Before we begin...

1. What program do you teach in? (type answer in the chat box)

2. What LMS do you use? (Blackboard, Canvas, D2L, Other)

3. How long have you been teaching online? (first time, 1-2 years, 3-5 years, 6+ years)

4. Rate your level of assessment experience. (beginner, intermediate, advanced)
Objectives

Explain assessment and its guiding principles.

Distinguish between diagnostic, formative, and summative assessment.

Use online tools to assess student learning.

Use learning management system (LMS) features and tools to improve assessment of student learning in online courses.
Getting Started…

Ask ourselves some questions
Definitions

“an ongoing process aimed at understanding and improving student learning.”
Teaching Cycle

1. Establish Learning Outcomes
2. Provide Learning Opportunities / Activities
3. Assess Student Learning
4. Use Assessment Results
Purposes

Assessing student in online courses: Best practices

gain feedback

ensure whether or not learning objectives are met.
Student Learning Outcomes
Alignment and Mapping

- Institutional/General Education
- Program/Discipline
- Course
Learning Management Systems (LMS) Assessment

Using Learning Objectives/Outcomes in LMS

Blackboard, Canvas and D2L Brightspace

Creating Rubrics

Creating Assignments

Aligning learning Outcomes with Assignments using Rubrics
Types of Assessment

• Where does assessment take place in the learning process?
  • Diagnostic
  • Formative
  • Summative

Note: many assessment techniques can be used for multiple types of assessment.

Please see the handouts at https://www.iccb.org/iccb/coronavirus-updates-and-resources/helpful-resources-and-information-for-faculty-and-staff/ for more examples than those we are able to share today.
Types of Assessment

• **Diagnostic Assessments** (AKA “Baseline Assessments”)
  
  • Measure students’ knowledge, skills, and abilities before instruction (or additional instruction) takes place
  
  • Help you, the instructor, determine
    • the most effective starting point for a lesson or course
    • the appropriate level at which to begin instruction
  
  • Examples: Background Knowledge Checks, Misconception/Preconception Checks, Ice Breakers
# Diagnostic Assessment Examples

## Background Knowledge Checks

<table>
<thead>
<tr>
<th>Time commitment</th>
<th>Before</th>
<th>During</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

### Benefits
- Provide information about students’ background knowledge and potentially their communication skills
- Allow students to think about the upcoming coursework before instruction begins

### Drawbacks
- Responding may be difficult for students who are underprepared

### Online/Virtual
- Raise hands in Collaborate or Zoom, quizzes, Kahoot, discussion boards

---

**Before we begin...**

1. What program do you teach in? (type answer in the chat box)
2. What LMS do you use?
3. How long have you been teaching online? (first time, 1-2 years, 3-5 years, 6+ years)
4. Rate your level of assessment experience. (beginner, intermediate, advanced)

# Diagnostic Assessment Examples

**Misconception/Preconception Checks**

<table>
<thead>
<tr>
<th>Time commitment</th>
<th>Before</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>During</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

**Benefits**
- Provide information about students’ background knowledge and perceptions about the course or topic: “The greatest obstacle to new learning often is not the student’s lack of prior knowledge but, rather, the existence of prior knowledge.” (Angelo & Cross, 1993.)
- Allow students to think about how their views relate to the upcoming coursework
- Allow instructors to develop methods for overcoming barriers to learning

**Drawbacks**
- Students may not respond well to having their “certainties” questioned
- Fundamental attitudes and beliefs are difficult to change (and may not be the instructor’s responsibility or right to attempt to change)

**Online/ Virtual**
- Kahoot, LMS quizzes or surveys
- Zoom or LMS quizzes or hand raises

Diagnostic Assessment—Your Turn

We will split you into breakout rooms to discuss with ideas with your colleagues.

• Identify a diagnostic assessment activity to use in the online/remote environment in fall semester.

• What can you use in your LMS?
Types of Assessment

• **Formative Assessments**
  
  • Measure what students are learning in the midst of the teaching and learning process
  
  • Provide feedback that you can use to guide improvements during the semester or unit, or within a specific class period
  
  • Examples: Minute Paper, Muddiest Point, Memory Matrix, Journal
Formative Assessment Examples

<table>
<thead>
<tr>
<th>Graphic Organizers</th>
<th>Time commitment</th>
<th>Benefits</th>
<th>Drawbacks</th>
<th>Online/ Virtual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Provide information about background knowledge</td>
<td>• Certain graphic organizers may cause difficulties for students who are not visual learners or are visually impaired</td>
<td>• Online possibilities: <a href="https://www.techlearning.com/tl-advisor-blog/9736">https://www.techlearning.com/tl-advisor-blog/9736</a> • Don’t introduce a new software if you’re only going to use it once</td>
</tr>
<tr>
<td></td>
<td>Before Medium</td>
<td>• Allow students to think about the upcoming coursework before instruction begins</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low-High</td>
<td>• Allow students to visually connect course content</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Information varies based on specific organizer used.)
## Formative Assessment Examples

### Memory Matrix

<table>
<thead>
<tr>
<th>Time commitment</th>
<th>Before</th>
<th>Low-Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>During</td>
<td></td>
<td>Low-Medium</td>
</tr>
<tr>
<td>After</td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>

### Benefits
- Use the results to gauge comprehension of vital course concepts
- Can be used repeatedly throughout the semester

### Drawbacks
- More time-consuming for more complex concepts

### Online/Virtual
- Graphic organizers or Word/Google docs
- Whiteboard

### Unit of Analysis

<table>
<thead>
<tr>
<th>Unit of Analysis</th>
<th>Demand depends on</th>
<th>Supply depends on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microeconomics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Formative Assessment—Your Turn

We will split you into breakout rooms to discuss with ideas with your colleagues.

• Identify a formative assessment activity to use in the online/remote environment in fall semester.

• What can you use in your LMS?
Types of Assessment

• Summative Assessments
  • Measure what students have learned from a unit, course, or program
  • Conducted at the end of a course or program, or after completing a specific section of a course (as classroom assessment)
  • Examples: Exams, term papers, portfolios, performance tasks
## Summative Assessment Examples

### Performance Tasks

<table>
<thead>
<tr>
<th>Time commitment</th>
<th>Before</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>During</td>
<td>Low-High</td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

### Benefits
- Provide information about students’ background skills in relation to the course

### Drawbacks
- Student confidence can be undermined for those who do not have the previous knowledge, skills, or abilities required to complete the assessment

### Online/Virtual
- Students can submit videos or video links to show you how well they can complete a hands-on task
## Summative Assessment Examples

<table>
<thead>
<tr>
<th>Time commitment</th>
<th>Before</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>During</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

### Benefits
- Students collect examples of their work that they are already completing for their course
- Portfolios can be helpful for students’ metacognition as well as their applications to future jobs/education

### Drawbacks
- Need to determine appropriate technology for the portfolios—you may want to use something outside the LMS

### Online/Virtual
- Online portfolios are becoming very popular. Check with your LMS support to see what options you have, or use Google docs for an easy/free solution
Summative Assessment—Your Turn

We will split you into breakout rooms to discuss with ideas with your colleagues.

• Identify a summative assessment activity to use in the online/remote environment in fall semester.

• What can you use in your LMS?
Teaching Cycle

1. Establish Learning Outcomes
2. Provide Learning Opportunities / Activities
3. Assess Student Learning
4. Use Assessment Results
Assessment in an
Online/Remote Environment

Resources


Assessment in an Online/Remote Environment

Thank you!

Raymond L Lawson, Ed.D., rlawson@oakton.edu
Faon Grandinetti, grandinettif@cod.edu