CONNECTING ASSESSMENTS TO LEARNING OUTCOMES

LEARNING OUTCOMES

What should students know (be able to do) when they have completed class?

Learning outcomes are foundational to the construction of an integrated learning environment
Well-written learning outcomes are:
- concise and clearly stated
- specific and observable
- measurable and can be assessed
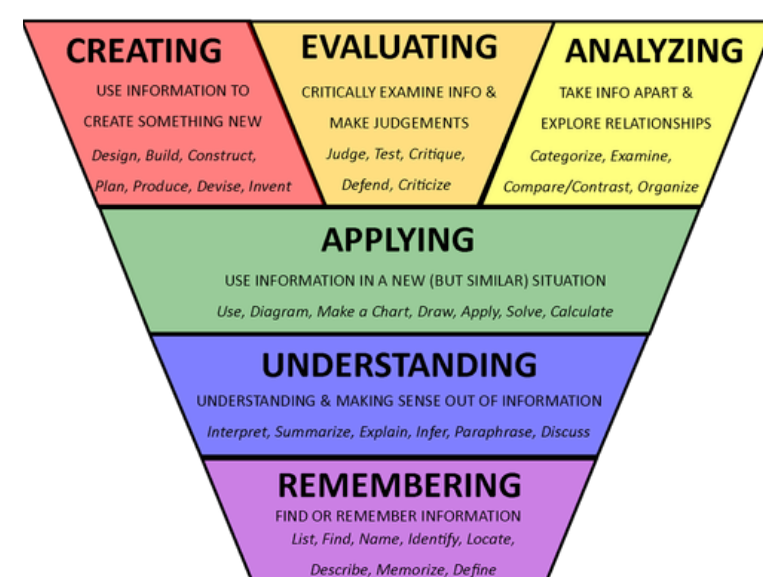
The ideal learning outcome has three elements:
1. action verb(s)
2. subject
3. context

Example: At the end of this class, a successful student will be able to; practice and evaluate group skills that support team performance.
1. verbs = "practice" and "evaluate,"
2. subject = "group skills,"
3. context = "team performance."

A good learning outcome can be translated into an assignment or exam question

Use Bloom's taxonomy to formulate learning outcomes according to the level of learning expected

CREATING — USE INFORMATION TO CREATE SOMETHING NEW — Design, Build, Construct, Plan, Produce, Devise, Invent

EVALUATING — CRITICALLY EXAMINE INFO & MAKE JUDGEMENTS — Judge, Test, Critique, Defend, Criticize

ANALYZING — TAKE INFO APART & EXPLORE RELATIONSHIPS — Categorize, Examine, Compare/Contrast, Organize

APPLYING — USE INFORMATION IN A NEW (BUT SIMILAR) SITUATION — Use, Diagram, Make a Chart, Draw, Apply, Solve, Calculate

UNDERSTANDING — UNDERSTANDING & MAKING SENSE OUT OF INFORMATION — Interpret, Summarize, Explain, Infer, Paraphrase, Discuss

REMEMBERING — FIND OR REMEMBER INFORMATION — List, Find, Name, Identify, Locate, Describe, Memorize, Define

INSTRUCTIONAL ACTIVITIES

What kinds of activities reinforce learning objectives and prepare students for assessment?

- small, routine segments of instruction that specify participation expectations for the teacher and students and for how they will interact with the materials/content in the class
- The fundamental task is to engage students in learning activities that provide opportunities to achieve the learning outcomes
- Every learning activity should be intentional, meaningful and connect to a learning outcome

Learning Objectives
Assessment
Instructional Activities
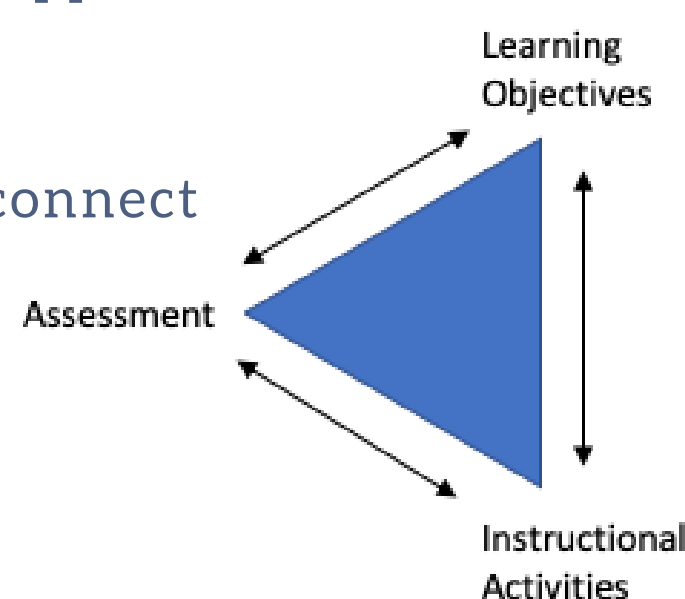
ASSESSMENT

- ### What tasks reflect students' achievement of learning objectives?

When teaching and learning is online, questions about the nature of assessment arise. Is it the same? Is it different? How best to do it?
- traditionally assessment was defined by its primary role of evaluating a student's ability to share factual knowledge
- contemporary definitions of assessments point to activities designed primarily to foster student learning (vs. regurgitation of content)

Assessments can be summative and formative (*see StFX TLC tip sheet titled: Creating Assessments to Foster Student Learning*)

Assessment should collect information that measures achievement of the stated outcomes (i.e,. learning objectives). This information should then be used to enhance students' learning and for continuous curriculum improvement (i.e., professor learning about their teaching)

Assessments can be direct (students' performance) and indirect (curriculum design and delivery):
- Direct; Electronic portfolios, Comprehensive exams, Pre-/post-tests, Essays, Case studies, Oral presentations, etc.
- Indirect; Course evaluations, Student, alumni, faculty or employer surveys, Stakeholder focus groups, SWOT analysis, Enrollment or retention rates, Job placement rates, Peer bench marking

How can technology be used to enhance assessments?
- Greater variety and authenticity in their design
- Potential for deeper learner engagement (e.g., interactive formative assessments with adaptive feedback)
- Choice in the timing and location of assessments
- Capture skills and attributes not easily assessed (e.g., through simulations, e-portfolios and inter-active games)
- Efficient submission, marking, and data storage processes (environmentally friendlier too)
- Consistent, accurate results with opportunities to combine human and computer marking
- Innovative approaches based around use of creative media and online peer and self-assessment

TEACHING & LEARNING CENTRE
St. Francis Xavier University

Resources:
Carnegie Mellon University. (n.d.). Align Assessments, Objectives, Instructional Strategies - Eberly Center - Carnegie Mellon University. Retrieved from https://www.cmu.edu/teaching/assessment/basics/alignment.html
Examples of Learning Activities. (2018, October 1). Retrieved from https://www.teaching-learning.utas.edu.au/learning-activities-and-delivery-modes/planning-learning-activities/examples-of-learning-activities
Hunt, G., & Harris, L. (n.d.). A Guide to Writing and Assessing Learning Outcomes at Thompson Rivers University. Retrieved June 4, 2020, from https://www.tru.ca/__shared/assets/assessinglearningoutcomes33278.pdf