Office of Institutional Effectiveness and Assessment

Workshop Title: Answering the big questions about assessment expectations and purpose

Student Learning Outcomes Assessment

Suggested Citation:
Answering the big questions about assessment expectations and purpose

Student Learning Outcomes Assessment
Introductions
Name
Degree Program
What is one thing you hope to learn today?
GOALS

Describe the purpose of assessment

Be able to apply the process and guidelines of assessment to your programs
ASSESSMENT
WHY DO WE DO IT?
Improvement of student learning
Culture of Betterment
Support Your Claims With Data
Accountability
WHO DO WE DO IT FOR?
FOR YOU
Assessment for you
Assessment for you

The capstone instructor last year reported her impression of low graphing skills in seniors. Rubric scores on the capstone report supported this.

We arranged with the mathematics department for greater emphasis on graphing in the required math course and for assessment of graphing skills during that course, working closely with the capstone instructor(s). We also arranged for graphing to be a required component in the program’s 300 level required course.

The capstone instructor(s) will report next year whether graphing skills are stronger. Prof. Brody is currently developing a rubric to assess graphing skills more accurately within the program.

(Walwoord, 2004, Assessment Clear and Simple)
Assessment for you

Two years ago, an advisory council of regional employers notes that our majors had a good level of biological knowledge but needed stronger skills in conducting biological research. Data from the alumni survey also supported this need.

We instituted the required capstone course, which requires students to conduct original scientific research, and we asked the instructor annually to report to the department on student research and communication skills demonstrated by their capstone projects.

In three years, when several cohorts have passed through the capstone, we will again survey alumni and employers to see whether student skills have increased, and we will review data from all the years of the capstone project.

(Walwoord, 2004, Assessment Clear and Simple)
Assessment for you
Assessment for you
division

Assessment for everyone else
What do you and your faculty want to improve?

What are the key skills that you want to pursue with excellence?
WHAT IS THE PURPOSE?

ASSESSMENT

WHAT IS THE PURPOSE?
THE PURPOSE
To collect meaningful actionable data that leads to program and student learning improvements.
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ASSESSMENT

WHAT IS IT?
Assessment is the ongoing process of:

1. Establishing clear, measurable 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, 2014, Assessing Student Learning )
ASSESSMENT

HOW DO WE DO IT?
Assessment is the ongoing process of:

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Student Performance | Criteria by | Evaluated by | Feedback by
---|---|---|---
The Grading Process

Course embedded assignments and tests

Instructor

Instructor

Grades

Instructor Improvements

Simple Program Assessment

Course embedded assignments and tests

Instructor

Instructor

Grades

Instructor Improvements

Department

Instructor Improvements

(Walwoord, 2004, Assessment Clear and Simple)
Assessment is the ongoing process of:

1. **Establishing clear, measurable expected outcomes of student learning.**
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(Suskie, 2014, Assessing Student Learning)
Step 1: Student Learning Outcomes

The specific knowledge, skills, or abilities that students should be able to demonstrate or perform at the end of the program.
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The specific **knowledge, skills, or abilities** that students should be able to demonstrate or perform at the end of the program.

☑ Observable
Step 1: Student Learning Outcomes

The specific knowledge, skills, or abilities that students should be able to demonstrate or perform at the end of the program.

- Observable
- Reasonable level of learning
- Uses concrete action verbs
What are the characteristics of well-stated learning goals?

Posted on May 27, 2018 at 7:40 AM

When I help faculty and co-curricular staff move ahead with their assessment efforts, I probably spend half our time on helping them articulate their learning goals. As the years have gone by, I’ve become ever more convinced that learning goals are the foundation of an assessment structure...and without a solid foundation, a structure can’t be well-constructed.

So what are well-stated learning goals? They have the following characteristics:

**They are outcomes:** what students will be able to do after they successfully complete the learning experience, not what they will do or learn during the learning experience. *Example: Prepare effective, compelling visual summaries of research.*

**They are clear,** written in simple, jargon-free terms that everyone understands, including students, employers, and colleagues in other disciplines. *Example: Work collaboratively with others.*
Dee Fink (2013)

Taxonomy of Significant Learning

“Creating Significant Learning Experiences”

https://serc.carleton.edu/sp/library/interdisciplinary/index.htm
Students graduating with a degree in Music, will be able to compose a short piece of music with creativity, craftsmanship, and aesthetic appeal.
Step 1: Student Learning Outcomes

Students graduating with a degree in Music, will be able to compose a short piece of music with creativity, craftsmanship, and aesthetic appeal.

☑ Observable
☑ Reasonable level of learning
☑ Uses concrete action verbs
Step 1: Student Learning Outcomes

Students will demonstrate an understanding of musical concepts and composers.
Students will demonstrate an understanding of musical concepts and composers.

- Observable
- Reasonable level of learning
- Uses concrete action verbs
MS Economic students will be able to apply the theoretical foundations of economics to policy issues in the private and—or public sector.
MS Economic students will be able to apply the theoretical foundations of economics to policy issues in the private and/or public sector.

- Observable
- Reasonable level of learning
- Uses concrete action verbs
HGTV Activity (2 minutes)

Pick an outcome to “remodel” or improve
Now share your before and after student learning outcome with your group.

As a group, identify one that example that you would like to share.
Assessment is the ongoing process of:

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2. **Ensuring that students have sufficient opportunities to achieve those outcomes.**

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4. Using the resulting information to understand and improve student learning.

(Suskie, 2014, Assessing Student Learning)
Curriculum Maps

The map:
• Documents what is taught and when
• Reveals gaps in the curriculum
• Helps design an assessment plan
**Step 2: Opportunities to Achieve**

<table>
<thead>
<tr>
<th>Course</th>
<th>Outcome 1: Students will be able to describe three major theories related to music development.</th>
<th>Outcome 2: Students will be able to compose a short piece of music.</th>
<th>Outcome 3: Students will be able to critique pieces of music and describe opportunities for improvement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 200</td>
<td>X</td>
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<tr>
<td>MUSC 250</td>
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<td>MUSC 300</td>
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<td>MUSC 350</td>
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<td>MUSC 400</td>
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<td>MUSC 450</td>
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</table>
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(Suskie, 2014, Assessing Student Learning)
Step 3: Gather, Analyze, and Interpret

Measures
Measures are opportunities for programs to collect information about how well students are demonstrating or performing the Student Learning Outcomes (SLOs).
Yields meaningful information for improvement
Yields meaningful information for improvement
One direct measure
Multiple types of measures
<table>
<thead>
<tr>
<th>Direct Measures</th>
<th>Indirect Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Course assignments</td>
<td>● Surveys, questionnaires, open-ended self-reports, dealing with current students’ perception of their own learning</td>
</tr>
<tr>
<td>● Scores and pass rates on standardized tests</td>
<td>● Course grades</td>
</tr>
<tr>
<td>● Research projects or writing samples</td>
<td>● Employment or placement rates of graduating students into appropriate career positions</td>
</tr>
<tr>
<td>● Course quizzes, tests, or inventories</td>
<td>● Number or rate of students involved in research, publications and/or presentations</td>
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<tr>
<td>● Portfolio artifacts</td>
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<td>● Capstone projects</td>
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<td>● Case studies</td>
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<tr>
<td>● Comprehensive or oral examination</td>
<td></td>
</tr>
<tr>
<td>● Ratings or evaluation</td>
<td></td>
</tr>
</tbody>
</table>
✓ Yields meaningful information for improvement
✓ One direct measure
✓ Multiple types of measures
✓ Relevant and directly assesses intended SLO

Step 3: Gather, Analyze, and Interpret
Yields meaningful information for improvement
One direct measure
Multiple types of measures
Relevant and directly assesses intended SLO
Yields useful information
Yields consistent information across administrations
COMPETENCY

CHANGE OVER TIME

GROUP COMPARISONS
Outcome: Students graduating with a degree in Music, will be able to compose a short piece of music with creativity, craftsmanship, and aesthetic appeal.

M1: Music Composition Course, Final Project – Compose an original piece of music graded on a program level rubric.

M2: Senior Survey (music composition skills section)
M1: Music Composition Course, Final Project - Compose an original piece of music graded on a program level rubric.

M2: Senior Survey (music composition skills section)

✔ At least 1 direct measure for each SLO;
✔ Multiple types of measures are present
M1: **Music Composition Course, Final Project** – Compose an original piece of music graded on a program level rubric.

M2: **Senior Survey (music composition skills section)**

- ✔ Directly assess intended SLO (validity)
M1: Music Composition Course, Final Project - Compose an original piece of music graded on a program level rubric.

M2: Senior Survey (music composition skills section)
✓ Yields trustworthy and consistent information
M1: **Music Composition Course, Final Project** - Compose an original piece of music graded on a **program level rubric**.

M2: **Senior Survey** (music composition skills section)

✔ Yields meaningful information for improvement
Think, Pair, Share

We want to improve writing.

What information would we collect to help us learn more? Select 3 sources.
Evaluate Your Choice of Measure

1. Provides specific answers to the assessment question being investigated.
2. Is feasible to carry out given program resources and amount of time faculty members are willing to invest in assessment activities.
3. Has a maximum of positive effects and minimum of negative ones. The method should give faculty members, intended users, and students the right messages about what is important to learn and teach.
4. Provides useful, meaningful information that can be used as a basis for decision-making.
5. Provides results that faculty members and intended users will believe are credible.
6. Provides results that are actionable. Faculty members will be willing to discuss and make changes to the program (as needed) based on the results.
7. Takes advantage of existing products (e.g., exams or surveys) whenever possible.
Reflection

How did these questions help you reconsider the assessment measures/methods?
Measures Description:
Measures Description:
1. General Information about the assignment/rubric and Relationship to Outcome
2. Quality of Evidence
3. Data Collection
Are students meeting our expectations?

Step 3: Gather, Analyze, and Interpret
So What?
What are the strengths and weaknesses of student learning in this area?
How well are students learning and why?
For programs with both online and on-campus degree earners: how does the performance of these unique cohorts compare?
How do the results compare to previous years?
Overall students did well on the final music composition project. This is an end of semester assignment that involves some scaffolding. They were able to include some interesting musical ideas (aesthetic appeal). They were also able to compose a piece of music that varies a few musical elements (creativity). Many exceed expectations by composing very original, unusual or imaginative musical ideas.

Students struggled with craftsmanship. Many students presented one complete musical idea. However, composition lacked overall completeness. They failed to use musical elements to organize musical ideas or form.
Step 3: Gather, Analyze, and Interpret

- Evaluates specific strengths and/or weaknesses related to the SLO;

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Students struggled with craftsmanship. Many students presented one complete musical idea. However, composition lacked overall completeness. They failed to use musical elements to organize musical ideas or form.
Upon review, students also scored lowest on the “craftsmanship” section of the rubric assignment last year. Overall student performance is on par with the previous year. Students’ scores lowest in craftsmanship last year as well.

The findings suggest that students need additional opportunities to practice and develop composition skills related to craftsmanship in this course.
Step 3: Gather, Analyze, and Interpret

✔ Analyze trends and results from previous years

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Step 3: Gather, Analyze, and Interpret

✔ Proposes strategies for improvement as a result of the analysis

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(Suskie, 2014, Assessing Student Learning)
Step 4: Using Results to Improve Student Learning

1. How is assessment information about the quality of learning shared and used for program decision making in areas such as curriculum, pedagogy, and other aspects that impact learning?

1. What actions do the results suggest need to be implemented?

1. What concrete actions will the program take to sustain or improve this outcome? What is the timeframe of these actions?
ACTION PLANS
Based on the final composition findings and discussions with faculty, an additional assignment focused on developing craftsmanship skills will be added to the course. The curriculum committee will complete a curriculum map for this outcome to evaluate how students are developing these skills sets over time.
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✔️ Actions are intended to improve program, teaching methods, or curriculum
One year later
Step 4: Using Results to Improve Student Learning

ACTION PLANS

LEARNING IMPROVEMENTS
LEARNING IMPROVEMENTS

Evidence from direct or indirect measures and reassessment that supports substantive student learning improvement due to program modifications.

(Fulcher, Good, Coleman, & Smith, 2014)
LEARNING IMPROVEMENTS

An opportunity for programs to tell their story as it relates to student learning and programmatic improvements. Improvements should be developed from previous action plans or assessment findings.
LEARNING IMPROVEMENT
SANDWICH

Photo by Handsome Biscuit
<table>
<thead>
<tr>
<th>2</th>
<th>Description of data and/or discussions that prompted action for improvement, list outcome of focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
LEARNING IMPROVEMENT
SANDWICH

1
2 Interpretation of the modifications that were made
3

Photo by Handsome Biscuit
LEARNING IMPROVEMENTS

In 2016–2017, students in MUSC 450 were not meeting the target set by the program. As a result, the program added an additional assignment to help students develop craftsmanship skills. With the modifications to this course, student performance increased slightly this year. We hope to see additional improvements in future years as we evaluate the development of this outcome across the curriculum.
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✔ Changes in student achievement are stated and, as appropriate, student learning improvement is discussed.
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THE PURPOSE
To collect meaningful actionable data that leads to program and student learning improvements.
What is one takeaway from today’s workshop?
Thank you