USING ASSESSMENT RESULTS FOR PROGRAM IMPROVEMENT

A resource for faculty

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Introduction

The University of Florida is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).While the primary role of regional accreditation is to ensure that institutions meet commonly accepted levels of academic quality and financial stability, our accreditation with SACSCOC also allows students access to Federal financial aid, which totals approximately $350 million annually for UF.

University of Florida faculty have engaged in responsible course and program assessment for decades because it is good practice. SACSCOC requires that academic programs provide evidence that they plan for and assess student learning outcomes. More recently, SACSCOC has required that universities provide ongoing evidence of program assessment planning, reporting and how faculty seek improvement based on the use of the assessment results they obtain. This document discusses some of the possible uses of assessment results that should be reported as a part of program improvement.

In any discussion of how use assessment results most effectively, it is important to remember that assessment is part of the larger teaching and learning process. Thus, questions about the use of assessment results should always be framed as a part of the larger teaching and learning framework.

Student Learning Outcomes (SLOs)

Figure 1 provides a graphic representation of the teaching, learning and assessment process and shows where reporting of assessment results fits into the overall framework. The circle at the top shows the Student Learning Outcomes (SLOs).   For all programs, SLOs describe the knowledge and skills that students should attain from their programs at the University of Florida. Each undergraduate program is required to establish SLOs in Content, Critical Thinking and Communication (State University System of Florida, January 19, 2012). Graduate and professional programs must have outcomes in Content Knowledge, Skills, and Professional Behavior (Gerhardt, 2010, November 15).

The second circle in Figure 1 represents the curriculum which should be described in the course syllabi. The curriculum specifies the learning experiences, content and skills that students will engage in to learn the SLOs.   For courses that have been identified as a point where program level assessment will take place, the results of the course-level assessment measure selected for program level assessment are used for annual data reporting.

The third circle in Figure 1 represents the actual instruction that occurs. The instruction is the application of the curriculum for students to learn the content and skills required in the SLOs. Thus, instruction is most effective when it aligns with the SLOs and the curriculum.

Figure 1: The Teaching and Learning Process
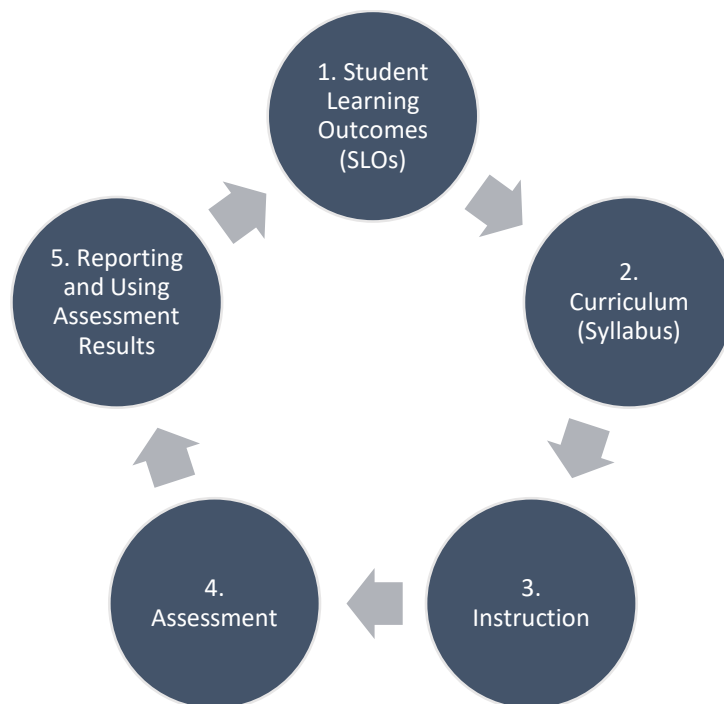
The fourth circle in Figure 1 is the assessment of the students to determine if the experiences, content and skills specified in the curriculum and operationalized in the instruction have resulted in learning what is included in the SLOs. Thus, it is imperative that the SLOs, curriculum, instruction and assessment align with each other.   The fifth circle represents the reporting of results and what can be done with the information. This document provides guidelines for what can be done with the assessment results.

Using Assessment Results

 The primary reason for the assessment at a program or course level is to determine if the students are learning the content and skills specified in the SLOs.   When SLOs, curriculum, instruction and assessment align in the system, the use of assessment results needs to be considered in the broad context of the SLOs, curriculum, instruction and assessment, and adjustments to any of these components would be a reasonable use of the assessment results. Consequently, when examining results and considering the next step, it should be a consideration of the SLOs, curriculum, instruction and assessment learning process and not just focus on the assessment. Considering how to use results could include questions about any or all of the components in Figure 1. Below are some questions and possible next steps for each of the components.

Student Learning Outcomes

Any examination of assessment results should begin with a review of the SLOs to focus on *what should be taught, learned and assessed*. Always begin by asking if the specified SLOs are the

correct key outcomes by answering this question: "What should students know and be able to do at the end of their program?" This step may result in little or no change to the SLOs, or it may also lead to rewording SLOs for clarity or even completely changing the SLOs, or adding or dropping SLOs. Thus, some SLO questions that might be used in the assessment process include the following:

1. Are the SLOs clear?
   If not, reword the SLOs for clarity.
2. Do the SLOs align with the curriculum, instruction and assessment?
   If not, make changes to the component that needs adjustment for all components to be aligned.
3. Are these the correct SLOs?
   If not, add or drop SLOs to specify the appropriate outcomes. The course SLOs when changed need to be aligned with program SLOs and objectives.

Curriculum

The curriculum is specified in the syllabus and potentially other program or class documents. The curriculum should clearly show what is *intended to be taught* and with what methods (e.g., lecture, labs, discussion). Correct specification of the curriculum and its alignment with SLOs, instruction and assessment are important to having interpretable assessment results. Thus, assessment results may lead to questions about the curriculum such as the following:

1. Does the curriculum align with the SLOs?
   If not, make changes in the curriculum to align with the SLOs. This could include changes in content coverage, methods of teaching or amount of time spent on specific topics.
2. Does the curriculum lead to instruction with content and methods that are consistent with the assessment?
   If not, adjust the curriculum (or the instruction) to improve alignment.
3. Does the curriculum align with the assessment in terms of content and method?
   If not, adjust the curriculum (or the assessment) to improve alignment.

Instruction

Instruction should show what is *actually taught*. It should be aligned with the curriculum and the assessment. Thus, assessment results may lead to questions about the instruction that include the following:

1. Is the instruction aligned with the curriculum?
   If not, make changes to the instruction so that it is aligned with the curriculum.
2. Is the instruction aligned with the assessment?
   If not, make the appropriate adjustments to the instruction or assessments so that they are aligned.

3. If the class has multiple sections, is the instruction consistent across sections?

    If not, work with the multiple instructors or sections to ensure consistency in instruction. This may include adjustments to the curriculum or preparation/training of instructors.

4. Are instructors, including teaching assistants, prepared and trained to deliver the course?

    If not, instructors may need additional training and preparation.

Assessment

The assessment shows *what the students have learned*. Thus, assessment results are a function of the specified outcomes, what is taught (intended and actual) and the quality of the assessment. The quality of the assessment is based on three issues: validity, reliability and fairness. Methods for examining these issues are discussed briefly below and additional resources are listed:

1. Validity is defined in terms of the strength of the interpretations and uses of the assessments and is considered the most important characteristic of the assessment. There are many types of evidence that could be used to examine the validity of an assessment for a particular use or interpretation. In achievement testing, the most frequent form of validity evidence is to use expert judgement to examine the content and skills covered in the assessment. The primary method is to have experts review the assessment to make sure it aligns with the SLOs, curriculum and instruction. Thus, it is a continuation of the evidence suggested for the other components with a focus on the assessment. Since the experts for the content and skills in higher education is often the instructors of the course, this means that the course instructors are often responsible for the validation of the assessments. They should carefully examine the assessment to see if some items or tasks should be modified or dropped. It also includes potentially needing to add items or tasks to more broadly cover the SLOs, curriculum and instruction.

2. Reliability is the consistency of the assessment. If the items/tasks are subjective, this may involve providing training and practice in scoring to make sure that instructors are consistent in their scoring. With multiple choice items, there are methods for assessing internal consistency statistically. This could include item analyses that can be conducted through Canvas or other software.

3. Fairness is ensuring that the assessment has the same validity for each group of students. This can be assessed by expert review of the items/tasks or through statistical analyses of the assessment.

4. Finally, one may examine what is being assessed and decide that additional information would help understand the teaching and learning process. For example, the SLOs may

only lead to cognitive assessments, but it may be useful to interview students about their class experience.

Summary

Assessment and the results of the assessment should not be viewed on their own. Instead, they should be part of a larger review which includes the specific outcomes (SLOs) being assessed, the curriculum, the instruction and the assessment. In this document, we have specified some of the alternative questions and actions that can be taken on the basis of assessment results. In using assessment results, the next steps may include study of or changes in any of the four components emphasized in this document. Resources for some of the components that have been developed through UF's Office of Institutional Assessment and are listed below.

1. SLOs - Developing Program Goals and Student Learning Outcomes available at:

   https://assessment.aa.ufl.edu/media/assessmentaaufledu/faculty-resources/2020-21-update-documents/Guide-for-Developing-Program-Goals-and-Student-Learning-Outcomes.pdf

   Video on The Basic of Student Learning Outcomes Assessment available at: https://www.youtube.com/watch?v=uXSf9a5UTF4&feature=youtu.be

2. Curriculum and Instruction are based on the expertise of the faculty developing and teaching the courses.

3. Assessment -- UF's Office of Institutional Assessment has developed A Practical Guide to Assessment available at:
   https://assessment.aa.ufl.edu/resources-and-information/faculty-resources/a-practical-guide-to-assessment/

4. In particular, Module 4b includes resources on validity and reliability
   The Association of American Colleges & Universities has the VALUE rubrics that can be modified and used to fit your needs at:
   https://www.aacu.org/value-rubrics

References

State University System of Florida. (2012, January 19). *Regulation 8.016 – Student Learning Outcomes Assessment*. Retrieved from https://www.flbog.edu/documents_regulations/regulations/8_016_StudentLearningOutcomes_final.pdf

Gerhardt, K. (2010, November 15). *Memo regarding the centralize collection of graduate student learning outcomes*. Retrieved from https://ufl.compliance-assist.com/Accreditation/source2.aspx?id=d340115f-1dee-e211-875e-86539cf2d30e.