

Implementing the Assessment of Administrative and Academic Support Units – A Handbook

Florida Memorial University

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Office of Institutional Effectiveness

Dr. Richard Yaklich, Assessment Director

Dr. William Hopper, VP Institutional Effectiveness

Implementing Assessment in Administrative & Academic Support Units

Although learning is directly affected by instruction in the classroom, it is indirectly affected by the processes and resources of administration and support staff. Because these offices have great impact on the environment and tools of the classroom, their objectives must be assessed. The objectives for these offices and the processes by which resource allocations are made should ultimately promote the learning environment in the classroom.

The Office of Institutional Effectiveness will endeavor to begin to educate the units concerning the functions and processes of assessment. Considerable time must be spent explaining what assessment is, how it can help the units, and what is involved in the processes.

What is assessment?

Assessment is a process that centers on student learning or support of and the ways in which the units within an institution facilitate the support of learning. Assessment provides a picture of the extent to which the actions of the units are consistent with their missions.

How can it help my unit?

Assessment is the vehicle through which academic institutions can demonstrate and document that we as educators do what we say we do, linking our outcomes back to the overall mission of the institution. It is an opportunity to identify ways to improve our effectiveness as a learning institution and to clarify any need for more resources and development. Ultimately, assessment can be linked to budgeting as we strive to create an environment that enhances a student's potential to learn.

What are the steps to assessment? (How to complete the process?)

Assessment is a process by which each unit of an institution must:

- **Establish goals** which support / facilitate student learning;
- **Set performance measures** (decide how outcomes are demonstrated, when, and to whom);
- **Measure outcomes** (administer the performance measures);
- **Act on findings** to improve student learning where measures demonstrate deficiency;
- **Document** for attainment-benchmarks, proof of need, and accreditation; and
- **Formulate Action Plans** to provide continuous improvement for the unit

All administrative support units should have a mission statement that clearly defines the services and direction that the unit provides. This mission statement must be linked to the overall institutional mission or vision statement, paying special attention to how the unit affects the learning environment of the institution.

With this in mind, the mission statements need to be broad enough to incorporate all the varied activities of the unit while still identifying the over-arching services the unit provides for the institution.

Steps for Defining a Unit Mission Statement

1. Identify the aspect(s) of the institutional mission into which your unit's activities fit.
2. Describe your stakeholders (e.g., the public, faculty, students, staff, etc.).
3. Indicate the key services provided by your unit to support the above aspect(s) of the institution's mission/vision and the learning environment. (Include only those services that you have control or influence over.)
4. Use the above lists of stakeholders and services to develop mission statement.

Once units have written their individual mission statements, they are ready to begin the formulation of Goals and assessable unit Objectives (Outcomes). Goals and outcomes are the building blocks from which administrative assessment is conducted. Goals define the division's direction and are the basis from which units develop outcomes and evaluate effectiveness. Goals indicate the broad thrust of the division's assessment activity and should be related to the University's Strategic Plan.

Understanding and Identifying Goals

Goals indicate the major priorities of the unit during a set period of time for assessment purposes, typically an annual cycle. They are broad statements linked to the University's Mission and Strategic Plan, but focused enough to be evaluated.

Goal Examples:

- Provide high-quality academic programs and a learning environment that promotes student success
- Enhance the availability and use of technology for student learning
- Support the intellectual, emotional and physical growth of students

- Attract and retain highly qualified professional faculty and staff

Objectives/Outcomes:

Objectives/outcomes should be services/processes under the control of the unit and be worded in terms of what the unit will accomplish or what its clients will think, know, or do following the provision of services. The objectives must be linked to the services described by the unit -level mission statement and lead to the improvement of these services; the assessment of the objective provides useful information for this improvement.

The formulation of assessable objectives is followed by the selection of appropriate assessment tools to measure success in the objective. The assessment tools may be direct or indirect measures of success; whatever assessment tool is used must yield useful results that inform possible change for improvement. In addition to the selection of assessment tools, measurement criteria (criteria of success) must be established to indicate the level of attainment toward the objective being assessed. Established criteria serve as a reference against which to gauge actual assessment results. Without these criteria, any results yielded by the assessment tool become vague and unusable.

Outcomes operationalize individual units' role in and support of the divisional goals. Developing goals and outcomes is challenging, but it is crucial that they are well written. They need to:

- Articulate clearly that which is to be accomplished by the division or the unit
- Can be measured and evaluated by those conducting the assessment activity.

Operational vs. Strategic Outcomes:

There are two types of outcomes used in administrative assessment activity.

Operational Outcomes reflect the core mission and purpose of the administrative unit by stating the expected results. Operational outcomes are generally assessed to ensure effectiveness of the unit at meeting its mission. Accordingly, operational outcomes are written in present tense.

Strategic Outcomes reflect future expected results of the unit, based on a planned activity. Strategic outcomes are generally assessed as part of the planning process to ensure strategic initiatives have the intended or positive results. Accordingly, strategic outcomes typically are written in future tense.

Examples:

Example of Operational and Strategic Outcomes:

Goal: Provide high-quality academic programs and a learning environment that promotes student success.

- **Operational:** The Registrar's Office maintains accurate, secure student records.
- **Strategic:** Over the next year, the Registrar's Office will expand hours of operation to improve student access to services.

After the objectives, tools, and criteria have been determined, the units are ready to capture outcome data from their services and processes. Using the assessment tools they have selected, the unit gathers data that, when compared to their criteria, becomes information directing the unit's Action Plan. Based on the resulting information, the unit must determine any tasks, processes, and services it will start doing, stop doing, and/or continue doing. As these action plans are implemented into the daily functions of the unit, the assessment cycle begins once again with the selection of new assessment objectives and the tools and criteria with which to measure these new objectives.

Measuring Effectiveness and Collecting Data

Once unit outcomes are developed, the next step of the process is to identify measures to evaluate the unit's effectiveness. Measures come in a wide variety of forms and from a wide variety sources. Sometimes measures require the development and implementation of new tools, but often measures rely on secondary analysis of data that are already collected by the unit, division, or University. Although coming from many different sources, strong measures share three key attributes. They are:

- Related to the outcome being assessed directly and clearly (i.e. the results will answer the questions: "How effectively did the unit meet this outcome?")
- Objective and avoid structural bias (e.g. the results of the measure are not determined by how its tool is written or implemented).
- Analyzable using standard research and evaluation techniques (i.e. the process for evaluating the measure is documented, impartial, and systematic).

Quantitative vs. Qualitative Measures

The selected measure impacts the data generated and the methods used to analyze that data. There are two types of measures used in administrative assessment

- **Quantitative** measures require numeric analysis (e.g. counts, percentage, and means)
- **Qualitative** measures require analysis of the character or content (e.g. content reviews, theme extraction, and secondary analysis).

Examples of Quantitative and Qualitative Measures

Outcome: The Registrar's Office maintains accurate student records.

- **Quantitative:** Track and count the number of errors on transcripts reported by students.
- **Qualitative:** Review the policies used to maintain and update student records.

The type of measure is sometimes prompted by the nature of the outcome being assessed; however most outcomes can be examined using either (or both) qualitative or quantitative measures. In the example, simply tracking and counting data entry errors could provide useful information. At the same time, using more qualitative measures such as a review of policies used to update records may illustrate possible holes in the process. Using both measures would provide the richest understanding by providing data on both the seriousness of the issue and an understanding of the process.

Direct vs. Indirect Measures:

In addition to the being classified by the type of data generated, measures are also described by how they relate to outcomes. **Direct** measures examine actual results:

Indirect measures examine perceptions relative to the outcome. Typically measures that are based on surveys, focus groups, and other methods to gather opinion through samples of respondents are considered to be indirect. Measures that are based on a complete or comprehensive data source that reflect the results of the outcome are considered to be direct.

Based on the example above, both the qualitative and quantitative measure would be considered direct measures because they are drawn from the actual results of the outcomes. However, the same outcome could be assessed using indirect measures. The Registrar's Office could survey students and ask them to indicate their agreement with a statement such as "My transcript is always correct" or conduct a focus group of office

staff members on accuracy issues. Using student or staff perceptions of accuracy would provide serve as an indirect measure

Example of Quantitative and Qualitative Measures:

Outcome: The Registrar’s Office maintains accurate student records

	Direct	Indirect
Quantitative	Compile and count the number of errors on transcripts reported by students	Survey students on their perceptions of record accuracy
Qualitative	Review the policies used to maintain and update student records	Conduct a focus group of the Registrar office staff on accuracy issues

Not all assessment needs to be quantitative, good assessment can include equipment/facility inventories, process timelines, focus group results, meeting minutes, or demonstrated performance.

Including Institutional Data Sources for Assessment:

The Office of Institutional Effectiveness conducts several annual surveys which can provide the basis for assessment measures. Most of data generated from the surveys is global in nature asking questions regarding students’ overall experiences; however some can be customized to provide units with data directly relating to their outcomes. The IE Office can also assist you in designing an instrument for your unit’s assessment.

The Assessment Process:

Planning the Assessment Process

1. List all of the services your unit provides to its stakeholders.
2. List three (3) current tasks/aspects of service/methods of operation that you feel could be improved within your office. These should be services that are provided within the scope of your control or influence. Note how this improvement will benefit learning by students and/or your colleagues, either directly or indirectly. Consider the importance and the impact of the task on achieving your unit mission, the vision of the college, and learning.

- 3.** a.) Consider how you might assess these three objectives during the coming year. What kinds of direct and indirect assessment tools might be used to gauge the unit's performance in these three areas?
b.) Describe your criteria for success: How will you know if and when your unit achieves success toward the particular objective you are assessing?
- 4.** Be sure the results from your assessment reflect the level of success toward your objective and can be used to support modifications to your activities. These modifications might include starting new action, continuing current action, or stopping current yet ineffective action.

Results from these administrative and support unit assessments should be recorded on the Assessment Report and warehoused to document the following activities: benchmarking successes, substantiating resource requests, and providing accountability to the community and governing agencies. This documentation is particularly useful when one unit's assessment reveals a need for change in the services provided by another unit; an aggregated feedback report can be used to inform other units of these needs. In addition, assessment documentation can be used as the foundation for data-driven resource allocation (annual budgeting) throughout the institution. Good assessment efforts will improve the individual unit, the units relationship with stakeholders, and the institutions overall effectiveness and efficiency.

Potential Barriers to Good Assessment

Barriers to good assessment should be expected and can be overcome by deliberate and detailed education. Some potential barriers include the following:

- The belief that one must assess every unit goal or task rather than just a few; assessment is for improvement, not job justification.
- The belief that all assessment must be quantitative; some of the best criteria include equipment/facility inventories, process timelines, focus group results, meeting minutes, or demonstrated performance.
- Doing assessment before you have a use for whatever results you may obtain.
- The disconnect between things we assess and plans for improvement and budgetary decisions

- Using assessment to justify a predetermined budget rather than budgeting the needs demonstrated by the assessment.

Review:

Each Academic and Academic Support Unit must conduct an Annual Assessment. The program involves the annual development of a template that includes the following components:

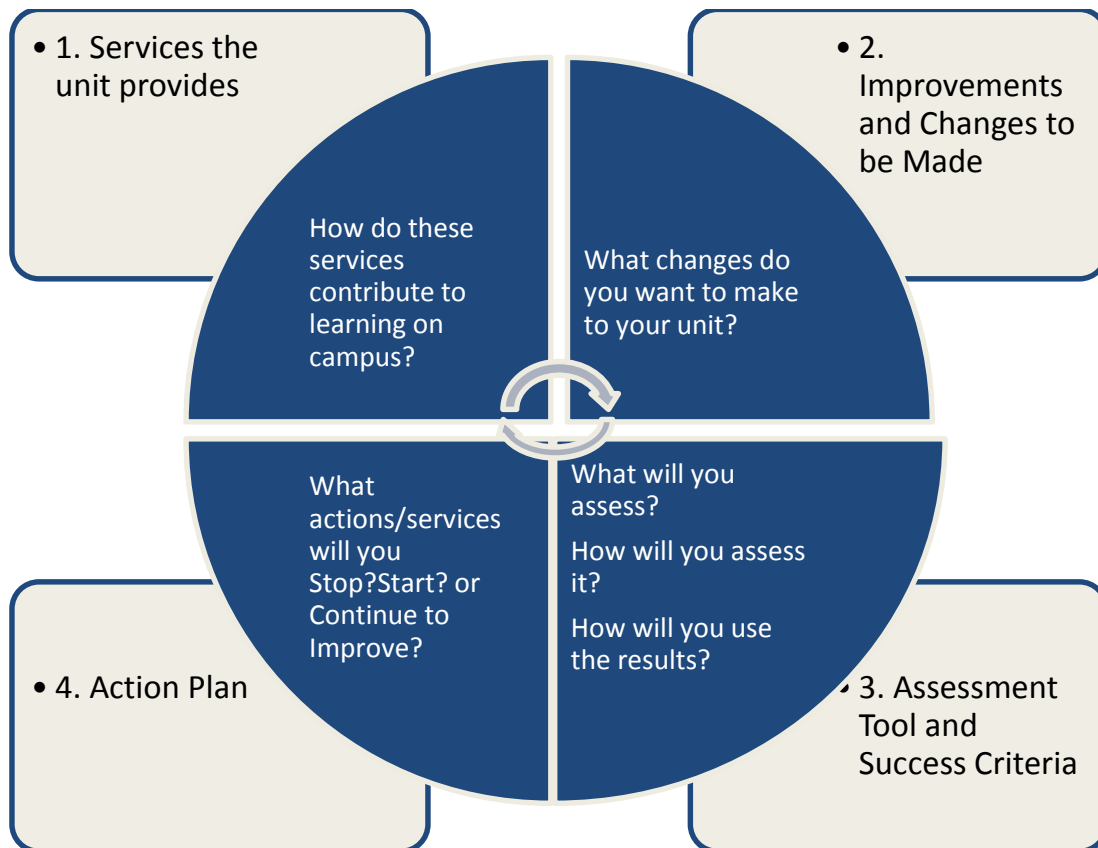
- **Mission Statement:** This is drawn from the University's Mission Statement, and identifies ways in which the unit contributes to fulfilling the Mission. The unit's mission statement is not likely to change significantly from year to year, although, it may be amended as the department's role within the university changes.
- **Goal:** Identification of an important goal clearly derived from the University's Mission, Strategic Plan, and the unit's own Mission Statement.
- **Objectives/Outcomes:** Identification of objectives that support the identified goal. The objective states how you plan to accomplish the goal, and will be the focus of the unit's assessment activities for the coming year. The objectives may change from year to year.
- **Measure/Tool:** Identification of assessment mechanisms that will be used to evaluate the selected objectives. Each objective should contain a criterion for success; this is the level at which the staff would conclude the objective has been reasonably met. The criterion should be set at whatever level is appropriate and meaningful.

Note: Goals, Objectives/Outcomes, and Measure/Tool make up the Assessment Plan, are typically completed in late summer-early fall.

- **Results/Use of Results:** Identifies the results of the application of the assessment mechanism. This describes what has been learned from each assessment mechanism about performance relative to the corresponding objective. It must contain information that allows the unit to determine whether or not the criterion level has been reached. This is completed at whatever time during the year the results from the assessment mechanism are available.
- **Action Plans/Recommendations/Improvements:** ("Closing the Loop") Identifies efforts to make program or service improvements based on what has been learned and reported in the Results/Use of Results. If assessment shows that an objective is being met the Recommendations/Improvement may simply

reports as such. When assessment shows that an objective is not being met and/or ideas are suggested for doing better, the Action Plan/Recommendations/Improvements should report the changes designed to enhance performance. This is usually completed in late spring/early summer.

- **Resource Impact:** Recommendations and improvements based on assessment will have some impact on resources whether it is financial, personnel, equipment, facilities, time or effort. It is important to identify the additional stress on resources so that planning may account for additional needs to reach Florida Memorial University's goals.



Academic Support Units Assessment Plan Template

Each Academic Support Unit must complete and Assessment Plan. This will guide the unit in its annual assessment cycle.

Academic Unit:

Mission	Goals	Outcomes/ Objectives	Assessment Tool	Criteria for Success	Person Responsible

Mission:

Issues to Consider:

- How does your department support the University’s Mission?
- How would you describe your department’s contribution to the University’s Mission?
- What are the strengths and weaknesses of your unit?
- What would be good indicators of quality for your unit?

Guidelines:

- The Unit Mission Statement should be short—no more than three sentences.
- The Unit Mission Statement should answer why you do what you do, as well as state what you do.
- The Unit Mission Statement should be consistent with the University’s Mission.
- The Unit Mission Statement should unite, inspire, challenge and motivate you and your colleagues.

Example Missions Statements:

Office of Development, Division of Institutional Advancement

- To build relationships and encourage constituents to make financial investments toward the purposes and priorities of Florida Memorial University.

Goals:

Unit Goals Should:

- Respond to the questions, “What does the unit wish to accomplish?” and “What is the unit’s vision for itself?”
- Be challenging but attainable.
- Be linked clearly to the unit’s mission statement.
- Be consistent with the university’s educational ideals, philosophy and mission.
- Be useful to the unit, as well as to long-range, University-wide planning.

- Be compatible with those of other units.

Example Unit Goals:

Office of Development, Division of Institutional Advancement

1. Increase and broaden Annual Fund support.

Outcomes/Objectives:

Unit Objectives Should:

- Respond to the questions, “How will the unit accomplish this goal?,” “What service is being provided?” and “What value is being added to the service or program?”
- Be specific enough to allow assessment of progress, but not at the expense of failing to address important issues.
- Be assessable, though not necessarily in easy, quantifiable terms.
- **Strategies:** What initiatives we will undertake to accomplish this objective?

Example Unit Objectives:

Office of Development, Division of Institutional Advancement

- 1a. Increase total annual fund contributions by 3%.
- 1b. Increase number of individual donors among friends, and parents by 3%, and increase alumni participation by 4% to 37% overall.
- 1c. Increase number of gifts to the Annual Fund in the \$1000 to \$10,000 range by 4%.
- 1d. Improve overall Pledge Fulfillment rate by 3%.

Assessment and Criteria:

A successful assessment program will be capable of responding to two questions:

- Is your department accomplishing what it wishes to accomplish?
- How do you know?
- **Unit Strategies:** What initiatives individual administrative units will undertake to accomplish this objective?

Assessments can be any type of qualitative or quantitative measure of achievement of departmental objectives. They should include evaluations already in use, as well as others the department would like to put into place. They should also be tied directly to specific objectives, so there is no doubt about what assessments are to be used to measure each objective. Avoid establishing goals and objectives which might be easily assessed, but which are of little value in improving the quality of programs and services.

What are the major types of assessment mechanisms?

- Direct Measures: specific tallies of performance.
- Attitudinal Measures: satisfaction surveys conducted through questionnaires or focus groups.
- Data System Indicators: some helpful data related to objectives may be collected in the university's routine data collection efforts.
- Administrative Practice: administrative departments may collect helpful information in the process of writing annual reports or other required documentation procedures.
- Professional Standards: some administrative areas have corresponding professional associations that offer guidelines and/or external review.

Example Measures/Tools:

Office of Development, Division of Institutional Advancement

- 1a. Track YTD progress toward the goal on monthly gift reports.
- 1b. Compare YTD numbers of donors (alumni, friends, etc.) with last year's totals.
- 1c. Compare the number of gifts in the \$1,000 to \$10,000 range to the Annual Fund with last year's results.
- 1d. Compare YTD pledge fulfillment rate with last year's rate.
- 1e. Schedule and hold an Alumni Recognition event.

Other examples of assessments in other departments:

- Library Circulation Statistics
- Computer Usage Statistics
- Number of Admissions Applications
- Admission Yield
- Percent of Alumni Giving
- Annual Fund Receipts
- Net Tuition Revenue
- Number of Safe Work Days
- Questionnaires (Students, Employers, Faculty/Staff, Alumni, etc.)
- Response Time to Requests for Service
- Campus Crime Statistics
- Homecoming Attendance Figures
- Cost-Saving Statistics
- Facility Usage Statistics
- Counts of Students Served

- Student satisfaction surveys
- Attitudinal surveys
- Student learning outcomes
- Retention statistics

Results:

This identifies the results from each assessment mechanism. It must contain information that allows the unit to determine whether the criterion level has been reached. This data may be completed whenever the results from a particular assessment mechanism become available. Assessment results should be factored into future planning for the unit.

Example Analysis/Results:

Office of Development, Division of Institutional Advancement

- 1a. Annual Fund totals increased from \$1.3 million to \$1.35 million, a 3.8% increase. The Development Office exceeded its goal for increasing overall fundraising for the Annual Fund. The Reunion Year mailings seem to have been particularly effective.
- 1b. Giving by parents and friends increased by 4%. Alumni giving increased 2%. The fundraising among parents and friends reached target, overall alumni giving did not.
- 1c. The number of \$1,000-\$10,000 leadership gifts increased from 573 to 598, a 4.2% increase. The campaign for increasing leadership gifts exceeded its goal.
- 1d. The pledge fulfillment rate increased by 1% from 87% to 88%. Pledge fulfillment rate showed little improvement.

Action Plan:

Effective assessment should inform decisions leading to improvements in what you're doing. Action Plans guide the unit to make improvements and assess them in the next assessment cycle.

Example Use of Results Action Plan:

Office of Development, Division of Institutional Advancement

- 1a. Mailings will continue in the future.
- 1b. A review of strategies for reaching young alumni in particular is called for.
- 1c. The campaign will be repeated next year.
- 1d. Develop new strategies for more effective follow-up.

Use the following Chart to help in your assessment planning:

Florida Memorial University
Academic Support Unit Assessment Guide

Unit Name	
Unit Mission Statement	
Unit Goals/Relevant to Institutional Goals (Strategic Plan)	
Unit Objectives	

Objectives	Strategies: What initiatives we will undertake to accomplish this objective?	Unit Strategies: What initiatives individual administrative units will undertake to accomplish this objective?	Expected Outcomes: What results will indicate that we've achieved the objective?	Timeline: When will we assess achievement of the objective? When will we report the results?	Performance Indicators: What data will show that we are achieving the goal?	Lead Responsibility: Who will make sure this strategy is accomplished?

Assessment Plan Form

A template of the Assessment Plan form used at Florida Memorial University is given below:

Unit Title

Completed by:

I. Unit Mission Statement

II. Use of Results from Last Assessment Cycle

Listed below are the improvements in the program over the past year(s) that have resulted from past assessment findings. (What changes did you make to the program? – This is the summary of your results from the last cycle. You MUST assess these changes)

Changes to Assessment Plan:

	Changes Implemented
Revised Unit Outcome Objective(s)	
Revised Measurement Approach(es)	
Collected / Analyzed Additional Data and Information	
Changed Method(s) of Data Collection	
Changed Timetable for Data Collection	
Other planned change(s)	

Details for each checked item:

Changes to Support Service Processes:

	Changed Implemented
Modified Services Provided	
Made Technology Related Improvements	
Made Personnel Related Changes	
Revised/Modified/Added Training for Personnel	
Revised Admission Criteria	
Other Implemented/planned change(s)	

Details for each checked item:

Details for each checked item:

III. Assessment Report

Unit Goals

GOAL 1 -

GOAL 2 -

GOAL 3 -

Unit Outcomes (services which support learning)

U01:

U02:

U03:

Unit Service Outcomes Assessment (UOs)

Unit Outcome	Means (Method) of Assessment	Criteria for Success	Direct* or Indirect Measure**	Results/Findings/Outcomes	Action Plan
Increase total annual fund contributions	Track YTD progress toward the goal on monthly gift reports	Increase total annual fund contributions by 3%.	Indirect	Annual Fund totals increased from \$1.3 million to \$1.35 million, a 3.8% increase. The Development Office exceeded its goal for increasing overall Fundraising for the Annual Fund. The Reunion Year mailings seem to have been particularly effective	Mailings will continue in the future.
Increase number of individual donors among friends, and parents, and increase alumni participation	Compare YTD numbers of donors (alumni, friends, etc.) with last year's totals.	Increase number of individual donors among friends, and parents by 3%, and increase alumni participation by 4% to 37% overall	Indirect	Giving by parents and friends increased by 4%. Alumni giving increased 2% The fundraising among parents and friends reached target, overall alumni giving did not	A review of strategies for reaching young alumni in particular is called for.
Increase number of leadership gifts to the Annual Fund in the \$1000 to \$10,000 range	Compare the number of gifts in the \$1,000 to \$10,000 range to the Annual Fund with last year's results	Increase number of leadership gifts to the Annual Fund in the \$1000 to \$10,000 range by 4%.	Indirect	The number of \$1,000-\$10,000 leadership gifts increased from 573 to 598, a 4.2% increase. The campaign for increasing leadership gifts exceeded its goal	The campaign will be repeated next year

Note: Add or delete tables as needed

Use of results to improve Unit

Action Plan: How will you use the results to improve your unit?

Listed below are the improvements in the unit assessment that will be or are being implemented based on data collected over the past year that have resulted from the above assessment findings. Please use these items to indicate changes based on your assessments.

Changes to Assessment Plan:

	Changes Planned
Revise Unit Outcome Objective(s)	
Revise Measurement Approach(es)	
Collection / Analysis Additional Data and Information	
Change Method(s) of Data Collection	
Change Timetable for Data Collection	
Other planned change(s)	

Details for each checked item:

Changes to Support Service Processes:

	Changes Planned
Modify Services Provided	
Make Technology Related Improvements	
Make Personnel Related Changes	
Revise/Modify/Add Training for Personnel	
Revise/Review Unit Strategies	A review of strategies for reaching young alumni in particular is called for.
Other Implemented/planned change(s)	

Details for each checked item:

IV. Unit Highlights

Unit Highlights Write a narrative about anything unique or special about your unit

Narrative summary of results: Write a summary of your results and how you will use them to improve your unit – this will become your starting point for the next assessment cycle

* *Direct measures* examine actual results such as research papers, presentations, test results, case analysis, projects ...

**** Indirect measures** examine perceptions relative to the outcome. Typically measures that are based on surveys, focus groups, and other methods to gather opinion through samples of respondents are considered to be indirect this can be senior exit or graduation survey, or survey of student internship mentor or employee. You should have at least one Indirect Measure Assessed somewhere in the program

Resources Used

This work is based largely on the material developed by James O. Nichols, Director of University Planning and Institutional Research at The University of Mississippi.

AAHE Assessment Conference, 2002 by Paul Johnson Coordinator of Assessment *Tulsa Community College*

Guidelines for Assessment, (Publication. (1993). Retrieved February 11, 2008, from California State University Chico:
<http://www.csuchico.edu/community/assessment.html>

Huba, & Freed. (2000). *Learner-Centered Assessment on College Campuses*. Boston: Allyn and Bacon.

Hutchings, P., & Marchese, T. (1990). Watching Assessment: Questions, Stories, and Prospects. *Change. The Magazine of Higher Learning*, 22(5), 12 -38.

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Operational Excellence and Assessment Support. (2003). University of Central Florida website. Retrieved February 11, 2008, from <http://oeas.ucf.edu>

Outcomes Assessment Manual. (2000). Retrieved February 11, 2008, from University of Wisconsin, Madison Assessment website

Palomba, C., & Banta, T. (1999). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco: Jossey Bass.

Pet-Armacost, J., & Armacost, R. (2003). *Challenges in Communicating Innovative Assessment Approaches*. Paper presented at the AAHE Assessment Forum.

Pet-Armacost, J., Armacost, R., & Young, D. (2003). *Transforming the Assessment Culture: One University's Story* Paper presented at the 2003 AAHE Assessment Forum.

Stassen, M., Doherty, K., & Poe, M. (2001). Program-Based Review and Assessment. Retrieved February 11, 2008, from University of Massachusetts Amherst Office of Academic Planning and Assessment website:
[http://www.umass.edu/oapa/assessmentiprogram based.pdf](http://www.umass.edu/oapa/assessmentiprogram%20based.pdf)

