



ASSESSMENT DESIGN

CENTER FOR TEACHING AND LEARNING (CTL)
NYU SHANGHAI



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DISCUSSION

- 1) Why do we assess?
- 2) What's the purpose of assessment in your course?
- 3) How are your ways of assessing effective toward achieving your purpose?

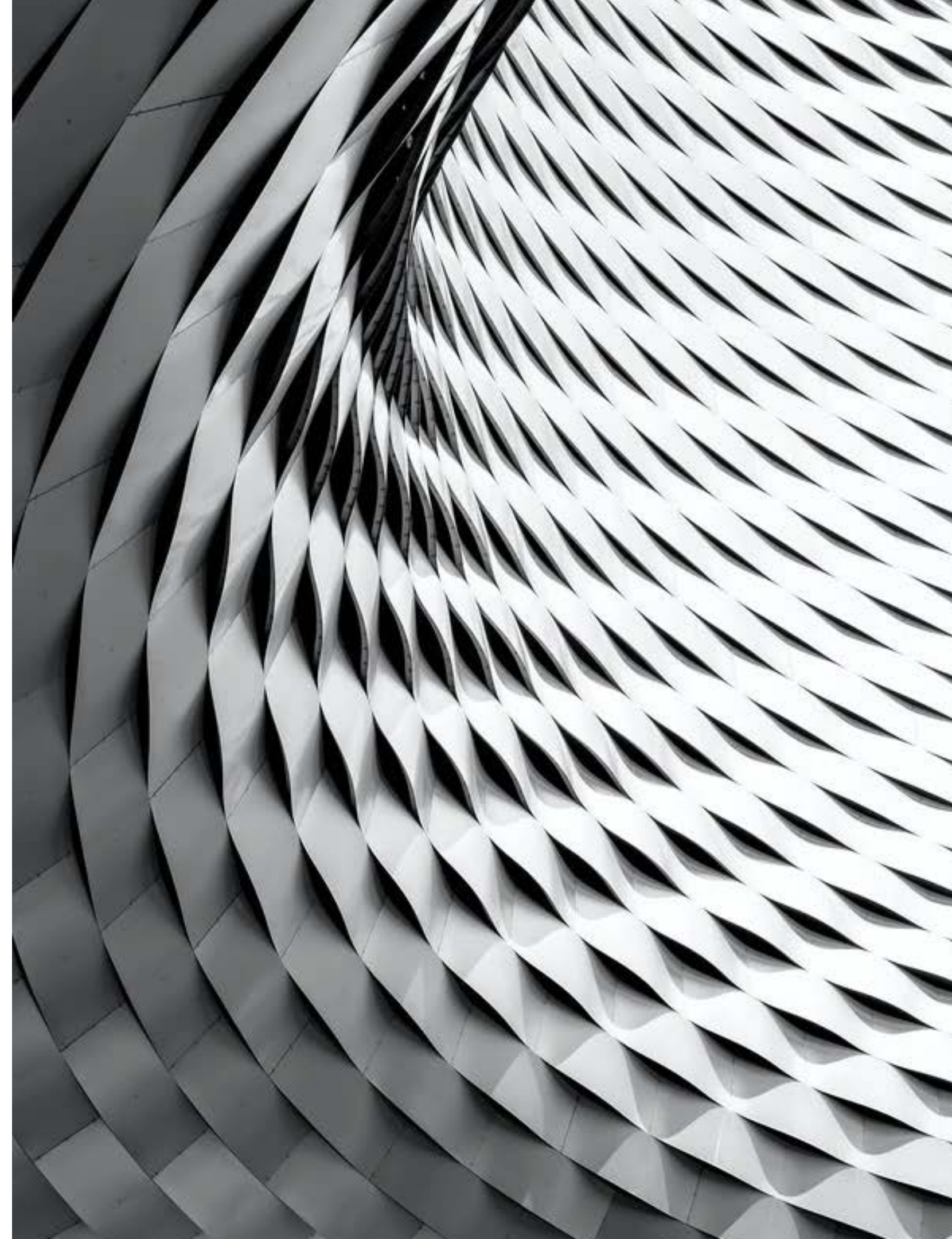




To measure
progress
toward, or
mastery of, a
desired
outcome.

"Instructional design should begin with clear learning outcomes, then move next into the development of assessments that align with those outcomes."

BACKWARD DESIGN MODEL
(Wiggins and McTighe (2005))



Bloom's Taxonomy

create

Produce new or original work

Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate

Justify a stand or decision

appraise, argue, defend, judge, select, support, value, critique, weigh

analyze

Draw connections among ideas

differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply

Use information in new situations

execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand

Explain ideas or concepts

classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

remember

Recall facts and basic concepts

define, duplicate, list, memorize, repeat, state



ASSESSMENT FOR LEARNING - FORMATIVE ASSESSMENT

- Formative assessment occurs throughout a class or course
- It seeks to improve student achievement of learning objectives through approaches that can support specific student needs

(Theal and Franklin, 2010, p. 151)

ASSESSMENT OF LEARNING - SUMMATIVE ASSESSMENT

- Summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program.
- Summative assessments are formally graded and often heavily weighted BUT they do not need to be, particularly when in conjunction and alignment with formative assessment.



EXAMPLES OF FORMATIVE & SUMMATIVE ASSESSMENTS

FORMATIVE

- In-class discussions
- Clicker questions
- Low-stakes group work
- Quizzes
- 1-3 minute reflection writing
- Homework assignments
- Surveys

SUMMATIVE

- Instructor-created exams
- Standardized tests
- Final projects
- Final essays
- Final presentations
- Final reports

*See Classroom Assessment Techniques (CATS), Angelo and Cross (1993).



Both forms of assessment can vary across several dimensions (Trumbull and Lash, 2013).

- Informal / formal
- Immediate / delayed feedback
- Embedded in lesson plan / stand-alone
- Spontaneous / planned
- Individual / group
- Verbal / nonverbal
- Oral / written
- Graded / ungraded
- Open-ended response / closed / constrained response
- Teacher-initiated/ controlled / student-initiated / controlled
- Teacher and student(s) / peers
- Process-oriented / product-oriented
- Brief / extended
- Scaffolded (teacher supported) / independently performed

What about
Multiple Choice
exams?



- Multiple choice questions can effectively measure a learner's ability to remember, identify, or understand important concepts related to the subject matter.
- However, to see evidence of Bloom's Higher Order Thinking Skills (HOTS), typically requires *open-ended* demonstration .

Designing assessments
to match learning
outcomes is good
pedagogy.



LEARNER VARIABILITY

There are different ways
learners can show
progress or mastery of a
learning outcome.

TAKE-HOME ASSESSMENTS

- Students are typically allowed more time to complete a take-home exam.
- Studies have shown that take-home exams can reduce students' anxiety. (Bengtsson, 2019; Myyry & Joutsenvirta, 2015).
- Give students at least a couple days after distributing the exam to submit.
- Provide clear expectations.
- Final assessments often encompass multiple LOs since they are meant to be cumulative and holistic.

TAKE-HOME ASSESSMENTS

- Take-home exams are most effective if they ask students to demonstrate **higher-order thinking skills**, like analysis, synthesis, and evaluation.
- Lower-order thinking skills questions, such as multiple choice, fill-in-the blank, matching items, or writing definitions can be answered by a simple Google search or a quick skim in a textbook.

TAKE-HOME ASSESSMENTS

- For **essay-based exams**, a choice of questions that focus on getting students to demonstrate they know how to retrieve, apply and integrate information is a good idea.
- Questions might include
 - making an extended argument or evaluation,
 - providing a solution to a new problem or case study, or
 - analyzing a new text or problem using frameworks from the course.
- Metacognition - Students are asked to analyze their own learning in a course:
 - what changed in their thinking?
 - what questions remain?
 - what ideas can they propose for extending their learning?

TAKE-HOME ASSESSMENTS

- Be cautious about pivoting to a final project in the middle of a term.
- Final projects require regular *scaffolding* and *feedback*.
- They also often require students to find and incorporate new sources of data or ideas, whereas take-home exams typically draw on students' access to existing course materials.

TO MINIMIZE ACADEMIC MISCONDUCT

- Require students to directly reference course-specific materials, such as lecture notes.
- Require the use of TurnItIn for written submissions.
- Assign different questions to different students.
- Require a signed “Honor Statement” in the exam instructions (Bengtsson, 2019).

CONSIDER YOUR COURSE

1 What learning outcomes do you want to assess?

2 How can you formatively assess these outcomes throughout your course?

3 How do your formative assessment tasks prepare students for the summative?

4 How does your summative assessment align with the learning outcomes and formative tasks?

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Formative and Summative Assessment

Yale University

Classroom Assessment Techniques (CATS)

Angelo and Cross (1993)

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