Assessing Student Learning in Tertiary Programs in the United States: An Institutional Process

Queensland Conservatorium Assessment Symposium
August 27, 2015

Timothy S. Brophy
Director, Institutional Assessment
Professor, Music Education
University of Florida Office of the Provost
Gainesville, Florida, USA
Presentation Aims

1. To introduce, describe, and explain the context of assessment of student learning in tertiary programs in the United States

2. To share an institutional structure and process for assessment of student learning in undergraduate, graduate, and professional programs
Common Challenges to Student Learning Assessment in Tertiary Programs

Size and scope
- Multiple colleges/departments
- Undergraduate, Graduate, Professional, and certificate programs

Institutional consistency
- Outcomes
- Assessment reporting
- Cycles

Management and Tools

Honoring unit autonomy, disciplinary distinctions, and institutional requirements

Faculty comportment
This is not associated with tenure or promotion
Regulation and Accreditation

PRIMARY DRIVERS OF ASSESSMENT OF STUDENT LEARNING
The Florida Board of Governors
Regulates higher education in Florida

Regulation 8.016, *Student Learning Outcomes Assessment*

All undergraduate programs must have student learning outcomes in three categories

- Content knowledge
- Critical Thinking
- Communication
Accreditation

The educational context in the US: States versus the federal government

Eligibility for federal dollars is tied to accreditation

7 regional accreditors in the US

Southern Association of Colleges and Schools (SACSCOC) – over 800 institutions

95 standards
SACSCOC Standard 3.3.1.1

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*

There are four more areas – administrative support services, academic and student support services, research, and community/public service.
Requirements for meeting this standard

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>All university programs must establish goals and outcomes</td>
</tr>
<tr>
<td>Assessment planning and reporting</td>
</tr>
<tr>
<td>Institutions meet this requirement in a manner that is appropriate for them</td>
</tr>
<tr>
<td>Develop frameworks and processes to ensure compliance</td>
</tr>
<tr>
<td>There is variance among institutions in how this is accomplished</td>
</tr>
</tbody>
</table>
Assessment Elements (and Challenges) Common to All Programs
Student Learning Outcomes (SLOs) are defined generally as “what students are expected to know and be able to do by completion of their degree program.”

We define this for faculty and ensure that this definition is consistent across campus and clearly posted.
A Categorical Organizing Framework for SLOs

Undergraduate
- Content/Discipline Knowledge
- Critical Thinking
- Communication

Graduate
- Content/Discipline Knowledge
- Skills
- Professional Behavior
SLO characteristics: Recent, Relevant, and Rigorous

Student Learning Outcomes reflect the curriculum the discipline, and faculty expectations; as these elements evolve, learning outcomes change.

**Recent** – the outcome reflects current knowledge and practice in the discipline.

**Relevant** – the outcome relates logically and significantly to the discipline and the degree.

**Rigorous** – the degree of academic precision and thoroughness that the outcome requires to be met successfully.
Distinguishing Outputs from Outcomes

**Outputs** describe and count what we do and whom we reach, and represent products or services we produce. Processes deliver outputs; what is produced at the end of a process is an output.

An **outcome** is a level of performance or achievement. It may be associated with a process or its output. Outcomes imply measurement – quantification of performance.
Outcomes and Outputs: What is the Difference?

We seek to measure outcomes as well as their associated outputs; however, SLOs focus on outcomes.

For example, while we produce a number of new graduates (the output), it is critical that we have a measure of the quality of the graduates as defined by the college or discipline (the outcome).

Effective Student Learning Outcomes describe, in measurable terms, these quality characteristics by defining our expectations for students.
Distinguish between SLOs and Program Goals

**Student Learning Outcomes** (SLOs) describe student learning – what students will know and be able to do as a result of completing an academic program (undergraduate, graduate, professional, and certificate). Program faculty set *targets* for their SLOs.

**Program Goals** describe the unit’s expectations for programmatic elements, such as admission criteria, acceptance and graduation rates, etc. There are also **Learning Goals** that are broad statements of how the program prepares students for post-graduate careers or study.
Ensuring Outcomes are Measurable

Effective SLOs:

Focus on what students will know and be able to do.

- All disciplines have a body of core knowledge that students must learn to be successful as well as a core set of applications of that knowledge in professional settings.

Describe observable and measurable actions or behaviors.

- Effective SLOs present a core set of observable, measurable behaviors. Measurement tools vary from exams to complex tasks graded by rubrics.

The key to measurability: an active verb that describes an observable behavior, process or product.

- A framework for developing SLOs: Bloom’s Taxonomy
Verbs and Phrases that Complicate Measurability

**Understand**

- An internal process that is indicated by demonstrated behaviors – OK for learning goals but not recommended for program or course SLOs

**Appreciate; Value**

- Internal processes that are indicated by demonstrated behaviors closely tied to personal choice or preference; OK if the appreciation or valuing is supported by discipline-specific knowledge

**Become familiar with**

- Focuses assessment on “becoming familiar,” not familiarity
Verbs and Phrases that Complicate Measurability

<table>
<thead>
<tr>
<th>Learn about, Think about</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not observable; demonstrable through communication or other demonstration of learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Become aware of, Gain an awareness of</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focuses assessment on becoming and/or gaining – not actual awareness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demonstrate the ability to</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focuses assessment on <em>ability</em>, not achievement or demonstration of knowledge or skill</td>
</tr>
</tbody>
</table>
Developing Measurable SLOs: A Three-level Model (Ron Carriveau, *Connecting the Dots*, 2010, Fancy Fox Publications)

**Program Learning Goal Level** – programs establish learning goals for the degree
- *These goals require multiple actions over time to measure*

**Program-level – Student Learning Outcome**
- *These describe what students will do to demonstrate they have met the learning goals*

**Course-level – Student Learning Outcome**
- *These are determined by the faculty and specify course-level, observable products or demonstrations*

This model connects course-level and program-level SLOs directly to the program learning goals.
Balancing Direct and Indirect Assessments

**Direct assessments** of student learning are those that provide for direct examination or observation of student knowledge or skills against measurable performance indicators.

**Indirect assessments** are those that ascertain the opinion or self-report of the extent or value of learning experiences.
Planning and Reporting
Academic Assessment Plans provide a common framework for units to plan how they assess and measure student achievement of the SLOs.

Plans also present the process for how the data from these assessments are used to enhance the quality of student learning.
Why Plan?

- Provides faculty a focal point for the discussion of the assessment of student learning in the degree programs.
- Planning discussions provide an opportunity to revisit the curriculum and its relationship to the SLOs.
- Provides a consistent reference resource when faculty and leadership change.
Planning Timelines/Cycles

Develop assessment plans

Submit for institutional review

Implement plan

Collect data and submit reports
Common elements of Academic Assessment Plans

- Mission Alignment
- Student Learning Outcomes
- Curriculum/Assessment Maps
- Assessment Cycle
- Assessment Oversight
- Methods and Procedures

Academic Assessment Plan
Approval and Management Process

The University of Florida SLO Approval Process

- Program/Department
- College
- Academic Assessment Committee
- Student Academic Support System
- University Curriculum Committee
System or Cycle of Assessment and Reporting

Assessment and Institutional Effectiveness → Data Reporting

- **Establish Mission, Goals, and Outcomes**
- **Assessment Planning**
- **Implement the Plan and Gather Data**
- **Interpret and Evaluate the Data**
- **Modify and Improve**

**February** – Assessment Plans submitted for the next AY

**October** - Assessment Data, results, and use of results for previous AY reported
Reporting Assessment Results

Assessment Reporting

- Outcome
- Measure(s)
- Data/Results
- Use of Results

Program Modifications
Quality Assurance Process
Elements of Quality Assurance

- Multi-step, institutional review and approval process
- Templates and rubrics for guiding faculty through the process
- Review and evaluate faculty submissions
- Cross-reference plans with data reported annually
- Design and provide professional development
- Model the process: Modify and improve quality assurance processes based on the data you collect
Music Program Example

BACHELOR OF MUSIC, UNIVERSITY OF FLORIDA
Bachelor of Music

Programs goals for 2015-16:

*Recruitment/Enrollment*

Send representatives to college fairs and high school music programs.

Follow up with students who express interest in the program.

Continue to develop and distribute marketing materials regarding the most-popular tracks in the BM with an Outside Field program.
Content Knowledge:

*Performance*: Perform at an advanced level on an instrument or voice in solo and ensemble settings.

*Elements and Patterns*: Identify, describe, and explain common elements and organizational patterns of music.

*History and Style*: Apply knowledge of music history from early practice to the present.

*Musicianship*: Exhibit independent, professional musicianship through high personal performance standards
Critical Thinking:

*Critical Analysis* - Critically analyze and evaluate problems and issues in music and other disciplines.

*Aesthetic Quality* - Consistently and accurately discriminate musical quality based on sound musical reasoning.

*Judgment, Criticism, and Preference* – Present effectively one’s musical judgments, criticisms and preferences.
Bachelor of Music
SLOs for 2015-16

Communication:

*Communication*- Effectively communicate, verbally and in writing, ideas, thoughts and feelings in music and other disciplines.

*Collaboration*- Collaborate effectively with others.
# Bachelor of Music Curriculum Map

## Curriculum Map

<table>
<thead>
<tr>
<th>SLOs</th>
<th>MUH 3211</th>
<th>MUH 3212 &amp; MUH 3213</th>
<th>MUT 1121</th>
<th>MUN__ Ensemble</th>
<th>MV_242_/ MV_343_ or MV_3970</th>
<th>2000 Level Performance &amp; Comprehensive Musicianship Juries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>#3</td>
<td>I</td>
<td>R</td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td>#4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td><strong>Critical Thinking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td>#6</td>
<td>R</td>
<td>I</td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td>#7</td>
<td>I</td>
<td>R</td>
<td></td>
<td></td>
<td>A Project/Recital</td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>#9</td>
<td>R</td>
<td>I</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

*The capstone course for assessment is the highest level required recital (i.e., junior or senior) and the accompanying program notes.*
# Bachelor of Music SLO1 Rubric

**Sample Rubric for Content Knowledge Assessment (SLO 1)**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Unsatisfactory (0-1)</th>
<th>Developing (2-3)</th>
<th>Accomplished (4)</th>
<th>Exceptional (5)</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform on an instrument or voice in solo and ensemble settings</td>
<td>Student’s performance lacks necessary technical skills. Little or no musicianship or stylistic diversity is exhibited.</td>
<td>Student’s performance displays a satisfactory level of technical skill and musicianship. Limited stylistic diversity is demonstrated.</td>
<td>Student’s performance displays a high level of technical skills and musicianship with some diversity of style and genre.</td>
<td>Student’s performance displays a mastery of technical skills and musicianship across multiple styles and genres.</td>
<td></td>
</tr>
</tbody>
</table>
# Bachelor of Music SLO Matrix

## SLO Assessment Matrix

<table>
<thead>
<tr>
<th>SLO</th>
<th>Assessment Method</th>
<th>Measurement Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#2</td>
<td>Oral Examination (Comprehensive Musicianship Jury)</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#3</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#4</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#5</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#6</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#7</td>
<td>Project/Recital</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#8</td>
<td>Oral Examination (Comprehensive Musicianship Jury)</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
<tr>
<td>#9</td>
<td>Oral Examination (Comprehensive Musicianship Jury)</td>
<td>Faculty-Developed Rubric (Requires a score of 3 or better on a 0-5 scale)</td>
</tr>
</tbody>
</table>
Vertical Alignment
Vertical Alignment – Bachelor of Music

Content/Discipline Knowledge SLOs

<table>
<thead>
<tr>
<th>BM SLOs for Content/Discipline Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
</tr>
</tbody>
</table>

College Goal 1: Academic Excellence

Offer academic and outreach programs that meet the highest standard of excellence

Institutional Outcome

Identify, describe, and explain the terminology, concepts, methodologies and theories used within the discipline
Summary of Elements of Assessment of Student Learning in Tertiary Programs

1. Define the terms and disseminate them
2. Consider an institutional categorical organizing framework for SLOs
3. Recent, Relevant, and Rigorous
4. Distinguish Outputs from Outcomes
5. Distinguish SLOs from Program Goals
6. Ensure the outcome is measurable
7. Balance direct and indirect assessments
8. Planning Timeline/Cycle
9. Approval and Management Process
10. Develop a System or Cycle of Assessment and Reporting
11. Quality Assurance Process
Questions

Timothy S. Brophy, Ph.D.
Professor and Director, Institutional Assessment
tbrophy@aa.ufl.edu
352-273-4476

University of Florida Assessment website:
http://assessment.aa.ufl.edu