Program Assessment Planning:

A Three Part Series on How to Set Up a Manageable and Effective Assessment Plan

Office of Assessment and Evaluation at Virginia Tech

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Overview

Assessment overview

- ◦ What is assessment?
- ◦ Why do we do assessment?
- ◦ Are we required to do assessment?

Developing a Program Assessment Plan: What is included in the three part series?

- ◦ Part I: Developing a mission statement, writing good student learning and program outcomes, and developing a curriculum map
- ◦ Part II: Implementing appropriate measures, creating additional assessment maps, developing targets, and analyzing data
- ◦ Part III: Designing an action plan, closing the loop, and reporting results
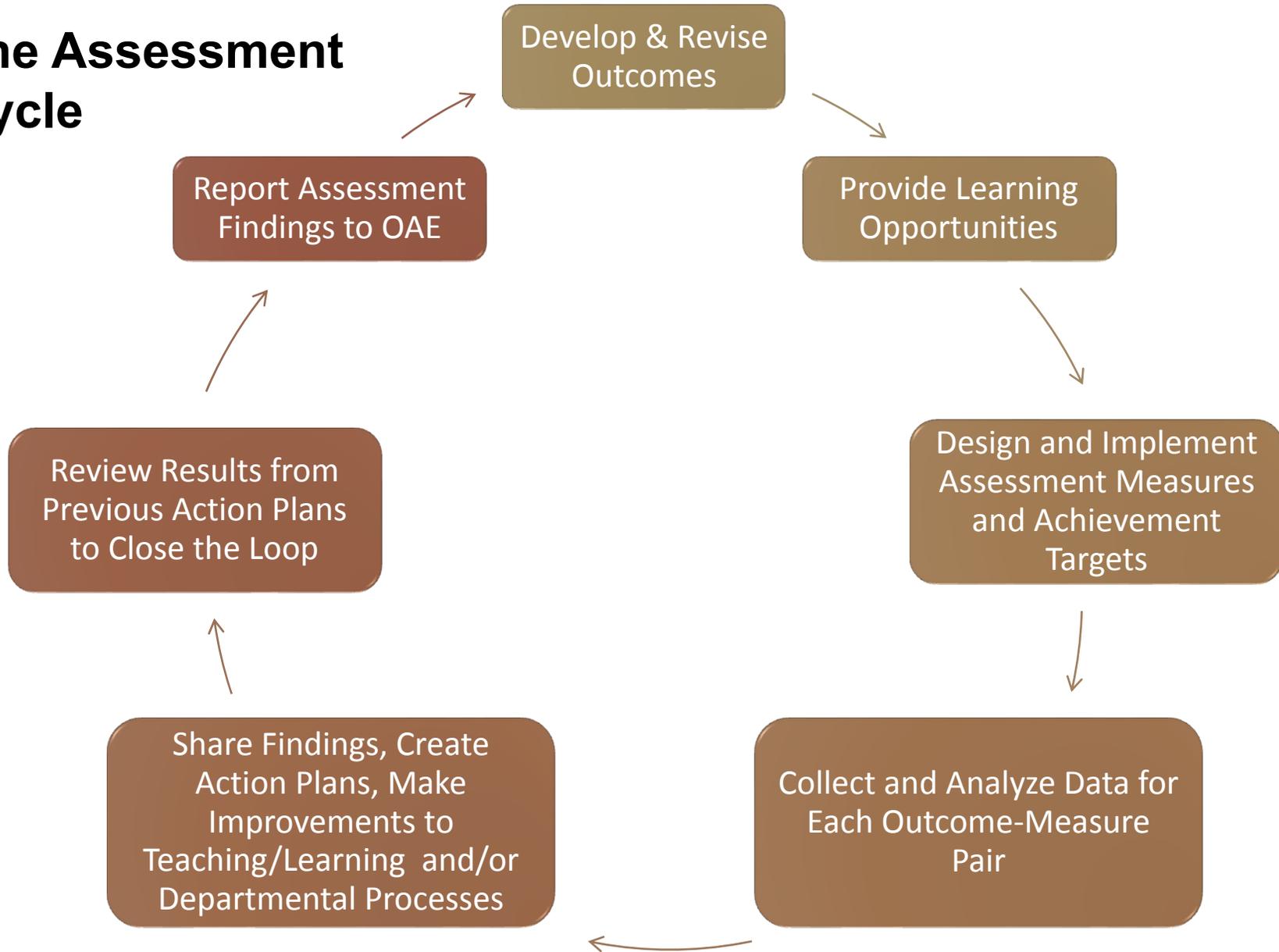
What is assessment?

Suskie (2009, p.4) defined assessment as an ongoing four-step process:

1. "establishing clear, measureable expected outcomes of student learning;

2. ensuring that students have sufficient opportunities to achieve those outcomes;

3. systematically gathering, analyzing, and interpreting evidence to determine how well student learning matches our expectations;

4. using the resulting information to understand and improve student learning."

Suskie, L. (2009). *Assessing student learning: A common sense guide* (2nd ed.). San Francisco: Jossey-Bass.

The Assessment Cycle

Develop & Revise Outcomes

Provide Learning Opportunities

Design and Implement Assessment Measures and Achievement Targets

Collect and Analyze Data for Each Outcome-Measure Pair

Share Findings, Create Action Plans, Make Improvements to Teaching/Learning and/or Departmental Processes

Review Results from Previous Action Plans to Close the Loop

Report Assessment Findings to OAE

Why should programs do assessment?

◦ Help identify a program's strengths and areas for improvement
◦ Provide student learning evidence for stakeholders including discipline-specific and regional accreditors
◦ Highlight the positive contributions of the program to stakeholders
◦ Encourage collaboration among faculty in the program
◦ Create a program vision and ideal
◦ Encourage the review of the curriculum as a whole

BUT the PRIMARY REASON is to improve the teaching and learning process

What are the SACSCOC requirements for program assessment?

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Comprehensive Standard,

"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:

3.3.1.1 educational programs, to include student learning outcomes"

Southern Association of Colleges and Schools Commission on Colleges (2011, December, pg. 27). *The principles of accreditation: Foundations for quality enhancement*. Retrieved from http://www.sacscoc.org/pdf/2012PrinciplesOfAcreditation.pdf

What are some things SACSCOC considers when examining this standard?

◦ "How are expected outcomes clearly defined in measureable terms for each educational program?

◦ What assessment instruments are used and why were they selected?

◦ Have the programs assessed the extent to which they have been successful in achieving their learning outcomes?

◦ If called for, have program improvements been made as a result of assessment findings?"

Southern Association of Colleges and Schools Commission on Colleges (Second Edition 2012, p.55). *Resource manual for the principles of accreditation: Foundations for quality enhancement.* Retrieved from http://www.sacscoc.org/pdf/Resource%20Manual.pdf

RECAP from Part I – Mission Statements, Outcomes, and Curriculum Mapping

Mission Statements
- Statement covering values and purpose of the program
- Foundation for student learning and program outcomes

Student Learning Outcomes
- Specific knowledge, skill, or ability students are expected to achieve
- Are measureable and observable

Program Outcomes
- Statements that define program metrics or services
- Are measureable, specific, and feasible

Curriculum Mapping
- Technique allowing programs to align courses and other academic experiences with their learning outcomes
- Can assist in the assessment planning process

Part II – Measures, Additional Mapping Techniques, Targets, and Analyses

By the end of this session you will be able to:

1. Give examples of items to consider when choosing an assessment measure

2. Distinguish between direct and indirect measures for outcomes

3. Describe why your program should develop an assessment methodology map and assessment timeline planning map

4. Explain how to develop targets for your outcome-measure pairs

Choosing Assessment Methods

What should you consider when choosing an assessment measure?

◦ Assessment measure is compatible with the outcome
◦ The measure selected should provide reasonably accurate, useful information
◦ The measure would yield results specific enough to know where improvements can be made
◦ Assessment measure matches the cognitive level of the outcome (for student learning outcomes)

What should you consider when choosing an assessment measure?

Consider what is already being done:
- ◦ Survey faculty on what activities are being done in their courses
- ◦ Find out what is being done locally or institution-wide that might map to your outcomes
- ◦ Utilize one activity for several outcomes where possible
- ◦ Use capstone points in the curriculum

When selecting your measure what should your program ask?

◦ Is the measure a reasonable indicator for the cognitive level specified in the student learning outcome?

◦ Would this assessment method assist the program in other ways (meeting accreditation standards, provide feedback to students, etc.)?

◦ Will the results of the assessment produce data that is trustworthy and understandable?

◦ Is the development/preparation time involved in using this measure reasonable?

What is a direct measure?

Direct measures are tangible, visible, and observable
  ◦ Allow someone to directly observe the student learning, usually via student work embedded in a course
  ◦ Show a demonstration of a students' knowledge or skill
  ◦ Indicate a service or activity implemented by the program

For each student learning outcome the program should have at least one direct indicator of student learning.

What are examples of direct measures?

Student learning outcomes:

- Student artifacts (ex. capstone projects, portfolios, presentations, case studies, etc.) examined by learning outcome and scored with a rubric
- Externally reviewed exhibitions, performances, or projects scored by learning outcome
- External evaluation of performance during internships based on outcomes.
- Commercially-developed tests, locally-developed tests, national licensure exams or professional exams if examined by learning outcome

Program outcomes:

- Number of students meeting certain criteria (ex. % attending graduate school) or number of projects or initiatives implemented (ex. courses developed, grants obtained, etc.)
- Enrollment numbers / number of majors

What is an indirect measure?

An indirect measure is subjective and not directly observable

◦ Asks students to reflect on their learning or abilities but does not provide direct evidence of the learning

◦ Infers student knowledge

For each student learning outcome the program can have a combination of both direct and indirect indicators of student learning

What are some examples of indirect measures?

- Survey research: National or local instruments
  - Exit surveys / senior surveys, alumni or employer surveys
  - National Survey of Student Engagement (NSSE), The College Senior Survey (CSS), etc.
  - Faculty surveys
  - Course evaluations
- Employer satisfaction studies and advisory boards
- Exit interviews and student focus groups
- Self-assessments
- Peer ratings

Assessment Methodology Mapping and Assessment Timeline Planning

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What is an assessment methodology map?

An assessment methodology map is a way to chart your measures to:

◦ Determine if you can cover several outcomes with one method

◦ Give timelines and responsibilities of the assessment (who, what, where, and when of the plan)

◦ Ensure that you have at least one direct measure for each outcome

◦ Determine where you can implement a combination of both direct and indirect measures

What does an assessment methodology map look like?

Student Learning Outcome (SLO)	Departmental Direct Assessment Methods			Departmental Indirect Assessment Methods		
	Capstone Course Projects	Written Course Assignments	Standardized Subject Matter Test	Graduating Student Interviews	UG Exit Survey: Departmental Items	Alumni Survey
SLO#1: Explain the core biological concepts related to evolution and principles of genetics.	X (BIOL 4030 course, collected by professor every time course is offered)		X (Conducted by the department every year)	X (Spring semester, conducted by the department chair)	X (Every Spring, Assessment Office)	X (Even Spring semesters, Assessment Office)
Program Outcome (PO)	Direct Measures for the Program Outcomes					
PO: Students enrolled in the BS Biology program at the end of their sophomore year will complete the program	Tracking of students through the program (retention numbers)					

What is an assessment timeline plan?

An assessment timeline plan is a way to chart your measures to:

- Plan your program assessment needs for several years
- Allow your program to have a collective vision of what is being done in the department in terms of assessment
- Help the program ensure assessments are conducted when appropriate

What does an assessment timeline plan look like?

Student Learning Outcome (SLO) or Program Outcome (PO)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
SLO#1: Explain the core biological concepts related to evolution and principles of genetics.	X BIOL 4030 Capstone Project Standardized Test		X BIOL 4030 Capstone Project Standardized Test		X BIOL 4030 Capstone Project Standardized Test
SLO #2: Critically analyze biological research and findings.		X BIOL 4064 Capstone Project Standardized Test (Outcome not met)	X (Decide to assess to examine if action plan is working.)	X BIOL 4064 Capstone Project Standardized Test	
PO: Students enrolled in the BS Biology program at the end of their sophomore year will complete the program.	X Tracking of students through the program		X Tracking of students through the program		X Tracking of students through the program

Developing Targets and Data Analysis

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What is an achievement target?

An achievement target:

◦ Defines the program's achievement expectations for each outcome-method pair

◦ Is usually expressed as percentages or numbers expected

◦ Is achievable but rigorous

◦ Is realistic for the program level

Examples:

◦ Student learning outcome: 80% of students will meet or exceed expectations on the rubric items for this outcome.

◦ Program outcome: 80% of students who declare XYZ as a major will complete the program.

How should programs present their findings?

Findings presented should be:

◦ Directly related to the outcome-measure pair (usually expressed as a percentage)

◦ Presented on the same scale as the target

◦ Completed at the end of the assessment period

◦ Specific enough to examine all components of the learning outcome

Examples:

◦ Student learning outcome: 75% of the students met or exceeded expectations on the rubric items for this outcome.

◦ Program outcome: 65% of students who declared XYZ as a major completed the program.

What does the final report look like so far?

Student Learning Outcome (SLO)	Assessment Methodology (Measure)	Target	2014-2015 Academic Year Findings Did you met your target?	Action plan (if target was not met or program desires further improvement)	Comments Regarding Previous Action Plan Implemented for this Student Learning Outcome
SLO: Explain the core biological concepts related to evolution and principles of genetics.	Capstone paper. In BIOL4030, students are required to complete a capstone paper. This paper contains a section for students to explain the core biological concepts related to evolution and principles of genetics. A rubric will be used to evaluate student performance on this aspect of the capstone paper.	80% of the students will met or exceed expectations on the rubric items pertaining to history and evolution (score of 3 or 4 on a 4-pt rubric; 4 = exceeding expectations).	65% of the seniors taking the BIOL 4030 course were rated as meeting or exceeding expectations. Target: Not Met		
	Any other methodology that was used to assess learning outcome #1				

What does the final report look like so far?

Program Outcome (PO)	Assessment Methodology (Measure)	Target	2014-2015 Academic Year Findings Did you met your target?	Action plan (if target was not met or program desires further improvement)	Comments Regarding Previous Action Plans Implemented for this Program Outcome
PO: Students enrolled in the BS Biology program at the end of their sophomore year will complete the program.	Tracking of students enrolled in the program.	80% of students enrolled at the end of their sophomore year will complete the program.	85% of students who were enrolled in the program at the end of their sophomore year graduated. Target: Met		
	Any other methodology that was used to assess program outcome #1				

Next session

Part III – Action Planning, Closing the Loop, and Reporting

Question and Answer

For questions or additional information please contact the Office of Assessment and Evaluation

We are always happy to help!

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Presentation will be made available on the Office of Assessment and Evaluation website.