



**TEXAS A&M**  
**UNIVERSITY**  
**CENTRAL TEXAS**

# Assessment Guide for Academic Programs

College of Business Administration  
(6th Edition, April 3, 2019)

## Table of Contents

ASSESSMENT GUIDE FOR ACADEMIC PROGRAMS .....	3
SECTION 1: WHAT IS ASSESSMENT? .....	4
SECTION 2: CREATING A MISSION STATEMENT .....	13
SECTION 3: CREATING PROGRAM GOALS .....	19
SECTION 4: CREATING PROGRAM LEARNING OUTCOMES .....	22
SECTION 5: ASSESSMENT METHODS .....	33
SECTION 6: PLANNING FOR DISSEMINATION AND USE .....	46
SECTION 7: YOUR CONTINUOUS IMPROVEMENT PLAN.....	48
SECTION 8: ANALYZING ASSESSMENT RESULTS .....	63
SECTION 9: YOUR ASSESSMENT REPORT .....	70
SECTION 10: CLOSING THE LOOP .....	72
SECTION 11: DATA/EVIDENCE/ARTIFACT REPOSITORY .....	76
SECTION 12: ASSESSMENT CONDUCT DURING AN ASSESSMENT CYCLE .....	79
References.....	83
Appendix A: Data Flow .....	85
Appendix B: Reporting Flow .....	86

# ASSESSMENT GUIDE FOR ACADEMIC PROGRAMS

## *A Programmatic Guide to Creating an Assessment Plan and Reporting Assessment Results*

The purpose of this workbook is to provide a guide for developing an assessment plan for an academic program and for summarizing assessment results in an assessment report. The information that is developed as a result of the use of this guide will be uploaded to the TAMUCT academic assessment – continuous improvement repository, [TaskStream](https://www.watermarkinsights.com/signon/), found at <https://www.watermarkinsights.com/signon/>. For the purpose of academic assessment for the Southern Association of Colleges and Schools – Commission on Colleges, an academic program is defined as any undergraduate or graduate degree program<sup>1</sup>. If the degree program has multiple majors, then each major is further defined as an assessable academic program. This guide has been divided into 12 sections, providing guidance for developing assessment plans from initial development through the submission of annual reports, and is outlined below.

- Section 1 of the workbook will provide an overview of assessment and the assessment cycle. Sections 2-5 cover each step in the process of developing an assessment – continuous improvement plan.
- Section 2 will provide a guide for the process of creating a program mission statement, and the foundation of an assessment plan.
- Section 3 will provide a guide for developing program goals.
- Section 4 will provide a guide for the process of developing measurable student learning outcomes.
- Section 5 will assist in designing assessment methods and measures.
- Section 6 will help provide guidance for the dissemination of the assessment results and how to use them to improve the program.
- Section 7 will provide guidance on completing the assessment plan.
- Section 8 will provide guidance for analyzing the data and the preparation of a summary, including the proposed changes to the program based on the results.
- Section 9 will aid the completion / submission of the annual assessment report.
- Section 10 explains what happens with the report once it has been submitted.
- Section 11 provides information on data repository and report flows
- Section 12 provides guidance on conducting an assessment during an assessment cycle.

---

<sup>1</sup> The Association to Advance Collegiate Schools of Business (AACSB) requires assessment on the overall program, not to the major level, i.e. BBA, BAAS, BS CIS, MS Accountancy, MS IS MBA, MS One Planet Leadership unless there are substantial differences in the core of the majors within a program.

## SECTION 1: WHAT IS ASSESSMENT?

*The purpose of this section is to provide you with 1) an overview of assessment at the College of Business Administration, Texas A&M University - Central Texas; 2) definitions and an explanation of what assessment is not; 3) questions assessment may answer about your program and 4) a description of the assessment process. At the end of this section you will be prepared to start developing your assessment plan.*

### **Assessment at the College of Business Administration, Texas A&M University - Central Texas**

In this era of accountability, assessment has come to dominate the discourse about higher education and its progress. The political pressures to assess student learning and to hold campuses accountable have increased into the new millennium. Universities are now facing external pressures as accrediting bodies are requiring them to assess how well their academic programs are meeting goals to inform improvement efforts. The ability of universities in the South to offer student financial aid from federal sources depends on their ability to remain accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). The accreditation process is partly based on the institution's ability to demonstrate that it has an ongoing assessment process that continually examines the quality of services and programs and uses this information to make improvements. Dissemination and use is essential. Creating an assessment plan and collecting data are not enough. According to SACSCOC, the university (and COBA) must comply with the following assessment requirements (SACSCOC, 2012b):

*2.5: The institution engages in ongoing, integrated, and institution-wide research-based planning and evaluation processes that (1) incorporate a systematic review of institutional mission, goals, and outcomes; (2) result in continuing improvement in institutional quality; and (3) demonstrate the institution is effectively accomplishing its mission.*

*3.3.1: The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results in each of the following areas: (Institutional Effectiveness)*

*3.3.1.1 educational programs, to include student learning outcomes*

*3.3.1.2 administrative support services*

*3.3.1.3 academic and student support services*

*3.3.1.4 research within its mission, if appropriate*

*3.3.1.5 community/public service within its mission, if appropriate*

*3.4.1: The institution demonstrates that each educational program for which academic credit is awarded is approved by the faculty and the administration (Academic program approval).*

The College of Business Administration (COBA) is committed to creating a culture of evidence, one that is based on using data to inform decision makers and to improve the quality of education on campus. In accordance with SACSCOC regulations, COBA has established a goal that all academic programs will develop and sustain mission statements, learning outcomes and plans to carry out assessment, including the use of results. As per the Office of Institutional Research and Assessment (IRA) guidance, assessment must be conducted annually for any major or field in which COBA offers a degree. Generally, minors and concentrations do not require assessment plans for SACSCOC purposes. However, in those programs for which the institution does not identify a major, assessment is required for the “curricular area or concentration” (SACSCOC, 2012a, p. 64). The TAMUCT assessment cycle is from September through August each year. Therefore, at the beginning of each academic year, COBA academic programs must submit an annual assessment plan for the coming academic year and a report summarizing the assessment results from the previous academic year to the IRA, through the vice presidents for undergraduate and graduate studies. The IRA will review the assessment plans for the coming year and contact programs if revisions are required or recommended. The assessment reports summarizing assessment results will be reviewed by the COBA department chairs and will provide summaries and recommendations to the Dean, COBA, and as required, feedback to the individual programs using TaskStream as the medium for the reports. The vice presidents for undergraduate studies and for graduate studies will review the reports from each college and present their recommendations to the provost. The Provost and Deans will work with the department chairs and program leads as needed to improve student learning based on these assessment results. A more detailed timeline of our assessment cycle is included below.

### **COBA Annual Assessment Cycle – in TaskStream**

Assessment Plan	At the beginning of each assessment cycle plans are finalized and uploaded into TaskStream for review and approval. Generally, all plans should be available for review in October of the new assessment cycle.
Assessment Findings	At the end of each assessment cycle, data are analyzed and findings developed, including the determination of improvement actions within each scheduled assessed area. Then, the findings are uploaded into TaskStream for review, by September following the assessment cycle.
Continuous Improvement Plan (CIP)	The continuous improvement plan is developed providing the details for the actions necessary to improve those identified assessed areas and is then uploaded into TaskStream and for review. The plans should be available for review by the October following the assessment cycle.
CIP Update	The improvement plan update is a review of the progress made on the CIP and should be uploaded into TaskStream for review by the February following the assessment cycle.

Data Collection	<p>Data collection is a continuous process and should be collected for all assessed areas, during the year or cycle of assessment, by the end of each long semester (Fall / Spring).</p> <p><b>Note:</b> For courses that traditionally have low enrollment numbers or are offered once during an assessment cycle, or that do not have multiple sections available during the cycle, program leads should consider collecting data within the year prior to the assessed cycle and then again during the assessed cycle.</p> <p>The data should be then stored in the assessment shared drive on the T-Drive. Only the data that is scheduled for assessment will be analyzed within a particular assessment cycle.</p>
-----------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### Example Cycle (2018-2019):

- Assessment Plan: Due 10/19/2018
- Data Collection: Due 12/21/2018 and 05/17/2019
- Assessment Findings: Due 09/13/2019
- CIP: Due 10/04/2019
- CIP Update: Due 02/14/2020

### What Assessment Is and What Assessment Is Not

*Assessment is the systematic and ongoing process of gathering, analyzing and using information from multiple sources to draw inferences about characteristics of students, the curriculum, programs, and units for the purpose of making informed decisions to improve the learning process. (Linn & Miller, 2005)*

In order to understand what assessment is, it may be helpful to understand what assessment is not. The terms assessment, test, grades, evaluation, and research are often confused because they all involve the process of collecting information about student learning. However, they are distinct in their purposes, methodologies, and basic philosophies of modes of inquiry. The following definitions should provide you with a better understanding of what assessment is.

**Assessment** may be defined as “the systematic and ongoing process of gathering, analyzing, and using information from multiple sources to draw inferences about characteristics of students, the curriculum, program, and units for the purposes of making informed decisions to improve the learning process” (Linn & Miller, 2005). In this respect assessment also includes the formulation of value judgments in terms of using the information gathered to determine the success of the program and to make improvements in student learning.

A **test** is a type of assessment that consists of a measure of a sample of behavior. It differs from assessment in that assessment includes a broader array of performance tasks rather than just a single measure that a test represents. Assessment results give broader descriptions of what students are learning since they include more than one measure. (Linn & Miller, 2005).

A **grade** is a nominal value that provides an overall summary of a student's performance. Grades are concise and easy to compute, however they have shortcomings when being used for the purposes of making informed improvements since they may not be specifically linked to learning goals and standards making it difficult to identify the student's strengths and weaknesses. For example, a grade of C on an English paper may reflect adequate content, poor mechanics, average synthesis, and good effort or may reflect poor content, adequate mechanics, and average synthesis (Linn & Miller, 2005; Suskie, 2004).

**Evaluation** is defined as "the systematic process of gathering, analyzing, and using information from multiple sources to judge the merit or worth of a program, project or other entity" (Rossi, Lipsey, & Freedman, 2004). Just like assessment, the utility of data is in decision making. Evaluation also includes value judgments concerning the desirability of results and is not limited to quantitative descriptions. However, evaluation differs from assessment in terms of the unit of analysis. Evaluation is concerned with all major goals of a program and not just with student learning. Therefore, evaluation is a broader term than assessment (Rossi et al, 2004; Suskie, 2004).

**Research** may be defined as the systematic process of gathering, analyzing, and using information from multiple sources to draw inferences, and test hypotheses, in order to discover, establish fact, or revise accepted theories or laws. The largest criticism that faculty often make about assessment is that it is "not research" and will not produce generalizable results. This is correct in that assessment is not post-positivistic, the traditional framework guiding most faculty research. Assessment is a type of **action research**. Its primary goal is to improve practice not to generate theoretical knowledge (Kemmis & McTaggart, 2005). Experimental control and random assignment are not as important and in many cases are just not possible. Assessment also differs from empirical research in that collaborative reflection is imperative in making modifications based on shared feedback.

### **What Questions Assessment Can Answer**

In order to gain a better perspective of what assessment is, it may be helpful to understand what questions assessment can help to answer about your program. Formulating an assessment question and determining how results will be used are the essential first steps in developing a plan. These steps will dictate the formulation of learning outcomes as well as the selection of assessment methodology. For example, if you are interested in determining whether or not your students are achieving a certain level of competence (a standards-based question) then most likely you will design your assessment procedure around collecting data and comparing your findings against a

standard that is set a priori (set before you collect the data). Interpretations will be criterion referenced (i.e., performance will be compared to a preset numerical standard). However, if instead you are interested in how your students compare to your peers (a benchmarking question), then you will probably identify standardized instruments that allow for norm-referenced interpretations. If you are interested in whether or not your students are improving (a value-added question), then your assessment procedures will most likely include some type of pre/post design (collecting data from the same students at two successive time points to measure change over time). Finally, if you are interested in whether or not your program or successive groups of students are improving (a longitudinal question), then a cross-sectional design should be used—one in which the same assessment is given to successive groups of students.

### **The Assessment Process**

Assessment is an ongoing, iterative process that uses results to inform decisions and make improvements. In order to improve, careful planning is necessary. Learning goals





and outcomes must be clearly specified, appropriate measures must be selected, data collection must be carefully executed and most importantly results must be shared for improvements to occur. The figure below illustrates a cycle of interlinked activities that facilitate continuous improvement. (Figure adapted from Maki, 2004)

## **Seven Steps to Closing the Loop**

### **Step 1: Creating an Infrastructure for Assessment: Organizing an Assessment Committee**

Before beginning, it is important to set up the appropriate infrastructure for assessment in order to ensure that the process is self-sustaining. The college or department may want to organize a faculty retreat to devote specific time to devising a plan. A suggestion is that departments establish an assessment committee, with a rotating chair who will lead the process and ensure the annual reports are completed by each program lead. This will alleviate faculty workload as well as provide quality assurance for planning and dissemination. It is essential that all faculty in the program participate in the decision making process and in reviewing the results. The assessment process is more likely to be self-sustaining if faculty collectively agree on what is important, buy into assessment procedures, and decide as a group what the data mean and how to improve. As Allen (2004) notes, "Assessment is not something someone does to you or for you; it is the responsibility of the faculty who control and offer the program." Please note faculty members are well suited to discuss the assessment results within the majors in their departments. This will be sufficient for SACSCOC accreditation; however, for AACSB accreditation, entire programs will have to meet to discuss results, implications, and needed actions to improve the programs. Programs within COBA (i.e. BBA, MBA) cross over departments and representation is required from these departments.

### **Step 2: Defining the Mission of the Program (Degree Program or Major)**

Each program must formulate a mission statement that will constitute a broad statement of its goals, values, and aspirations.

### **Step 3: Defining the Program Learning Outcomes**

Each program must formulate program level learning outcomes that describe the specific abilities, knowledge, values, and attitudes it wants students to acquire as a result of the program. Three to five outcomes per program is ideal. Please note that AACSB considers learning outcomes as objectives. COBA will continue to use learning outcome terminology because we cannot change the terminology in TaskStream.

### **Step 4: Selecting assessment methods and identifying targets**

Programs may use several different methods to measure student learning outcomes and must include direct measures of learning for each learning outcome. This is a SACSCOC requirement. They must also identify expected levels of performance for each outcome.

### **Step 5: Collecting the Data**

It is important to determine how the data collection will be implemented (i.e., who will collect the data, where it will be collected, and who will be sampled). All data will be reported in the form of group data to ensure the privacy of those who are assessed.

### **Step 6: Analyzing the Results**

It is important to summarize and report the data in a meaningful way to communicate findings to program faculty. An overall or annual report can then be generated through TaskStream.

### **Step 7: Closing the Loop**

No matter how results turn out, they are worthless unless they are used. The results of assessment data should be disseminated to faculty in the program as well as faculty outside of the program to obtain their ideas about how to improve the program. Appropriate actions, based on the analysis must then be taken and documented. Where possible, impact statements must be completed, describing the how the actions will affect the course(s), student learning, outcomes, and the program. SACSCOC and AACSB are particularly interested in seeing documentation for this step. In some cases changes will be minor and easy to implement, while others will be more difficult and will have to be implemented over multiple years.

### **Developing an Assessment Plan – Continuous Improvement Plan**

Prior to conducting assessment, academic programs should develop an annual continuous improvement plan that details what the program intends to do and why. It is critical to have a plan that clearly defines the program's educational mission and outcomes that faculty expect students to demonstrate as a result of the program. The plan should also include a detailed description of how the outcomes are going to be assessed and how the results will be used. The table below describes the components of a continuous improvement plan and shows an example from TaskStream. Sections 2-5 that follow in this workbook will provide a more detailed description of these processes.

## Components of a Continuous Improvement Plan

<b>Mission Statement</b>	Overall description of the program's purpose, its primary functions, and its educational goals for its students
<b>Learning Outcomes (AACSB: Objectives)</b>	3-5 statements of the knowledge, skills, and abilities students will possess and can demonstrate upon completion of the program
<b>Assessment Methods and Measures</b>	This section will include the measure's name, description of assessment, and criteria for success.
<b>Plans for Use and Dissemination of Assessment Results</b>	This section will include the implementation plan and timeline, as well as the key and responsible personnel for data collection and reporting on the measure.

# Example Continuous Improvement Plan in TaskStream

Continuous Improvement (CI) Plan VIEW LOG WORD PDF PRINT SHARE CHECK OUT

Review Released | Due: 05/31/2017

- Directions
- Review Method

**Mission Statement**

Newer Version Exists

**Mission:** The mission of the Bachelor of Applied Arts and Sciences degree program is to develop business managers and leaders by providing majors a high quality and relevant education in business management including small business and entrepreneurship. The program provides the majors the ability to professionally communicate, reason ethically, become globally business aware, and integrate business knowledge with their technical, military, or supervisory experience. Serving undergraduate students with previous technical training, military training, and / or supervisory experience, this program will prepare graduates to lead and manage an organization within the chosen technical field, move on to leadership and management positions within other industries, and further their education in a selected graduate level business or management program.

**Vision:** The BAAS-BM graduate is a capable business manager and leader, within a chosen technical field, in a dynamic business environment, and is prepared to continue education in advanced business degrees.

**Actions**

Show Descriptions  Show Full Findings Details

**BAAS in Business Management (2015 to 2017)**  
Professional Communication Ability

**Outcome: Demonstrate proficiency in written communications**

**Action: On the right track**

This Action is associated with the following Findings @

Action details:	We improved significantly from 2016 to 2017, but are still below our target. Some of the improvements suggested leading into 2017 appear to have greatly helped in GBK 301. We did change the artifact assessed, but we also successfully had outside evaluators assess the work for the first time.
	We saw another low performance cycle in GBK 459, but staffing was an issue each cycle. A new full time faculty member starts in the fall of 2017, so hopefully our results will improve. It is possible the new faculty member will change the artifact used.
	We should continue to monitor over the next long cycle.
Implementation Plan (timeline):	2017-2018 Academic Year
Key/Responsible Personnel:	GBK 301 & GBK 459 leads, as well as the Assessment Chair.
Measures:	Improved performance
Budget approval required? (describe):	No
Budget request amount:	\$0.00
Priority:	Medium

## SECTION 2: CREATING A MISSION STATEMENT

*Now that you have a basic understanding of assessment, you are ready to begin by defining your program's educational mission. This section provides a simple tutorial on writing a mission statement. The worksheet provided in this section can be completed as a group exercise with program faculty to create your program mission statement. When that is done, you can use the template provided in this section to complete your mission statement. (An electronic version of the template is available on the COBA Academic Assessment website). Once completed, use the checklist also provided in this section to review the mission statement to ensure that it is sufficient. A sample completed mission statement is included at the end of the section.*

### **Creating a Program Mission Statement**

Understanding and articulating what your program is trying to accomplish is necessary for a successful assessment plan. It is important to carefully specify and obtain a consensus from faculty members in your program on the program's vision, values and goals that will serve as guiding principles for developing outcomes and collecting data. Thus the time you and your faculty spend developing your mission statement is important. An important note is to ensure the mission of each program is linked to both the university and college missions.

### **Definition of a Mission Statement:**

*A mission statement is a broad statement of what the program is, what it does, and for whom it does it. It is the initial point of reference for any program. (Adapted from University of Central Florida UCF Academic Program Assessment Handbook February 2005 Information, Analysis, and Assessment)*

SACSCOC requires that every academic program on campus have a mission statement. For any given program a mission statement should 1) provide a clear description of the purpose of the program and its primary functions; 2) identify who the program will serve and ; 3) contain a description of how the program will contribute to the development and careers of the students participating. Please note that a vision statement is not required but is recommended.

The mission statement should be clear, powerful and broad enough to guide your decision-making and provide the foundation for your learning outcomes. In addition, the mission statement should be able to stand on its own and distinguish itself from other programs if the program's name were removed. Most importantly the mission statement should be aligned with the mission statement of the University and College.

Complete the given worksheet to help develop your mission statement. Ideally, this should be done as a group exercise with program faculty so that there is consensus and buy-in. Once the exercise has been completed, you can take the answers from the

exercise to complete the template. After completing the template, have program faculty review it using the checklist. When you are able to check “yes” on each item in the checklist, your mission statement is complete.

### **Worksheet to Create a Mission Statement**

*By completing the questions below, you will be able to create a program mission statement. It may be helpful to do this as a group exercise with program faculty or your program assessment committee.*

**1. What is your academic program’s primary educational purpose?** For example, does your program provide certain types of skills (critical thinking, analytical thinking, writing or communication skills, etc.) or broad background/theoretical foundation in a certain academic discipline(s) (e.g., art history, biology, philosophy, sociology, etc.)?

**2. What is your program providing to your students to meet this purpose?** For example, what activities does your program use to facilitate this learning? Coursework, labs, research projects, etc.?

**3. Who are your program’s key stakeholders?** In other words, who does your program serve? Undergraduate students? Graduate students? Non-traditional students? Students preparing for graduate school?

**4. What type of careers or further study will the program prepare students for?**

## Mission Statement Template

**Using the information you entered on the previous worksheet, complete the template below to form your mission statement. (NOTE: This template is just to facilitate your writing a mission statement. You are not required to use this wording but you should include all of its components in your statement.)**

**The mission of [                    *insert the name of your program here*                    ] is to**

*[insert your response from question 1 on the worksheet]*

**by providing majors**

*[insert your response from question 2 on the worksheet]*

**in order to**

*[insert your response from question 3 on the worksheet]*

*[OPTIONAL: Insert additional clarifying statements including a description of how the program will contribute to students' educational and professional opportunities]*

## Mission Statement Checklist

*Now that you have created your mission statement, use this checklist to help determine if your statement is effective and clearly defines the goals and vision of the program. Please fill out the questions listed below.*

	YES	NO
Is the mission statement brief and memorable?		
Is the mission statement distinctive? (Can it stand on its own and distinguish itself from other programs if the program's name were removed?)		
Does it clearly state the purpose of the program?		
Does it indicate the primary functions or activities that the program offers?		
Does it identify the major stakeholders?		
Does it support the University's and school's mission?		

*If you checked "NO" on any of the items above, go back and revise your mission statement accordingly.*

*When you are able to check "YES" on all of the items above, your mission statement is complete and you are ready to go to the next section where you will develop your learning outcomes.*



## Sample Worksheet to Create a Mission Statement

*By completing the questions below, you will be able to create a program mission statement. It may be helpful to do this as a group exercise with program faculty or your program assessment committee.*

**1. What is your academic program's primary educational purpose?** For example, does your program provide certain types of skills (critical thinking, analytical thinking, writing or communication skills, etc.) or broad background/theoretical foundation in a certain academic discipline(s) (e.g., art history, biology, philosophy, sociology, etc.)?

Develop business managers and leaders by providing a high quality and relevant education in business management including small business and entrepreneurship

**2. What is your program providing to your students to meet this purpose?** For example, what activities does your program use to facilitate this learning? Coursework, labs, research projects, etc.?

The program provides the majors the ability to professionally communicate, reason ethically, become globally business aware, and integrate business knowledge with their technical, military, or supervisory experience

**3. Who are your program's key stakeholders?** In other words, who does your program serve? Undergraduate students? Graduate students? Non-traditional students? Students preparing for graduate school?

This program serves undergraduate students with previous technical training, military training and/or supervisory experience

**4. What type of careers or further study will the program prepare students for?**

This program will prepare graduates to lead and manage an organization within the chosen technical field, move on to leadership and management positions within other industries, and to further their education in a selected graduate level business or management program.

## Sample Completed Mission Statement Template

**The mission of [Bachelor of Applied Arts and Sciences – Business Management ] is to**

develop business managers and leaders

**by providing majors**

a high quality and relevant education in business management including small business and entrepreneurship. The program provides the majors the ability to professionally communicate, reason ethically, become globally business aware, and integrate business knowledge with their technical, military, or supervisory experience

**in order to**

serve undergraduate students with previous technical training, military training and/or supervisory experience.

This program will prepare graduates to lead and manage an organization within the chosen technical field, move on to leadership and management positions within other industries, and further their education in a selected business or management graduate level program.

### Completed mission statement

*The mission of the Bachelor of Applied Arts and Sciences degree program is to develop business managers and leaders by providing majors a high quality and relevant education in business management including small business and entrepreneurship. The program provides the majors the ability to professionally communicate, reason ethically, become globally business aware, and integrate business knowledge with their technical, military, or supervisory experience. Serving undergraduate students with previous technical training, military training, and / or supervisory experience, this program will prepare graduates to lead and manage an organization within the chosen technical field, move on to leadership and management positions within other industries, and further their education in a selected graduate level business or management program.*

## SECTION 3: CREATING PROGRAM GOALS

*Now that you have completed your program's mission statement, you are ready to start developing program goals. This section provides guidelines for developing and reviewing goal statements and will serve as a foundation for the remaining steps in the assessment process. Sample program goal statements are included in this section for your information. Best practices in AACSB include four to eight learning goals for each program.*

### **What Are Program Goals?**

Program Goals are general statements of what the program intends to accomplish. They are broad statements of the kinds of learning we desire students to achieve - they describe learning outcomes and concepts (what you want students to learn) in general terms (e.g., clear communication, problem-solving skills, etc.) Program Goals are statements of long range intended outcomes of the program and the curriculum. They describe the knowledge, skills, and values expected of graduates and should be consistent with the mission of the program and the mission of the university.

Program Goals flow from the mission and provide the framework for determining the more specific program learning outcomes. Goals describe overarching expectations such as "Students will develop effective written communication skills." or "Students will understand the methods of science."

The main function of the Program Goals statement is to form a bridge between the lofty language of the Mission Statement and the concrete-specific nuts and bolts of program outcomes. Each program should have at least three, but not more than five goals.

The Program Goals statement becomes a blueprint for implementing the mission by answering the following questions:

- How do program goals relate to the program mission?
- How does this program fit into a student's overall development?
- What general categories of knowledge and abilities will distinguish your graduates?
- For each principle of the mission, what are the key competency categories graduates of the program should know or be able to do?

### **Possible Approaches for Generating Goals**

- "Ideal graduate":
  - Describe the "perfect student" in your program in terms of his/her knowledge, abilities, values, and attitudes. Which of these characteristics can be directly attributed to the program experience?

- Describe the “ideal student” at various phases in your program, focusing on the abilities, knowledge, values, and attitudes that this student has either acquired or has had supported as a result of your program. Then answer
  - What does the student know? (cognitive)
  - What can the student do? (performance/skills)
  - What does the student care about? (affective)
- Think what an ideal unit or program would look like and how its services and operations (refer to the program mission) would need to be conducted to reach that vision - think of how you would improve, minimize, maximize, provide, etc. Then state these ideas as goals.
- List the skills and achievements expected of graduates of the program. Describe the program alumni in terms of their achievements, such as career accomplishments, lifestyles, and community involvement. Use these to identify overarching goals.
- Existing material review
  - Review current material which may shed light on program goals; e.g., catalog descriptions, program review reports, mission and vision statements, accrediting agency documents, etc. List five to seven of the most important goals identified in the sources listed above. Prioritize the list of important goals in terms of their importance to your program and their contribution to a student’s knowledge, abilities, attitudes, and values.
- Course goals inventory
  - Review course syllabi, assignments, tests, and any additional materials and categorize the instructional materials into (i) recall or recognition of factual information, (ii) application and comprehension, or (iii) critical thinking and problem solving. From this inventory, determine the goals which are taught and use them as a starting point for determining program goals.
- Review other programs’ goals
  - Often broad overarching goal statements are quite similar from program to program and from institution to institution. Looking at what is in use elsewhere can reaffirm or serve as a starting point for brainstorming.
- Note: You may have from three to five goals where a single goal will have a minimum of one to three specific program learning outcomes. Program learning

outcomes are discussed in Section 4.

### **Structure of a Goal Statement**

- “To (action verb) (object) (modifiers)”
- Examples:
  - to graduate students who are prepared for industry
  - to adequately prepare students for graduate school

### **Example of Program Mission, Goals, and Outcomes**

- Program Mission: The Bachelor of Applied Arts and Sciences in Business Management (BAAS-BM) develops business managers and leaders by providing high quality and relevant education in business management integrated with technical and/or military experience in preparation to lead and manage an organization and attend selected graduate business or management programs and in support of department, college, and university missions.
- Program Goal:
  - Professional Communication Ability: Provide BAAS-BM graduates the ability to communicate effectively within their chosen professions.
- Program Learning Outcome:
  - Students will be able to demonstrate proficiency in written communications.
  - Students will be able to demonstrate proficiency in oral presentations.

### **Checklist for Goals**

Are they consistent with your mission?

Are your goals aligned with your values?

Do your goals describe desired performance?

## SECTION 4: CREATING PROGRAM LEARNING OUTCOMES

*Now that you have completed your program's mission statement, you are ready to start developing program learning outcomes. This section provides guidelines for developing and reviewing learning outcome statements and will serve as a foundation for the remaining steps in the assessment process. Sample learning outcome statements are included in this section for your information. A group exercise for program faculty is provided to assist in the development of two to three learning outcomes for each program goal, including a curriculum map for you to use to tie the outcomes to specific courses in the program. Once completed, use the checklist in this section to review them to ensure that they are sufficient.*

### What Are Program Learning Outcomes?

Learning outcomes are statements of the knowledge, skills and abilities individual students should possess and can demonstrate upon completion of a learning experience or sequence of learning experiences (upon graduation). The term “objectives” is used in AACSB for outcomes. We will continue to use “outcomes” to remain consistent with both the university and with the TaskStream repository. Before preparing a list of learning outcomes consider the following recommendations:

**Learning outcomes should be specific and well defined.** When developing a list of program learning outcomes, it is important that statements be specific and well defined. Outcomes should explain in clear and concise terms the specific skills students should be able to demonstrate, produce, and know as a result of the program's curriculum. They should also exclude the greatest number of possible alternatives so that they can be measured. For example, the learning outcome “Students completing the BS in Math should be well practiced in the relevant skills of the field” is too vague. In this example, we do not know what the relevant skills of the field of math include. This will create problems in measuring the behavior of interest and drawing valid conclusions about the program's success.

**Learning outcomes should be realistic.** It is important to make sure that outcomes are attainable. Outcomes need to be reviewed in light of students' ability, developmental levels, their initial skill sets, and the time available to attain these skill sets (i.e. 2 years). They should also be in line with what is being taught.

**Learning outcomes should rely on active verbs in the future tense.** It is important that outcomes be stated in the future tense in terms of what students will be able to do as a result of instruction. For example, the learning outcome “Students have demonstrated proficiency in...” is stated in terms of students' actual performance instead of what they will be able to accomplish upon completion of the program. Learning outcomes should also be active and observable so that they can be measured. For example, outcomes like “Students will develop an appreciation of, and will be

exposed to...” are latent terms that will be difficult to quantify. What does it mean to have an appreciation for something, or to be exposed to something?

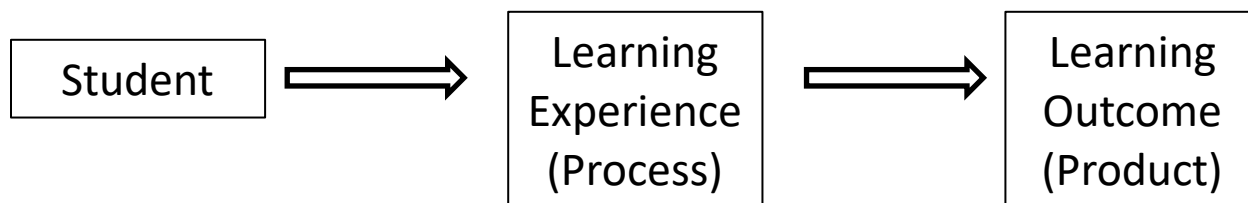
**Learning outcomes should be framed in terms of the program instead of specific classes that the program offers.** Learning outcomes should address program goals and not specific course goals since assessment at the college level is program-focused. For example, the learning outcome “Students completing Business 3311 should be able to...” is focused at the course level. It does not describe what a graduating senior in Business Administration should be able to demonstrate as a result of the program.

**There should be a sufficient number of learning outcomes.** You should include between one to three learning outcomes per goal, in your assessment plan. Fewer than two may not give you adequate information to make improvements, more than five may be too complicated to assess. Do not have more than 10 outcomes per program. *It is important to note that learning outcomes will not be assessed in all courses.* The program may choose to focus their assessment of the outcomes in one or two applicable courses. This doesn’t mean the learning only takes place in these courses, as learning may take place in multiple courses across the program.

**Learning outcomes should align with the program’s curriculum.** The outcomes developed in your plan need to be consistent with the curriculum goals of the program in which they are taught. This is critical in the interpretation of your assessment results in terms of where changes in instruction should be made. Using curriculum mapping is one way to ensure that learning outcomes align with the curriculum. A curriculum map is a matrix in which learning outcomes are plotted against specific program courses. Learning outcomes are listed in the rows and courses in the columns. This matrix will help clarify the relationship between what you are assessing at the program level and what you are teaching in your courses. An example curriculum map is included in this section for you to complete as part of the group exercise.

**Learning outcomes should be simple and not compound.** The outcomes stated in your plan should be clear and simple. Avoid the use of bundled or compound statements that join the elements of two or more outcomes into one statement. For example, the outcome “Students completing the BS in mathematics will be able to analyze and interpret data to produce meaningful conclusions and recommendations and explain statistics in writing” is a bundled statement. This outcome really addresses two separate goals, one about analyzing and interpreting data and another about writing.

**Learning outcomes should focus on learning products and not the learning process.** Learning outcomes should be stated in terms of expected student performance and not on what the faculty intends to do during instruction. The focus should be on the students and what they should be able to demonstrate or produce upon completion of the program. For example, the learning outcome “Introduces mathematical applications” is not appropriate because its focus is on instruction (the process) and not on the results of instruction (the product).



### Approval Process for Program Learning Outcomes

Current programs have approved outcomes and are published in each successive university catalog. Program learning outcomes are not “set in stone” and must be replaced once the outcome has been achieved. The decision to replace an outcome must be based on the closing-the-loop evidence of achievement. New outcomes must be developed by the program team and approved by the respective department chair. The deletion of the old outcome(s) and the addition of the new outcome(s), must then be processed through the university curriculum process so that updates to the catalogs can be made. Approval of outcomes for new programs will be conducted through the approval process of the program.

### Constructing Program Learning Outcomes

**Considering Taxonomies.** Taxonomies of educational objectives can be consulted as useful guides for developing a comprehensive list of student outcomes. Taxonomies attempt to identify and classify all different types of learning. Their structure usually attempts to divide learning into three types of domains (cognitive, affective, and behavioral) and then defines the level of performance for each domain. Cognitive outcomes describe what students should know. Affective outcomes describe what students should think. Behavioral outcomes describe what students should be able to perform or do.

**Bloom’s Taxonomy.** Bloom’s Taxonomy of Educational Objectives (1956) is one traditional framework for structuring learning outcomes. Levels of performance for Bloom’s cognitive domain include knowledge, comprehension, application, analysis, synthesis, and evaluation. These categories are arranged in ascending order of cognitive complexity where evaluation represents the highest level. The table below presents a description of the levels of performance for Bloom’s cognitive domain.

Level	Description
<b>Knowledge</b> <i>(represents the lowest level of learning)</i>	To know and remember specific facts, terms concepts, principles or theories
<b>Comprehension</b>	To understand, interpret, compare, contrast, explain



<b>Application</b>	To apply knowledge to new situations to solve problems using required knowledge or skills
<b>Analysis</b>	To identify the organizational structure of something; to identify parts, relationships, and organizing principles
<b>Synthesis</b>	To create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme
<b>Evaluation</b> (represents the highest level of learning)	To judge the quality of something based on its adequacy, value, logic or use

### Using Power Verbs

When composing learning outcomes, it is important to rely on concrete action verbs that specify a terminal, observable, and successful performance as opposed to passive verbs that are not observable. For example, the statements “be exposed to,” “be familiar with,” and “develop an appreciation of,” are not observable and would be difficult to quantify. The table below provides a list of common active verbs for each of Bloom’s performance levels. *Please note this list is not all inclusive.*

<b>Knowledge</b>	<b>Comprehension</b>	<b>Application</b>	<b>Analysis</b>	<b>Synthesis</b>	<b>Evaluation</b>
define/state	classify	apply	analyze	arrange	appraise
identify	describe	compute	appraise	assemble	assess
indicate	discuss	construct	calculate	collect	choose
know	explain	demonstrate	categorize	compose	compare
label	express	dramatize	compare	construct	contrast
list/label	identify	employ	contrast	create	decide
memorize	locate	give examples	criticize	design	estimate
name	paraphrase	illustrate	debate	formulate	evaluate
recall	recognize	interpret	determine	manage	grade
record	report	investigate	diagram	organize	judge
relate	restate	operate	differentiate	perform	measure
duplicate	review	organize	distinguish	plan	rate
select	suggest	practice	examine	prepare	revise
underline	summarize	predict	experiment	produce	score
tell	translate	inspect	propose	select	argue
translate	cite	inventory	set up	value	critique
sketch	question	articulate	infer	model	interpret
read	distinguish	assess	solve	perform	criticize
use	solve	collect	test	integrate	defend

## Other Sources for Program Learning Outcomes

When creating learning outcomes, it may also be helpful to consult professional organizations, similar programs at other universities, methods books, peer institution websites, or banks of learning outcomes on-line. It is also useful to develop ideas for student learning outcomes based on what students have accomplished in previous semesters.

### Sample Program Learning Outcomes

<b>Professional Communication Ability:</b>
Students will be able to demonstrate proficiency in their written communications
Students will be able to demonstrate proficiency in their oral presentations
<b>Ethical Reasoning:</b>
Students will be able to recognize an ethical dilemma.
Students will be able to evaluate the implications of an ethical dilemma from a variety of ethical frameworks.
Students will be able to design and defend a reasoned resolution to an ethical challenge.
<b>Global Business Awareness:</b>
Students will be able to recognize the impacts of business globalization.
Students will be able to discuss the dimensions of conducting business globally.
<b>Business Integration &amp; Knowledge</b>
Students will be able to utilize management information systems to support business decision making.
Students will be able to integrate the knowledge across multiple business functional areas.
Students will be able to demonstrate knowledge proficiency in the core business disciplines.
<b>BAAS Programmatic Objective</b>
Students will be able to integrate multiple business functional areas with the technical, military, or experiential knowledge previously received.

## Using a Curriculum Map

After you have developed the learning outcomes for your program, you should use a curriculum map to see how the outcomes you have developed are met in each course in the program. A curriculum map is simply a matrix in which you list each learning outcome in the rows and the program courses in the columns to indicate which courses contribute to each learning outcome. In each cell, place a letter to indicate how the course relates to the learning outcome. Use the letter “X” to designate which courses in the program have subject matter present in the course; this could be *introduced*, *practiced*, or *reinforced*. Type the letter “A” to designate which course(s) in the program will be used to assess the corresponding learning outcomes. By completing the curriculum maps, you can check for unnecessary redundancies, inconsistencies, misalignments, weaknesses and gaps in your learning outcomes.

For example, the curriculum map below reveals that the 4th learning outcome is not addressed by any of the courses in the Business program. To correct for this a course could be redesigned to include this outcome or the outcome could be eliminated from the program.

Learning Outcome	Course Number				
	FIN 3301	BUSI 3311	MGMT 3301	MKTG 3314	BUSI 4359
Outcome 1	X	X	X	X	A
Outcome 2	X	X	A	X	A
Outcome 3		X	X		
Outcome 4					
Outcome 5			X	A	A

Problem: None of the learning outcomes have been met in Learning Outcome 4

Use the curriculum map template to verify that your program’s curriculum aligns with your learning outcomes. A sample completed curriculum map is also included for your reference.

A recommendation is to develop a curriculum map as a group exercise with your program faculty to facilitate faculty discussion about the program’s learning priorities. The curriculum map will also illustrate how well your curriculum aligns with the specified outcomes. You can also use it to help design your assessment plan (e.g., which courses you might sample students from or administer assessment to). It will also

provide a reference that may assist in interpreting assessment results later and in determining where you might make modifications in the curriculum.

### **Group Exercise to Create Program Learning Outcomes**

***INSTRUCTIONS:*** *Have a group of faculty members in your program complete this exercise. At the end of this process, you should be able to summarize and articulate 3-5 learning outcomes for your program's assessment plan.*

#### **Step 1**

Start with a discussion describing what the “perfect student” graduating from your program should be able to demonstrate, represent, or produce.

#### **Step 2**

Have each faculty member write down 3-5 learning outcome statements and use the checklist located on page 26 to evaluate them.

#### **Step 3**

Conduct a panel discussion about your learning outcomes using a facilitator. Combine all criteria on to one list and have each member anonymously rank the outcomes as being very, somewhat, or not important. Discuss the results with your faculty and repeat the process until consensus is reached.

#### **Step 4**

Map learning outcome statements to courses in the program to ensure educational coherence using the matrix on the following page. This will ensure that every student in your program has sufficient opportunity to achieve every outcome.

#### **Step 5**

List your final set of learning outcomes and have faculty use the checklist on page 26 once more to make any last changes.

## Curriculum Map

*Use this map to verify if your program outcomes are in line with your program's current educational curriculum. This activity will serve as a road map for writing learning outcomes as well as assist you later in interpreting assessment results and making program improvements.*

LEARNING OUTCOME	COURSE NUMBER																							
Use these codes under each course as appropriate: I=Introduce in course; R=Reinforce; E=Emphasize																								

## Sample Completed Curriculum Map

Objectives	Major Upper-Level Requirements										
	BUSI 3301	BUSI 3311	BUSI 3332	BUSI 3344	BUSI 4301	BUSI 4359	FIN 3301	MGMT 3301	MKTG 3301	MGMT 3302	CIS 4350
<b>Professional Communication Ability:</b> Students will be able to demonstrate proficiency in written communications	A			X	X	A		X	X	X	X
Students will be able to demonstrate proficiency in oral presentations	A					A					
<b>Ethical Reasoning:</b> Students will be able to evaluate the implications of an ethical dilemma from a variety of ethical frameworks.			A		A		X	X		X	X
Students will be able to design and defend a reasoned resolution to an ethical challenge.			A		A			X		X	X
<b>Global Business Awareness:</b> Students will identify the differences in business environment between countries may impact business decisions.			A		X		X	X	X		
Students will be able to exhibit cross-cultural competencies that will aid in working with people from different cultures.	X				X		X	X	X		
<b>Business Integration &amp; Decision Making:</b> Students will be able to demonstrate knowledge proficiency in the core business disciplines.						A	X	X	X		
Students will be able to integrate knowledge across multiple business disciplines.						A	X			X	X
Students will be able to demonstrate how technology can support business decision making.		A				X	X		X		A
X - Introduced and/or Reinforced A - Assessed											

NOTE: You do not need to include course titles on your curriculum map. You can enter the courses in whatever order makes the most sense for your program. You should include courses taught outside your department if they are part of the major.

<p style="text-align: center;"><b>Learning Outcomes Checklist</b></p> <p><i>Once you have developed your learning outcomes, use this checklist to verify that our learning outcomes are complete. List your learning outcomes in the first column and then evaluate each outcome by placing a check mark in the appropriate boxes for each outcome.</i></p>	Can be directly measured and observed					
	Maps directly to curriculum					
	Focuses on student learning outcomes and not teaching activity					
	Relies on action verbs in future tense					
	Is useful to identify areas to improve					
	Describes what students are intended to do, know, produce					
	LEARNING OUTCOME					

## Results from the Learning Outcomes Checklist

If you are able to check all of the columns on the checklist for every outcome, you are ready to go on to the next section in which you will select the methods for how you are going to assess these outcomes.

The following figure is an example curriculum map created in TaskStream. Please note the legend uses I: Introduced, P: Practiced, and R: Reinforced. The COBA recommendation, when creating a curriculum map in TaskStream, is to use “P” to designate subject matter present and “R” to designate Assessed. This will provide consistency in the designation of the courses and measures in which data will be collected for assessment.

## Example Curriculum Map from TaskStream

### BAAS in Business Management

Courses and Activities Mapped to BAAS in Business Management (2018 to Present)

Courses and Learning Activities	Professional Communication Ability Provide the BAAS-BM graduate the ability to communicate effectively within their chosen professions.		Ethical Reasoning Provide the BAAS-BM graduate the ability to reason and make decisions while maintaining appropriate legal and social norms.		Global Business Awareness Provide the BAAS-BM graduate awareness of the global business environment.		Business Integration & Decision Making Provide the BAAS-BM graduate the ability to integrate knowledge, systems, and methods across multiple business functional areas using a variety of tools and techniques.		
	Demonstrate proficiency in written communications	Demonstrate proficiency in oral presentations	Evaluate the implications of an ethical dilemma from a variety of ethical frameworks	Design and defend a reasoned resolution to an ethical challenge	Identify the differences in business environment between countries may impact business decisions	Exhibit cross-cultural competencies that will aid in working with people from different cultures.	Demonstrate knowledge proficiency in the core business disciplines	Integrate knowledge across multiple business disciplines	Demonstrate how technology can support business decision making
BUSI 3301 Business Communications and Research	R	R				P			
BUSI 3311 Business Statistics									R
BUSI 3332 Legal Environment of Business			R		R	R			
BUSI 3344 Introduction to the Global Business Environment	P				R	P			
BUSI 4301 Business Ethics	P		R	R	P	P			
BUSI 4359 Business Strategy 3	R	R				P	R	R	P
FIN 3301 Financial Management I			P		P	P	P	P	P
MGMT 3301 Principles of Management	P		P	P	P	P	P		
MKTG 3301 Marketing	P				P	P	P		P
MGMT 3302 Personnel and Human Resource Management	P		P	P				P	
CIS 4350 Management Information Systems	P		P	P					R

Legend: I Introduced P Practiced R Reinforced



## **SECTION 5: ASSESSMENT METHODS**

*Now that you have successfully developed program learning outcomes, you are ready to start thinking about ways to measure them. Selecting appropriate means for assessment is an essential step in the assessment process. In this section, different methods of assessment are presented with special attention devoted to validity issues surrounding assessment.*

### **Selecting Assessment Measures**

There are many different ways to assess student learning. In this section, we present the different types of assessment approaches available and the different frameworks to interpret your results. Each outcome should have from one to two measures. If only one measure is selected, that measure must be direct, as described in the following paragraphs.

### **Direct versus Indirect Measures of Assessment**

Direct measures of assessment require students to represent, produce or demonstrate their learning. Standardized instruments, student portfolios, capstone projects, student performances, case studies, embedded assessments and oral exams all provide direct evidence of student learning. Indirect measures capture information about students' perceptions about their learning experiences and attitudes towards the learning process. Informal observations of student behavior, focus groups, alumni surveys, self-reports, curriculum and syllabi analysis, exit interviews, and evaluation of retention rates are some examples. The difference between direct and indirect measures of student learning has taken on new importance as accrediting agencies such as SACSCOC have required the use of direct measures to be the primary source of evidence. Indirect measures may serve only as supporting evidence. (See table on page 30).

### **Objective versus Performance Assessment**

Objective assessments such as short answer, completion, multiple-choice, true-false, and matching tests are structured tasks that limit responses to brief words or phrases, numbers or symbols, or selection of a single answer choice among a given number of alternatives (Miller & Linn, 2005). Objective assessments capture information about recall of factual knowledge and are less useful for assessing higher-order thinking due to their structured response format that allows for only one best answer. Performance assessments allow for more than one correct answer. They require students to respond to questions by selecting, organizing, creating, performing and/or presenting ideas. For this reason, performance assessments are better at measuring higher-order thinking. However, these assessments are often less reliable than objective assessments since they require expert judgment to score responses.

## **Embedded and Add-On Assessment**

Embedded assessments are tasks that are integrated into specific courses. They usually involve classroom assessment techniques but are designed to collect specific information on program learning outcomes. These assessments are typically graded by course instructors and then pooled across sections to evaluate student learning at the program level. Embedded assessments are highly recommended. They are easy to develop and to administer and can be directly linked to the program's curriculum and learning outcomes. Additionally, students are usually more motivated to show what they are learning since embedded assessments are tied to the grading structure in the course. Add-on assessments are additional tasks that go beyond course requirements and are usually given outside of the classroom such as during designated assessment days on campus. Generally they involve standardized testing. Because they are not typically part of the course grading structure, students are often less motivated to perform well. Some programs have tried to eliminate this problem by offering incentives for performance.

## **Local versus Standardized Assessment**

Local assessments are instruments developed by faculty members within a program for internal use only. They are helpful in assessing standard-based questions (i.e., whether or not students are meeting objectives within the program), because they can be directly linked to program learning outcomes. Standardized assessments are published instruments developed outside of the institution. They rely on a standard set of administration and scoring procedures and because of this are often times more reliable. These assessments provide information about how students in a program compare to students at other peer institutions or to national/regional norms and standards. Knowing what you want to assess is key in the selection of standardized instruments. This includes making sure that these assessments contain enough locally relevant information to be useful. It also means that norms should be comparable in terms of the institution's size, mission and student population in order to draw valid conclusions.

Although standardized assessments are primarily used to generate benchmarking information, they are sometimes used to answer standards-based questions. If you decide to use a standardized assessment for this purpose, make sure that the test content aligns with your learning outcomes, otherwise interpretations will be invalid. Secondly make sure results are reported in the form of subscales so that you can identify where improvements need to be made. Testing companies should be able to provide you with this information.

## Direct Versus Indirect Measures




Measures	Description	Examples
<b>Direct</b>	<p>Prompt students to represent or demonstrate their learning or produce work</p> <p>Must have at least one direct measure per outcome.</p> <p><i>Note: SACSCOC requires the use of direct measures of learning</i></p> <p><i>Note: Standardized instruments may be used as a direct measure if they can be directly mapped to the program's learning outcomes</i></p>	<ul style="list-style-type: none"> <li>• Standardized instruments*</li> <li>• Student portfolios</li> <li>• Capstone projects</li> <li>• Performance, products, creations</li> <li>• Case studies</li> <li>• Embedded-assessments</li> <li>• Orals</li> </ul>
<b>Indirect</b>	<p>Capture students' perceptions of their learning attitudes, perceptions, and experiences. May also include informal observation of student behavior, evaluation of retention rates, and analysis of program procedures that are linked to student learning.</p> <p>Must have at least one indirect measure associated with a direct measure.</p> <p><i>Note: Indirect methods alone do not provide adequate information about student learning outcomes. They must be supplemented with direct measures.</i></p>	<ul style="list-style-type: none"> <li>• Standardized instruments*</li> <li>• Focus groups</li> <li>• Student surveys and exit interviews</li> <li>• Interviews</li> <li>• Alumni surveys</li> <li>• National surveys</li> <li>• Self-Reports</li> <li>• Observation</li> <li>• Curriculum and syllabi analysis</li> </ul>
<b>NOTE:</b>	May not have more than 20 total measures (direct/indirect) for a program.	

## Examples of Direct Assessment Methods

Assessment Method	Description
<b>Capstone Projects</b>	<ul style="list-style-type: none"> <li>• Culminating research projects that provide information about how students integrate, synthesize and transfer learning</li> <li>• Assess competence in several areas • May be independent or collaborative</li> <li>• Focus on higher order thinking</li> <li>• Are useful for program-level assessment • Examples: exams, integrative papers, projects, oral reports, performances</li> <li>• Typically disciplined based and may be designated as a “senior seminar”</li> <li>• Scoring Method: Pre-Specified rubrics</li> </ul>
<b>Course-Embedded Assessment</b>	<ul style="list-style-type: none"> <li>• Assessment procedures that are embedded into a course’s curriculum</li> <li>• May include test items or projects</li> <li>• May be take-home or in-class</li> <li>• Usually locally developed</li> <li>• Can be used assesses discipline-specific knowledge</li> <li>• Scoring methods: Raw scores or pre-specified rubrics</li> </ul>
<b>Performance Assessment</b>	<ul style="list-style-type: none"> <li>• Use student activities to assess skills and knowledge</li> <li>• Assess what students can demonstrate or produce</li> <li>• Allow for the evaluation of both process and product • Focus on higher order thinking</li> <li>• Examples: Essay tests, artistic productions, experiments, projects, oral presentations</li> <li>• Scoring Methods: Pre-Specified rubrics</li> </ul>
<b>Portfolio Assessment</b>	<ul style="list-style-type: none"> <li>• Collection of student work over time that is used to demonstrate growth and achievement</li> <li>• Usually allows student to self-reflect on incorporated work</li> <li>• May include written assignments, works of art, collection of projects, programs, exams, computational exercises, video or other electron media, etc.</li> <li>• Focus on higher-order thinking</li> <li>• Scoring Methods: Pre-Specified rubrics</li> </ul>
<b>Standardized Instruments</b>	<ul style="list-style-type: none"> <li>• Instruments developed outside the institution with standardized administration and scoring procedures and frequently with time restrictions</li> <li>• Psychometrically tested based on “<i>norming</i>” group</li> <li>• Sometimes allow for national comparisons</li> <li>• Caution: Content may not link to local curriculum and so may not pinpoint where to improve; normative comparisons may be inappropriate; do not allow for examination of processes of learning;</li> <li>• Scoring Methods: Answer key, scored by testing company</li> </ul>
<b>Localized Instruments</b>	<ul style="list-style-type: none"> <li>• Instruments within the university usually developed within the department for internal use only</li> <li>• Content may be tailored to match outcomes exactly</li> <li>• Caution: Not as psychometrically sound as standardized instrument unless validated internally</li> <li>• Scoring Methods: Answer key, scored internally</li> </ul>

## TaskStream Measures

Within TaskStream you will need to insert the following information: Measure Title, Measure Type/Method (drop-down box in TaskStream), Measure Level (drop-down box in TaskStream), Assessment Description, Criteria for Success, Implementation Plan (timeline), and Key/Responsible Personnel. Each measure item listed above must be included within each measure that will be used during an assessment cycle. The following figure shows the TaskStream field in which the information will be inserted. The program is copy/paste capable.

<b>* Measure Title:</b>	<input type="text"/>
<b>Measure Type/Method:</b>	- Select -  
<b>Measure Level:</b>	- Select - 
<b>Assessment Description:</b>	<input type="text"/>
<b>Criteria for Success:</b>	<input type="text"/>
<b>Implementation Plan (timeline):</b>	<input type="text"/>
<b>Key/Responsible Personnel:</b>	<input type="text"/>

## Sampling

One of the decisions that must be made about assessment is how to select students to participate. Because we are a small university, we have many programs with small numbers of graduates each year. For this reason, most small programs won't use sampling at all. Please note that even if your program has only one graduate, you must assess that student and submit an annual report. However, these data will have limited use until multiple years of data are collected and aggregated.

On the other hand, when the population size of the program is large and classes have multiple sections, assessing every student in the program may become an unmanageable task that will require the use of a sampling procedure. It is important to consider the manner in which students are selected since this has important implications in terms of how results may be generalized to the entire population of

students in the program. When a sample is biased it will be difficult to draw valid conclusions about how the program is working.

Sampling bias occurs when sampling procedures consistently under-represent some kinds of groups while over-representing others. To avoid bias, every student ideally should have an equal opportunity of being selected. For this to occur, there must be an unbiased sampling frame, one that does not exclude certain individuals (i.e., the worst students, a particular gender, major or race, etc.). Simple random sampling provides the best means of obtaining a representative sample. However, in most instances this is difficult to do since access to the entire population of students in a program may not be available. In most cases, programs often rely on multistage sampling that is not truly random. For example, courses or sections of courses are selected and then students are systematically sampled from these classes. This is done by first arranging students' work in alphabetical order, randomly selecting a starting point, and then selecting every  $k^{\text{th}}$  student. However, the main point is to try to make the sample as representative as possible by not excluding any particular group of students. In courses with multiple sections, it is important to include all sections to avoid a possible "professor" effect.

The other important consideration in sampling is the number of students to include in the sample to draw valid conclusions. Obviously the greater the sample size, the more confidence you may have in your conclusions. We recommend a very simple rule of thumb. Include all students in the sample if there are there fewer than thirty-five students who can be assessed ( $N < 35$ ). If there are thirty-five or more students you may choose to use sampling rather than assessing all students. Consult the table below to get an approximate sample size given a population size, assume a 5% margin of error, and a 95% confidence level. We realize that margin of error can only truly be estimated for a probability sample; however this table will provide an approximate estimate of what you may need.

Population Size	Sample size
35	32
50	44
75	63
100	80
125	94
150	108
175	120
200	132

*Note: 5% margin of error and 95% confidence level*

### **Assessment Schedules**

Please note that assessment and continuous improvement is an annual requirement; however, there is not an annual requirement analyze and assess data on each learning outcome or objective. Therefore, program leads have the ability to collect and pool data over multiple years to ensure a large enough and representative sample for analysis for

courses that traditionally have low enrollment numbers or are offered once during an assessment cycle, or the do not have multiple sections available during the cycle. An assessment schedule should be developed and implemented to ensure appropriate data collection in each assessment year.

Please note: For AACSB accreditation, each program goal will be measured and assessed at least twice within a 5-year cycle. Additionally, each goal will have loop closure at least once in the 5-year cycle. Follow a “MIM” cycle where you measure (M), conduct some type of intervention (I), and then measure again (M). Loop closure includes the intervention and the analysis and action of the outcome after the second measure. Each program learning outcome, related to each program goal, at a minimum will follow the MIM model during the review cycle. Closing the loop is defined as making appropriate changes in the curriculum, the course(s), or the program based on assessment results. Additionally, impact statements must be completed, describing the how the actions will affect the course(s), student learning, outcomes, and the program.

For low density courses, it might be necessary to actually conduct a modified MIM cycle, where you may have to have two years of measures then followed by an intervention (i.e. MMIM).

Also note: When a single measurement instrument is used to assess more than one outcome, clustering objective(s) for that instrument into the same year may make the use of that instrument easier to manage. The following is an example of an assessment schedule.

### Example Assessment Schedule

	A	B	C	D	J	K	L	M	N	O
					Measurement Year					
	Program Goals	Program Outcomes	Measures	Achievement Target	2020	2021	2022	2023	2024	
3	Goal 1	Outcome 1	Direct Measure 1		M	I	M			
4			Indirect Measure 2							
5		Outcome 2	Direct Measure 1		M	I	M			
6			Indirect Measure 2							
7	Goal 2	Outcome 1	Direct Measure 1		M	I	M			
8			Indirect Measure 2							
9		Outcome 2	Direct Measure 1		M	I	M			
10			Indirect Measure 2							
11	Goal 3	Outcome 1	Direct Measure 1			M	I	M		
12			Indirect Measure 2							
13		Outcome 2	Direct Measure 1			M	I	M		
14			Indirect Measure 2							
15	Goal 4	Outcome 1	Direct Measure 1			M	I	M		
16			Indirect Measure 2							
17		Outcome 2	Direct Measure 1				M	I	M	
18			Indirect Measure 2							
19	Goal 5	Outcome 1	Direct Measure 1				M	I	M	
20			Indirect Measure 2							
21		Outcome 2	Direct Measure 1				M	I	M	
22			Indirect Measure 2							
23										

## Measurement Issues

There are many different ways to assess learning outcomes, but regardless of the type of procedure selected, all assessment should possess certain characteristics. The most important of these are reliability and validity.

### Validity

Validity refers to the meaningfulness and appropriateness of the uses and interpretations to be made of assessment results and is considered the most important criteria when selecting an assessment procedure (Miller & Linn, 2005). There are many factors that may affect validity of interpretations and uses of assessment. These may include factors within the assessment itself, in the relationship between teaching and testing, in the administration and scoring of instruments, and in the nature of the group being assessed. A major goal in the construction, selection and use of assessment instruments is to control for those factors that will have the potential effect on validity and to interpret the results in accordance to what validity evidence is available. Presented below are some questions for evaluating assessment methods in light of validity considerations. AACSB desires a minimum of face validity (or content validity) on all measuring instruments.

1) Does the content represent the construct that you are interested in assessing? Does the method of assessment align with your student outcomes and prompt students to represent the dimensions of learning desired? Are you measuring the content too narrowly leading to a narrow interpretation or are you measuring the content too broadly (e.g., measuring something more than the learning outcomes that you are looking for)?

2) Will the assessment method elicit responses from the students that are consistent with the learning outcomes desired?

3) How do your assessment results compare to other measures like it? You would expect students scoring high on one criterion to score high on another criterion like it. You might use grades as a proxy but remember to interpret results carefully. Grades are not a flawless criterion as we have already mentioned as they are lacking in the comprehensiveness and are contaminated by other factors.

### Tips on Selecting Instruments

Look at the instrument's measurement properties
Has it been validated? Does it have good measurement properties?
Identify the kind of inferences that can be drawn
Determine its limitations and restrictions (i.e., will this work for your sample of students at this university?)



## Reliability

Next to validity, reliability is an important characteristic of assessment results. Reliability provides the consistency that makes valid interpretations possible. It looks at issues related to stability and consistency of test scores over time, test administrations, test forms, and raters as well as homogeneity of items within an instrument. For example, if different faculty members obtain similar ratings on the same assessment task we can conclude that our results are reliable from rater to rater and if similar scores are obtained when the same assessment instrument or equivalent forms are used in a pre/post design we can conclude that our results are reliable across administrations and test forms. However, we cannot expect assessment results to be perfectly stable since there are many factors that may contribute to fluctuations. These factors contribute to measurement error, and methods for determining reliability essentially are a means for determining how much measurement error there is in our results. We want to minimize measurement error as much as possible. When making criterion-referenced interpretations (i.e., comparison to a fixed standard as opposed to relative standing) our desire for consistency of measurement is similar to norm-referenced interpretations (i.e., consistency across raters, task, time, and forms); however, the focus is more often on whether the performance meets the standard than on the actual scores. For a more detailed discussion on how to estimate reliability, consult Linn and Miller (2005).

### Tips to Increase Reliability

<b>Test Length</b>	Tests with more items have higher reliability assuming items are homogeneous
<b>Time Limits</b>	Increasing test time increases reliability; decreasing time between two test administrations of the same test or similar form increases reliability
<b>Training Raters</b>	Training raters increases consistency across raters

### Scoring Procedures

Once you have identified a means of assessment, the next step is identifying a scoring procedure. The assessment methodology you choose will dictate how you will score student data. If you are using some type of objective assessment to measure student learning then the instrument should be scored dichotomously with an answer key to ensure standardization. Scores will be presented in the form of the number or percent correct.

Standardized assessments are usually scored by a testing company and results can be presented in the form of raw or scale scores to make interpretation easy. Results may be aggregated across subscales or for the test as a whole (i.e., composite score).

Performance assessments require the use of a standardized scoring procedure usually involving a rubric. A rubric is a matrix that identifies the expected outcomes of performance on task with the respective levels of performance along those outcomes. There are two type of scoring rubrics. Analytic scoring rubrics break scoring down into components. They provide descriptions and sub-scores for each characteristic of performance. For example, a writing assessment may be broken down into integration of ideas, mechanics, and clarity of expression. Holistic scoring rubrics on the other hand provide a single score for overall performance. Because of this analytic scoring rubrics provide more information and have more of a diagnostic value than holistic scoring rubrics.

### Parts of a Rubric

There are four components to a rubric: 1) a task description; 2) task dimensions; 3) a performance scale; and 4) cell descriptions. (See the figure on the following page.) The task description describes the assessment activity that serves as a reminder to the grader as to what the task is about. This can be created directly by cutting and pasting from a course syllabus or from the assessment task directions. The task dimensions lay out and describe the parts of the task and are listed in the first column of the table. They should be directly observable and in harmony with the program’s learning outcomes. The performance scale identifies the levels of performance along each of the dimensions and is presented in the first row of the table. Scales should include three to five points. Too many scale points makes it more difficult to differentiate between performance levels. Finally, cell descriptions operationalize what each level of performance means for each dimension. These may include check boxes beside each element of the performance description in the cell. They help convey why the student is given a particular score.

### Illustration of a Rubric

**Task Description (example):** Each student will make a 5-minute presentation on the changes in one Texas community over the past thirty years. The student may focus the presentation in any way he/she wishes, but there needs to be a thesis of some sort, not just chorological exposition. The presentation should include x, y, and z.

	Scale: Level 1	Scale: Level 2	Scale: Level 3
Dimension 1			
Dimension 2			
Dimension 3			
Dimension 4			

*(Stevens & Levi, 2004)*

### Developing a Rubric

When developing a rubric, first complete the table by filling in the dimensions in the first column. After you have completed this step, fill in the scale points along the boxes in the first row. Huba and Freed (2000) have developed a list of scale points which is

presented below for your assistance. It is helpful to frame scale points in a positive light in order to mitigate potential shock for low marks. Complete the cell descriptions next for each row and corresponding column. Start out by identifying the extreme levels of performance (i.e., the highest and lowest levels of performance). The lowest level of performance can be the negation of the exemplary category or a list of typical mistakes that students may make. It may be helpful to look at student work to identify these descriptions. Next fill in the middle categories.

Once you completed your rubric, share it with other faculty members in the program to get their feedback. Ask them to apply it to a sample of student work to determine if they understand the dimensions and performance levels and can identify any overlap between criteria for cell descriptions.

## Examples of Scale Points

**Lowest Level**  **Highest Level**

Emerging	Progressing	Partial Mastery	Mastery
Not Yet Competent	Partly Competent	Competent	Sophisticated
Unacceptable	Marginal	Proficient	Exemplary
Novice	Intermediate	Intermediate High	Advanced
Beginning	Developing	Average	Accomplished

*(Huba & Freed, 2000)*

<b>Sample Rubric: TAMU-CT Major Field of Study</b>  <b>Task Description:</b>	Scale Point (High)				
	Scale Point				
	Scale Point				
	Scale Point (Low)				
	Learning Outcome				

## Scoring Using a Rubric

Because rating performance involves human judgment, it is subject to error. Personal biases, carry-over effects of judgments due to preceding tasks, and inconsistency in scoring due to lack of standardization of scoring criteria intrude and limit the value of the ratings. To avoid these common errors, 1) rate the performance of all students on one task before going to the next to keep scoring criteria in mind; 2) whenever possible rate performance without knowledge of student's name to avoid halo effects; 3) use multiple raters for high-stakes decisions; and 4) train your raters to calibrate their scoring by bringing them together to review their responses in order to identify patterns of inconsistent responses.

## Selecting a Target

After identifying learning outcomes and ways to assess them, the next step is to identify standards of performance or targets. The purpose of identifying targets is to gauge student performance. If you don't have a clear sense of how you expect students in your program to perform, then it becomes more difficult to evaluate their performance and draw valid conclusions about your results. Setting targets can be thought of as setting an a priori hypothesis. Results compared against hypotheses are usually more informative.

In higher education, criteria for success are usually expressed in terms of the percentage of students who will meet a specified performance level. (See the template in the box below.) This is an arbitrary process since it is essentially a consensus judgment based on faculty's holistic impressions of how they expect students to perform. Because of this, it may take more than one try to set appropriate targets.

When identifying targets, it is important to set criteria that are reasonable in terms of what students are capable of performing. Targets that are too high or too low provide relatively little information. Targets should also be set with a timeframe in mind. Make sure that students have enough time to achieve the desired level of performance within the timeframe they have to complete the degree. Finally it is important the faculty is aware that performance data will not be used to evaluate them so that target setting remains unbiased and fair.

### Template for Setting Targets

*[Insert target figure] % of students will achieve [insert desired scale level] level of performance in [insert dimension of assignment or learning outcome] .*

**NOTE:** This template is provided to help you develop your target statement. You are not required to use this wording but you should include its components.

## SECTION 6: PLANNING FOR DISSEMINATION AND USE

*“The gods condemned Sisyphus to endlessly roll a rock up a hill, whence it would return each time to its starting place. They thought with some reason that there was no punishment more severe than eternally futile labor”*

*- The myth of Sisyphus (Camus 1955)*

Just like the myth of Sisyphus, there is no punishment more severe than investing time and effort for nothing. As foolish as it may seem, the last and most important step in assessment, “closing the loop,” is often ignored after faculty have spent much time and effort developing a plan and collecting data.

Although it is impossible to predict what uses will be made of the assessment results until activities are conducted and results are considered, it is still important to think about how information will be shared and acted upon. This will include planning how results will be shared with faculty members in the program and what types of changes could be made in light of the assessment results (i.e., changes in your curriculum, teaching materials, or instruction).

Here is an example of what a plan for dissemination and use might look like:

*Anecdotal evidence (professor reports) suggests that there is a wide discrepancy in the skill level of students entering into BUSI 4359. Assessment data will be used to make decisions about our structure of existing courses. More specifically, the progression of our courses as students enter into BUSI 4359. We will use the collected assessment data to help answer some of these questions by comparing assessment results for students who have taken MGMT 3301 versus those who have not while controlling for ability (SAT). In addition, we are interested in determining whether our current assessment instrument and rubric effectively assess application of scientific reasoning (i.e., instruments sensitivity). Results will be shared via a faculty retreat and on our program’s website. The entire staff and faculty will participate in reviewing the assessment data at a faculty retreat held each summer. Results will be presented by the assessment committee through a formal presentation. Additionally we will post the assessment results on-line annually for transparency.*

Use the template below to develop your plans for dissemination and use of results to include in your assessment plan. Remember: AACSB requires closing the loop on each goal, at least twice in each 5 year period.

### **Template for Plan for Dissemination and Use**

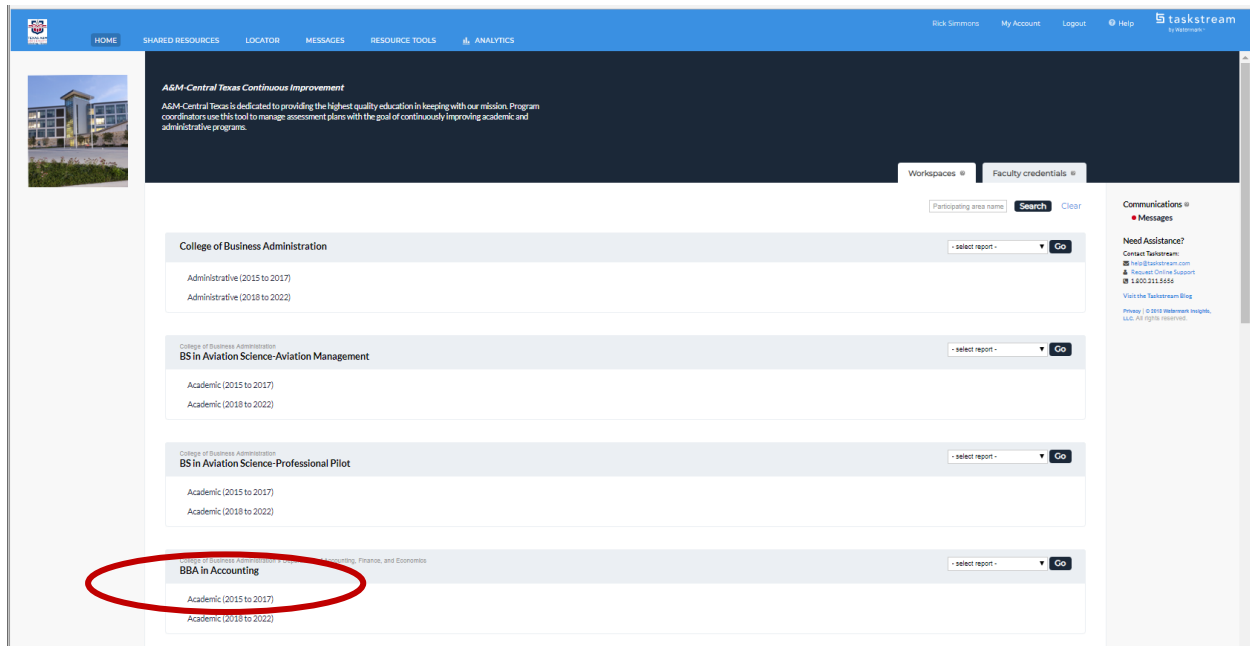
Assessment data will be used to make decisions about *[insert first item]* , *[insert second item if appropriate]* , and *[insert third item as appropriate]* .

Results will be shared via *[insert dissemination vehicle]* .

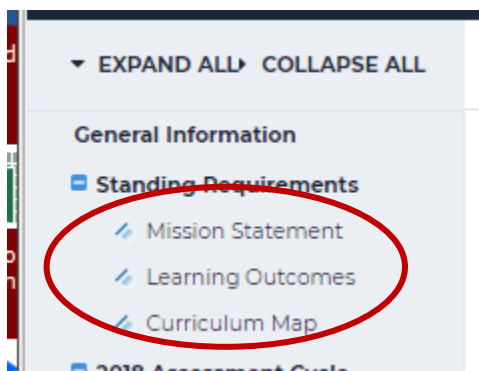
*NOTE: This template is provided to help you develop your statement on how you plan to disseminate and use your assessment results. You are not required to use this wording but you should include its components.*

## SECTION 7: YOUR CONTINUOUS IMPROVEMENT PLAN

Now that you have successfully completed sections 2-5, you have all of the components required to develop your continuous improvement plan. This is the point where you will need to log in to TaskStream. After logging in, the first screen you come to will look similar to the following figure:



On this page you will find your program and select the “Academic Assessment Workspace” link (circled in the figure above). The next page will contain the links required to upload and maintain your plan. Begin by selecting the Standing Requirements and expanding the menu so that you are able to see the Mission Statement, Learning Outcomes, Three Year Assessment Plan, and Curriculum Map links, as shown below.



In Standing Requirements, select each of the pictured links and either copy and paste your mission and outcomes, or conduct updates. It is from here your outcomes will populate all of the continuous improvement cycles. When selecting Mission Statement Link, for instance, you will see your mission statement and some menu tabs above the statement. To either upload a new mission or update a current mission, you will need to select the green “Check Out” button, so that editing can take place. This procedure of editing will be the same throughout the TaskStream program.



BAAS in Business Management | PREVIEW

Workspace :Academic (2018 to 2022)

HOME SHARED RESOURCES LOCATOR MESSAGES RESOURCE TOOLS ANALYTICS

Rick Simmons My Account Logout Help taskstream by Watermark

Edit Content Discussion Submission & Read Reviews Publish Options & Info

EXPAND ALL COLLAPSE ALL Mission Statement VIEW LOG WORD PDF PRINT SHARE CHECK IN

General Information

Review Released | Due : 10/13/2017

Checked out : 08/28/2018 04:15:54 PM (EDT)  
Checked out to : Rick Simmons

Standing Requirements

- Mission Statement
  - Directions
  - Review Method
- Learning Outcomes

After selecting the “Check Out” button, you are ready to edit, just select the Edit button. Please note that once you’re done inserting or editing your text, select the submit button to save your edits. To complete the editing, you have to select the red “Check In” button to ensure the section doesn’t lock out reviewers and TAMUCT TaskStream Managers.

BAAS in Business Management | PREVIEW

Workspace :Academic (2018 to 2022)

HOME SHARED RESOURCES LOCATOR MESSAGES RESOURCE TOOLS ANALYTICS

Rick Simmons My Account Logout Help taskstream by Watermark

Edit Content Discussion Submission & Read Reviews Publish Options & Info

EXPAND ALL COLLAPSE ALL Mission Statement VIEW LOG WORD PDF PRINT SHARE CHECK IN

General Information

Review Released | Due : 10/13/2017

Checked out : 08/28/2018 04:15:54 PM (EDT)  
Checked out to : Rick Simmons

Standing Requirements

- Mission Statement
  - Directions
  - Review Method
- Learning Outcomes
- Curriculum Map

2018 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Continuous Improvement Plan (CIP)

The Bachelor of Applied Arts and Sciences in Business Management develops business managers and leaders by providing high quality and relevant education in business management integrated with technical and military experience in preparation to lead and manage an organization and attend selected graduate business or management programs and in support of department, college, and university missions.

Edit

BAAS in Business Management | PREVIEW

Workspace :Academic (2018 to 2022)

HOME SHARED RESOURCES LOCATOR MESSAGES RESOURCE TOOLS ANALYTICS

Rick Simmons My Account Logout Help taskstream by Watermark

Edit Content Discussion Submission & Read Reviews Publish Options & Info

EXPAND ALL COLLAPSE ALL Mission Statement Due 10/13/2017 CANCEL & BACK SUBMIT

General Information

Standing Requirements

- Mission Statement
- Learning Outcomes
- Curriculum Map

2018 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Continuous Improvement Plan (CIP)
- CIP Update

2019 Assessment Cycle

- Assessment Plan
- Assessment Findings

Mission Statement Text : (Max. 7000 chars)

The Bachelor of Applied Arts and Sciences in Business Management develops business managers and leaders by providing high quality and relevant education in business management integrated with technical and military experience in preparation to lead and manage an organization and attend selected graduate business or management programs and in support of department, college, and university missions.

Check Spelling Character Count

The Learning Outcome menu is a little bit trickier. Select the link and then select Check Out. If you are inputting new goals and outcomes, select the “Create New Set.” Then, select “Create New Learning Goal”; type the goal in the field provided select “Update”. This is the tricky part; to ensure the outcome aligns with the goal, find the “Create New Outcome” link that is directly beneath the newly created goal. You will insert the outcome by copying and pasting the outcome in the Outcome field. Then select Update.

The screenshot displays the 'Learning Outcomes' interface. At the top, a green navigation bar contains 'VIEW LOG', 'WORD', 'PDF', 'PRINT', 'SHARE', and 'CHECK IN' buttons. Below this, a secondary bar features 'CREATE NEW SET' and 'SELECT EXISTING SET' buttons, with 'CREATE NEW SET' circled in red. The main content area shows 'Outcome Sets' with a section for 'BAAS in Business Management (2018 to Present)'. Within this section, 'Create New Learning Goal' and 'Create New Outcome' buttons are circled in red. Below these buttons is a table of outcomes with columns for 'Outcome' and 'Mapping'. The 'Edit Outcome' form is visible at the bottom, showing fields for 'Outcome' (with a character count of 140), 'Description' (with a character count of 1000), and 'Status' (with radio buttons for 'Active' and 'Obsolete'). The 'UPDATE' button at the bottom of the form is circled in red.

## Mapping Learning Outcomes to the Academic Master Plan

The mapping of each outcome within your Standing Requirements, regardless if an outcome is being assessed in a particular assessment cycle, is required. Each outcome within each program will be mapped to at least one of the outcomes listed in Academic Affairs (2018 to Present).

For those overall degree programs with multiple majors or concentrations, (i.e. BBA and CIS), the outcomes that are the same across majors and concentrations, should have the same mapping. For example the first four objectives in BBA are used in each of the BBA majors, the outcomes in each of the objectives should be mapped the same. Each of the program assessment leads will then map the major or concentration specific outcomes to a fitting outcome.

In TaskStream, select your learning outcomes under the Standing Requirements menu. Then for each outcome, one outcome at a time, select “[Map]”, as shown in the picture.

The screenshot shows the 'BAAS in Business Management (2018 to Present)' set in TaskStream. At the top, there are buttons for 'Create New Learning Goal', 'Reorder', and 'Edit Set Name/Properties'. Below this is the title 'Professional Communication Ability' with a description: 'Provide the BAAS-BM graduate the ability to communicate effectively within their chosen professions.' To the right of the description are 'Edit', 'Hide', and 'Delete' icons. A 'Create New Outcome' button is located below the description. The main area is a table with two columns: 'Outcome' and 'Mapping'. The first row shows the outcome 'Demonstrate proficiency in written communications' mapped to 'Academic Affairs (2018 to Present): Offer quality academic program...'. The 'Map' button for this row is circled in red. The second row shows the outcome 'Demonstrate proficiency in oral presentations' also mapped to the same set, with its 'Map' button also visible.

If the outcome has not been previously mapped, then select “Create New Mapping”.

The screenshot shows the 'Create New Mapping' dialog box. At the top, there is a 'Back to outcome sets' link. Below that, the 'Directions' are: 'Manage Mapping for outcome:'. The outcome being mapped is 'Demonstrate proficiency in written communications ( part of Professional Communication Ability)'. A red circle highlights the 'CREATE NEW MAPPING' button. Below the button, the set 'Academic Affairs (2018 to Present)' is shown, owned by 'Academic Affairs' and 'A&M-Central Texas will'. The 'Outcome' section shows 'Offer quality academic programs that are carefully selected to respond to regional needs'.

In the drop-down box of “Select category of set to map to”, select the “Outcome Sets in other organizational areas” option (in blue highlight).

Directions : Select the set to which you would like to map the Outcome:

Demonstrate proficiency in written communications (part of Professional Communication Ability) 🔍

Select category of set to map to :   
 Outcome Sets in other organizational areas ▼   
 Select Type of Set   
 Goal sets distributed to BAAS in Business Management   
 Outcome Sets in BAAS in Business Management   
 Outcome Sets in other organizational areas

Select Set :   
 Academic Affairs (2018 to Present)   
Owned by Academic Affairs   
 Academic Master Plan (2015 to 2017)   
Owned by Academic Affairs

Cancel CONTINUE

A second drop-box appears in the “Select category of set to map to:” category named “Select Set from a Specific Organizational Area”. Under “Academic and Student Affairs”, select the “Academic Affairs” option and the “Go” button.

ement | PREVIEW

Directions : Select the set to which you would like to map the Outcome:

Demonstrate proficiency in written communications (part of Professional Communication Ability) 🔍

Select category of set to map to :   
 Outcome Sets in other organizational areas ▼

Select Set :   
 » Academic Affairs   
 Select Set from a Specific Organizational Area   
 TAMU-Central Texas NEW   
 » Administrative   
 » Academic and Student Affairs   
 » Academic Affairs   
 » Institutional Research and Assessment   
 » Undergraduate Advising   
 » Enrollment Management   
 » Admissions and Recruiting   
 » Ft. Hood Office   
 » International Student Services   
 » Recruiting

Go

Select the radial button for the “Academic Affairs (2018 to Present)” in the “Select set:” field, then, select the “Continue” button.

Directions : Select the set to which you would like to map the Outcome:

Demonstrate proficiency in written communications (part of Professional Communication Ability) 🔍

Select category of set to map to : Outcome Sets in other organizational areas ▼

» Academic Affairs Go

Select Set :

- Academic Affairs (2018 to Present)**  
Owned by Academic Affairs
- Academic Master Plan (2015 to 2017)**  
Owned by Academic Affairs

Cancel CONTINUE

The Academic Affairs (2018 to Present) has been divided into five primary outcomes, as shown below. Select the outcome that is most relevant to the learning outcome, then select continue.

Directions : Select the outcome within Academic Affairs (2018 to Present) to which to map Demonstrate proficiency in oral presentations.

Demonstrate proficiency in oral presentations (part of Professional Communication Ability) 🔍

**Academic Affairs (2018 to Present)**

Owned by Academic Affairs

A&M-Central Texas will

Outcome

- Offer quality academic programs that are carefully selected to respond to regional needs
- Promote a culture that celebrates faculty excellence in teaching, scholarship, and service
- Foster an environment for scholastic achievement and student success
- Increase enrollment of academically qualified students to fulfill our mission of contributing to the economic transformation of our region
- Be a leader community engagement and community based-research

Your newly mapped outcome will look as shown below:

Outcome	Mapping	
Demonstrate proficiency in written communications Q	Academic Affairs (2018 to Present): Offer quality academic program...	Map Edit Hide Delete
Demonstrate proficiency in oral presentations Q	Academic Affairs (2018 to Present): Offer quality academic program...	Map Edit Hide Delete
Evaluate the implications of an ethical dilemma from a variety of ethical frameworks Q	No Mapping	Show Delete

Again, this mapping needs to be conducted for each outcome, regardless if the outcome is being assessed in a particular assessment cycle year. As outcomes change, then so, must the mapping; new outcomes must be mapped as described previously and changed outcomes will be mapped as described previously but with a slight difference. In changing the mapping of a particular outcome, you must first remove the previous mapped AMP outcome and then follow the instructions above. Select “[Remove Mapping]”, then select “Create New Mapping”.

◀ Back to outcome sets

Directions : Manage Mapping for outcome :

Demonstrate proficiency in oral presentations ( part of Professional Communication Ability)

CREATE NEW MAPPING  Show Descriptions

**Academic Affairs (2018 to Present)**  
Owned by Academic Affairs

A&M-Central Texas will

Outcome

Offer quality academic programs that are carefully selected to respond to regional needs [\[Remove Mapping\]](#)

Also please note that when you return to the site to make edits, links are given to you on the right side of the page. When you have completed your work here, please select “Check In.”

Now, select Curriculum Map from the Standing Requirements on the left margin menu, then select Check Out. If you have no current maps for your program, select Create New Curriculum Map and enter the title in the title field. Select the “View sets available within” your programs, in the “Select Alignment Set” field, then select the Go button. You should then see your objectives/outcomes title, view the set to ensure they are the correct set, and then select that set. See the following figure.

[Back to Curriculum Maps Home](#)

New Map Title :   
(Max 100 Chars)

Description :

Select Alignment Set : View sets available within BAAS in Business Management **Go**

[Select](#) BAAS in Business Management (2015 to 2017) [View Set](#)

[Select](#) BAAS in Business Management (2018 to Present) [View Set](#)

You will then be directed to the base page for the Curriculum Map. You will need to select “Edit Map” on the curriculum map you just created.

When creating the map, the goals/objectives will appear as the column headings. Select the blue “+” next to the Courses and Learning Activities to insert courses. Follow the instructions given in the New Course pop-up window. Continue this action until you have entered each course from the course map you created.

The screenshot shows a web browser window with the URL [https://folio.taskstream.com/Folio/CurMap/default.asp?qyz=JHbZYFK3S9PU1C49eTO&folder\\_id=auhrc6er00avcthcucqwhafpc6ep&map\\_id=a7e0h2c1hhfbzw&gsi\\_id...](https://folio.taskstream.com/Folio/CurMap/default.asp?qyz=JHbZYFK3S9PU1C49eTO&folder_id=auhrc6er00avcthcucqwhafpc6ep&map_id=a7e0h2c1hhfbzw&gsi_id...)

The main page is titled "Test" and "Courses and Activities Mapped to BAAS in Business Management (2018 to Present)". It has buttons for "ACTIONS" and "SAVE NOW". There are checkboxes for "Show Outcome Descriptions" and "Show Course/Activity Detail".

The main content area shows a table with the following structure:

Professional Communication Ability						
Provide the BAAS-BM graduate the ability to communicate effectively within their chosen profession.						
Demonstrate proficiency in written communications	Demonstrate proficiency in oral presentations	Evaluate the implications of an ethical dilemma from a variety of ethical frameworks	Design and defend a reasoned resolution to an ethical challenge	Identify the differences in business environment between countries that may impact business decisions	Exhibit cross-cultural competencies that will aid in working with people from different cultures.	Demonstrate knowledge/proficiency in the core business disciplines

Below the table is a section for "Courses and Learning Activities" with a blue bar indicating "No courses/activities in this category. Use the 'Insert Course' quick link + to start adding courses in this category."

The "Create a New Course or Activity" pop-up window is open, showing the following fields:

- Course/Activity ID :  (Max 15 Chars)
- Course/Activity Title :  (Max 100 Chars)
- Description : Optional  (Max 1000 Chars) [Check Spelling](#)
- Link : Optional  (Max 100 Chars)

Buttons for "Cancel" and "CREATE" are at the bottom of the pop-up.

You are able to reorder your courses by dragging and dropping the newly added course. Align each course with its respective objective outcome by selecting the “Click” button in each cell to the right of the course names. For COBA purposes, select “I” for

the courses that introduce concepts, “P” for practice concepts, and select “R” for the courses in which concepts will be reinforced and in which assessments will be conducted.

Show Outcome Descriptions     Show Course/Activity Detail

	Professional Communication Ability Provide the BAAS-BM graduate the ability to communicate effectively within their chosen professions.		Ethical Reasoning Provide the BAAS-BM graduate the ability to reason and make decisions while maintaining appropriate legal and social norms.		Global Business Awareness Provide the BAAS-BM graduate awareness of the global business environment.		Business Integration & Decision Making Provide the BAAS-BM graduate the ability to integrate knowledge, systems, and methods across multiple business functional areas using a variety of tools and techniques.			
	Demonstrate proficiency in written communications	Demonstrate proficiency in oral presentations	Evaluate the implications of an ethical dilemma from a variety of ethical frameworks	Design and defend a reasoned resolution to an ethical challenge	Identify the differences in business environment between countries that may impact business decisions	Exhibit cross-cultural competencies that will aid in working with people from different cultures.	Demonstrate knowledge proficiency in the core business disciplines	Integrate knowledge across multiple business disciplines	Demonstrate how technology can support business decision making	
<b>Courses and Learning Activities</b>										
+	BUSI 3301 Business Communications and Research	R	R	Click	Click	Click	P	Click	Click	Click
+	BUSI 3311 Business Statistics	Click	Click	Click	Click	Click	Click	Click	Click	R
+	BUSI 3332 Legal Environment of Business	Click	Click	R	Click	R	R	Click	Click	Click
+	BUSI 3344 Introduction to the Global Business Environment	P	Click	Click	Click	R	P	Click	Click	Click
+	BUSI 4301 Business Ethics	P	Click	R	R	P	P	Click	Click	Click
+	BUSI 4359 Business Strategy 3	R	R	Click	Click	Click	P	R	R	P
+	FIN 3301 Financial Management I	Click	Click	P	Click	P	P	P	P	P
+	MGMT 3301 Principles of Management	P	Click	P	P	P	P	P	Click	Click
+	MKTC 3301	P	Click	Click	Click	P	P	P	Click	Click

Legend: **I** Introduced    **P** Practiced    **R** Reinforced

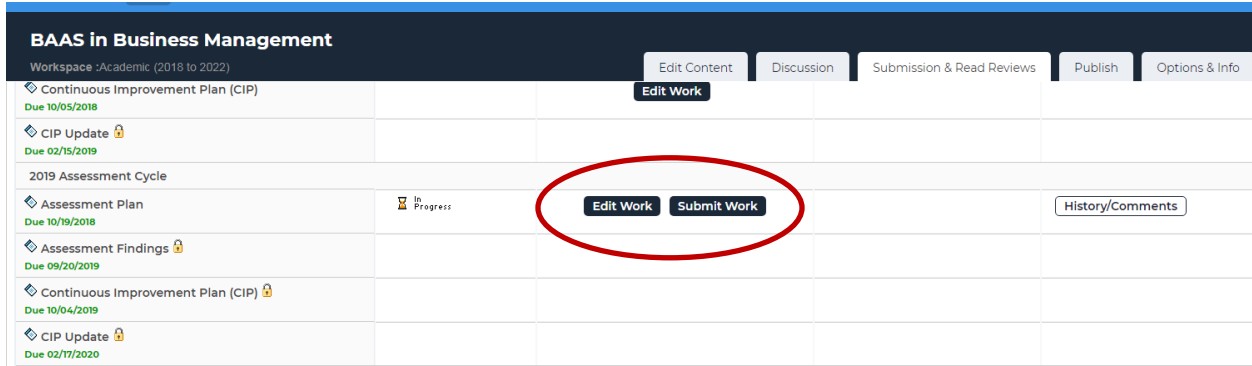
Please note, you need to save the map often to prevent loss of information. The save button is in the top right section of the window.

Now select the “Submission & Read Reviews” tab at the top of the web page and select “Submit Work” so that your reviewers may review and comment on your mission, learning goals/objectives, and curriculum map.

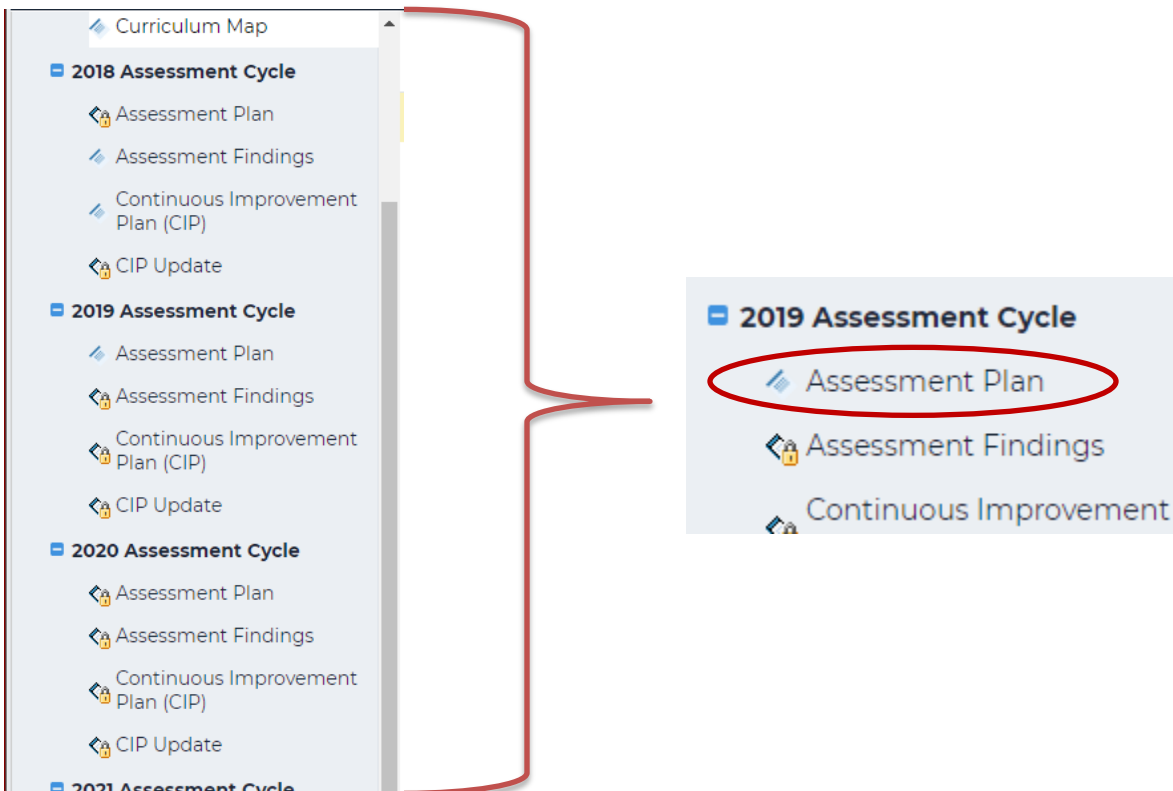
BAAS in Business Management						
Workspace : Academic (2018 to 2022)						
		Edit Content	Discussion	Submission & Read Reviews	Publish	Options & Info
Scores/Results Summary @				Print View	Export to PDF	
Area	Status	Actions	Results	History		
Standing Requirements						
Mission Statement Due 10/13/2017	Review Released	Edit Work Submitted : 11/09/2017 08:36:56 PM	24.00/24 Score/Results Report	History/Comments		
Learning Outcomes Due 10/13/2017	Review Released	Edit Work Submitted : 11/09/2017 08:37:02 PM	36.00/36 Score/Results Report	History/Comments		
Curriculum Map Due 10/13/2017	Review Released	Edit Work Submitted : 11/09/2017 08:37:07 PM	20.00/20 Score/Results Report	History/Comments		
2018 Assessment Cycle						
Assessment Plan Due 10/13/2017	Review Released	Submitted : 12/04/2017 11:23:41 PM	34.00/40 Score/Results Report	History/Comments		



In the Submission and Read Reviews figure, only Edit Work is available. Once you have completed your edits, Submit Work will become available.



You are now ready to complete the current year's Assessment Cycle. Select the appropriate cycle from the left margin menu and select Assessment Plan.



As usual, you will need to select the Check Out button. If this is your initial Assessment Plan, then select "Create a New Assessment Plan", or if you are using a previous cycle's Assessment Plan, select "Copy Existing Plan as Starting Point".

Workspace :Academic (2018 to 2022) | Edit Content | Discussion | Submission & Read Reviews | Publish | Options & Info

Assessment Plan | VIEW LOG | WORD | PDF | PRINT | SHARE | CHECK IN

Work Not Started | Due : 10/19/2018 | Checked out : 09/18/2018 03:51:41 PM (EDT) | Checked out to : Rick Simmons

**2019 Assessment Cycle**

- Assessment Plan
- Assessment Findings
- Continuous Improvement Plan (CIP)
- CIP Update

**Directions**

Measures objectively quantify or qualify the achievement of program outcomes in support of the mission. [Print](#)

Select the outcomes to be measured for the current cycle from the outcomes set in the standing requirements section. Include at least two measures (one direct and one indirect) for each outcome.

View the rubric in the "Review Methods" section for specific criteria.

**Review Method**

[CREATE NEW ASSESSMENT PLAN](#) | [COPY EXISTING PLAN AS STARTING POINT](#)

When creating a new plan, ensure your current or updated mission shows in the field. If not, select edit and follow the instructions. Then, if your new outcomes are not showing, you will need to select the Select Set button, and select only the outcomes you plan to assess in the current cycle; this is where you will need your assessment schedule created in Section 4.

Assessment Plan | VIEW LOG | WORD | PDF | PRINT | SHARE | CHECK IN

Work Not Started | Due : 10/19/2018 | Checked out : 09/18/2018 03:51:41 PM (EDT) | Checked out to : Rick Simmons

**Directions**

Measures objectively quantify or qualify the achievement of program outcomes in support of the mission. [Print](#)

Select the outcomes to be measured for the current cycle from the outcomes set in the standing requirements section. Include at least two measures (one direct and one indirect) for each outcome.

View the rubric in the "Review Methods" section for specific criteria.

**Review Method**

**Mission Statement**

[Edit](#)

The Bachelor of Applied Arts and Sciences in Business Management develops business managers and leaders by providing high quality and relevant education in business management integrated with technical and military experience in preparation to lead and manage an organization and attend selected graduate business or management programs and in support of department, college, and university missions.

**Measures**

[Select Set](#)

Select Existing Set and then select the relevant set of Learning Goals and Outcomes, then Continue

Import Outcome Set

Select an Existing Set in BAAS in Business Management:

- BAAS in Business Management (2015 to 2017) (Learning Goals & Outcomes) [\[View Set\]](#)
- BAAS in Business Management (2018 to Present) (Learning Goals & Outcomes) [\[View Set\]](#)

Select the appropriate outcomes and then select “Accept and Return to Plan.”

Select outcome sets for Measure

**Global Business Awareness**  
Provide the BAAS-BM graduate awareness of the global business environment. [Hide](#)

Mapping	Outcome	Mapping	
<input checked="" type="checkbox"/>	Identify the differences in business environment between countries may impact business decisions <a href="#">Q</a>	Academic Affairs (2018 to Present): Offer quality academic program...	<a href="#">Hide</a>
<input checked="" type="checkbox"/>	Exhibit cross-cultural competencies that will aid in working with people from different cultures. <a href="#">Q</a>	Academic Affairs (2018 to Present): Offer quality academic program...	<a href="#">Hide</a>

**Business Integration & Decision Making**  
Provide the BAAS-BM graduate the ability to integrate knowledge, systems, and methods across multiple business functional areas using a variety of tools and techniques. [Hide](#)

Mapping	Outcome	Mapping	
<input type="checkbox"/>	Demonstrate knowledge proficiency in the core business disciplines <a href="#">Q</a>	Academic Affairs (2018 to Present): Offer quality academic program...	<a href="#">Hide</a>

If you plan to use an Assessment Plan from a previous cycle, then select “Copy Existing Plan as a Starting Point”, then select the plan you wish to use, then select submit.

Select an existing plan as starting point

**Directions:** Select an existing plan as a starting point for your new plan. You will be able to modify this plan after copying it.

Existing Plan:

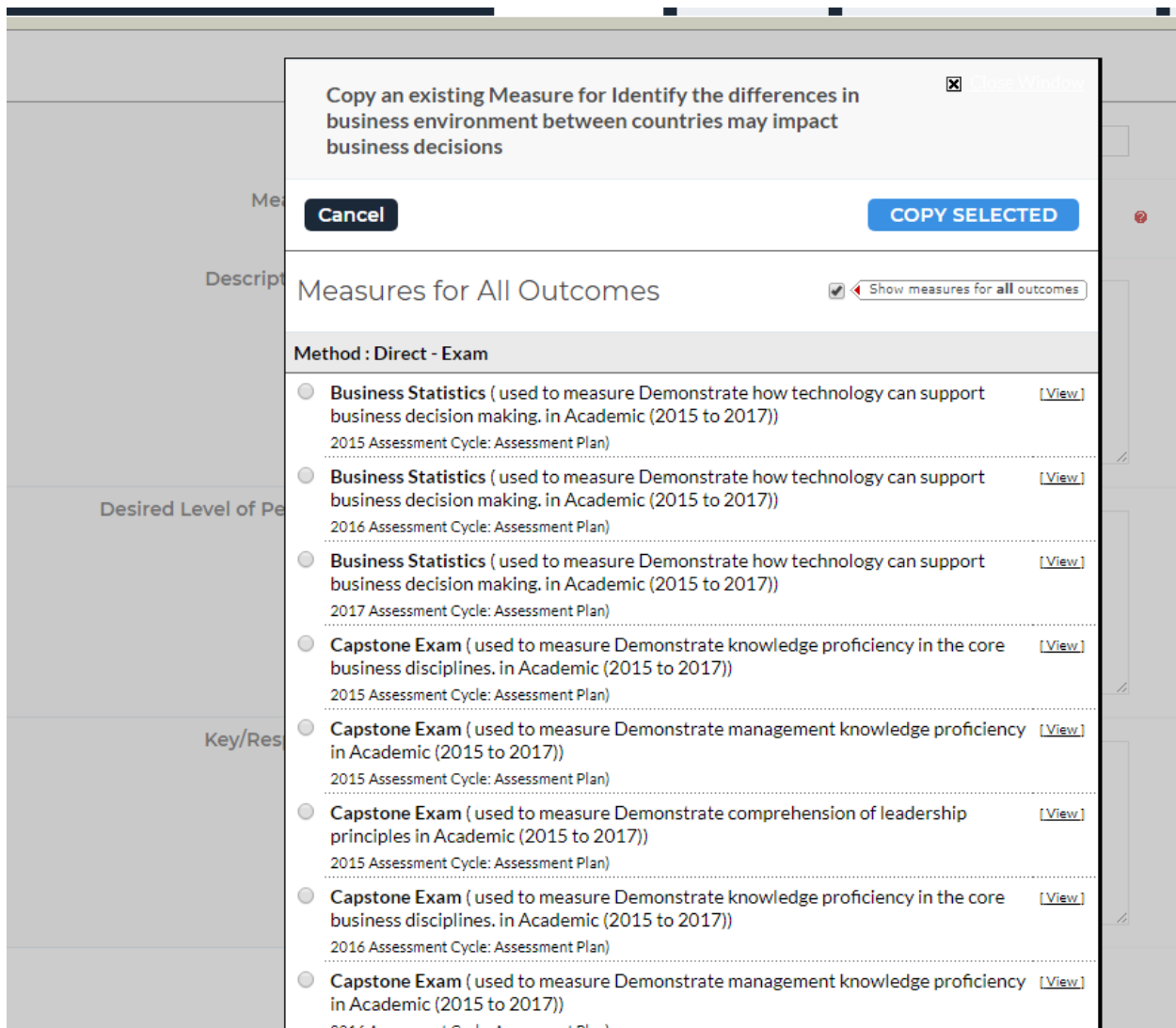
- Academic (2018 to 2022)**  
2018 Assessment Cycle: Assessment Plan [\[Plan\]](#)  
( last modified : 11/27/2017)
- Academic (2015 to 2017)**  
2017 Assessment Cycle: Assessment Plan [\[Plan\]](#)  
( last modified : 08/22/2017)
- Academic (2015 to 2017)**  
2015 Assessment Cycle: Assessment Plan [\[Plan\]](#)  
( last modified : 08/17/2017)
- Academic (2015 to 2017)**  
2016 Assessment Cycle: Assessment Plan [\[Plan\]](#)  
( last modified : 08/17/2017)

At this point, you are ready to enter your measures created in Section 4. Select “Add New Measure” and copy and paste your measures into the appropriate fields. You will also need to select the appropriate measure type and measure level from the given drop down menus. If you are using the same measures from a previous cycle, select the “Import Measure”, place a check in the “Show measures for all outcomes” checkbox, select the appropriate measure, and select “Copy Selected”.

The screenshot shows a web-based form for adding a new measure. At the top left is a "Cancel" button, and at the top right is a blue "IMPORT MEASURE" button. The form is divided into five sections, each with a label on the left and a corresponding input field on the right:

- \* Measure Title:** A single-line text input field.
- Measure Type/Method:** A dropdown menu currently showing "- Select -" with a red error icon to its right.
- Description of the Measure:** A large multi-line text area.
- Desired Level of Performance (Target):** A large multi-line text area.
- Key/Responsible Personnel:** A large multi-line text area.

At the bottom of the form are three buttons: "Check Spelling", "Cancel", and "APPLY CHANGES".



Once you have completed all additions or editing, select “Apply Changes.” You will need to repeat these procedures for each outcome that will be assessed within the current year.

The completed plan will show the mission statement, outcomes and measures mapped to the appropriate goal, and the methods for assessing. At this point you are able to upload any appropriate attachments or links that are pertinent to the particular measure, i.e. an assessment rubric. As shown in the next figure.

[Edit Content](#) | [Discussion](#) | [Submission & Read Reviews](#) | [Publish](#) | [Options & Info](#)

**Assessment Plan** | [VIEW LOG](#) | [WORD](#) | [PDF](#) | [PRINT](#) | [SHARE](#) | [CHECK IN](#)

**Measures**

Show Descriptions [Select Set](#)

**BAAS in Business Management (2018 to Present)**  
 Global Business Awareness  
 Provide the BAAS-BM graduate awareness of the global business environment.

**Outcome: Identify the differences in business environment between countries may impact business decisions** [Add New Measure](#)

**Measure: BUSI 3332 Exam Essay Question** [Edit](#) [Remove](#)  
*Direct - Student Artifact*

Description of the Measure: In BUSI 3332, students will answer an exam essay question that requires them to consider the differences in the business environments that may impact a business decision.

Desired Level of Performance (Target): 75% of the students in BUSI 3332 will achieve a 6 out of 8 on the exam essay rubric.

Key/Responsible Personnel: BUSI 3332 faculty will submit their results to the PAL for entry into TaskStream.

Supporting Attachments:  
[Add/Edit Attachments and Links](#)

Now that you have completed your plan for the year, you are ready to begin the process of collecting and analyzing the data needed for each measure that will be assessed, as discussed next.

## SECTION 8: ANALYZING ASSESSMENT RESULTS

*Once you have completed your assessment plan and have collected your data, you will need to analyze the results. This section introduces some basic methods of summarizing and presenting data. For a more detailed description on methods of analysis, refer to Linn & Miller (2005). This section may present challenges to those who are unfamiliar with quantitative research methods.*

### Scores

Analyzing data begins with scores. As mentioned in the previous section, the assessment methodology you choose will dictate what type of scores will be reported. For example, if you are using an objective assessment to measure student learning then your instrument will be scored dichotomously and summed across items to produce a total continuous score. Test results may be presented in the form of the number or percent correct for each student.

If you are using standardized assessments, scores may be reported in the form of raw or standard scores for each student. Raw scores are the original and untransformed scores before any operation is performed on them. They are essentially meaningless by themselves but form the basis for other more interpretable scores such as percentiles and standard scores. They are usually reported as aggregates in the form of total scores and sub-scale scores.

Performance assessments require the use of a standardized scoring procedure usually involving a rubric. Results are usually presented in the form of scale scores for each student on each dimension. Dimensions are not usually summed since they generally represent distinct concepts such that a total score would be meaningless. The diagram on the following page from the University of Virginia's Assessment website illustrates how rubric results can be analyzed. In the diagram, students are represented in the first column of the table. Across the top of the table are dimensions labeled outcomes taken from a rubric. Each student is assigned a scale score ranging in value from 0 to 4 for each of the dimensions presented where 0 represents the lowest score and 4 the highest. From these data, descriptive statistics can be easily generated.

Once data are tabulated, they can be analyzed with the assistance of software packages available on campus such as EXCEL, SPSS, or Minitab. Most assessment data are descriptive in nature and rarely involve the testing of hypotheses. On occasion a simple t-test may be required for examining group differences for questions that address value-added or longitudinal issues.

### Describing Quantitative Data

Once you have collected and scored your assessment data, you are ready to analyze and describe the results. Hidden among your scores there is an important message,

possibly one that will help you make improvements in your program. Your main responsibility is to describe the data as clearly, completely, and concisely as possible. The statistics presented in this section will be helpful in this process. One way of organizing data to get a clearer picture of what your scores mean is to compute frequencies. For example, you may be interested in determining the number of students who receive a particular score on an objective test or on a rubric. Frequency distributions are an easy way to summarize this information. Data are organized into classes of single values rather than grouped data and the number of occurrences for each single class of values can be reported. Frequencies are easily converted to percentages by dividing counts by the sum of all frequencies and then multiplying by 100. An easy way to display these data is in a table.

Calculating measures of central tendency and measures of dispersion are two other ways of summarizing data. Measures of central tendency describe the average or typical value of a set of scores. For example, you may be interested in determining the average score on an objective test or an average score for an outcome on a rubric. The three most commonly used measures of central tendency include the mean, median and mode. The mean is simply the arithmetic average that is obtained by summing all the scores in a set of data and then dividing by the number of scores ( $\text{Mean} = \frac{\text{sum of all data}}{\text{sample size}}$ ). When calculating the mean, be careful of outlying data points that may artificially drag the mean up or down. In the case of extreme outlying points, it is better to rely on the median. The median is a counting average. If the number of scores is odd then the median is calculated by arranging the set of scores in ascending order and then counting up to the midpoint. If the number of scores is even, it is the average of the two middle scores. The mode is the most frequently occurring score. A set of scores sometimes has two modes (bimodal).

Measures of dispersion or variability describe how scores are spread out above and below the measures of central tendency. The range, variance, and standard deviation are examples of measures of variability. The range is the simplest measure of variability. It describes the difference between the two most extreme scores ( $\text{range} = \text{maximum score} - \text{minimum score}$ ). The variance of your data is simply a measure of the average of your squared deviations from the mean. For each data point, the mean is subtracted from it and then this value is squared. The squared values are then added together and divided by the sample size minus 1 to create an average [ $\text{variance} = \frac{\text{sum of each data point} - \text{mean}}{2} / (\text{sample size} - 1)$ ]. Finally, the standard deviation is the square root of the variance, and is in standard deviation units and not squared units to make interpretation easier [ $\text{standard deviation} = \sqrt{\text{variance}}$ ].

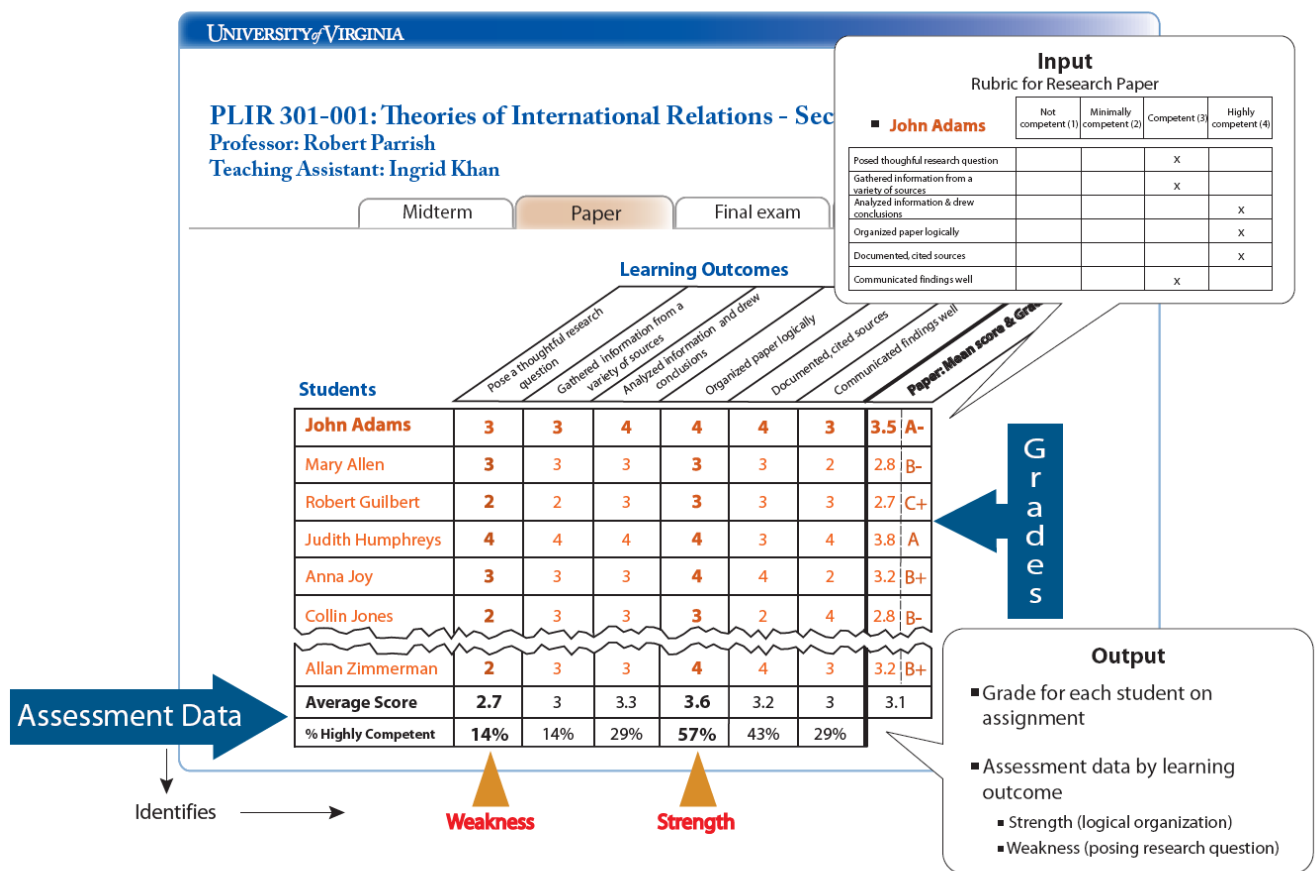
### **Example of Scoring using a Rubric**

More likely than not, assessment data will be collected from selected assignments, papers, or portfolios, from multiple sections. To avoid the “professor effect”, mentioned previously, an effective method, and recommended method, is the use of a rubric for particular program outcomes. These can then be easily incorporated into the grading system by each faculty member of the target course / section. University of Virginia’s



Office of Institutional Assessment and Studies developed the following (fictitious) example for incorporating a grading rubric into the grade book so that assessment data may be easily pulled when required. In the example, certain outcomes in the assignment are previously determined as program assessment factors. The rubric is developed such that a score may be obtained for each outcome. The scores then contribute to both individual student grades and the assessment data. The assessment data is collected by averaging individual outcome scores and then by calculating the competency rating. These ratings would then be reported to the program lead who would aggregate the data and then compare the data as per the program measures, identified in TaskStream.

### Using a Rubric to Produce Both Grades and Assessment Data



(Fictitious example)

From: <http://web.virginia.edu/iaas/assess/tools/assessment-graphic.pdf>

### Scoring External to Courses

Best practices within AACSB is that data are collected within each assessed course, placed in a repository, and when it is time to conduct the analysis, faculty members not

associated with the course (or sections) are selected to score the data using the established rubrics. This method should be the aspirational method used within COBA.

### **Drawing Conclusions about the Data**

Now that you have analyzed the data, what do the results mean? The easiest place to start is with your learning outcomes. For each learning outcome, compare your results with the target of performance you set in your assessment plan and determine if your students met or failed to meet each target. Next, make sure for each outcome that the conclusion drawn is valid in light of your assessment methodology. For example, did the sample you selected reflect all of your students in the program in terms of student demographics (i.e., gender, grades, and/or class level, etc.)? Was the instrument you selected valid and reliable (see Section 4)? Did it do a good job discriminating between high and low scorers? Was scoring consistent across raters? Did results follow expected patterns? If your methodology is flawed, then it is important to interpret your results in light of these limitations. Finally, for each learning outcome, try to identify causes for success or failures within the program such as in the curriculum or in the academic process itself. Once causes have been identified it will be easy to devise the appropriate solutions for making improvements. These improvements might include changes to the program’s assessment plan, changes to the curriculum, or changes to the academic process. The table on the following page details examples of changes that might be made as a result of assessment.

**NOTE:** A trend of “all standards met” in all goals is a signal that either the achievement “bar” is set too low, or the selection of measures are outdated or incorrect. Changes to the assessment plan will be needed.

### **Examples of Changes that May be Implemented as a Result of Assessment Findings**

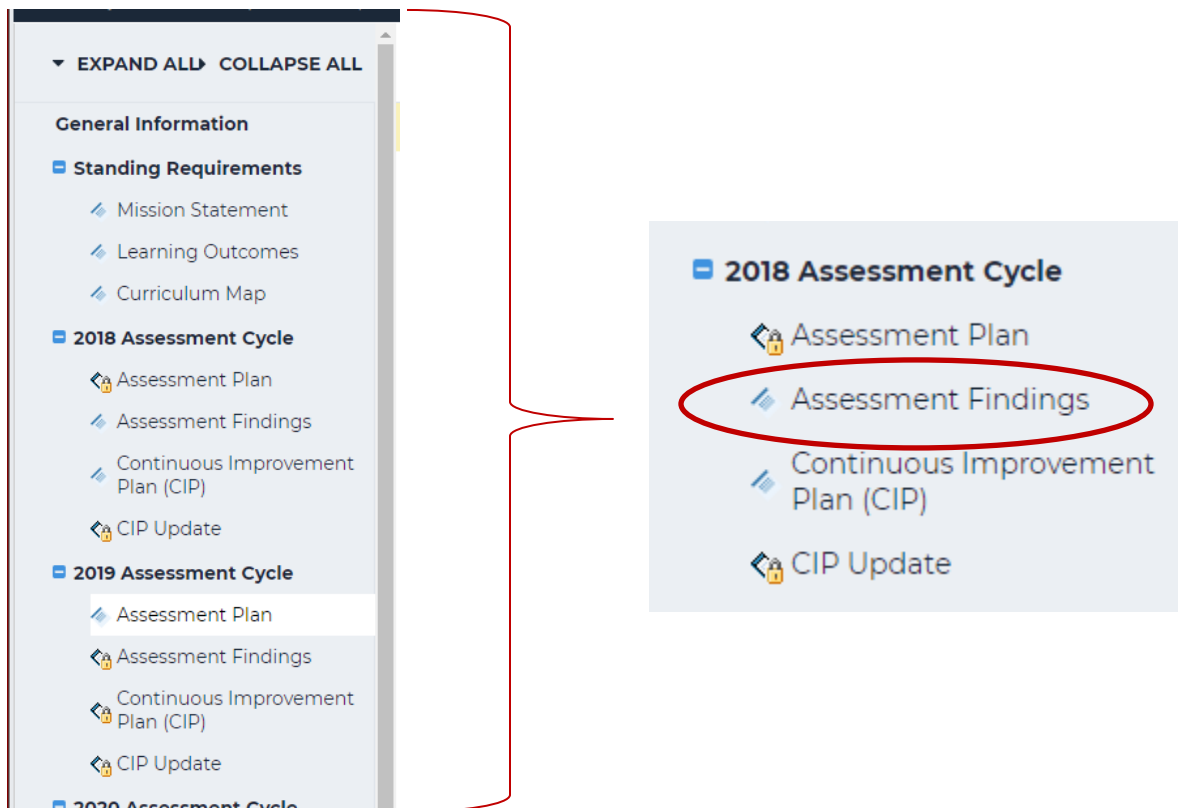
<p><b>Changes to the Assessment Plan</b></p>	<ul style="list-style-type: none"> <li>• revision of intended learning outcomes</li> <li>• revision of measurement approaches</li> <li>• changes in data collection methods</li> <li>• changes in targets/standards</li> <li>• changes in the sampling</li> </ul>
<p><b>Changes to the Curriculum</b></p>	<ul style="list-style-type: none"> <li>• changes in teaching techniques</li> <li>• revision of prerequisites</li> <li>• revision of course sequence</li> <li>• revision of course content</li> <li>• addition of courses</li> <li>• deletion of courses</li> </ul>

<p><b>Changes to the Academic Process</b></p>	<ul style="list-style-type: none"> <li>• revision of admission criteria</li> <li>• revision of advising standards or processes</li> <li>• improvements in technology</li> <li>• changes in personnel</li> <li>• changes in frequency or scheduling of course offering</li> </ul>
-----------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

*Adapted from University of Central Florida UCF Academic Program Assessment Handbook February 2005 Information, Analysis, and Assessment)*

### TaskStream Findings

Now that you have both collected the data and conducted the analysis, it is time to transfer that information to TaskStream. After logging in to TaskStream and selecting your program, select the appropriate improvement cycle, and this time select “Assessment Findings,” as shown in the figure below.



Again, you will need to Check Out the section which will show your goals, outcomes, and measures. Within each measure you will see a section for Findings; this is where you will provide your analysis. Select “Add Findings” to upload your analysis.

Assessment Findings

VIEW LOG WORD PDF PRINT SHARE CHECK IT

**Outcome: Demonstrate proficiency in written communications**

**Measure: Program Exit Survey**  
Indirect - Survey

Description of the Measure: In their final semester, students will be given a survey that asks them to assess their present writing proficiency, as well as how much they think they've improved in the course of their program.

Desired Level of Performance (Target): With regards to the first question, where students evaluate their own writing proficiency, the goal is that 85% of the students will at least "somewhat agree" that they are proficient writers.

With regards to the second question that addresses their writing improvement in the program, the goal is that 95% of the students either "somewhat agree" or "strongly agree" that they have improved as a writer during the course of their program.

Key/Responsible Personnel: BUSI 4359 faculty will facilitate the availability of the survey and the PAL will review and record the results from the fall and spring semesters at the end of each spring term.

Findings for Program Exit Survey **Add Findings**

No Findings Added

Enter your findings in the fields provided. Note the "Summary of Findings:" is a required field. Additionally, you must select whether the criteria for success was achieved using selections at the bottom of the page, before you select Submit to save the findings. You will have to repeat these steps for each measure in the cycle's improvement plan.

Findings for Program Exit Survey  
Outcome: Demonstrate proficiency in written communications

Please enter the findings/results for this measure. The purpose of this section is to critically examine the findings/results and determine what actions (recommendations) should be taken. When reviewing your results, include any relevant constituencies, such as faculty, staff, students, advisory board, and community members. Once you have reviewed your results, you will need to recommend actions based on the findings/results. Typical actions for academic programs include curriculum changes (i.e., revision of prerequisites, addition/deletion of course(s)), changing the schedule of course offerings, integration of additional technology into a course, or revision of advising and/or admission processes.

**\* Required Fields**

Summary of Findings:

Recommendations:

Acceptable Target Achievement: With regards to the first question, where students evaluate their own writing proficiency, the goal is that 85% of the students will at least "somewhat agree" that they are proficient writers. With regards to the second question that addresses their writing improvement in the program, the goal is that 95% of the students either "somewhat agree" or "strongly agree" that they have improved as a writer during the course of their program.

Not Met  Met  Exceeded

Cancel Check Spelling SUBMIT

The following figure shows an example of a completed finding section for the BAAS – BM program.

▼ **Measure:** GBK 332 Exam Essay Question  
*Direct - Student Artifact*

Description of the Measure: In GBK 332, students will have to answer a short essay that requires them design and defend a well reasoned solution to an ethical challenge.

Desired Level of Performance (Target): 80% of the students in GBK 332 will achieve at least a 3 out of 4 on the ethical reasoning essay question rubric.

Key/Responsible Personnel: GBK 332 faculty will submit their results to Professor Loafman who will then send the results to the PAL for entry into TaskStream.

**Findings for GBK 332 Exam Essay Question**

Summary of Findings: Overall, 60% of the students (36 out of 60) met the standard. The face to face students (higher sample size) met the standard at a 65% rate, while the online students were just under 50%. There was an issue with administration on this one in that the question was pushed to the second exam and not in close connection with the material as the target was intended to measure.

Results : Acceptable Target Achievement: Not Met

Recommendations: Monitor for another cycle, but look at how the information is presented, especially for the online students.

## SECTION 9: YOUR ASSESSMENT REPORT

Throughout the entire continuous improvement process, you will be submitting your improvement plans, findings, action plans, and status reports for review. The reviewers of the plans will be COBA's Chairs, the Dean for COBA (or his/her designated representative), and the university Provost (or his/her designated representative). The Director of Institutional Research and Assessment is the TaskStream manager and will monitor and review all programs for completeness, and will then develop university reports for both the Provost and the university president, which, once approved, will be published via the university website.

Therefore, it is important that program leads, within COBA take care when uploading information and ensure all information is current and accurate. This reporting process begins once the program lead has updated one of the four sections within an improvement cycle (Assessment Plan, Assessment Findings, Continuous Improvement Plan, and Status Report on CI Plan). The program lead will select "Submission & Read Reviews" tab at the top of the webpage, scroll down the list of improvement cycles, on the left side of the page, to the current improvement cycle.

As discussed previously with the Standing Requirements, you will see the status of your work for a particular section and the available actions (Edit Work or Submit Work). When you have completed your editing, submit your work for review. This will be done for each section within the improvement cycle. The requirement will be to submit as soon as a section has been updated to provide the reviewers the time needed to review and comment. The deadline for completing any section will be as per the university schedule, which will appear as a deadline on the Submission and Read Reviews section (bold red type).

Once the reviewers review and comment on a section, you may access those comments in the results section of the webpage, where you will then take whatever action is necessary. Ensure that your status reports are updated whenever you complete an action. See the figure below.

Scores/Results Summary

Area	Status	Actions	Results	History
<b>Standing Requirements</b>				
Mission Statement Due 12/04/2015	Review Released	<a href="#">Submit Work</a> Submitted: 01/24/2016 09:41:04 PM	Meets Requirement <a href="#">Score/Results Report</a>	<a href="#">History/Comments</a>
Learning Outcomes Due 12/04/2015	Needs Revision	<a href="#">Edit Work</a>   <a href="#">Resubmit Work</a>	Needs Revision <a href="#">Score/Results Report</a> Where are my results?	<a href="#">History/Comments</a>
Three Year Assessment Plan		<a href="#">Edit Work</a>		
Curriculum Map Due 02/05/2016	Review Released	<a href="#">Edit Work</a> Submitted: 01/24/2016 09:43:49 PM	Meets Requirement <a href="#">Score/Results Report</a>	<a href="#">History/Comments</a>
<b>2015 Assessment Cycle</b>				
Assessment Plan Due 12/04/2015	Submitted	Submitted: 02/11/2016 03:20:00 PM	Where are my results?	<a href="#">History/Comments</a>
Assessment Findings Due 12/18/2015	Submitted	Submitted: 02/12/2016 01:05:04 PM	Where are my results?	<a href="#">History/Comments</a>
Continuous Improvement (CI) Plan Due 02/19/2016	Review Released	Submitted: 04/15/2016 05:03:06 PM	Meets Requirement <a href="#">Score/Results Report</a>	<a href="#">History/Comments</a>
Status Report on CI Plan Due 06/03/2016	Review Released	Submitted: 05/31/2016 10:09:22 PM	Meets Requirement <a href="#">Score/Results Report</a>	<a href="#">History/Comments</a>
<b>2016 Assessment Cycle</b>				
Assessment Plan Due 02/19/2016	Review Released	Submitted: 02/11/2016 03:20:11 PM	3.50/4 <a href="#">Score/Results Report</a>	<a href="#">History/Comments</a>
Assessment Findings Due 12/16/2016	In Progress	<a href="#">Edit Work</a>   <a href="#">Submit Work</a>	Where are my results?	<a href="#">History/Comments</a>

= deadline for section

= submitted work which has been reviewed

= needing to be completed and submitted

## SECTION 10: CLOSING THE LOOP

Closing the loop is the last phase in the assessment cycle and involves making-decisions about how to respond to your program's shortcomings that have been identified through assessment data. Moreover, it is a dynamic process that involves shared feedback and collaborative reflection on the part of the faculty in the program. This begins first with making faculty aware of assessment findings and then organizing discussions around how to make improvements. Disseminating assessment findings is the first step. This may be accomplished through faculty newsletters, informal emails, websites, and/or faculty meetings and retreats. Once this has been accomplished then faculty must decide what changes are needed and how they are going to make them.

Remember: Follow MIM for closing the loop. For each outcome: measure – intervention – measure. Intervention is what you physically do with the results of an analysis. Examples could be some minor changes to a course's curriculum (including all sections), changing a program's curriculum (requires request for changes to the university curriculum process), or perhaps the retirement of an outcome and the addition of another.

The most common types of changes often relate to the assessment plan, the program's curriculum and/or the academic process. When making plans for modifications, remember, manage changes in terms of available time and resources. It is important not to make too many changes at once because it will be difficult to manage. Limit modifications to at most two per year depending on their magnitude. Finally, remember that improvements are generally gradual and cumulative in nature rather than all of a sudden, so don't get discouraged if they do not happen right away. The final step of closing the loop is the preparation for the next assessment cycle.

### **Closing the Loop – TaskStream**

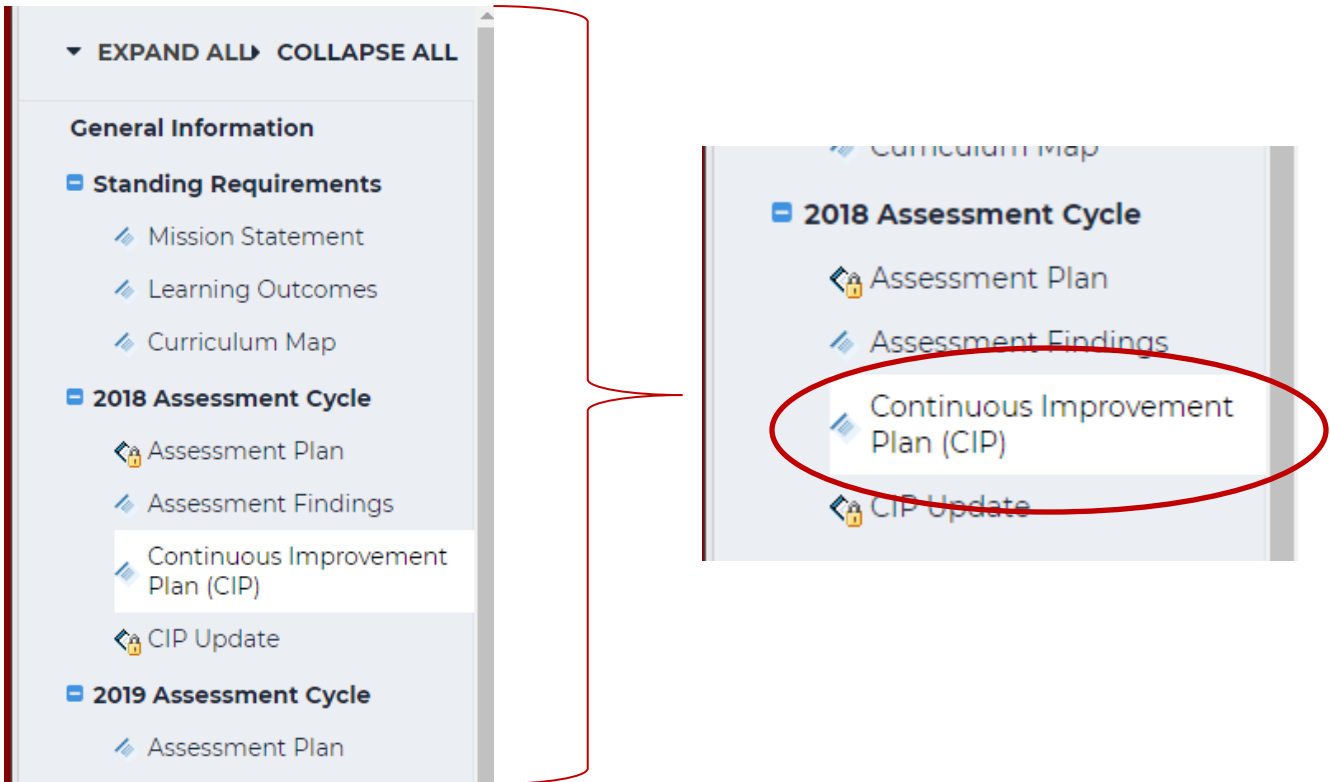
At this point you have developed/updated your mission statement, learning goals/outcomes, and your curriculum maps. Additionally, you created/updated your assessment plan in which you developed/updated your measures, including your assessment description, criteria for success, implementation plan, and assigned key/responsible people for data collection and for reporting. You collected and analyzed the data and updated the assessment findings, which included the summary of the findings, results, recommendations, and any reflections or notes, as well as overall recommendations and reflections.

NOTE: TaskStream is a repository of information as well as a method for generating reports. You report your loop closure in TaskStream.

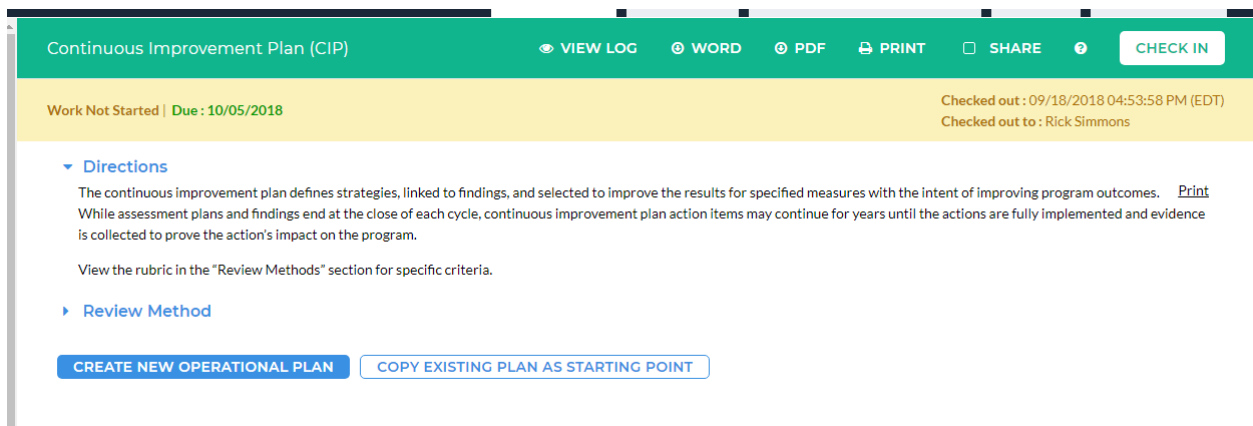


The next step, in closing the loop, is the creation and follow-through of the Continuous Improvement (CI) Plan for the particular cycle. Select the CI Plan and check-out. You will need to complete Action details, implementation plan (providing a timeline where applicable), key personnel, applicable measures, budget, and priority.

**NOTE: Your findings must be completed prior to completing your CIP**



Select either Create or Copy Existing Plan



**Outcome: Demonstrate proficiency in written communications**

▼ **Action: On the right track**

▶ This Action is associated with the following Findings @

Action details:	We improved significantly from 2016 to 2017, but are still below our target. Some of the improvements suggested leading into 2017 appear to have greatly helped in GBK 301. We did change the artifact assessed, but we also successfully had outside evaluators assess the work for the first time.
	We saw another low performance cycle in GBK 459, but staffing was an issue each cycle. A new full time faculty member starts in the fall of 2017, so hopefully our results will improve. It is possible the new faculty member will change the artifact used.
	We should continue to monitor over the next long cycle.
Implementation Plan (timeline):	2017-2018 Academic Year
Key/Responsible Personnel:	GBK 301 & GBK 459 leads, as well as the Assessment Chair.
Measures:	Improved performance
Budget approval required? (describe):	No
Budget request amount:	\$0.00
Priority:	Medium

The final step is to provide status updates of the continuous improvement follow-through. These updates will be conducted in TaskStream, using the last link an assessment cycle: "CIP Update".

The image shows a navigation menu on the left with the following structure:

- ▼ EXPAND ALL | COLLAPSE ALL
- General Information
- ▣ Standing Requirements
  - ↳ Mission Statement
  - ↳ Learning Outcomes
  - ↳ Curriculum Map
- ▣ 2018 Assessment Cycle
  - ↳ Assessment Plan
  - ↳ Assessment Findings
  - ↳ Continuous Improvement Plan (CIP)
  - ↳ CIP Update
- ▣ 2019 Assessment Cycle
  - ↳ Assessment Plan
  - ↳ Assessment Findings
  - ↳ Continuous Improvement Plan (CIP)
  - ↳ CIP Update

The right side of the image shows a detailed view of the '2018 Assessment Cycle' menu, where the 'CIP Update' item is circled in red. A red bracket on the left side of the image indicates that this detailed view corresponds to the '2018 Assessment Cycle' section of the main navigation menu.

Once required changes have been completed and updated in this section of TaskStream, submit for review. As done previously, check the Status Report on CI plan out. Select the appropriate action (from the CI Plan), and update the status.

Next Steps:

See if they can accurately use technology to respond to the given questions. This may help eliminate "test anxiety" and allow the student to be more comfortable when completing each quiz.

**Action: Raise 450 Target and Work on GBK 311 online students**

**Action details:** Based on results in CISK 450, it appears that the target is too low. We suggest that it be raised to 80%.  
In GBK 311, there is now appearing a solid gap between the performance of the face to face and online students, thus teaching methods, especially online need to be looked at.

**Implementation Plan (timeline):** 2017-2018 Academic Year

**Key/Responsible Personnel:** GBK 311 Faculty and Course Lead

**Measures:** Improved Online performance

**Budget approval required? (describe):** No

**Budget request amount:** \$0.00

**Priority:** Medium

**Status for Raise 450 Target and Work on GBK 311 online students**

**Current Status:** In Progress

**Budget Status:**

**Additional information:** BUSI 3311 (GBK 311): The gap between the online and F2F students was in the area of using technology (i.e. MS Excel and / or Minitab Statistical) to conduct statistical analysis, to assist in decision making. Because of this gap, a preparatory exercise was created to give students step by step instructions on conducting the analysis. Additionally, audio/video recordings were developed based on the preparatory exercises to provide the visual instruction on conducting the analysis.

In the Fall 2017 term, there were two online sections of which 71 students submitted responses to one or more assessment quizzes. On average, 31 of those students scored equal to or greater than the 75% target. There was 16% increase in achieving the target from the CY17 Assessment Cycle (from 28% to 44%).

Additionally, there were 109 F2F students who submitted responses to one or more assessment quizzes. On average, 67 students scored equal to or greater than the 75% target. There was a 1% increase in achieving the target in the Fall 2017 term from the previous assessment cycle (from 60% to 61%).

Overall, there was a 14% decrease in the gap between the online and F2F students achieving the 75% target.

**Requirement:** The online faculty need to assess if more time is needed to complete the quizzes and how to ensure all students complete all quizzes. Additionally, they need to assess if the students find the quiz prep exercises and the quiz prep recordings beneficial for quiz preparation.

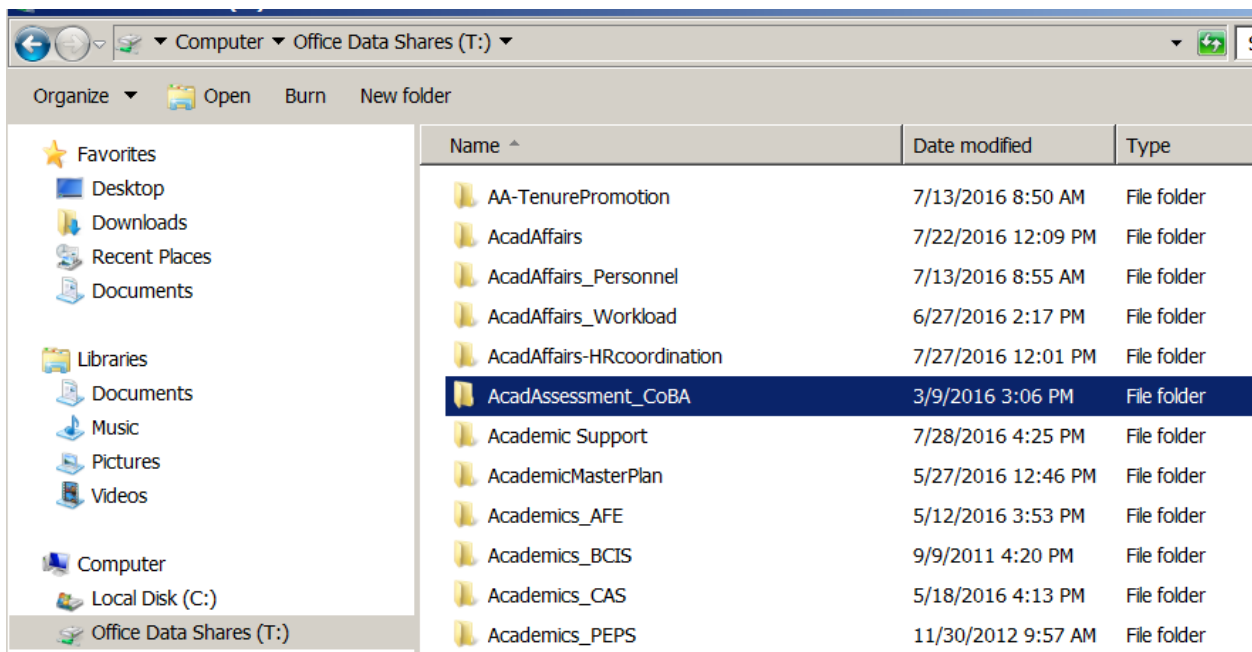
**Recommendation:** Increase the quiz time limits and allow students the time they need to complete the quiz. The intent is not to see how quickly they can complete the assessment, but to see if they can accurately use technology to respond to the given questions. This may help eliminate "test anxiety" and allow the student to be more comfortable when completing each quiz.

Next Steps:

## SECTION 11: DATA/EVIDENCE/ARTIFACT REPOSITORY

All assessment information will be maintained within the TaskStream environment. Each program lead will download an end of assessment cycle report and send that to the COBA academic assessment review committee chair. All end-of-cycle reports will then be uploaded to the COBA assessment website within the LMS Community. This will allow transparency in COBA reporting for those who are authorized in the TAMUCT system. In addition to the end of cycle reports, program leads must provide current or updated visions / missions, goals, curriculum maps, and assessment schedules for each assessed program.

Available to all Program Assessment Leads and Course Leads is a repository for raw data. The intent is for only analyzed data/results, methods of assessment, and substantiating evidence/artifacts be placed on TaskStream. The location is the Office Data Shares (T:) drive in the AcadAssessment\_CoBA folder.



Within the AcadAssessment\_CoBA folder will be identified assessment cycles, where each department has its own repository folder. Each departmental folder further contains their assessments programs and the associated assessed courses for those programs. See the following series of pictures, taking note of the locations in the address bar.

Shares (T:) ▾ AcadAssessment\_CoBA ▾

Name ^

- Assessment Cycle 2015
- Assessment Cycle 2016

Data Shares (T:) ▾ AcadAssessment\_CoBA ▾ Assessment Cycle 2015 ▾

Name ^	Date mo
AFE	3/9/2016
AVN	3/9/2016
CIS	3/9/2016
M&M	3/9/2016

es (T:) ▾ AcadAssessment\_CoBA ▾ Assessment Cycle 2015 ▾ M&M ▾

Name ^

- BBA and MGT-INTB and BAAS 3/9/2016 3:25 PM
- BBA\_HRM
- BBA\_MKTK
- MBA
- MS MGMT & Ldrshp
- MS-HRM

Assessment Cycle 2015 ▾ M&M ▾ BBA and MGT-INTB and BAAS ▾

Name ^	Date mo
FINK 301	3/9/2016
GBK 301	3/9/2016
GBK 311	4/15/2016
GBK 332	
GBK 344	
GBK 401	
GBK 459	
MGTK 301	
MGTK 350	
MGTK 425	
MGTK 450	
MKTK 301	

Assessment Cycle 2015 ▾ M&M ▾ BBA and MGT-INTB and BAAS ▾ GBK 311 ▾

Name ^	Date modified
FA 2015	4/15/2016 4:40 PM
SP 2015 Assessment Data	4/15/2016 4:45 PM
SU 2015	4/15/2016 4:44 PM
AY15 Assessment Data.xlsx	12/16/2015 8:23 AM
GB 311 Assessment Assignment Grading Ru...	12/14/2015 11:28 ...
GB 311 Assessment Guidance.docx	12/20/2015 7:06 PM
GBK 311(AY15 - Simmons).xlsx	12/16/2015 3:54 AM

The intent of this data repository is for course leads, according to the COBA process (see Appendix A: Data Flow), to provide their compiled data and place in the appropriate course folder. Additionally, course leads will provide data to a single location. If there are multiple programs that use the same data, then the course will be maintained in the parent program, i.e. BBA (BBA and MGT-INTB and BAAS folder). Program assessment leads will then access the appropriate course folder to pull the information needed for his or her program assessment.

Finally, the reporting flow, using TaskStream, will be from the program assessment lead to their respective department chair. Once the department chair conducts his or her review, the college Dean or his / her representative will review. After this second review, the Provost, or his / her representative will review prior to the university president's review. At any time during the process, program assessment leads may be requested to make corrections, additions, or deletions, as required through the reporting chain. See Appendix B: Reporting Flow.

## **SECTION 12: ASSESSMENT CONDUCT DURING AN ASSESSMENT CYCLE**

As stated previously, all assessment information will be maintained within the TaskStream environment, and all raw data/information will be maintained in the repository folders on the T-drive. However, the T-drive and TaskStream are not assessment methods; they are repository systems and provide the ability for storage and systematic review of each program, not only within COBA, but within the university. Actual assessments, then, within any program and within any assessment cycle, is conducted using the program assessment committees (faculty centered assessment).

### **Assessment Process**

At the beginning of an assessment cycle (fall term: prior to syllabi due dates), program assessment leads (PAL) will designate courses from which data will be collected throughout the cycle. PALs will provide course leads with the methods or rubrics associated with the measures of assessment, as identified in the cycle plan. Course leads will then be responsible to ensure all section instructors are aware of the data requirements, and that appropriate assignments are included within each sections' syllabi.

The course leads will then be required to collect all assessment artifacts and conduct preliminary analysis (for scored artifacts) and provide to the respective PAL no later than the official end of term date. The PAL will collect the artifacts and place in the T-drive repository, in preparation for end of cycle analysis.

For measures which require faculty to make observations during the term, PALs must coordinate with the Director of Continuous Improvement, not later two weeks prior to the initial observation or by midterm, whichever is earlier. Details of observation dates and times must be provided so that appropriate faculty members may be selected to conduct the observations. The completed observations score sheets are collected by each section instructor and then forwarded to the course lead, who will then consolidate, provide initial analysis, and then turn over to the PAL for storage.

If data are collected that will not be assessed within the current cycle, that data will remain in the repository (T-drive) until needed, per the assessment schedule.

At the end of an assessment cycle, COBA faculty will meet within one or two days after end-of-term grades are due (spring term), to conduct, or assist in the conduct, of the analysis of the data. Additionally, the faculty will split into their respective program assessment committees (PAC) to discuss the results of the analysis and determine the findings for the programs and subsequent majors. PALs will facilitate the discussions within their respective PACs.

The PACs then must determine required actions, based on the findings, and the timelines for implementation of those actions. Additionally, the PAC develops the requirements (plan) for the next assessment cycle.

Within a week of the completion of this assessment day, PALs must input the information into the current cycle's Assessment Findings and Continuous Improvement Plan (CIP), and complete the next cycle's Assessment Plan. Actions then must be taken prior to the beginning of the next fall term. This includes changes to curriculum within courses/sections and change documents that must be reviewed within the COBA and TAMUCT curriculum process. During the following assessment cycle, PALs must follow up on the actions and document the process for inclusion in the CIP update.

- Data Flow: Please review the flow chart in Appendix A prior to reading further. As shown in Appendix A, designated course leads will collect data from their sections.
  - If data are scores, the course lead should aggregate all scores and conduct an initial analysis of those scores.
  - If the data are writing samples, all submitted samples should be digital and cleared of any identifying marks of the student, instructor, or previous grading.
  - If the data are recorded presentations, a document should be prepared containing working links for all presentations.
  - All data are then turned over to the respective PAL, who will then place in the T-drive repository until the data need to be fully assessed.
  - During the annual assessment day (conducted within a few days after final grades are turned in, in the Spring Term), PACs will meet to conduct the analysis and assessment of the data for the current assessment cycle.
  - The Director of Continuous Improvement will coordinate for panels of faculty to assess writing samples and/or recorded presentations, using given rubrics from the PALs. These scores will then be passed to the PALs for the PACs' final assessment.
  - Once the results are determined by the PACs, actions need to be agreed upon and a timeline established for the actions.
  - PALs then input the results, received from the PACs, into TaskStream in the current assessment cycle's Findings and Continuous Improvement Plan, submitting for review.
  - PALs distribute findings and required changes to appropriate course leads.
  - Prior to the beginning of the Fall Term (prior to submission of syllabi), PALs contact course leads to ensure appropriate changes to courses (all sections) are made for the next cycle's data collection effort.



- Reporting Flow: Please review the flow chart in Appendix B prior to reading further. As shown in Appendix B, the reporting flow begins after the assessments have been completed, as discussed in the data flow section. Please review the COBA Assessment Cycle, discussed in Section 1 of this guide (pp. 5-6).
  - PALs are responsible for entering or updating the following in TaskStream (in each assessment cycle):
    - Standing Requirements (Mission, Program Outcomes, Curriculum Map)
    - Assessment Plans
    - Assessment Findings
    - Continuous Improvement Plans
    - Continuous Improvement Plan Updates
    - NOTE: Changes to program outcomes must be followed by change documents submitted for official approval/notification in the TAMUCT curriculum process.
  - When PALs complete any of the required TaskStream sections, they will submit that section for review (see Section 9, Your Assessment Report).
  - The submission for review will automatically signal the Department Chair to conduct the initial review.
    - Reviews content
    - Scores content using TaskStream rubric
    - Either approves or sends back to PAL for further editing
    - Provides PAL with any additional information regarding the program, not previously communicated
    - Submits approved program section for the Dean's review
  - The Dean or the designated representative (i.e. Director, Continuous Improvement) reviews the section submitted by the Department Chair.
    - Reviews content
    - Scores content using TaskStream rubric
    - Either approves or sends back to PAL for further editing
    - Informs the Department Chair of any content sent back for editing
    - Submits approved program section for the Provost's review
  - The Provost or the designated representative (i.e. Director, Institutional Research and Assessment) reviews the section submitted by the Department Chair.
    - Reviews content
    - Scores content using TaskStream rubric
    - Either approves or sends back to PAL for further editing
    - Informs the DCI and Department Chair of any content sent back for editing
    - If required, submits approved program section for the university president's review
    - If the president's review is not required, the process ends for the reviewed section

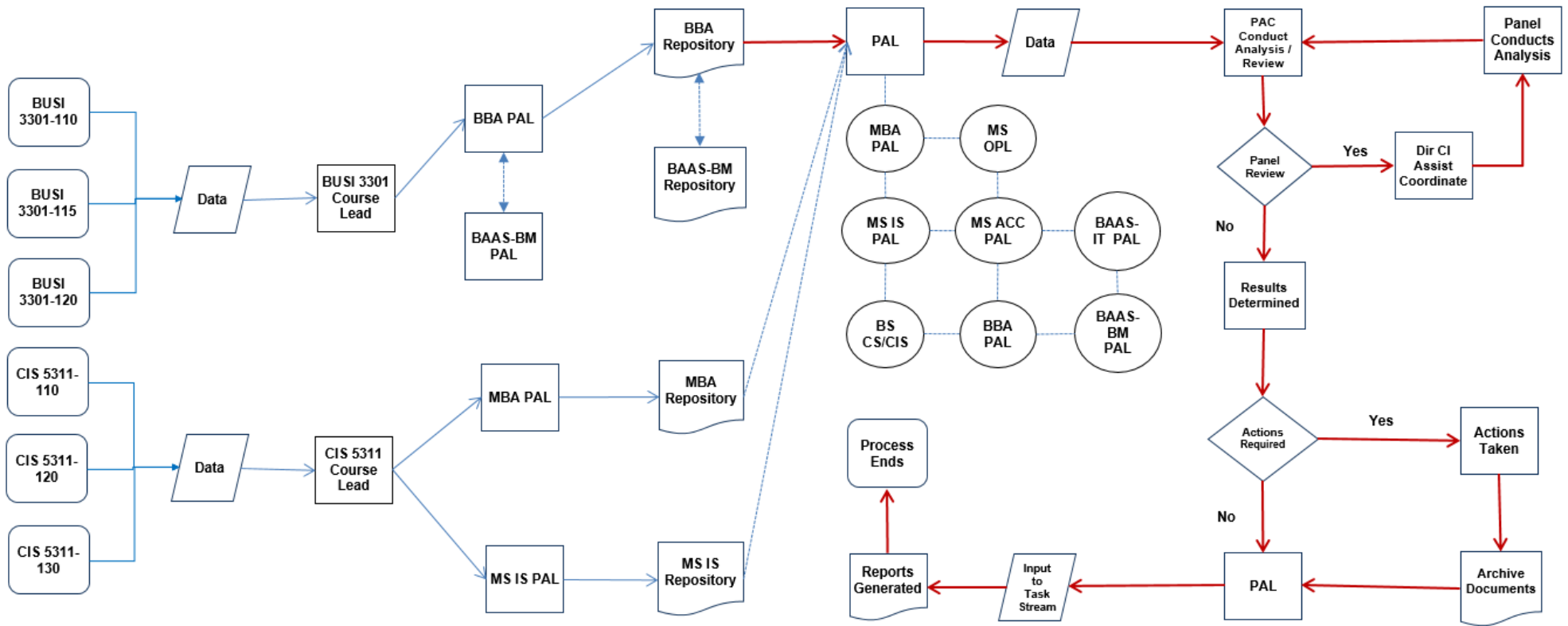
- The process ends with either the Provost's (or designated representative) approval, or, if required, the university president's (or designated representative) approval. The content remains in TaskStream and is archived by the Director, Institutional Research and Assessment.

## References

- Allen, M. J. (2001). *Assessing Academic Programs in Higher Education*. Bolton, MA: Anker.
- Allen, M. J. & Noel, E. (2002). *Outcomes Assessment Handbook*. California State University Bakersfield.
- American Association for Higher Education. (1991). *Principles of Good Practice for Assessing Student Learning*. Sterling, VA: Stylus.
- Angelo, T. A., & Cross, K. P. (1993). *Classroom Assessment Techniques: A Handbook for College Teachers* (2nd ed.). San Francisco: Jossey-Bass.
- Banta, T. W. (2004). *Portfolio Assessment: Uses, Cases, Scoring, and Impact*. San Francisco: Jossey-Bass.
- Belanoff, P., & Dickson, M. (1991). *Portfolios: Process and Produce*. Portsmouth, NH: Boynton/Cook.
- Bloom, B. S., Engelhart, M.D., Furst, E. J., Hill, W. H. & Krathwohl, D. R. (1956). *The Taxonomy of Educational Objectives, the Classification of Educational Goals, Handbook I: Cognitive domain*. New York: David McKay.
- Bridgewater State College (2000). *Assessment Guidebook*. Bridgewater, MA.
- California State University (1999). *PACT Outcomes Assessment Handbook*. Bakersfield, CA.
- Camus, A. (1955). *The Myth of Sisyphus: And Other Essays* (O'Brien, J., Trans.). New York: Vintage Books. (Original work published 1942).
- Croker, L., & Algina, J. (1986). *Introduction to Classical and Modern Test Theory*. New York: Harcourt brace & Jovanovich.
- Huba, M. E., & Freed, J. E. (2000). *Learner-Centered Assessment on College Campuses: Shifting the focus from teaching to learning*. Boston: Allyn and Bacon.
- Kemmis, S., and McTaggart, R. (2000). *Participatory Action Research*. In N. Denzin and Y. Lincoln (Eds.) *Handbook of Qualitative Research (2nd Ed.)* (pp. 567-605). Beverley Hills CA: Sage.
- Linn, R. L. & Miller, M. D. (2005). *Measurement and Assessment in Teaching (9th Ed.)*. Upper Saddle River, NJ: Pearson.

- Maki, P. L. (2004). *Assessing for Learning: Building a Sustainable Commitment across the Institution* (1st ed.). Sterling, VA: Stylus.
- Nichols, J. O., Nichols, K. W., et al. (2005). *A Road Map for Improvement of Student Learning and Support Services through Assessment*. New York: Agathon.
- Palomba, C.A., & Banta, T.W. (1999). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco: Jossey-Bass.
- Rossi, P. H., Lipsey, M. L., & Freeman, H. E. (2003). *Evaluation: A Systematic Approach* (7th ed.). Newbury Park: CA: Sage.
- Stevens, D.D. & Levi, A.J. (2004). *Introduction to Rubrics: An Assessment Tool to Save Grading Time, Convey Effective Feedback and Promote Student Learning*. Sterling, VA: Stylus.
- Southern Association of Colleges and Schools – Commission on Colleges (SACSCOC) (2012a). *Resource Manual for the Principles of Accreditation: Foundations for Quality Enhancement* (2nd ed.). Decatur, Georgia.
- Southern Association of Colleges and Schools – Commission on Colleges (SACSCOC) (2012b). *The Principles of Accreditation: Foundations for Quality enhancement* (5th ed.). Decatur, Georgia.
- Suskie, L. (2004). *Assessing Student Learning: A Common Sense Guide*. Bolton, MA: Anker.
- University of Central Florida. (2005). *University of Central Florida Assessment Handbook*. Orlando, FL.
- University of Massachusetts Amherst. (2001). *Program-Based Review and Assessment: Tools and Techniques for Program Improvement*. Amherst, MA.
- University of Virginia. *Assessment Guide: Seven Steps to Developing and Implementing a Student Learning Outcomes Assessment Plan*. Charlottesville, VA.

## Appendix A: Data Flow



Dir CI: COBA Director of Continuous Improvement

PAL: Program Assessment Lead

PAC: Program Assessment Committee Members

# Appendix B: Reporting Flow

