that included what could be considered to be true student learning objectives related to the technology theme.

Once again, the statements that embodied the QEP theme of technology were found in course syllabi that were included in only a small portion of some of the reports. It is important to note that all of the learning objectives related to technology were within this outcomes (2.1), and

were absent for the other three outcomes (2.2, 2.3, 2.4). Finally, two colleges had learning outcomes in this area.

Some examples of statements that this analysis team felt accurately reflected the QEP technology theme related to student learning include:

- *“The purpose of this course is to promote an understanding and knowledge of the concepts and **technologies** involved in the application of microorganisms for the biodegradation of hazardous materials” – Plant Pathology and Microbiology, College of Agriculture and Life Science.*
- *“Graduates will be proficient in the use of modern research **technology** and instrumentation in their field of stud” – Department of Chemistry, College of Science.*

Again, like the research theme, to say that the majority of documents did not relate to student learning would be inaccurate, since most did. The problem, however, was such that what were included in the documents were not learning outcomes related to the QEP technology theme, and instead resembled departmental directives or statements. Further to this, departments showed a propensity to discuss technology in a departmental facility resource aspect as opposed to relating to student learning outcomes. Some examples of statements that this analysis team felt did not constitute a learning outcome related to technology include:

- *“The objective of the ... program is the education of men and women to function at the highest levels of the engineering profession, with emphasis on solving problems that arise in the use of technology to benefit mankind” – Department of Aerospace Engineering, College of Engineering.*
- *“ Become totally integrated with teaching and research in support of electronic technology to maintain and expand websites, develop interactive CD’s and enhance delivery of information via the internet” – Department of Animal Sciences, College of Agriculture and Life Sciences.*

In the external review documents there were three comments made that fell within this outcome (2.1) as it relates to technology. Two of these comments were with respect to the Department of Poultry Science and one was with respect to the Department of Educational Psychology. These statements were deemed to be reflective of the technology theme and the articulation of student learning outcomes.

Internationalization

The QEP theme of internationalization is defined as:

“Students graduating from Texas A&M University will be able to function effectively in their chosen career fields in an international setting.”

Keeping in line with the criteria established to review the other themes, the theme of internationalization underwent the same scrutiny. Therefore, statements that embodied the

student learning outcome related to the QEP theme of internationalization were considered. As a result, this analysis team determined that of the sixteen documents reviewed, there was one stated learning outcome related to internationalization. Some examples of these include:

- “*Ph.D. graduates will be knowledgeable of the **international** aspects of the marketing of livestock and livestock products*” Department of Animal Sciences, College of Agriculture and Life Science.
- “*Integrate **international** dimensions into the Department’s programs by fostering a supportive institutional environment*” – Department of Agricultural Economics, College of Agriculture and Life Science.

Diversity

The QEP theme of diversity is defined as:

“Students graduating from Texas A&M University should be able to function successfully in complex, diverse, social, economic, and political contexts.”

This theme received by far the least amount of attention by departments. In fact, after following the same criteria outlined for the other themes, no student learning outcomes related to diversity were identified in the documents. As was the case with the other themes, most discussion surrounding diversity was found in either department directives or program outcomes. Therefore, the following statements are examples of the more common diversity related statements found in the self-studies:

- “*Endeavor to establish and maintain a community of faculty, staff and students that energize the department through greater racial, gender and ethnic diversity.*” – Department of Animal Sciences, College of Agriculture and Life Science.
- “*Faculty are encouraged to develop and expand their professional networks to include graduate students and colleagues from underrepresented groups. Over the next five years, the department will expand its recruiting efforts to create more diversity in our graduate applications.*” – Department of Anthropology, College of Liberal Arts.

In the external reviewer documents, there was one instance where reviewers made acknowledgements that fell within this QEP outcome (2.1). This was found in the document evaluating the Department of Educational Psychology.

Outcome 2.2: Articulation of Ways Student Learning Was to be Improved

There were no doctoral program review documents that clearly articulated how student learning was to be improved based on the results of QEP funded projects. However, in the external review documents related to technology and diversity, the external reviewers made applicable acknowledgements falling into this category (Outcome 2.2). In total there were two points discussing the articulation of ways student learning was to be improved with respect to the

Recreation, Parks, Tourism Sciences Department and one within the Department of Educational Psychology. These include:

- *“New directions now exist in areas such as youth development, urban parks, community development, technology and cooperative relationships...Great potential exists in emerging areas that tie aspects such as technology and community development to RPTS issues” – Recreation, Parks Tourism Sciences, College of Agriculture and Life Science.*
- *“Specific priorities for the department include efforts to enhance diversity in the student body and in program offerings” – Educational Psychology, College of Education.*

Outcome 2.4: Was Student Learning Enhanced in Accordance with the QEP Themes

Following Outcome 2.1, Outcome 2.4 was a prevalent outcome found in both the Doctoral Program Review documents and external review documents.

Research

Of the documents reviewed for the research theme, outcomes were found in one doctoral program review self-study document and six were found in the external reviewer documents. Again, it was the Department of Educational Psychology that accurately expressed that student learning was enhanced according to the research theme by reporting that:

- *“This implies that students are well versed in the knowledge base in their specialty area, and that they have developed facility with all aspects of the research process” – Department of Educational Psychology, College of Education.*

The external review documents revealed more instances where QEP Outcome 2.4 appeared to be evident within in departments. In total, reviewers commented on this outcome during reviews of four different departments, resulting in a total of six comments. Some examples of reviewer comments that applied to this outcome include:

- *“The department is advancing the state of the art in computer science in a number of important areas and offers students, both graduate and undergraduate, a broad range of courses covering fundamentals and research frontiers of the field” – External Reviewers for the Department of Computer Science, College of Engineering.*
- *“These facilities were being used fairly and frequently and students were receiving practical research opportunities at the centers” – External Reviewers for the Department of Horticulture, College of Agriculture Life Sciences.*

Technology

There were no self-study documents that addressed this outcome directly. However, there was one acknowledgement found during the review of the external review documents. External reviewers for the Department of Computer Science noted that:

- *“They appear to be eager to go beyond simply getting a degree to the development of a broad perspective in computer science and training that will serve them well in academia and industry” – External Reviewers for the Department of Computer Science, College of Engineering.*

Internationalization

In reviewing the self-study documents of the Doctoral Program Review and the external reviewer documents, the Internationalization theme was the only other theme other than research which had reflective learning objectives in both sets of documents.

In terms of the Doctoral Program Review document, internationalization as it relates to enhancing student learning was evident twice in two different departments, in two different colleges. Perhaps most clearly embodying the internationalization outcome stated earlier was the Chemistry Department in the College of Science:

- *“Graduate students will understand and experience professional practices in other countries” – Department of Chemistry, College of Science.*

The other department and college where this theme was noted was in the Department of Agricultural Economics in the College of College of Agriculture Life Sciences:

- *“Integrate international dimensions into the departments programs by fostering a supportive institutional environment” – Agricultural Economics, College of Agriculture Life Sciences.*

In terms of the External Review Team documents, there were two additional instances where the internationalization theme was acknowledged. Both were in the College of Agriculture Life Sciences, but one in the Department of Plant Pathology and Microbiology and the other in the Department of Animal Science. These comments were:

- *“The review document provided to the review team outlines in detail the departments progress on the priority goals of the department and in particular, extensive accomplishments are documented in the goals of educating students enabling the states agriculture to thrive in a global market, building future leaders...” – External Reviewers for the Department of Plant Pathology and Microbiology, College of Agriculture Life Sciences.*
- *“As with the Animal Breeding degree, the Animal Science degree defines a first semester GPA target and targets for grant proposal writing and international educational experience” – External Reviewers for the Department of Animal Science, College of Agriculture Life Sciences.*

Diversity

Diversity related themes as they pertained to QEP Outcome 2.4 did not emerge in the Doctoral Program Review self-study documents. However, the external review documents reveal a total of three instances where review teams acknowledged departmental efforts as they related to the diversity theme and Outcome 2.4. Three different departments in two different colleges received reviews that addressed this outcome. Some examples of these include:

- *“The diversity of skills, opinions and approaches offers a wide range of views to the students educated in this department” - External Reviewers for the Department of Horticulture, College of Agriculture Life Sciences.*
- *“Specific priorities for the department include efforts to enhance diversity in the student body and in program offerings” – External Reviewers for the Department of Educational Psychology, College of Education.*

Emergent Issues and Concerns Related to QEP Efforts

In reviewing the External Reviewers documents, there were several concerns that began to emerge as the analysis progressed, illuminating several areas that are relevant to the QEP themes and learning outcomes which this analysis was based upon.

Perhaps the most common emergent concern focused on the availability of resources. Financial, human, facility, and equipment resource issues were raised often by external review teams in their evaluation of departments and programs. In some cases these restraints inhibit departments and programs from addressing expectations related to the QEP themes and learning outcomes. Below are a few examples of such observations made by review teams:

- “a significant number of departmental faculty base their research and graduate programs on small budgets”
- “the quantity of animal facilities available for research on poultry production and health is adequate but the quality of that space has several shortcomings”
- “there was an elimination of the graduate research assistantships previously funded by the Texas Agricultural Experiment Station”
- “reallocation of space may be warranted on the basis of research program size and volume”
- “Nagle Hall is an embarrassment to Texas A&M University. Derelict office furniture fills the rooms, ceiling tiles are water stained, paint is peeling, laboratories are unfit for contemporary research”
- “the overlap of some graduate training programs does not appear to be a good use of faculty or fiscal resources (e.g. faculty expertise in educational technology is distributed across three departments in the college)”
- “the electronics instrumentation facility is staffed by one person with part-time student assistance. It is modestly provided with test equipment, can provide interfacing assistance for new experiments but is in effect an undergraduate support facility”

Another set of issues emerged during the analysis of external reviewer documents. These were items that external review teams noted as problematic. These were directly related to the QEP themes and a department's efforts to move toward them. Below are some examples of such observations made by external review teams:

- The...program lacks an identified research focus in its curriculum, as reflected in an absence of advanced doctoral level courses and in highly visible program initiatives that serve to meet state identified needs...
- The twelve research priorities of the department are too broad and need to be more focused.
- Lack of statistical support for graduate student and faculty research. Reliable statistical support is necessary for the faculty and students of the department to be competitive at all levels.
- The students expressed a desire to have more research interactions with other students and faculty. They would benefit from a general forum for research presentations and discussions.
- The review team also identified some areas of weakness as a high percentage of international students and insufficient diversity.
- Despite a very strong commitment to diversity by faculty in the department, diversity among the faculty is viewed as not sufficient.

There was one issue that emerged during review of the self-study documents which bears a brief discussion here. There were a handful of documents that discussed the QEP process as a whole and discussed related concepts such as assessment and student learning outcomes. Perhaps most profoundly, one department openly acknowledged that:

“One critical deficiency in evaluating and improving teaching with the department is the lack of outcomes assessment. The department has not attempted to establish exit interviews or a post graduation evaluation from our graduate students concerning the strengths and weaknesses of our teaching, as is regularly done with our undergraduates.”

Such an acknowledgement shows recognition of the value and importance of outcomes-based assessment, and more importantly, a desire to rectify the situation in order to strengthen the quality of teaching and learning in the department for its graduate students.

Assessment Report Recommendations

The university can take pride in the efforts and intentions of the QEP program since its inception. The assessment methods described above, while not completely adequate, reveal that the program has been successful in soliciting project proposals from all colleges and several academic support and student development units; raising awareness of assessment among groups of faculty and staff; facilitating discussions on the four learning themes of Diversity, Internationalization, Research, and Technology; and supporting evidence-gathering that has resulted in the improvement of academic programs and the student learning environment at Texas A&M.

However, the quality of assessment methodology and reporting varies greatly among the projects funded by QEP, and several refinements to the QEP program seem to be called for.

College QEP Councils

In response to feedback gathered in the Quality Enhancement Plan Council Feedback Report (Appendix D), the role of the college-level QEP Councils should be clarified to include the following responsibilities: informing colleagues of QEP activities, informing the university QEP council of college assessment activities, reviewing QEP proposals prior to final submission, providing a venue for QEP Principal Investigators to share assessment results, and participating in university and national assessment conferences. However, College QEP Councils would be more effective if they worked more closely with the university QEP Council in the evaluation of QEP projects and the identification of faculty and staff development needs.

Assessment Support and Training

It is clear that better support, resources, and training would improve the quality of QEP assessment projects, specifically in the areas of:

- Establishing more consistent language regarding the scholarship of assessment and promoting a better understanding of “one process, many purposes”
- Writing student learning outcomes that are measurable and identifiable
- Connecting outcomes with the department and university mission and connecting course-level assessment with program-level assessment
- Selecting appropriate assessment methods, including direct and authentic measures rather than exclusively indirect measures, and identifying naturally occurring methods to ensure that the assessment process is feasible and manageable
- Analyzing and utilizing results, including setting success targets, evaluating results based on criteria, and implementing changes to reach targets

Quality of QEP Follow-up Reports

The low response rate for QEP follow-up reports indicates that the QEP leadership needs a better system for ensuring that reports are submitted in a timely manner and that standards for quality are enforced. The format and requirements for QEP follow up reports will be revised to include an estimate of student impact, details on the use of funds, and a more specific description of how assessment findings were used for program improvement. Consistency in format and quality will allow the QEP to better evaluate how institutional goals are being met as a result of QEP funding.

QEP Leadership

QEP leadership must continue to educate the campus community about how QEP integrates with the larger Evidence-Based Decision-Making initiative, and how this initiative also supports program and department objectives, in order to reinforce the perceived value of assessment activities among faculty and staff. In addition, education about how assessment methods and results can be constructed to be expeditiously used for program improvement will improve perceived value. QEP leadership may want to find additional venues for PI's to report results and share successes in order to advance this objective.

To improve the quality of QEP activities, further training is required as described above, as well as better information during the proposal process regarding the criteria upon which proposals and reports are judged.

QEP Learning Themes

The four themes of Diversity, Internationalization, Research, and Technology have served as an appropriate focus for Texas A&M University, and QEP has served as a valuable venue for discourse and investigation of student learning in these areas. However, some overlap and ambiguity surrounding the themes may make it difficult to show tangible, measurable evidence of improved student learning in these areas across the university. Toward that end, refining the goals or targeting fewer themes may make it easier to evaluate whether QEP is advancing institutional goals for excellence in student learning.

QEP Assessment

While this report describes five assessment methods which have been helpful in illuminating areas of improvement for the QEP, it admittedly falls short of the full, thorough, and on-going evaluation which would be necessary to draw conclusions about the program's impact on student learning at Texas A&M. With the changes and refinements suggested by the evidence presented thus far, QEP is likely to evolve into a more targeted and integrated facet of evidence-based decision making. Along with this evolution, the program goals and outcomes—and the methodology used to evaluate them—should be reconstructed.

SECTION 2

Analysis of the Acceptability of the QEP

The following questions are put forth by the Southern Association of Colleges and Schools (SACS), Commission on Colleges (COC), to guide analysis of the extent to which the institution's Quality Enhancement Plan (QEP) meets the four primary Indicators of Acceptability: focus, institutional capability, assessment, and broad based involvement. Each COC question has been written as an outcome to promote the assessment and future success of the University's QEP.

Summary of Analysis Recommendations

The institutional leadership should:

- Further refine the focus of the QEP based on the needs and planning of the University and the extent to which the institution provides evidence that it is committed to a course of action that addresses the critical issue(s) to improve the quality of student learning. This will focus QEP implementation, spending, and assessment with readily identifiable academic resources and systems supporting QEP implementation and promoting

measurable benefits needed for the submission of the 5-Year Impact Report due to the Commission in 2007.

- Develop a multi-level assessment approach through EBDM where University-wide outcomes with key indicators of excellence relative to the QEP focus are established, along with the continued promotion of course and program-level student learning outcomes assessment using authentic and direct methods relevant to the QEP focus.
- Provide an approved time line for the implementation and completion of the QEP which includes appropriate administrative processes for maintaining the progress of its quality improvements.
- Continue to conduct EBDM Workshops to promote EBDM Assessment Plans and Reports that assess the quality of student learning relative to the QEP focus.
- Assign the QEP to qualified individuals who will remain consistent during QEP Implementation and Assessment and work closely with the QEP Council and other related University committees which have relevance to the QEP focus.
- Monitor follow-up through the consistent collection of EBDM Assessment Plans and Reports which have relevance to the QEP focus.

Focus of the Plan

Commission Question 1: Has the institution provided a clear and concise description of the critical issue(s) to be addressed?

Our Outcome 1: The institutional leadership will be able to articulate a clear and concise description of the critical issue(s) to be addressed by the QEP.

Method for Assessment: QEP document analysis, analysis of other University documents, interviews with Deans and Department Heads (Institutional Leadership).

Result: The QEP Assessment Report reveals that the institution has focused on two areas, undergraduate research and diversity, rather than the original four QEP foci. Further refinement of the QEP would promote a clear and concise description of the QEP.

Recommendation: The institution should further refine the focus of the QEP based on the needs and planning of the University and the extent to which the institution provides evidence that it is committed to a course of action that addresses the critical issue(s) to improve the quality of student learning. The QEPC should conduct further analyses of other relevant institutional documents such as the Faculty Senate Research Committee Report (DRAFT), QEP focus group results, NSSE Results relevant to the QEP, such as

undergraduate research which places TAMU 3rd from the bottom among our peer institutions, Enhancing the Undergraduate Experience Final Report, and the Quality Enhancement Plan Assessment Report, Summer 2005.

Commission Question 2: Has the institution described the relationship between the focus of the plan and student learning?

Our Outcome 2: The institutional leadership will be able to articulate the relationship between the focus of the plan and student learning.

Method for Assessment: QEP document analysis, analysis of other University documents, interviews with Deans and Department Heads (Institutional Leadership).

Result: The institution has described the relationship between the focus of the plan and student learning, but through summer 2005 QEP Assessment the institution learned that QEP PI's needed further training on authentic and direct means of assessing student learning to be reported in QEP Follow-up Reports presented using the Evidence Based Decision Making (EBDM) Process.

Recommendation: The institution should continue to conduct EBDM Workshops to promote EBDM Assessment Plans and Reports that assess the quality of student learning relative to the QEP focus.

Commission Question 3: Has the institution provided relevant and appropriate goals and objectives to improve student learning?

Our Outcome 3: The institutional leadership has relevant and appropriate University-wide goals and outcomes, with key indicators for excellence, to improve student learning.

Method for Assessment: QEP document analysis and analysis of other University documents.

Result: The institution has not documented appropriate University-wide goals and outcomes to improve student learning along with key indicators for excellence.

Recommendation: The institution should develop a multi-level approach where both University-wide outcomes with key indicators of excellence relative to the QEP focus are established, along with the continued promotion of course and program-level student learning outcomes assessment using authentic and direct methods relevant to the QEP focus.

Commission Question 4: Has the institution provided a comprehensive and clear analysis of the crucial importance of the Plan for improving the learning environment?

Our Outcome 4: Through comprehensive and clear analysis, the institutional leadership can articulate the crucial importance of the Plan for improving the learning environment.

Method of Assessment: Survey of QEP Council members and PI's and University document analysis, such as Vision 2020 materials, the Undergraduate Experience Report, and the Faculty Senate Research Committee Reports, which are in draft at this time.

Result: The survey revealed that QEP Council members believed that the Council had made good progress in gaining visibility and faculty involvement, but that the benefits of the QEP were not widely understood by faculty and remained a challenge.

Recommendation: The institutional leadership should continue to analyze and articulate the crucial importance of the Plan for improving the learning environment.

Commission Question 5: Has the institution identified the benefits to be derived from the QEP?

Our Outcome 5: The institutional leadership has identified the benefits to be derived from the QEP through the establishment of University-wide outcomes with Key Indicators.

Method of Assessment: QEPC document analysis and analysis of University documents

Recommendation: The institution should develop a multi-level approach where both University-wide outcomes with key indicators of excellence relative to the QEP focus are established, along with the continued promotion of course and program-level student learning outcomes assessment using authentic and direct methods relevant to the QEP focus.

Institutional Capability for the Initiation and Continuation of the Plan

Commission Question 6: Has the institution provided a time line for implementing and completing the QEP?

Our Outcome 6: The institutional leadership has a time line for implementing and completing the QEP.

Method of Assessment: Analysis of the QEP implementation time line

Result: The institution has not provided a time line for the implementation or completion of the QEP.

Recommendation: The institution must provide an approved time line for the implementation and completion of the QEP.

Commission Question 7: Has the institution assigned qualified individuals to administer and oversee its implementation?

Our Outcome 7: The institutional leadership has assigned qualified individuals to administer and oversee its implementation.

Method of Assessment: QEP Document analysis, job descriptions, letters of appointment to QEPC and other related University committees.

Result: Qualified individuals have been assigned to administer and oversee QEP implementation through a QEP Council. However, the individuals serving on this Council have not remained consistent within the institution. Consistency in oversight of QEP implementation and assessment brings strength to its institutional focus, value, and benefits which are needed for the 5-Year Impact Report of the QEP due to the Commission on Colleges in 2007.

Recommendation: The institution should clearly assign the QEP to qualified individuals who will remain consistent during QEP implementation and assessment and work closely with the QEPC and other related University committees relevant to the QEP focus.

Commission Question 8: Has the institution provided evidence of sufficient financial and physical resources to implement, sustain, and complete the QEP?

Our Outcome 8: The institutional leadership has allocated sufficient financial and physical resources to implement, sustain, and complete the QEP.

Method of Assessment: Financial Review of the QEP and academic resources and systems related to the QEP focus.

Result: Although \$100,000.00 has been provided by the Provost each year for QEP implementation, measurable benefits are lacking in that a number of QEP Follow-Up Reports were not submitted to the QEPC and clearly focused University-wide outcomes with Key Indicators have not been set. EDBM Budget issues have an impact on QEP resource allocation, most particularly in the area of assessment of the QEP relative to the quality of student learning within courses and programs.

Recommendation: The institution should establish a more clear and refined QEP focus for implementation, spending, and assessment which would bring greater measurable benefits to the institution. Measurable benefits to the institution relative to the QEP focus will be needed at the time of the QEP Five-Year Impact Report submission to the Commission on Colleges in 2007.

Commission Question 9: Has the institution allocated sufficient academic resources and systems to implement and sustain the Outcomes of the Plan?

Our Outcome 9: The institutional leadership has allocated sufficient academic resources and systems to implement and sustain the Outcomes of the Plan.

Method of Assessment: Financial Review of the QEP

Result: First, clear and focused University-wide outcomes of the plan, along with Key Indicators for excellence, should be refined so that academic resources and systems are clearly identifiable throughout the University. Second, relative to measuring the quality of student learning using authentic and direct methods, the EDBM process of assessing student learning outcomes at the course and program level will sustain the Outcomes of the Plan.

Recommendation: The institution should refine the QEP focus so that academic resources and systems supporting QEP implementation and EDBM assessment throughout the University will be funded and readily identifiable.

Commission Question 10: Has the institution established appropriate administrative processes for maintaining the progress of its quality improvements?

Our Outcome 10: The institutional leadership has established appropriate administrative processes for maintaining the progress of its quality improvements.

Method of Assessment: Analysis of the QEP Implementation time line and survey of administrative processes, including academic resources and systems supporting the QEP focus.

Result: There is not an established QEP implementation time line.

Recommendation: The institutional leadership must develop a QEP Implementation time line in order to establish appropriate administrative processes for maintaining the progress of its quality improvements.

Assessment of the Plan

Commission Question 11: Has the institution developed means for assessing the success of its QEP?

Our Outcome 11: The institutional leadership has developed means for assessing the success of its QEP.

Method of Assessment: Analysis of EDBM Assessment Plans and Reports relative to the focus of the QEP and survey evaluation of EDBM Workshops.

Results: QEP Follow-Up Reports have been inconsistent in both the number of reports received by the QEPC and the assessment of the quality of student learning.

Recommendation: The institution should continue to offer EDBM Workshops and should closely monitor the follow through with EDBM Assessment Plans and Reports relative to the focus of the QEP.

Commission Question 12: Has the institution identified relevant internal and external measures to evaluate the Plan?

Our Outcome 12: The institutional leadership has identified relevant internal and external measures to evaluate the Plan.

Method of Assessment: Analysis of EBDM Assessment Plans and Reports relative to the refined focus of the QEP includes a process for external reviewers and specific items on the National Survey of Student Engagement (NSSE).

Results: Due to the inconsistent nature of the Follow-Up Reports submitted to the QEPC so far, relevant internal and external measures to evaluate the Plan have not been consistently applied.

Recommendation: The institution should consistently collect EBDM Assessment Plans and Reports relative to the QEP focus.

Commission Question 13: Has the institution identified an internal system for evaluating the QEP and monitoring its progress?

Our Outcome 13: The institutional leadership has identified an internal system for evaluating the QEP and monitoring its progress.

Method of Assessment: Analysis of EBDM Assessment Plans and Reports relative to the focus of the QEP.

Result: Due to the inconsistent nature of the Follow-Up Reports submitted to the QEPC so far, the internal system for evaluating the QEP and monitoring its progress is not clear.

Recommendation: The institution should consistently collect EBDM Assessment Plans and Reports relative to the QEP focus.

Commission Question 14: Has the institution described how the results of the evaluation of the QEP will be used to improve student learning?

Our Outcome 14: The institutional leadership will be able to articulate how the results of the evaluation of the QEP will be used to improve student learning.

Method of Assessment: Analysis of EBDM Assessment Plans and Reports relative to the focus of the QEP.

Result: Due to the inconsistent nature of the Follow-Up Reports submitted to the QEPC so far, the use of results and the impact on the quality of student learning are not clear at this time.

Recommendation: The institution should consistently collect EBDM Assessment Plans and Reports relative to the QEP focus.

Broad Based Involvement of the Community

Commission Question 15: Has the institution described the methods used for the development of the QEP?

Our Outcome 15: The institutional leadership will be able to articulate the methods used for the development of the QEP.

Method of Assessment: Analysis of QEP Documents and other University documents

Result: The original QEP document illuminated much of this, spurred at first primarily by the Vision 2020 initiative. In that the Vision 2020 effort was clearly broad based, so, too, was the development of the QEP. The QEP had four foci in its initial development. Through summer 2005 QEP Assessment, the University learned that the QEP has not been consistently implemented and clearly focused in the four foci relative to the quality of student learning.

Recommendation: The institution needs further refinement of the QEP focus, well supported by broad based University planning and clearly related to the quality of student learning.

Commission Question 16: Has the institution demonstrated that all aspects of its community—faculty, staff, students, board members, and administrators—were involved in the development of the QEP?

Our Outcome 16: The institutional leadership will be able to document that all aspects of the University community—faculty, staff, students, board members, and administrators—were involved in the development of the QEP and its refined focus.

Method of Assessment: QEP document analysis

Reference

Bresciani and Sabourin (2002). National Association of Student Personnel Administrators (NASPA).

References to Institutional Documents

Executive Committee of the Task Force for Enhancing the Undergraduate Experience. (2005). *Enhancing the Undergraduate Experience: Final Report*.

Faculty Senate Research Committee. (2005). *Faculty Senate Research Committee Report: 2004-2005 Academic Year*. (DRAFT)

Measurement and Research Services (MARS). (Summer, 2005). *Quality Enhancement Plan Assessment Report*.

Measurement and Research Services (MARS). (2005). *Student Perceptions of Quality Enhancement Plan Factors at Texas A&M*.

Quality Enhancement Committee. (2002). *Texas A&M University Quality Enhancement Plan*.

Appendix A: QEP Analysis of Reports

A total of 23 QEP reports were reviewed to address the following questions:

- What is the quality of the QEP reports?
- What is TAMU learning from these QEP reports about the 4 QEP themes of technology, research, diversity, and internationalization?
- Are any themes emerging in the assessment reports that would better identify the themes?
- How many reports are course-based assessment verses program based assessment?
- Can we determine how many students have been served by each evaluation?

Thirteen of the reports included in this analysis were submitted for the 2002-2003 year, eight were for the 2003-2004 academic year and the remaining two reports were for the 2004-2005 academic year.

Quality of QEP Reports

To answer the question of what is the quality of the QEP reports, the Assessment Plan Criteria Checklist (Bresciani & Sabourin, 2002) was used. Several of the criteria on the checklist did not apply to the reports. For example, none of the reports contained overall goals or objectives and thus could not be evaluated. In addition, only two reports provided a program mission which was linked to an overall college mission but not to the university mission. In evaluating the outcomes being assessed, twelve of the twenty-three reports provided learning outcomes that stated what the program or department intends for students to know, think, or do? The majority of the outcomes could be described as program outcomes. These program outcomes were mainly concerned with the development of assessment programs. Furthermore, four reports did not contain any outcomes, results, or decisions and recommendations made. An additional, five reports described outcomes and evaluation methods but did not contain any results or decisions and recommendations made.

In evaluating the remaining programs' outcomes, only seven provided outcomes that were not detailed and specific. Furthermore, these seven programs' outcomes were not all measurable and identifiable. For example, it was often seen that there was more than one outcome described. Five of the program outcomes were rated as not being meaningful in making decisions of how to improve the program. The evaluation of whether the outcomes collectively reflected the most important purposes of the program was unable to be computed due to that in the majority of the reports the program's mission and objectives or goals were not provided.

In terms of the assessment methodology described in the reports, the majority of the programs described multiple methods of assessment. Twelve of the fourteen programs used multiple methods to assess one or two outcomes and the remaining outcomes were evaluated using only one method. In addition, only seven programs reported using any direct methods of assessment. The majority of the programs described using mostly indirect methods in combination with a direct method of assessment. Furthermore, only five of the twelve programs evaluating student learning outcomes reported using any authentic means of assessment to do so. Three of the programs reported using assessment methods that were judged as being not appropriate for the outcome they were intending to measure. For example, several of the programs reported using grades on exams and percentage of students passing a course as assessment methods. In terms of using comparable data, only three programs reported doing so. One of the programs described the use of an experimental design by using random assignment and a control group to determine whether the program outcomes were being met. The other two also used a "control" group although an experimental design could not be inferred from the description of their assessment process. All fourteen programs described assessment methodology that appeared feasible in terms of design, time and resources and appeared to reveal information that was suitable for program improvement. Five of the fourteen programs did not provide any criteria to determine whether the outcomes were successfully met. The criteria described for the most part appeared to be realistic.

In evaluating the results reported by the fourteen programs, five programs did not describe results that reflected adequate sampling of students from the program. It is important to note that several of the programs did not have results for all assessment methods described and thus decisions and recommendations were not available for those results. Four of the programs did not provide enough detail in their results to determine the extent to which the outcomes have

been achieved. One program described results that were not derived from their identified assessment methods but from a different method. Furthermore, one program referenced a figure in their description of results which was missing from the report. Finally, one program had “xx” where numbers were supposed to be entered. The majority of the programs reported results that could be used for program improvement. In terms of the use of the results for informing decisions and recommendations for program improvement, all but two of the fourteen programs described recommendations and decisions made for program improvement.

For decisions and recommendations, only one of the fourteen did not adequately state the results to describe specific changes made as a result of assessment and report decisions and recommendations that were clearly reflective of the results of the assessment plan. In addition, it was clear from nine of the reports that the assessment would be ongoing. Several reported improvements made to their assessment process as result of their outcomes evaluation.

In summary, the strengths and weaknesses of each of the fourteen reports varied. An overall weakness though was the lack of student and learning outcomes. Furthermore, the use of direct means or authentic means of assessment and comparable data appeared to be lacking from these reports. In addition, weaknesses could be seen in many of the programs’ drafting of program outcomes such as not being measurable or identifiable and having two outcomes described in one. The strengths of these assessment reports though can be seen in the use of the results that are generated and their use for program improvement.

What has TAMU learned regarding the 4 QEP themes?

To address the question of what is TAMU learning regarding the 4 QEP themes was difficult to answer given these available reports. Only eleven of the twenty-three reports provided assessment information regarding student learning outcomes reflecting one or more of the QEP themes. The remaining reports provided results for program outcomes. Two of the twelve reports did not report any current results for their assessment of learning outcomes. The difficulty of responding to this question is further impacted in that only five programs used direct and authentic assessment to measure student learning and four of those five did not address learning outcomes related to one of the four QEP themes. One other program reported using grades and percentage of students passing courses as assessment methods. The remaining programs used indirect means such as interview of students (i.e. the interviews contained self-report questions), student and faculty surveys, and syllabus reviews as assessment methods. Furthermore, criteria for success were not identified in one of the reports for the learning outcomes given the preliminary nature of the assessment. Given the data available and the limitations described above, one must be very cautious in the interpretation of these results and how they relate to the QEP themes.

Direct and Authentic Means of Assessment Results for Themes:

For the theme of research, two student learning outcomes were reported as being met by the one program. Student learning outcomes in the area of research were assessed using a faculty designed to rubric to assess students’ honor theses. The following results support the

accomplished outcome that students will be able to effectively conduct research and gain knowledge in their chosen topic area. It was found that all but eleven of the seventy-two students fell below the competent mark in their ability to review literature and use sources appropriately. Students' use of data was also highly assessed with only 15 of 72 students falling below the competent area. Forty-two students' ability in using data was assessed as being accomplished. Finally, students' analysis of data was also assessed highly with only 9 of the 72 students falling below the competent area and 45 students' ability assessed as being accomplished. Another learning outcome met was that of students being able to analyze the academic quality of information found in the web-based environment. As stated earlier it was found that all but eleven of the seventy-two students fell below the competent mark in their ability to review literature and use sources appropriately. As a result of these outcomes, several program decisions and recommendations were made. For example, it was recommended that the rubric to be used again to evaluate students' progress in accomplishing these outcomes and the addition of programs to support students' research such as a general meeting on using the library resources successfully.

Indirect Means of Assessment Results for Themes:

For the theme of research, several student learning outcomes were reported as being met in three of the four reports using indirect means of assessment. The results are as follows regarding the student learning outcomes for the theme of research. About half of the students in the one discipline interviewed (53%) reported they were not confident of their abilities in interpreting results and drawing conclusions from experiments. Although, 19% of the faculty surveyed reported that 75% of their students were confident in doing so. Students and faculty in this discipline reported greater agreement in student's confidence to work independently and asking for help when appropriately. Students interviewed in another discipline reported gaining confidence in their ability to completed research, write and use technology following the completion of an undergraduate research thesis project. A review of syllabi in a third discipline revealed that 100% of the courses provided opportunities for students to learn and/or improve their problem solving and summarization skills. Seventy-five percent of the students from this particular discipline reported that their course experience improved their ability to do so in course-evaluations. The majority (60%) of students interviewed reported being confident in their ability to integrate classroom knowledge and laboratory skills to a research setting. Only 8% of faculty reported that more than 75% of their students were able to do so. Despite the small number of students (range 2-3) who had done so, the majority of students reported being confident in preparing both professional-style written and oral presentations on their laboratory research. Only 3% of faculty reported that more than 75% of their students are comfortable in doing so. Most students in one discipline sampled reported being confident in their ability to locate research papers but were less confident in evaluating them. Six percent of faculty reported that 75% of their students are comfortable in doing so. In another discipline, a review of syllabi revealed that eighty percent of the courses offered in the program provide opportunities for students to improve their skills in locating appropriate research sources. Furthermore, 75% percent of these students on course evaluations agreed that their skills were improved in accessing credible research resources despite only half of the students reported using the TAMU online resources.

As a result of these findings, several recommendations and program improvements have occurred in these two disciplines. For example, “An Introduction to Undergraduate Research” meeting has been created for faculty and students. Another example is the recommendation that students should be required to submit at least one journal article for publication. In addition, tutorials were developed to assist students located more creditable resources and navigate TAMU library’s online resources. Changes could also be seen in the assessment process such as in the working of questions and plans for different methods such as exit surveys, etc.

For the QEP theme of technology, only three of the reports using indirect means of assessment provided data. In addition, criteria for success were not provided for these technology learning outcomes. Most students (73%) reported in an interview they felt confident using the needed instruments and equipment in their discipline. Twenty-eight percent of faculty reported that at least 75% of their students were comfortable in doing so. For the student learning outcome of being able to retrieve and organize specific information from the chemical literature, 40% stated they were confident to very confident in obtaining and evaluating information from databases. Seventy three percent expressed the same level of confidence in obtaining and evaluating journal articles. Eleven percent of faculty reported that more than 75% of their students were comfortable in retrieving and organizing specific information from the chemical literature. For the student learning outcome of being able to deliver oral and written reports, most students reported never having do. Fifty-three percent of students interviewed were confident to very confident in their ability to give an oral presentation on their research. In one other discipline it was found in exit interviews and on a survey that students gained greater proficiency in the use of technology including the use of software to create professional presentations and graphics-heavy research papers. Several recommendations for program improvement were generated from these results such as the development of evaluative criteria for research reports and oral presentations and rewriting of learning objectives for individual courses on syllabi.

For the QEP themes of diversity and internationalization, two reports assessed the ability of students to interact competently with both faculty and students from diverse backgrounds. One discipline reported that the majority of students stated that they felt very comfortable in working with students from other countries. Furthermore, almost half of the students reported that interactions with students from other countries occurred in their research group. Twenty-eight percent of the faculty reported that more than 75% of their students were able to function successfully in “complex, diverse, social, economic, and political contexts.” Results from another discipline revealed that 100% of the courses provided opportunities for students to interact with other students from a variety of backgrounds however students reported only taking advantage of some of those opportunities. More than half of the students in four of the six courses analyzed reported that these interactive exercises were good. Furthermore, 90% of the students reported that faculty and students were respectful of each other. An example recommendation that was put forward from these results include increasing the number of interactive activities available to students in courses. In another program, students’ ability to demonstrate understanding of issues surrounding diversity and ethnic minority membership was assessed. Through the use of focus groups, it was found that although classes cover material relevant to diversity and ethnicity, it does not devote enough time directly to these issues to make a substantial difference in students’ understanding. It was also found that a sizable majority of

students believe that the most important opportunities to learn about diversity and ethnicity come from interactions with other students outside of class.

Only one of the reports assessed learning outcomes for the internationalization theme. All learning outcomes were reported as having met the criteria for success. One of these outcomes was the ability of students to articulate concepts central to international affairs. A review of course syllabi revealed that 100% of all courses in the program provided opportunities for students to learn and increase their knowledge of international affairs. Furthermore, 90% of students strongly agreed in the course evaluations that the courses improved their ability to articulate this knowledge of concepts. Another outcome researched was the ability of students to analyze and evaluate different international perspectives and defend their conclusions. Similar results were found for this outcome as was found for the previous outcome. The final outcome assessed students' ability to apply their knowledge gained about international affairs to their field of study. Results revealed that more than 80% of students anticipated being able to do so. Example recommendations made from these results include refining the literature used to advertise their program and the development of support materials for various courses.

In summary, it appears from these results that students in at least four disciplines are being provided opportunities to engage in research, improve their technology skills, interact with others from diverse back grounds and improve their knowledge of concepts related to internationalization. In terms of being comfortable and reporting the ability to use basic research skills such as problem-solving, integrating and summarizing knowledge, only about half of the students surveyed reported being comfortable and confident in their ability to do so. Furthermore, only a small percentage of faculty surveyed reported that more than half of their students were able to do so. In addition, students reported being somewhat comfortable in their ability to locate research resources and in preparing oral and written presentations of their research. For the themes of diversity and internationalization, students are reporting that they are provided and have functioned well in interactions with others from diverse backgrounds. Furthermore, students have reported that they have improved in their ability to articulate knowledge about internationalization and anticipate being able to apply it their field of study. It is important to note that these results are from a very limited sample of students at TAMU and thus are very limited in their generalizability to the TAMU student population as a whole. More research is needed with a representative sample of programs from TAMU to address the question of what is TAMU learning regarding the 4 QEP themes of research, technology, diversity, and internationalization.

Emergent Themes

To address the question of whether there are any emerging themes in the QEP reports that would help identify the four QEP themes is difficult to answer given that only eleven of the programs assessed and reported results for learning outcomes that addressed the QEP themes. As stated earlier, the remaining programs assessed program outcomes. In reviewing the reports, similarities were apparent in the learning outcomes being assessed which may assist in identifying the learning themes. This could be seen for example in the theme of the research. Programs were often assessing students' ability to formulate research questions or hypotheses and summarize research. Many of the programs had additional outcomes addressing the research

theme such as the ability to prepare both written and oral presentations of research or the ability to recognize and access appropriate outlets for research. There appeared to be much overlap between the research and technology themes. Two programs described outcomes for research and technology and did not designate which outcomes spoke specifically to which theme. Another program's technology outcomes addressed students' skills in using technology for research specifically, i.e. the ability to use technology in order to deliver oral and written presentations of research.

A similar overlap was also seen between the diversity and internationalization themes. Again, two programs described outcomes for diversity and internationalization and did not designate which outcomes spoke specifically to which theme. Other programs only assessed learning outcomes for diversity and not internationalization. A common outcome was that of students interacting with faculty and other students of diverse backgrounds, cultures, and perspectives. Interaction may be considered a theme for the QEP theme of diversity. Other diversity or internationalization outcomes being assessed addressed students' articulate concepts of international affairs and their ability to apply that knowledge to their field of study.

In summary, two themes appear to emerge that help identify the QEP theme of research and diversity. For research, the theme appears to be ability of students to analyze and formulate hypotheses or research questions. For diversity, the theme appears to be the interaction of diverse students and faculty. However, it is important to note that these conclusions are very exploratory or preliminary given that they are drawn from the results of few reports. Further analysis of a more representative sample of QEP reports is needed.

Course Based Versus Program Based Assessment

All reports provided program-based assessment results. This was determined by reviewing each report's outcomes, assessment methods and results. Each program provided results for an overall program using methods such as exit interviews and surveys. No program reported using methods of assessing student learning in the classroom context using course goals, objectives, and content to determine the degree of learning that took place.

Number of Students Served

Only five (2003-2004) of the twenty-three programs indicated the number of students impacted or served by their evaluation. The numbers range from 66 to more than 3,000. In several cases, it is clear that the number reported reflects the number of students who participated in the evaluation such as by completing surveys. In the remaining reports, it is unclear whether the number reported is the number of students participating in the evaluation or the number of students thought to be served by the assessment. One report stated that 1200 students were served by their evaluation but hypothesized their evaluation would have a broader impact, that is a larger number of students served, given the program improvements resulting from the evaluation which in turn would increase participation in the program. Due to the lack of clarity, the number of students being served by these evaluations is difficult to determine. Further clarification on what is meant by this to the principal investigators is needed.

Recommendations

Several recommendations can be made regarding the QEP process. They are listed as follows:

- Programs need to shift from assessing program outcomes to student learning in order to effectively speak to what as we as a University community are learning about research, technology, diversity and internationalization.
- In terms of the quality of the assessment processes being implemented, i.e. the assessment plans, further training, staff development, and resources are needed. Specifically in the areas of:
 - Writing outcomes that are measurable and identifiable
 - Connecting outcomes to the mission of the department and the University as a whole
 - Assessment methods: direct and authentic measures of assessment versus indirect measures. Although at first appearance direct and authentic measures of assessment can often be costly and timely, others are readily apparent or at hand to the programs that could be used. Thus, training is also needed not only on identifying appropriate methods but on making the assessment process manageable and incorporated into the daily activities of a program.
 - Analysis and making use of results. Although most programs reported criteria for determining whether the outcomes were met successfully, several did not report enough detail in their results in order to determine whether the criteria were met.
- A process is needed to check and ensure the quality of the reports being submitted in terms of missing information, proofreading, and etc prior to being made public.
- In order to determine what we as a University is learning regarding the QEP themes a more representative sample of programs' efforts in evaluation are needed. A total of 30 programs in the academic years of 2003-2004 and 2004-2005 received funding for assessment in regards to QEP yet only 10 have provided results as of yet of their evaluation that could be included in this analysis. A process is needed to ensure timely submission of reports. Further analysis is needed of the remaining parts to effectively address the questions posed in this analysis.
- Further clarification and direction is needed to principal investigators on what is to be reported regarding the number of students served or impacted by their evaluations.
- Given the emphasis on diversity and research themes in the programs and the similarity in the outcomes being assessed between research and technology and diversity and internationalization, perhaps the QEP process should focus specifically on diversity and research instead of all 4 themes.

Executive Summary

A total of twenty-three QEP reports were reviewed to address several issues and questions regarding the QEP process. Thirteen of the reports included in this analysis were submitted for the 2002-2003 year, eight were for the 2003-2004 academic year and the remaining two reports were for the 2004-2005 academic year.

In analyzing the quality of the assessment processes implanted it was found that quality varied in terms of the different aspects of the assessment process. An overall weakness was found in the lack of student and learning outcomes. Furthermore, the use of direct means or authentic means of assessment and comparable data appeared to be lacking from these reports. In addition, weaknesses could be seen in many of the programs' drafting of program outcomes such as not being measurable or identifiable and having two outcomes described in one. The strengths of these assessment reports though can be seen in the use of the results that are generated and their use for program improvement. Furthermore, all programs reported engaging in program-based assessment. No program reported using methods of assessing student learning in the classroom context using course goals, objectives, and content, i.e. course based assessment, to determine the degree of learning that took place.

In addressing the question of what we are learning regarding the themes of the QEP, research, technology, diversity, and internationalization, it appears that students in at least two disciplines are being provided opportunities to engage in research, improve their technology skills, interact with others from diverse back grounds and improve their knowledge of concepts related to internationalization. It is important to note that these results are from a very limited sample of students at TAMU and thus are very limited in their generalizability to the TAMU student population as a whole.

Two themes appear to emerge that help identify the QEP theme of research and diversity. For research, the theme appears to be ability of students to analyze and formulate hypotheses or research questions. For diversity, the theme appears to be the interaction of diverse students and faculty. However, it is important to note that these conclusions are very exploratory or preliminary given that they are drawn from the results of only two reports.

In terms of the number of students being served by these evaluations, only five of the twenty-three programs indicated the number of students impacted or served by their evaluation. The numbers range from 66 to more than 3,000. It is unclear though in most of the reports whether the number reported is the number of students participating in the evaluation or the number of students thought to be served by the evaluation.

Several recommendations can be made regarding the QEP process. They are listed as follows:

- Programs need to shift from assessing program outcomes to student learning in order to effectively speak to what as we as a University community are learning about research, technology, diversity and internationalization.
- In terms of the quality of the assessment processes being implemented, i.e. the assessment plans, further training, staff development, and resources are needed. Specifically in the areas of:
 - Writing outcomes that are measurable and identifiable
 - Connecting outcomes to the mission of the department and the University as a whole
 - Assessment methods: direct and authentic measures of assessment versus indirect measures. Although at first appearance direct and authentic measures of assessment can often be costly and timely, others are readily apparent or at hand

to the programs that could be used. Thus, training is also needed not only on identifying appropriate methods but on making the assessment process manageable and incorporated into the daily activities of a program.

- Analysis and making use of results. Although most programs reported criteria for determining whether the outcomes were met successfully, several did not report enough detail in their results in order to determine whether the criteria were met.
- A process is needed to check and ensure the quality of the reports being submitted in terms of missing information, proofreading, and etc prior to being made public.
- In order to determine what we as a University is learning regarding the QEP themes a more representative sample of programs' efforts in evaluation are needed. A total of 30 programs in the academic years of 2003-2004 and 2004-2005 received funding for assessment in regards to QEP yet only ten have provided results as of yet of their evaluation that could be included in this analysis. A process is needed to ensure timely submission of reports. Further analysis is needed of the remaining parts to effectively address the questions posed in this analysis.
- Further clarification and direction is needed to principal investigators on what is to be reported regarding the number of students served or impacted by their evaluations.

Given the emphasis on diversity and research themes in the programs and the similarity in the outcomes being assessed between research and technology and diversity and internationalization, perhaps the QEP process should focus specifically on diversity and research instead of all 4 themes.

Appendix B: QEP Breakfast Meeting Focus Group Report

Summary of Findings

- Participants said that the intent and purpose of the QEP program is clear. However, most remarked that how QEP relates to other purposes such as IE, Vision 2020, and professional accreditation is not clear.
- Most participants reported that IE is viewed as an administrative function and lacks faculty buy-in. One respondent reported that IE and QEP have begun to have some faculty buy-in within the college.
- QEPC reporting structure is not clear – Who owns QEP? Who leads QEP? Who does QEPC report do?
- Participants learned about QEP from their deans and the Assessment Conference. It was very helpful for the PIs to be able to present their projects and for faculty to learn from the PIs at the Assessment Conference.
- Participants remarked that the guidelines and examples for proposal development are clear. They received very good support from MARS staff. However, such help was unexpected given the traditional roles of the office. Participants also reported that they learned about assessments from Center for Teaching Excellence and from discussions on learning communities and portfolios evaluations.
- Participants reported that money is a motivator to do QEP.
- Participants remarked that there must be a clear message from the Provost's Office that assessment is important and that it is part of the reward system if it is to be successful.
- Participants reported that it is very important to communicate the message of assessment using the suitable language for different audiences because deans, department heads, and faculty all have different priorities.
- Participants indicated that they need support in several areas: (1) assessment professionals to help with literature review and get assessment data published, (2) an opportunity to partner with other faculty or assessment professionals to get data published, and (3) knowledge of grant opportunities.
- Participants reported that their QEP assessment activities have improved the learning process. Their remarks include: (1) a research rubric used in multi-section courses helped gather information on student learning, (2) students were given the opportunity to stop and think about their ability to deal with conflicts in a team environment and their comments indicated learning has taken place, and (3) requiring students to prepare learning portfolios provide the opportunity for students to reflect on their learning experiences.

Background

In fall 2002, TAMU launched the QEP designed to use outcomes-based assessment to evaluate student learning in four leaning themes—research, diversity, technology, and internationalization. The Quality Enhancement Plan Council (QEPC), charged to support the QEP effort, developed a proposal solicitation process to encourage faculty participation. An annual budget of \$100,000 is set aside to support about 20 academic programs each year to assess student learning in the four QEP themes. The first RFP for QEP proposals was issued in October 2002 and the second RFP in April 2003. A total of 36 programs received funding for academic years 2002-03 and 2003-04.

To support the QEP effort, the QEPC provides guidelines in proposal development, reviews the proposals, recommends funding, and provides support/feedback to PIs in their assessment activities. In order to improve the QEP process, a small group of QEP PIs were invited to a breakfast meeting on October 20, 2004 to give feedback on how well the QEPC communicated the intent and scope of the QEP, how they learned about QEP, how adequate was the support provided, and what improvements can be made to better the process. This report is a summary of responses from a 1.5-hour discussion on the QEP process by QEP PIs.

Methodology

A list of questions was developed with input from MARS staff and several QEP EC members to guide the focus group discussion. An invitation was extended to all eighteen 2003-04 QEP PIs to the breakfast meeting at the Faculty Club. Four of the 2002-03 QEP PIs who have completed their QEP projects were also invited. All participants were provided with the discussion questions the day before the breakfast meeting. The format of the focus group discussion is semi-structured in a way to allow the moderator, Dr. Mark Troy, to phrase the questions to match the flow of the conversation. Dr. Simone Tiu served as the note taker. The focus group notes were categorized to identify themes of the discussion.

Participants at the breakfast meeting:

QEP PIs (6 total):

- Dr. Frances Gelwick – Wildlife and Fisheries Sciences
- Dr. Marty Loudder – Accounting
- Dr. Fidel Fernandez – Biomedical Engineering
- Dr. Claude Gibson – English
- Dr. Vicky Salin – Agricultural Economics
- Dr. Eluned Jones – Agricultural Economics

QEPC members and guests (6 total):

- Dr. John Fackler – Chair, QEPC
- Dr. Marilee Bresciani – Assistant Vice President for Institutional Assessment
- Dr. Nancy Simpson – Director, Center for Teaching Excellence

Dr. Elizabeth Tebeaux – Director, Office of Distance Education

Dr. Simone Tiu (note taker) – Assistant Director, Measurement and Research Services

Dr. Mark Troy (moderator) – Associate Director, Measurement and Research Services

Appendix C: Survey—Quality Enhancement Plan Council Feedback Report

Quality Enhancement Plan Council

Feedback Report Executive Summary

March 22, 2004

Survey Methods

- QEP Executive Committee conducted a survey of 32 QEP committee members and 31 QEP PIs for the purpose of appraising the effectiveness of the committee.
- The overall response rate for the survey was 31.7% (N=63). About one-fifth (21.9%) of QEP committee members surveyed responded (3 are also PIs). Over half (51.6%) of QEP PIs responded. The breakdown is as follows:

QEP committee members	=	4
QEP PIs	=	13
Both member and PI	=	3

- The survey consisted of seven qualitative questions. QEP committee members were asked to respond to questions #1, #2, #3, #4, #6, and #7. QEP PIs were asked to respond to questions #5, #6, and #7. Those who are both committee members and PIs were asked to respond to all seven questions.

SURVEY FINDINGS

1. What is your understanding of the primary goal of the QEP Council?	Committee members have a good understanding of the primary responsibilities of the Council. The two most common themes/responses were (a) to implement QEP to improve student learning/programs through assessment and (b) to provide leadership to promote greater understanding of the need for assessment across the University.
2. To what extent do you think the Council has been effective?	Committee members felt that the Council has made good progress in gaining visibility and involving faculty from most colleges to participate in QEP. However, respondents also felt that the Council has a very challenging task and faculty in general were not aware of the benefits of QEP.
3. To what extent do you feel that your input/involvement is affecting the decision making process of the QEP Council?	Almost all respondents indicated that they felt that their input and suggestions were considered or taken seriously in the Council's decision making process.

<p>4. What specific changes (including structure) would you recommend to make the QEPC and its executive council more effective?</p>	<p>About half of the respondents who suggested changes expressed the need for college-level infrastructure/committee to make QEPC more effective. It should consist of faculty with official titles such as Associate Dean of Assessment, clear responsibilities, and high profile leadership such as deans, associate deans, department heads, and well-respected faculty.</p>
<p>5. To what extent have you been able to involve your colleagues with your QEP project?</p>	<p>Most QEP PIs indicated that their colleagues' involvement with their QEP projects have been quite limited. Nevertheless, several reported seeing increased interest. Some PIs have been successful in inviting participation from colleagues while others found it difficult to engage colleagues.</p>
<p>6. Have you seen evidence that your colleagues/units have a better understanding of assessment now than two years ago? Please explain.</p>	<p>Most QEP PIs indicated that there is a better but not widespread understanding of assessment among faculty. Deans and department heads and those who are involved in QEP, IE, and some key faculty seem to have a better idea of what assessment is. Several expressed that perhaps, after they have a chance to share the QEP results, more faculty will have a better understanding of how assessment findings can help improve the program. There is currently no official venue for faculty to share their QEP projects.</p>
<p>7. Have you seen evidence that your colleagues/units have embedded assessment into their teaching? Please explain.</p>	<p>About half of the respondents indicated that they have seen evidence that assessment has been embedded in teaching. The increase, however, cannot be attributed entirely to QEP though QEP participants have definitely moved in that direction. Some reported that interested faculty, certain programs and departments are already quite progressive in assessment. About half of the respondents indicated that they have not seen much evidence that assessment has been embedded in teaching.</p>

Recommendation:

Survey findings indicated there is increased interest and awareness of QEP and assessment; however, getting faculty involved and sustaining assessment efforts remain challenging tasks. Pockets of success currently experienced depend largely on support and leadership from individual deans and interested faculty. In order to develop a culture of assessment and sustain assessment activities, it is recommended that each college form a college-level QEP Council (CQEPC) that can provide a venue for faculty to educate each other on assessment issues and share assessment findings. The Council should be given clear responsibilities which include the following:

- Represent the college in QEPC
- Inform faculty about QEP activities
- Inform QEP about CQEP activities
- Review QEP proposals before submission to QEP
- Review Institutional Effectiveness (IE) plans
- Provide a venue for QEP PIs to share their assessment activities and results
- Participate in university and national assessment conferences (e.g., Texas A&M Annual Assessment Conference, AAHE Assessment Conference)

Appendix D: QEP Assessment Task Force Theme Analysis

Members representing the task force: Marty Loudder, Claude Gibson, Vicky Salin, Eluned Jones, Charles Farnsworth, Fran Gelwick, and Tonya Driver

Research

- The objectives appear to fall mainly into two groups: (1) an academic research theme and (2) an applied research theme. It appears that it would be easier for faculty members to identify with the intent of the research theme if it were broken into two sub-themes of academic research and applied research (for problem solving).
- Division 1 – low level (recognize, articulate, demonstrate, access, compare, comprehend, etc.) and high level (analyze, apply, construct, evaluate); Division 2 – applied and “academic” research

Technology

- This theme appears fairly consistent. Some faculty may be confused by the use of the word “technology” though. It appears that most stress the use of computer technology. There might be better ways to communicate the breath of technologies that may be applied to this theme.

Diversity

- Many cluster around developing student understanding and appreciation of diversity for the purpose of teamwork, something that indicates that, in the world of work, most is accomplished collaboratively rather than individually. So students need an understanding of difference (cultural, economic, social, gender, academic) to function effectively and they must learn how awareness and appreciation of diversity lead to better building of consensus, conflict resolution, and attainment of various ends.
- Some indicate that proper use of technology and the proper conduct of research are dependent on participants/contributors who understand all implications of diversity. In other words, diversity is necessarily an element in the other three areas--research, technology, global.
- Many of the outcomes ask students to be able to demonstrate/utilize, communicate/articulate, analyze/evaluate, or share/describe their skills, abilities and understandings in some capacity. In other words, students should be able to reveal what they have gained.

Internationalization

- Outcomes fall into two groups--one passive and the other active. For the former, the verbs ask students to become aware of, to understand, to learn, and to appreciate international perspectives. For the latter, students are asked to use knowledge and skills with awareness of international impact, to interact more effectively with other cultures, to apply what they have

learned about the international specifically to their discipline, and to be able to analyze and evaluate international perspectives.

- Some outcomes are tied rather closely to the major with seemingly practical ends; others are broader and more abstract.

Other Comments:

- Both of these are (diversity and internationalization) very closely related.
- Emphasis is on teaching/training Students to Look for and Recognize Differences (across cultures, ethnicity, international etc...)
- Reasons to learn how to do this are to be Adaptive (flexible, etc...) in order to better frame and solve Problems
- Emphasis on students developing successful skills set needed for their more effective performance in careers (now as a student to better learn, later in their chosen profession etc...)
- Emphasis is on Relationships, especially in a Team (work, understanding, and appreciating) among people (cultures, ethnicities, nations...),
- Interestingly some also mentioned self-discovery and understanding by students of their own identity as well as relationship within a new culture, nation..., or better understand their fit even within their own culture etc...
- There is overlap between diversity and internationalization

Appendix E: Analysis Of Graduate Studies Program Reviews Doctoral Program Review Document Analysis

A total of 16 Doctoral Program Review self-study documents and external review team documents were analyzed, beginning in the academic year 2002-2003, the same academic year that the Quality Enhancement Plan (QEP) began. These documents were reviewed in relation to Goal 2, identified in the QEP Assessment Plan and Report. Goal 2 states, QEP efforts result in improvement of student learning. The analysis addressed the following questions:

- Were faculty members able to articulate student learning outcomes which reflected the learning objectives implied by each QEP theme (research, diversity, technology, internationalization)? (2.1)
- Did the reports articulate the ways student learning was to be improved based on the results of QEP funded projects? (2.2)
- Were the decisions that were made based on the results of QEP funded activities later evaluated to ensure that the desired improvement of student learning was achieved? (2.3)
- Was student learning enhanced in accordance with the four QEP learning themes? (2.4)
- Were there any emergent themes or issues related to the QEP?

The number of reports reviewed according to academic years follows: Six reports were submitted for the 2002 – 2003 academic year, five for the 2003 – 2004 academic year, and five for the 2004 – 2005 academic year.

Analysis Procedures

Due to the length of some of the documents, many over seven hundred pages, the process began with converting all documents into a more useable format for electronic scrutiny. All documents were scanned for key words related to the QEP themes (i.e. research, diversity, internationalization and technology) and words related to the process itself (i.e. objectives, outcomes, measurement, and assessment). Once the data had been surveyed, data bytes were identified and compiled into lists according to QEP themes and chronologically ordered according to years of review. Two independent judges then surveyed the documents and independently coded the data according to student learning outcomes as they pertain to the QEP themes. The two judges then met and discussed any points where opinions differed regarding associated objectives.

Outcome 2.1: Articulation of Student Learning Outcomes Reflective of QEP Themes

Research

The QEP theme of research is defined as:

“Students should graduate from Texas A&M University able to analyze problems, formulate research questions, and progress toward answers to those questions within their field of study, modifying these answers as new knowledge dictates.”

Based on the above definition, statements found in the documents that simply referred to research as a departmental goal or other related statements were not deemed to be a reflection of the QEP student learning outcome for research. Due to this parameter, less than half (n=7) of the documents had learning outcomes which reflected the research theme expressed in the QEP. Almost all of the statements that were believed to embody the QEP purposes were found in course syllabi that were included in some of the reports. However, only a small percentage of reports actually included full course syllabi for all courses offered by the department. Most reports included sample syllabi or only course descriptions (usually taken from the institutional course catalogue), which made it difficult to evaluate the departments holistically.

There were a total of thirteen learning outcomes stated reflecting the QEP theme of research. Again, it bears repeating that every document reviewed for this analysis listed issues regarding research, but not necessarily learning outcomes related to research. Some examples of statements that this analysis team felt accurately reflected the QEP research theme for student learning include:

- *“The student will demonstrate his/her understanding of and proficiency in the subject by being able to decompose the problem into a suitable number of parts for solution” - Aerospace Engineering, College of Agricultural and Life Sciences.*
- *“The student will demonstrate his/her understanding of and proficiency in the subject by being able to make a judicious evaluation as to whether the linearized **theory** is applicable to a particular situation” – Aerospace Engineering, College of Agricultural and Life Sciences.*
- *“Student research involvement should promote the development and integration of the full spectrum of research skills, including: identifying **research needs**; formulating **research questions**; developing a sound **design**; choosing or creating appropriate **procedures and measurement instruments**; carrying out **procedures, treatments, and interventions** with **fidelity**; **collecting, analyzing, and Interpreting data**; and presenting findings and conclusions cogently in both oral and print forums” – Educational Psychology, College of Education.*

As mentioned previously, to say that the majority of documents did not relate to the quality of student learning would be inaccurate, since most did. The problem however, was such that what was included in the documents were not learning outcomes related to the QEP research theme, and instead resembled departmental directives or statements. Some examples of statements that this research team felt did not constitute a learning outcome related to research include:

- *“Our students must perform high quality **research** to be competitive in academia.” – Department of Computer Science, College of Engineering.*
- *“Increase quality and quantity of **scientific research** produced by TAMU Department of Horticultural Sciences Ph.D. students” – Department of Horticulture, College of Agricultural and Life Sciences.*

In the external review documents there was one instance where reviewers made a statement that fell within the first objective (2.1) as it relates to research.

Technology

The QEP theme of technology is defined as:

“Students graduating from Texas A&M University should be recognized as highly competent in the use of modern technology relevant to their chosen career paths.”

The technology theme received the same critical analysis as did the research theme. Therefore, based on the above definition, statements found in the documents that simply referred to technology as a program outcome or other related statements were not deemed to be a reflection of the intended QEP technology outcome. As a result, there were two departments out of the sixteen that included what could be considered to be true student learning objectives related to the technology theme.

Once again, the statements that embodied the QEP theme of technology were found in course syllabi that were included in only a small portion of some of the reports. It is important to note that all of the learning objectives related to technology were within this outcomes (2.1), and were absent for the other three outcomes (2.2, 2.3, 2.4). Finally, two colleges had learning outcomes in this area.

Some examples of statements that this analysis team felt accurately reflected the QEP technology theme related to student learning include:

- *“The purpose of this course is to promote an understanding and knowledge of the concepts and **technologies** involved in the application of microorganisms for the biodegradation of hazardous materials” – Plant Pathology and Microbiology, College of Agriculture and Life Science.*
- *“Graduates will be proficient in the use of modern research **technology** and instrumentation in their field of stud” – Department of Chemistry, College of Science.*

Again, like the research theme, to say that the majority of documents did not relate to student learning would be inaccurate, since most did. The problem, however, was such that what were included in the documents were not learning outcomes related to the QEP technology theme, and instead resembled departmental directives or statements. Further to this, departments showed a propensity to discuss technology in a departmental facility resource aspect as opposed to relating to student learning outcomes. Some examples of statements that this analysis team felt did not constitute a learning outcome related to technology include:

- *“The objective of the ... program is the education of men and women to function at the highest levels of the engineering profession, with emphasis on solving problems that arise in the use of technology to benefit mankind” – Department of Aerospace Engineering, College of Engineering.*

- “ *Become totally integrated with teaching and research in support of electronic technology to maintain and expand websites, develop interactive CD’s and enhance delivery of information via the internet*” – Department of Animal Sciences, College of Agriculture and Life Sciences.

In the external review documents there were three comments made that fell within this outcome (2.1) as it relates to technology. Two of these comments were with respect to the Department of Poultry Science and one was with respect to the Department of Educational Psychology. These statements were deemed to be reflective of the technology theme and the articulation of student learning outcomes.

Internationalization

The QEP theme of internationalization is defined as:

“Students graduating from Texas A&M University will be able to function effectively in their chosen career fields in an international setting.”

Keeping in line with the criteria established to review the other themes, the theme of internationalization underwent the same scrutiny. Therefore, statements that embodied the student learning outcome related to the QEP theme of internationalization were considered. As a result, this analysis team determined that of the sixteen documents reviewed, there was one stated learning outcome related to internationalization. Some examples of these include:

- “ *Ph.D. graduates will be knowledgeable of the **international** aspects of the marketing of livestock and livestock products*” Department of Animal Sciences, College of Agriculture and Life Science.
- “ *Integrate **international** dimensions into the Department’s programs by fostering a supportive institutional environment*” – Department of Agricultural Economics, College of Agriculture and Life Science.

Diversity

The QEP theme of diversity is defined as:

“Students graduating from Texas A&M University should be able to function successfully in complex, diverse, social, economic, and political contexts.”

This theme received by far the least amount of attention by departments. In fact, after following the same criteria outlined for the other themes, no student learning outcomes related to diversity were identified in the documents. As was the case with the other themes, most discussion surrounding diversity was found in either department directives or program outcomes. Therefore, the following statements are examples of the more common diversity related statements found in the self-studies:

- *“Endeavor to establish and maintain a community of faculty, staff and students that energize the department through greater racial, gender and ethnic diversity.” – Department of Animal Sciences, College of Agriculture and Life Science.*
- *“Faculty are encouraged to develop and expand their professional networks to include graduate students and colleagues from underrepresented groups. Over the next five years, the department will expand its recruiting efforts to create more diversity in our graduate applications.” – Department of Anthropology, College of Liberal Arts.*

In the external reviewer documents, there was one instance where reviewers made acknowledgements that fell within this QEP outcome (2.1). This was found in the document evaluating the Department of Educational Psychology.

Outcome 2.2: Articulation of Ways Student Learning Was to be Improved

There were no doctoral program review documents that clearly articulated how student learning was to be improved based on the results of QEP funded projects. However, in the external review documents related to technology and diversity, the external reviewers made applicable acknowledgements falling into this category (Outcome 2.2). In total there were two points discussing the articulation of ways student learning was to be improved with respect to the Recreation, Parks, Tourism Sciences Department and one within the Department of Educational Psychology. These include:

- *“New directions now exist in areas such as youth development, urban parks, community development, technology and cooperative relationships... Great potential exists in emerging areas that tie aspects such as technology and community development to RPTS issues” – Recreation, Parks Tourism Sciences, College of Agriculture and Life Science.*
- *“Specific priorities for the department include efforts to enhance diversity in the student body and in program offerings” – Educational Psychology, College of Education.*

Outcome 2.4: Was Student Learning Enhanced in Accordance with the QEP Themes

Following Outcome 2.1, Outcome 2.4 was a prevalent outcome found in both the Doctoral Program Review documents and external review documents.

Research

Of the documents reviewed for the research theme, outcomes were found in one doctoral program review self-study document and six were found in the external reviewer documents. Again, it was the Department of Educational Psychology that accurately expressed that student learning was enhanced according to the research theme by reporting that:

- *“This implies that students are well versed in the knowledge base in their specialty area, and that they have developed facility with all aspects of the research process” – Department of Educational Psychology, College of Education.*

The external review documents revealed more instances where QEP Outcome 2.4 appeared to be evident within in departments. In total, reviewers commented on this outcome during reviews of four different departments, resulting in a total of six comments. Some examples of reviewer comments that applied to this outcome include:

- *“The department is advancing the state of the art in computer science in a number of important areas and offers students, both graduate and undergraduate, a broad range of courses covering fundamentals and research frontiers of the field” – External Reviewers for the Department of Computer Science, College of Engineering.*
- *“These facilities were being used fairly and frequently and students were receiving practical research opportunities at the centers” – External Reviewers for the Department of Horticulture, College of Agriculture Life Sciences.*

Technology

There were no self-study documents that addressed this outcome directly. However, there was one acknowledgement found during the review of the external review documents. External reviewers for the Department of Computer Science noted that:

- *“They appear to be eager to go beyond simply getting a degree to the development of a broad perspective in computer science and training that will serve them well in academia and industry” – External Reviewers for the Department of Computer Science, College of Engineering.*

Internationalization

In reviewing the self-study documents of the Doctoral Program Review and the external reviewer documents, the Internationalization theme was the only other theme other than research which had reflective learning objectives in both sets of documents.

In terms of the Doctoral Program Review document, internationalization as it relates to enhancing student learning was evident twice in two different departments, in two different colleges. Perhaps most clearly embodying the internationalization outcome stated earlier was the Chemistry Department in the College of Science:

- *“Graduate students will understand and experience professional practices in other countries” – Department of Chemistry, College of Science.*

The other department and college where this theme was noted was in the Department of Agricultural Economics in the College of College of Agriculture Life Sciences:

- *“Integrate international dimensions into the departments programs by fostering a supportive institutional environment” – Agricultural Economics, College of Agriculture Life Sciences.*

In terms of the External Review Team documents, there were two additional instances where the internationalization theme was acknowledged. Both were in the College of Agriculture Life Sciences, but one in the Department of Plant Pathology and Microbiology and the other in the Department of Animal Science. These comments were:

- *“The review document provided to the review team outlines in detail the departments progress on the priority goals of the department and in particular, extensive accomplishments are documented in the goals of educating students enabling the states agriculture to thrive in a global market, building future leaders...” – External Reviewers for the Department of Plant Pathology and Microbiology, College of Agriculture Life Sciences.*
- *“As with the Animal Breeding degree, the Animal Science degree defines a first semester GPA target and targets for grant proposal writing and international educational experience” – External Reviewers for the Department of Animal Science, College of Agriculture Life Sciences.*

Diversity

Diversity related themes as they pertained to QEP Outcome 2.4 did not emerge in the Doctoral Program Review self-study documents. However, the external review documents reveal a total of three instances where review teams acknowledged departmental efforts as they related to the diversity theme and Outcome 2.4. Three different departments in two different colleges received reviews that addressed this outcome. Some examples of these include:

- *“The diversity of skills, opinions and approaches offers a wide range of views to the students educated in this department” - External Reviewers for the Department of Horticulture, College of Agriculture Life Sciences.*
- *“Specific priorities for the department include efforts to enhance diversity in the student body and in program offerings” – External Reviewers for the Department of Educational Psychology, College of Education.*

Emergent Issues and Concerns Related to QEP Efforts

In reviewing the External Reviewers documents, there were several concerns that began to emerge as the analysis progressed, illuminating several areas that are relevant to the QEP themes and learning outcomes which this analysis was based upon.

Perhaps the most common emergent concern focused on the availability of resources. Financial, human, facility, and equipment resource issues were raised often by external review teams in their evaluation of departments and programs. In some cases these restraints inhibit

departments and programs from addressing expectations related to the QEP themes and learning outcomes. Below are a few examples of such observations made by review teams:

- “a significant number of departmental faculty base their research and graduate programs on small budgets”
- “the quantity of animal facilities available for research on poultry production and health is adequate but the quality of that space has several shortcomings”
- “there was an elimination of the graduate research assistantships previously funded by the Texas Agricultural Experiment Station”
- “reallocation of space may be warranted on the basis of research program size and volume”
- “Nagle Hall is an embarrassment to Texas A&M University. Derelict office furniture fills the rooms, ceiling tiles are water stained, paint is peeling, laboratories are unfit for contemporary research”
- “the overlap of some graduate training programs does not appear to be a good use of faculty or fiscal resources (e.g. faculty expertise in educational technology is distributed across three departments in the college)”
- “the electronics instrumentation facility is staffed by one person with part-time student assistance. It is modestly provided with test equipment, can provide interfacing assistance for new experiments but is in effect an undergraduate support facility”

Another set of issues emerged during the analysis of external reviewer documents. These were items that external review teams noted as problematic. These were directly related to the QEP themes and a department’s efforts to move toward them. Below are some examples of such observations made by external review teams:

- The...program lacks an identified research focus in its curriculum, as reflected in an absence of advanced doctoral level courses and in highly visible program initiatives that serve to meet state identified needs...
- The twelve research priorities of the department are too broad and need to be more focused.
- Lack of statistical support for graduate student and faculty research. Reliable statistical support is necessary for the faculty and students of the department to be competitive at all levels.
- The students expressed a desire to have more research interactions with other students and faculty. They would benefit from a general forum for research presentations and discussions.
- The review team also identified some areas of weakness as a high percentage of international students and insufficient diversity.
- Despite a very strong commitment to diversity by faculty in the department, diversity among the faculty is viewed as not sufficient.

There was one issue that emerged during review of the self-study documents which bears a brief discussion here. There were a handful of documents that discussed the QEP process as a whole

and discussed related concepts such as assessment and student learning outcomes. Perhaps most profoundly, one department openly acknowledged that:

“One critical deficiency in evaluating and improving teaching with the department is the lack of outcomes assessment. The department has not attempted to establish exit interviews or a post graduation evaluation from our graduate students concerning the strengths and weaknesses of our teaching, as is regularly done with our undergraduates.”

Such an acknowledgement shows recognition of the value and importance of outcomes-based assessment, and more importantly, a desire to rectify the situation in order to strengthen the quality of teaching and learning in the department for its graduate students.