Assessing Student Learning in General Education

Fall 2021

Creating assessment measures
Assessment Methods & Measures

Assessment Methods: How students demonstrate learning

Assessment Measures: How we evaluate that learning

You already know....

• Grades are here to stay...and still they aren’t particularly useful for assessment purposes....
• Grades are very useful for evaluating performance....
• Assessment is useful in analyzing or diagnosing performance issues...

Evaluation is not Feedback

**Evaluation**
- Provides judgment on the performance
- Regards the performance as finished...e.g., ACT, SAT, other secure tests, end-of-term grades.

**Assessment/Feedback**
- Provides information about the relation of performance to goal
- Provides information the performer can use to improve performance...e.g., coaching, benchmarks, corrective annotation.
### Evaluation vs. Assessment

<table>
<thead>
<tr>
<th>Quizzes</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count toward final grade</td>
<td>Used to determine whether students understand</td>
</tr>
<tr>
<td>Tests</td>
<td>Scored and returned</td>
</tr>
<tr>
<td></td>
<td>Scored, tabulated, returned &amp; discussed; syllabus adjusted, class content revisited</td>
</tr>
<tr>
<td>Rubrics</td>
<td>Returned to students with grade</td>
</tr>
<tr>
<td></td>
<td>Returned after being aggregated &amp; analyzed; adjustments considered</td>
</tr>
</tbody>
</table>

### Assessment Measures

Scoring tools: Provide quantitative and/or qualitative data that will inform the faculty of the extent to which student performance is being met.

### Assessment Measures

Keep in mind the functions of assessment – Discussion, Reporting, and Improving.
Assessment Measures

Keep in mind the functions of assessment – Discussion, Reporting, and Improving

Some level of standardization of assessment measures is critical

Assessment Measures

Scoring Tools
• Distinguish between levels of student performance (strengths and weaknesses)
• Have utility across multiple disciplines and assessment methods
• Provide direction for improvement

Framework: Performance Indicators

Assessment Measures

To Start:
Discuss and describe the level of acceptable learning for each of your performance indicators:

What are your goals for student learning?
<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Public Speaking Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops</td>
<td>Clear</td>
<td>Organization</td>
</tr>
<tr>
<td>Explains</td>
<td>Meaningful</td>
<td>Context</td>
</tr>
<tr>
<td>Exhibits</td>
<td>Engaging</td>
<td>Delivery</td>
</tr>
<tr>
<td>Demonstrates</td>
<td>Direct</td>
<td>Eye contact</td>
</tr>
<tr>
<td>Maintains</td>
<td>Appropriate</td>
<td>Rate</td>
</tr>
<tr>
<td>Presents</td>
<td>Supporting</td>
<td>Evidence</td>
</tr>
<tr>
<td>Analyses</td>
<td>Responsible</td>
<td>Claims</td>
</tr>
<tr>
<td>Applies</td>
<td>Comfortable</td>
<td>Data</td>
</tr>
<tr>
<td>Utilizes</td>
<td>Relevant</td>
<td>Conclusion</td>
</tr>
<tr>
<td>Selects</td>
<td>Effective</td>
<td>Sources</td>
</tr>
<tr>
<td>Provides</td>
<td>Consistent</td>
<td>Examples</td>
</tr>
<tr>
<td>Summarizes</td>
<td>Complete</td>
<td>Visual support</td>
</tr>
<tr>
<td>Preparas</td>
<td>Effective</td>
<td>Transitions</td>
</tr>
<tr>
<td>Selects</td>
<td>Reasonable</td>
<td>Verbal variety</td>
</tr>
</tbody>
</table>

### Indicator Problem Solving

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Problem Solving Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops</td>
<td>Clear</td>
<td>Problem statement</td>
</tr>
<tr>
<td>Explains</td>
<td>Thorough</td>
<td>Current situation</td>
</tr>
<tr>
<td>Defines</td>
<td>Compelling</td>
<td>Contributing factors</td>
</tr>
<tr>
<td>Documents</td>
<td>Balanced</td>
<td>Rationale</td>
</tr>
<tr>
<td>Maintains</td>
<td>Logical</td>
<td>Implications</td>
</tr>
<tr>
<td>Presents</td>
<td>Appropriate</td>
<td>Potential bias</td>
</tr>
<tr>
<td>Analyses</td>
<td>Supporting</td>
<td>Conceptual model/s</td>
</tr>
<tr>
<td>Applies</td>
<td>Relevant</td>
<td>Alternate theories</td>
</tr>
<tr>
<td>Utilizes</td>
<td>Effective</td>
<td>Supporting data</td>
</tr>
<tr>
<td>Selects</td>
<td>Consistent</td>
<td>Evidence</td>
</tr>
<tr>
<td>Provides</td>
<td>Complete</td>
<td>Consequences</td>
</tr>
<tr>
<td>Summarizes</td>
<td>Effective</td>
<td>Action plan</td>
</tr>
<tr>
<td>Preparas</td>
<td>Consistent</td>
<td>Content</td>
</tr>
<tr>
<td>Selects</td>
<td>Reasonable</td>
<td>Decision</td>
</tr>
</tbody>
</table>

Successful Achievement of the Indicator:

**Target Achievement Level**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Problem Solving Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops</td>
<td>Clear</td>
<td>Problem statement</td>
</tr>
<tr>
<td>Explains</td>
<td>Thorough</td>
<td>Current situation</td>
</tr>
<tr>
<td>Defines</td>
<td>Compelling</td>
<td>Contributing factors</td>
</tr>
<tr>
<td>Documents</td>
<td>Balanced</td>
<td>Rationale</td>
</tr>
<tr>
<td>Maintains</td>
<td>Logical</td>
<td>Implications</td>
</tr>
<tr>
<td>Presents</td>
<td>Appropriate</td>
<td>Potential bias</td>
</tr>
<tr>
<td>Analyses</td>
<td>Supporting</td>
<td>Conceptual model/s</td>
</tr>
<tr>
<td>Applies</td>
<td>Relevant</td>
<td>Alternate theories</td>
</tr>
<tr>
<td>Utilizes</td>
<td>Effective</td>
<td>Supporting data</td>
</tr>
<tr>
<td>Selects</td>
<td>Consistent</td>
<td>Evidence</td>
</tr>
<tr>
<td>Provides</td>
<td>Complete</td>
<td>Consequences</td>
</tr>
<tr>
<td>Summarizes</td>
<td>Effective</td>
<td>Action plan</td>
</tr>
<tr>
<td>Preparas</td>
<td>Consistent</td>
<td>Content</td>
</tr>
<tr>
<td>Selects</td>
<td>Reasonable</td>
<td>Decision</td>
</tr>
</tbody>
</table>
Each performance indicator assessed separately
Describes levels of performance
– Criteria against which their learning will be assessed
– Defines expected performance
Provide guidance to students
Useful for multiple raters

Types of Rubrics
Summative (targeted performance level)
Developmental / Formative (student progress)
Holistic
Global assessment
Rubrics

Summative Rubric
Benchmark is built into the rubric
Proficient / Meets Expectations / Meets Standard

Verb
Develops
Explains
Defines
Documents

Descriptor
Clear
Thorough
Competent
Balanced
Appropriate

Presents Supporting
Analysis
Applicable
Effective
Relevant

Prepares
Summarizes
Selects
Provides

Robust
Reasonable
Developmental Rubric
Documents student progress toward deeper learning, maturation in thinking
Benchmark is relative to the degree program and students’ progression in the program

Cognitive level

Indicator
Indicator
Indicator
Indicator
Indicator

Developmental Rubric

Indicator
Indicator
Indicator
Indicator

Developmental Rubric

Indicator
Indicator
Indicator
Indicator
Rubrics

Holistic Rubrics
Provides general information about student learning

Overall impression of a performance

Each category describes performance on several performance indicators
## AAC&U Inquiry and Analysis VALUE Rubric

<table>
<thead>
<tr>
<th>Source</th>
<th>Rubric</th>
<th>2</th>
<th>3</th>
<th>Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td>holistics</td>
<td>Inquiry and Analysis</td>
<td>Identification of a meaningful problem or issue.</td>
<td>Identification of a meaningful problem or issue with supporting evidence.</td>
<td>Identification of a meaningful problem or issue with supporting evidence and implications.</td>
</tr>
<tr>
<td>Adapting Rubrics</td>
<td>Engagement will be higher if the outcomes and indicators are meaningful to your campus</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Developing Assessment Measures

Test before implementation
  Friendly Faculty
  Pilot test
  Discussion, Feedback, Suggestions
Identify
  User training issues
  Structural Issues
  Methods
  Measures

Rubric Review

20 Minutes
  • In your small group rooms, review the following rubric.
  • What works?
  • How could it be improved?

Creating an Implementation Plan
Implementation Plan
Who does What?

- Collects data?
- Aggregates data?
- Interprets data?
- Reports data?
- Responds to data?

- Student
- Faculty member
- Faculty committee (discipline / outside)
- Department chair
- Advisor
- Dean
- Provost
- Assessment committee
- IR office
- Board of Trustees
- Employers

Creating an Implementation Plan

- √ What you are going to assess (Assessment Methods)
- √ How you are going to assess (Assessment Measures)
- √ How are you going to collect data? (Implementation)

Exploring Implementation Plans

Keep in mind ---
- Student Motivation: How motivated would students be to do their best work?
- Training: How much training would be involved to implement the data collection? (Time and potential cost)
- Faculty Engagement: How involved would faculty be in the process and results? (Time and potential cost)
- Potential Impact on Learning: How much potential does the plan have to generate information that would help us understand and improve learning?
Data Collection

√ Who - or what - are you going to assess?
√ Who is going to do the assessing?
√ What happens to the data?
√ How is the data going to be used?
√ Where do we start?

Data Collection

Keep in mind:
- Your assessment question: To what degree have our students achieved our General Education Learning Outcomes?
- The difference between collecting data and assessing data.
- The philosophy of your GE Program: Do your outcomes stand alone, are contextualized in academic programs, or are they the same as institutional outcomes?

Data Collection

Keep in mind:
- Your assessment question: To what degree have our students achieved our General Education Learning Outcomes?
- The difference between collecting data and assessing data.
- The philosophy of your GE Program
- Your assessment methods
Data Collection

Assessment Method determines Assessment Collection

GE Learning Data is collected specifically for assessment (exam, event)

What students are we going to select/invite to participate?

GE Learning Data is collection is ongoing (in class assignments, tasks, portfolios, events)

What data are we going to select to analyze?

In Chat: What criteria would you use to obtain the most reliable evidence of student achievement of your General Education outcomes? (Either data or students)

Who – or what data - are you going to assess?

Selecting Students or Artifacts:
- At specific credit or enrollment threshold/s
- In specific courses
- At an assessment event
- At a specific time of year
- Upon graduation
- After graduation

Motivation
Training
Engagement
Impact
Data Collection

- Who - or what data - are you going to assess?
- Who is going to do the assessing?
  - Student self-assessment, faculty, staff, administrator, committee, department chair, employer, peer

<table>
<thead>
<tr>
<th>Single Rater</th>
<th>Multiple Raters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td></td>
</tr>
</tbody>
</table>

- What happens to the data?
- How / Is it aggregated?
- Who sees it?
- In what format?
Data Collection

- Who - or what - are you going to assess?
- Who is going to do the assessing?
- What happens to the data?
- How is the data going to be used?
  - Reporting
  - Documenting
  - Improving

Exploring Implementation Plans

- Move to team room
- Discuss assigned scenario
  - (20 minutes)
  - How could this implementation plan be improved?
- Select a spokesperson
- Quick break (5 minutes)

Exploring Implementation Plans

Keep in mind ---
- Student Motivation: How motivated would students be to do their best work?
- Training: How much training would be involved to implement the data collection? (Time and potential cost)
- Faculty Engagement: How involved would faculty be in the process and results? (Time and potential cost)
- Potential Impact on Learning: How much potential does the plan have to generate information that would help us understand and improve learning?
**Data Collection**

- ✓ Who - or what - are you going to assess?
- ✓ Who is going to do the assessing?
- ✓ What happens to the data?
- ✓ How is the data going to be used?
- ✓ Where do we start?

---

**Outcome 1**
- Fall: Assess
- Spring: Assess
- Fall: Assess
- Spring: Assess

**Outcome 2**
- Fall: Assess
- Spring: Assess
- Fall: Assess
- Spring: Assess

**Outcome 3**
- Fall: Assess
- Spring: Assess
- Fall: Assess
- Spring: Assess

**Outcome 4**
- Fall: Assess
- Spring: Assess
- Fall: Assess
- Spring: Assess

**Outcome 5**
- Fall: Assess
- Spring: Assess
- Fall: Assess
- Spring: Assess
Assessment Cycle

- Stages of Implementation
  - Design implementation strategy (methods, measures, sample)
  - Pilot implementation strategy (methods, measures, sample)
  - Revise implementation strategy (methods, measures, sample)
  - Train those involved
  - Assess student learning
  - Analyze the results of the learning assessment
  - Intervene (if appropriate) to improve learning
  - Re-Assess student learning
Team Time Questions

- What tools/approaches are currently used for Gen Ed measures? Are they working as intended?
- How does your current assessment cycle facilitate getting results to inform change or improvement?
- How does today’s discussion impact your agenda for the year ahead?