# Assessment: It's about learning

Assessment Overview

September 2, 2021

Char Spruce, Assessment & Accreditation Coordinator



**About Me** 



Why I'm Here



Why are you here?

### Office of Assessment & Accreditation

## Goals & Objectives (DRAFT)

**Goal:** Coordinate, support, and assist faculty and staff in institution-wide assessment and continuous improvement efforts

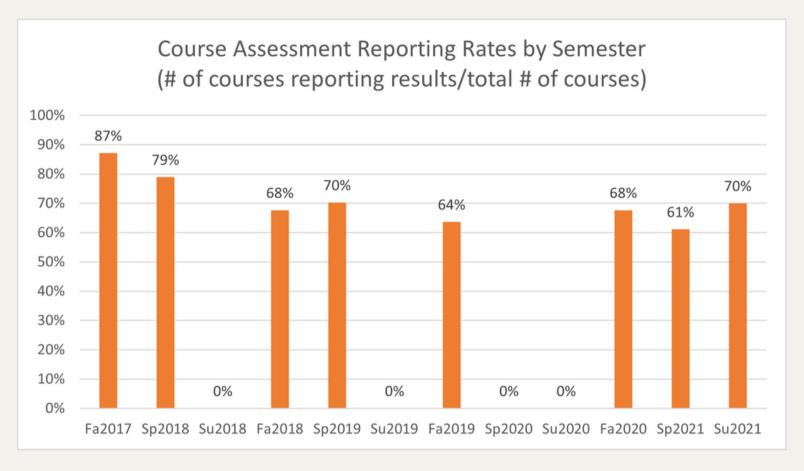
#### **Outcomes:**

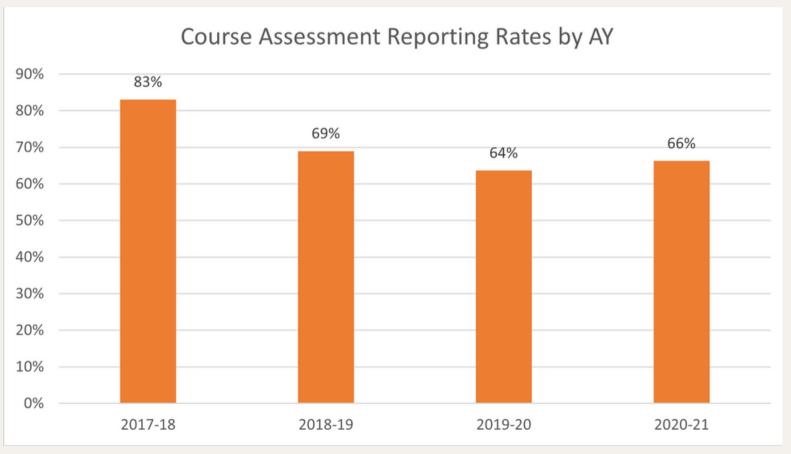
- Faculty and staff will use effective assessment and continuous improvement strategies to drive improvement of student learning and effectiveness
- Faculty and staff will regularly report and share data on student learning, effectiveness, and plans for improvement
- Internal and external stakeholders will be knowledgeable about KBOCC's effectiveness and assessment-driven improvements.

**Goal:** Provide leadership and support College's accreditation and reaffirmation efforts

#### **Outcomes:**

• KBOCC will maintain reputation as a quality learning institution by completing all processes required to met and exceed accreditation requirements





## Today's Objectives

Participants will be able to:

Define assessment and it's purposes

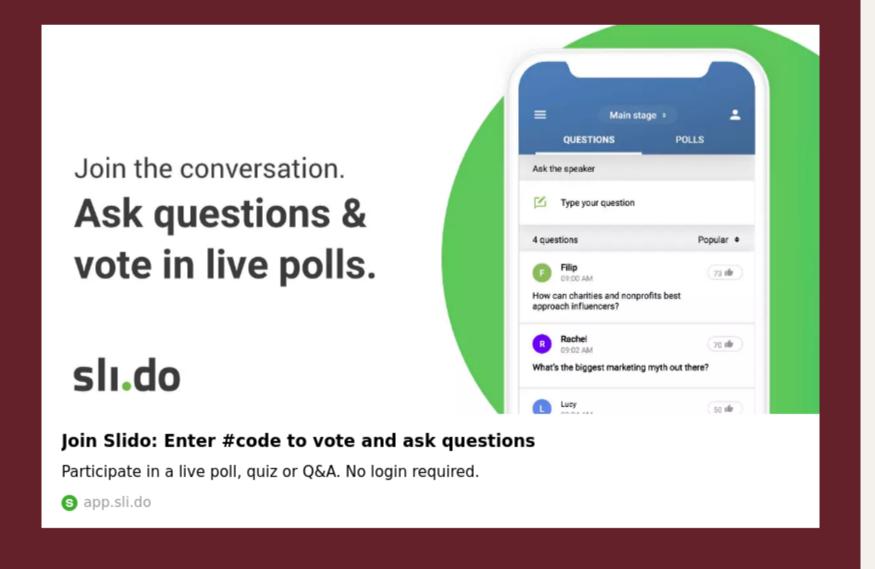
Apply and share effective assessment principles

Align learning activities, assessments/assignments, and learning outcomes

Understand importance of engaging in assessment and some ways to document the process

Understand where to get assistance

## Why are you here?

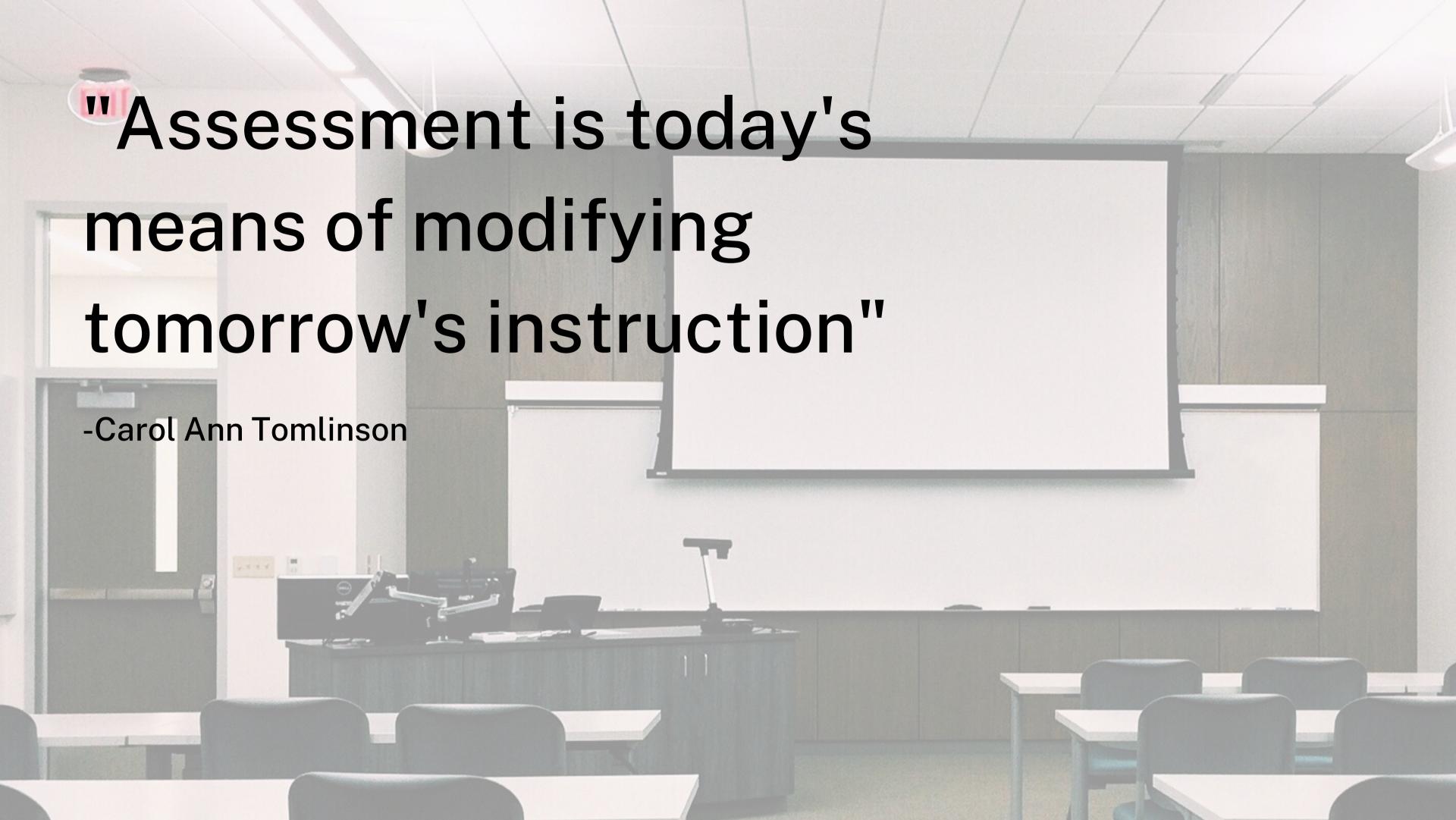


Join poll at slido.com Event Code #677081 or



What level of assessment master are you?

What assessment-related topic are you hoping to learn about today?



## **Assessment Foundations**

What, Why & How of Assessment

## "Without proper self-evaluation failure is inevitable"

John Wooden

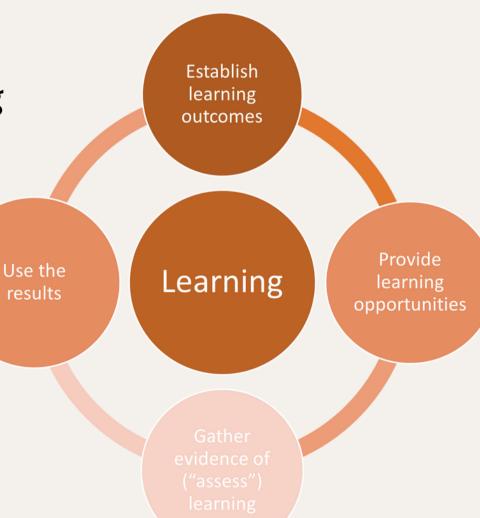
## What is Assessment?

[Student learning] assessment is the systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to inform decisions that affect student learning.

-Barbara Walvoord, Assessment Clear and Simple

Assessment is a natural part of the scholarship of teaching and learning

Part of 4-step teaching, learning, and assessment cycle



[Student learning] assessment is deciding what we want our students to learn and making sure they learn it.

-Dr. Jane Wolfson, Towson University

#### 3 Fundamental Traits of Assessment

- 1. We have evidence of how well out students are achieving key learning goals.
- 2. The quality of that evidence is good enough that we can use it to inform important decisions, especially regarding helping students learn.
- 3. We use that evidence not only to assess the achievement of individual students but also to reflect on what we are doing and, if warranted, change what we're doing.

## Assessment is NOT....

#### Simply testing

While testing certainly can be a part of most assessment programs, assessment is much more than just testing.

## Gathering evidence to make decisions about individual students or individual faculty

There are three typical levels of assessment: the institutional level, the program or department level, and the course level. Assessment data is aggregated across multiple students, courses, and programs or departments to improve and inform decision-making.

#### **Punitive**

Assessment is not used to punish faculty or students into submission

### Purposes

#### Giving students the best possible education

Assessment activities provide a feedback loop to help students learn and succeed more effectively

#### Stewardship

Assessment evidence can show a clearer picture of what is really happening in a program or unit for determining whether the value is worth the investment.

#### Accountability

Assessment activities provide evidence of the effectiveness of the institution, programs, and services.

## Why do we assess?



Support for informed decision-making and commitment to educational excellence



#### For ourselves

- Determine whether we are meeting our goals
- Identify areas in need of improvement



#### For external stakeholders

- Funders
- US Department of Education
- Accreditors (HLC)



#### For community at-large & potential students

• Communicate the value of education

# So what does HLC say about assessment?



#### **HLC Criterion 3.A.2.:**

The institution articulates and differentiates learning goals for its undergraduate, graduate, post-baccalaureate, post-graduate, and certificate programs

#### **HLC Criterion 4B:**

The institution engages in ongoing assessment of student learning as part of its commitment to the educational outcomes of its students

- 1. The institution has effective processes for assessment of student learning and for achievement of learning goals in academic and cocurricular offerings
- 2. The institution uses the information gained from assessment to improve student learning
- 3. The institution's processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty, instructional and other relevant staff members

# Effective Assessment Principles

#### Assessment should be:

- Valid
- Reliable
- Equitable
- Explicit & transparent: clear to students as well as faculty & staff
- Efficient & cost-effective
- Useful & used
- Culturally-responsive



### Types of Assessment

#### FORMATIVE ASSESSMENT:

#### For Staff

- To monitor student learning.
- To ascertain progress.
- To check understanding.
- To teach responsively.

#### For Students

- To evaluate their own learning.
- To build knowledge.
- To identify strengths and weaknesses.
- To continually improve learning.
- To target learning.

#### **BOTH:**

- Are ways to assess student learning.
- Are opportunities to give and receive feedback.
- Are ways to evaluate the effectiveness of teaching.

#### SUMMATIVE ASSESSMENT:

#### For Staff

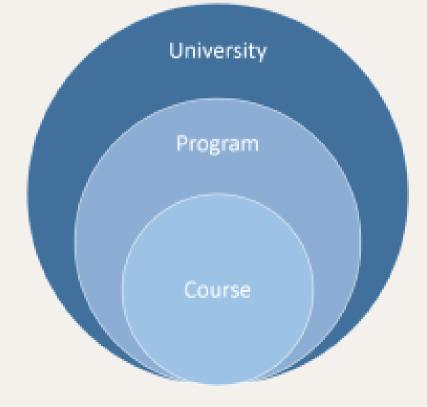
- To measure whether a student has met learning outcomes, and to what extent at the end of a unit of study.
- To make further improvements in future iterations.

#### For Students

- To understand their overall performance in a unit of study.
- To understand whether they have met the learning outcomes, and to what extent, at the end of a unit of study.

At the conclusion of a learning experience

#### Levels of Assessment



During a learning experience

## How to Assess: Assessment Cycle



• Step 1: Articulate learning outcomes

- What should students/graduates know and be able to do?
- Step 2: Design assessment methods, select measures and establish targets
- How do we know whether they know and can do these things?
- What level of performance do we expect?

- Step 3: Provide learning experiences
- Step 4: Gather student work and information and evaluate the results
- Where is the student work coming from? Who will conduct the research for the measure?
- Does the student work represent all major populations?
- How will the results be tabulated or categorized?

ANALYZE

PLAN

**ASSESS** 

- Step 5: Analyze assessment data
- Did student performance meet expectations?
- What patterns of strengths or weaknesses did we see?
- What factors contributed to performance?

REFLECT & REFINE

- Step 6: Reflect on and share results
  - How can learning be improved?
- Does the assessment process need to be revised?
- Step 7: Use what you've learned to improve
- Implement action plans
- Reassess start cycle again!

## Student Learning Outcomes

#### What?

Statements of specific skill or ability, knowledge, or belief/attitude students are expected to achieve as a result of a learning experience

#### Should be:

- Always expressed in terms of students
- Use concrete,
   observable action verbs
   when possible
- Be rigorous, yet realistic
- Neither too broad nor too specific
- Emphasize higher-order thinking
- Collaborative: Achieved by consensus of multiple faculty/staff
- Limit to 3-5 key outcomes

#### **Should NOT:**

- Describe course content, products, or activities
- Be a wish list of
   what a student is
   capable of doing
   upon completion of
   learning
   experience focus
   on enduring
   knowledge

#### Levels

- <u>Course</u>: Course learning outcomes (CLOs)
- <u>Program:</u> Program learning outcomes (PLOs)
- <u>Institution:</u> General Education learning outcomes (GELOs)
- Approved by
   Faculty Council for each new course/program

### SLO

### Frameworks

#### Learning **Taxonomies**

### **Degree Qualifications Profile** (DQP):

What graduates should know and be able to do to earn an associate, bachelor's or master's degree learningoutcomeassessment.org/dqp

#### Bloom's Taxonomy (1953)

- Levels of cognitive learning
- Revised in 2001 (Anderson & Krathwohl), added 7th level (Creation/Creating)



KNOWLEDGE:

Define.

Identify,

Describe,

Recognize,

Tell.

Explain,

Recite,

Memorize,

Illustrate,

Ouote



**UNDERSTAND:** 

Summarize,

Interpret,

Classify,

Compare,

Contrast.

Infer.

Relate.

Extract,

Paraphrase,

Cite



APPLY:

Solve.

Change,

Relate,

Complete,

Use.

Sketch.

Teach.

Articulate,

Discover,

Transfer







**CREATE:** 

#### ANALYZE:

Contrast,

Connect,

Relate,

Devise.

Correlate.

Illustrate.

Distill.

Conclude,

Categorize,

Take Apart

Criticize. Reframe, Judge, Defend. Appraise, Value. Prioritize. Plan, Grade, Reframe

#### **EVALUATE:**

Design, Modify, Role-Play, Develop, Rewrite. Pivot. Modify, Collaborate. Invent. Write

**Analyzing &** 

**Evaluating** 

Mapped to Medicine

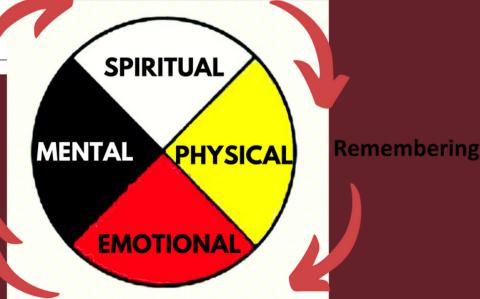
Wheel Pamela Rose Toulouse, Achieving Indigenous Student

Success

Creating

**Understanding &** 

**Applying** 



#### Affective Learning

#### Psychomotor Learning

Observable through physical activity

Attitudes and values

# SLO Examples/ Practice

#### PRO TIP: Evaluating SLOs:

- Is action done by students?
- Is action observable?
- Can action be measured?
- Is it important?

Upon successful completion of this program, students will be exposed to case studies documenting the use of ethical reasoning in daily decisions



Upon successful completion of this program, students will be able to apply ethical reasoning in daily decisions



Upon successful completion of this program, students will be able to appreciate the value of ethical reasoning in their daily decisions



Upon successful completion of this program, students will be able to apply ethical reasoning in discussing an ethical issue

## Assessment Methods

#### Measures

Specific tools and methods that generate data and information about students' performance relative to learning outcomes

#### **Direct Measures**

Methods for assessing actual samples of student work:

- Capstone projects
- Performance/presentation
- Exams/exam questions
- Course-embedded assessments
- Pre- and post-test evaluation
- Portfolios

#### **Indirect Measures**

Methods for assessing secondary information on student learning:

- Student surveys
- Alumni surveys
- Employer surveys
- Exit interviews
- Focus groups

#### **Targets**

Performance criteria that lets you know whether students have met expectations for learning

#### **Benchmark:**

Minimally acceptable level of performance i.e. score of 3 on a 4-point rubric



#### Target:

Percentage of students that will meet benchmark i.e. 80% of students

i.e. 80% of students will achieve a rubric score of 3 on a 4-point rubric

## Assessment Methods Best Practices

#### PRO TIP: Selecting Measures

Do measures:

- Provide sufficient data to analyze learning outcome?
- Require a reasonable amount of work to collect?
- Establish performance criteria to guide analysis?

#### Aligned

 Tools and instruments should be linked to intended learning outcome and the linkage should be logical and appropriate

#### Balance

- Employ multiple methods with a mix of measures:
  - Focus on direct measures of student learning
  - Supplement with indirect measures to explain or support finding from direct measures
  - Select quantitative or qualitative measures based on type of learning outcomes
  - Use formative assessment "mid-course" to improve teaching and learning

#### Options abound!

 Many tools and instruments exist for assessing student learning. First consider assessment purpose and the intended learning outcome being measured.

## Common Assessment Tools

From Linda Suskie, Assessing Student Learning:

If you want to	Use these sources of information	And assess them using
Assess knowledge and conceptual understanding	Multiple-choice tests	Item scores, mapped back to test blueprints
Assess thinking and performance skills	Paper, projects, performances, essays, exhibitions, field experience, and other learning activities	Rubrics
Assess attitudes and values	Reflective writing	Qualitative analysis
Draw an overall picture of student learning, including thinking and performance skills as well as attitudes, values, and habits of mind	Portfolios	Rubrics and reflective writing
Compare your students against peers	Published instruments/standardized tests	Item scores and instrument sub- scores, mapped back to key learning goals

## Course-embedded Assessment

#### Use of graded materials as the basis for learning outcomes assessment

- Course assignments and learning activities that can provide evidence of student achievement of program, general education, or institutional learning goals
  - Assignments = assessments
- Double- or triple-duty:
  - Provide evidence to evaluate individual students (i.e. grades) as well as evidence to improve teaching and learning at the course level and inform program assessment.
- Advantages:
  - Time-efficient and cost-effective assessment since classroom work is already being examined as part of grading process
  - Students are motivated to participate
  - Reflects what students are actually taught

#### Vs. Add-on Assessment

Ungraded assessments that are not part of course or program requirements

Level of Student Learning Assessment	Sources of Evidence	Aggregation of Data	Uses of Data	Responsibilities	
Individual student learning within courses	All student work embedded in course	Sequential as evidence is collected for each student. Final holistic course grade.	<ul> <li>Formative/summative feedback to student to understand progress</li> <li>Feedback to instructor on how well she/he is communicating with and motivating students</li> </ul>	<ul> <li>Student is responsible for their effort</li> <li>Instructor is responsible for setting expectations and making transparent</li> </ul>	by
Individual student learning within programs	Embedded work across courses Portfolios Capstone Student self-reflection	Students can aggregate evidence of own learning across courses, programs, or entire college experience	<ul> <li>Formative/summative feed to students to understand progress</li> <li>Feedback to program faculty on how well individual students are achieving goals and outcomes</li> </ul>	<ul> <li>Student responsible for quality of work and gathering evidence, also integrating learning over time</li> <li>Collectively faculty clarify goals and outcomes</li> <li>Individual faculty objectively evaluating work samples and providing feedback</li> </ul>	- G
Assessing Courses	Embedded assignments of students course portfolios	Work of all students in a course to reveal how well content and assignment help students achieve outcomes	<ul> <li>Formative feedback so instructors can improve learning</li> <li>Summative feedback to inform planning for future by instructor or curriculum committee</li> </ul>	<ul> <li>Faculty and committees responsible for setting expectations, establishing criteria, and using analysis to improve</li> </ul>	s b a
Assessing Programs (major or general education)	<ul> <li>Multiple sources:</li> <li>Embedded assignments from courses</li> <li>Portfolios built over entire progra.</li> <li>Capstone</li> </ul>	<ul> <li>Course-level data analyzed individually or collectively</li> <li>Disaggregated data by subgroups of students reveal information about equity</li> </ul>	<ul> <li>Confirm purpose of program</li> <li>Check alignment of curricula with program outcomes</li> <li>How well program fosters cumulative learning</li> <li>Identify superfluous or missing curricular or cocurricular elements</li> </ul>	<ul> <li>Collectively faculty are responsible for entire program achievement of goals and outcomes</li> <li>Individual instructors responsible for advancing program and institutional outcomes embedded in courses</li> <li>Faculty collaboratively establish criteria and scoring rubrics</li> </ul>	r p
Assessing Institutions	Significant body of evidence from multiple sources:  • Summarized data from program assessments  • Supplemented by indirect measures of learning  • Sampling student work at entry and graduation levels	Aggregated by courses, program, student cohort	<ul> <li>Reveal what students know and can do when they graduate</li> <li>Understand value-added by program</li> <li>Discover interactions between programs</li> <li>Guide decisions about resource allocations, faculty hiring, professional development</li> <li>Demonstrate institutional effectiveness to external stakeholders</li> </ul>	Administrators responsible for working in close collaboration with faculty, student affairs, and staff	a

From *Levels of*Assessment,
by Ross Miller and
Andrea Leskes

All levels use courseembedded
assessment
(assignments) as
source of evidence
but differ in
aggregation of data,
use of data and
responsible
person(s)

Assessing courses informs program assessment

## Evaluating Student Work

Examination of students' work by faculty to determine the level to which it meets the learning outcome

#### **Evaluation Tools include:**

- Checklist of criteria or expectations
- Rubrics one of most widely used tools

#### Rubric Best-Practices

- Use existing rubrics (i.e. AACU VALUE rubrics for liberal education core competencies) or develop your own
   If you develop own rubric, provide a copy along with reported course assessment data at end of semester
- Review rubric with all raters prior to evaluating
- Use descriptors in each performance level to guide ratings
- Assign rating that best represents students' work

## Closing the Loop: Assessing for Action

Using the results from assessment to inform improvements and enhancements to student learning



#### Most Common Actions Resulting from Assessment:

#### Curricular

Changes to curriculum, requirements, programmatic structures, or other aspects of course of study

#### Supports

Changes to policies, funding, and planning that support learning

#### Faculty

Faculty development

Changes to Courses & Programs						
Most Common	Example					
<ul> <li>How concepts are introduced</li> <li>The timing of introduction</li> </ul>	<ul> <li>A program determines that a writing outcome is not achieved at capstone level</li> <li>Possible Action Steps: <ul> <li>Developing capstone guidelines</li> <li>Requiring draft submissions of the capstone paper</li> <li>Evaluating writing development in the program (i.e. courses)</li> <li>Ensure writing practice in developmental/remedial coursework</li> </ul> </li> </ul>					

Changes to Learning Outcomes	
Assessment Results	Learning Outcome Modification
Outcome not met = students not performing adequately	<ul> <li>Consider making outcome a priority focus in next cycle</li> <li>Reassess more than once in next cycle</li> <li>Evaluate action steps taken</li> </ul>
Outcome met = students performing adequately	<ul> <li>If same results for past 3 years, consider rescheduling re-assessment at appropriate interval (only once in cycle)</li> </ul>
Outcome partially met = student performance unclear	<ul> <li>If difficulty relates to outcome, re-write outcome and reassess next cycle</li> <li>If difficulty relates to measure, retain outcome but revise measure and reassess next cycle</li> </ul>

## Alignment

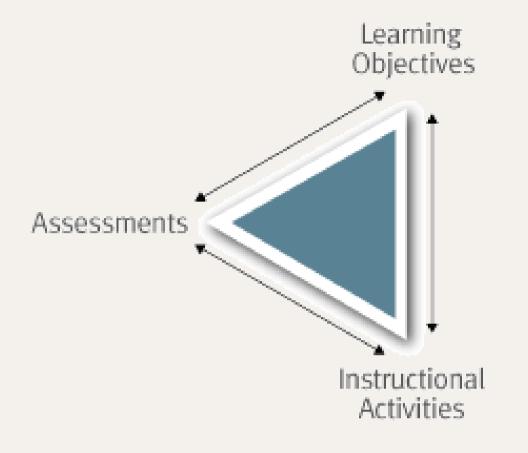
## Alignment

Assessment requires attention to learning outcomes but also and equally to the experiences that lead to those outcomes.

- Keep learning outcomes & assessments learnercentered
  - Learner-centered syllabus
- Alignment in learning materials
- Alignment in learning activities & assessments

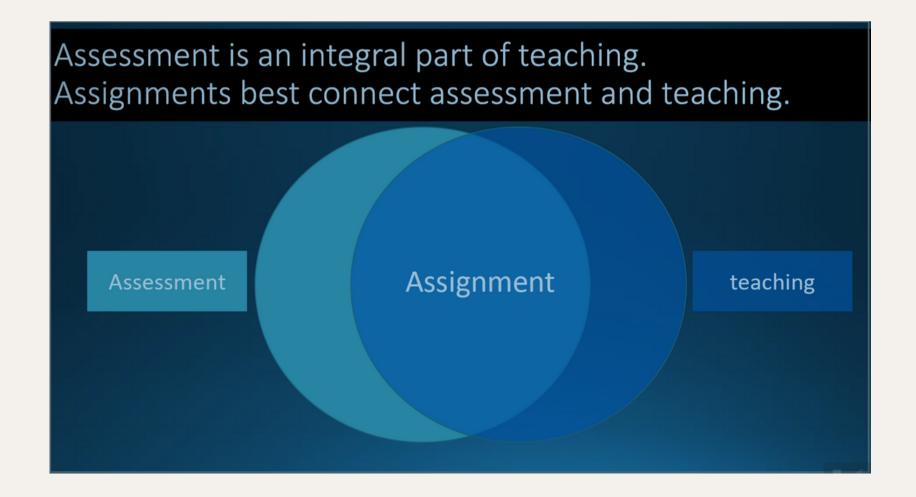
Alignment is also <u>essential</u> for assessing institutional (and program) learning goals through programs and courses.

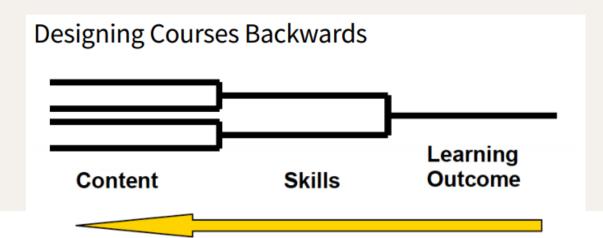
 Relationships between assessments, coursework, program outcomes, program and institutional goals, and the program's mission are explicit and clear to students.



#### Pro Tip:

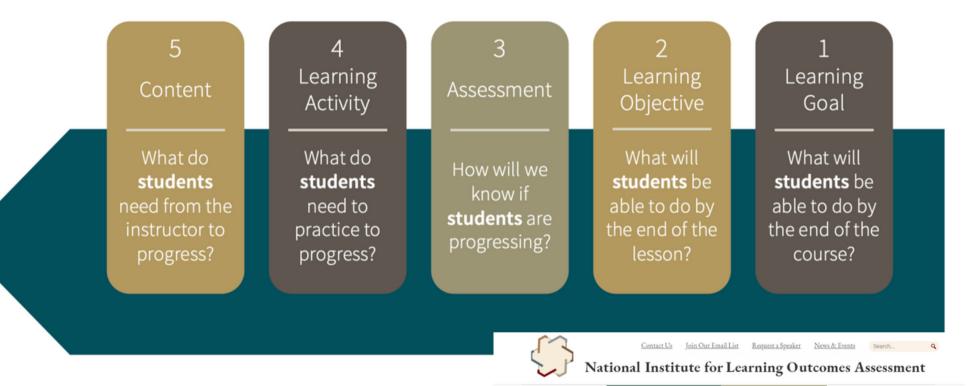
"If you find you are struggling to figure out how to assess something, the problem is likely not assessment per se, but the first two steps. The root cause of assessment struggles is often poorly articulated learning outcomes, a poorly designed curriculum, or both". - Linda Suskie





## Assignment/Curricular Design

#### **Student-centered course design**



Assignment Library

Assignment authors revise their assignment informed by the feedback and implement it in a course, gathering feedback from students along the way. Finally, authors resubmit their materials to NILOA, where they pass through a final review prior to posting. Authors are encouraged to submit updated versions of their materials and to continue reporting how the assignment is

Users are invited to search the assignment library for ideas using the identified tags below of disciplines and assignment characteristics, degree

Browse the NILOA Assignment Library

level, or Degree Qualification Profile Proficiencies.

Academic Disciplines and Assignment Characteristic

#### **Designing Backwards**

Understanding by Design, Wiggins and McTige

Start with learning goals, design assessments to measure learning, and then design learning activities and content so students have ample opportunity to achieve learning outcomes

#### Assignments as Assessments

Not sure how to design effective assignments that serve as authentic assessments of learning?

Check out NILOA's Assignment Library!

<a href="https://www.learningoutcomesassessment.org/ourwork/assignment-library/">https://www.learningoutcomesassessment.org/ourwork/assignment-library/</a>

#### 3 Column Template (for course syllabus):

This what you'll learn how to do (course learning outcomes)	This is how you'll learn how to do it (homework, coursework, assignments, etc.)	This is how you'll show me that you've learned how to do it (test, paper, project, presentation, etc.)
CLO #1:		
CLO #2:		

#### 4 Column Template:

This what you'll learn how to do (course learning outcomes)	And learning this will help you learn how to (program or general education learning outcomes)	This is how you'll learn how to do it (homework, coursework, assignments, etc.)	This is how you'll show me that you've learned how to do it (test, paper, project, presentation, etc.)
CLO #1	PLO #3		
CLO #2	GELO #1		

#### Pro Tips:

- Start with first column, fill out last column, then fill out middle column
- Make assessments in last column meaningful (significant)
- Make learning activities active and meaningful
- Course curriculum maps (like program curriculum maps) are excellent tools to ensure learning experiences are designed to give students enough opportunity to achieve learning goals Linda Suskie, Assessing Student Learning
- Relationship between course content, course-level outcomes, assignments and assessments.

## Tools for Aligning Learning Activities

## Course Mapping Example

Youngstown State University

Identify the basic Analyze a business Poad toythook Participate in Take graded exam	-	Assignment/Unit Learning Objective	Alignment with Course Learning Outcome	Learning Materials	Learning Activities	Assessments
activities and situation to benefits of information management man		benefits of information	determine an information	Watch the video in		Take graded exam #1

	Program Level LEARNING OUTCOMES						
EQUIRED COURSES AND EXPERIENCES	Demonstrate knowledge of key historical material, theoretical perspectives, institutional practices, and legal and ethical concerns.	Analyze and identify the materials from which historical and or artistic objects are made.	Develop visual and hand skills for recognizing and analyzing materials that compose cultural objects and processes by which they have been constructed.	Develop appropriate research skills.	Analyze the conservation needs of an object and identify best practices.	Illustrate research and computer skills.	Exhibit knowledge of actual museum work through personal experience.
0533-370 Intro to Museums Collecting	I, A		I	I		I	I
0533-422 Art Materials and Photography	R	I, A	R	R	I		
0533-423 Artists' Materials: Panel Paintings		R					
0533-424 Legal and Ethical Issues for Collecting Institutions	R		R, A			R	
0533-425 Display and Exhibition		R			R, A		
0533-426 Collections, Management & Museum Administrators			R				
0533-427 Fundraising, grant Writing & Marketing for Nonprofits				R,A			
0533-437 Forensic Investigation	R	R, A				R	
0533-438 Art Conservation					R		
0533-510				R		R,A	R
Internship	М	M	М	М	М	М	M,A

## Program Mapping Example

Relationship
between course
learning outcomes
and program
learning outcomes

## Pulling Together

# Course Assessment & Alignment Exercise

## In small groups:

- 1. Select course syllabus (grab your own or use mock)
- 2. Select 1 course learning outcome (CLO) to evaluate (revise if necessary) and assess
- 3. Identify assessment measures (2 per CLO)
- 4. Align learning activities course map
- 5. Collect assessment data (mock)
- 6. Record, analyze and report results
- 7. Draft action plan

## KBOCC Assessment Expectations & Requirements

### Course Assessment Cycle: Submissions & Deadlines

Assessment Phase	Activities	Submit	Due	Fall 2021	Spring 2022
Plan	Review course learning outcomes (CLOs) for currency  - If revision is necessary, work with your Department Chair on revision and approval (by Faculty Council)  Select 2 CLOs for assessment & reporting this semester  Identify assignments that will provide evidence of student learning towards  - Selected CLOs  - Writing Across the Curriculum (WAC)(GELO #1)  - Anishinaabe Experience (GELO #6)	Course Syllabus	10 days prior to start of classes	(ASAP)	12/31/21
Assess	Provide learning activities	Keep copies of evaluation tools (i.e. rubrics)	Throughout semester		
	Collect assessment data: gather student work and evaluate	Course Assessment Reporting Survey	Wednesday following last day of classes	12/22/21	5/4/22
Analyze	Analyze assessment data for learning strengths and weaknesses				
Reflect & Refine	Identify actions to improve and strengthen learning and/or improve assessment process and share results				
	Use what you've learned to improve	Begin Again: Reassess and reflect on in next course assessment cycle			

## Coming Soon!

- Reference materials @ KBOCC
   Library check them out!
- Handbook of Student Learning
   Assessment
- KBOCC Assessment Website
- Weave Institutional Effectiveness
   Management Platform

## Need Assistance?

#### **Assessment Contacts:**

Department Chair

Dean of Instruction: B. Louise Virtanen, dean@kbocc.edu Assessment Coordinator: Char Spruce, cspruce@kbocc.edu

#### Further Reading:

Assessing Student Learning by Linda Suskie Assessment Essentials by Banta & Palomba Assessment Clear and Simple by Barbara Walvoord

#### Recommended Websites:

National Institute of Learning Outcomes Assessment (NILOA)

Association of American Colleges & Universities (AAC&U)

Weave Knowledge Center

## References

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#### Websites:

- American Association of Colleges and Universities: https://www.aacu.org/strengthening-guided-pathways
- Bakersfield College Assessment Handbook: https://committees.kccd.edu/sites/committees.kccd.edu/files/Bakersfield%20College%20Assessment%20Handbook.pdf
- Higher Learning Commission: https://www.hlcommission.org/Policies/criteria-and-core-components.html
- Youngstown State University, Academic Assessment Handbook: https://ysu.edu/sites/default/files/Handbook.pdf

## Questions?

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