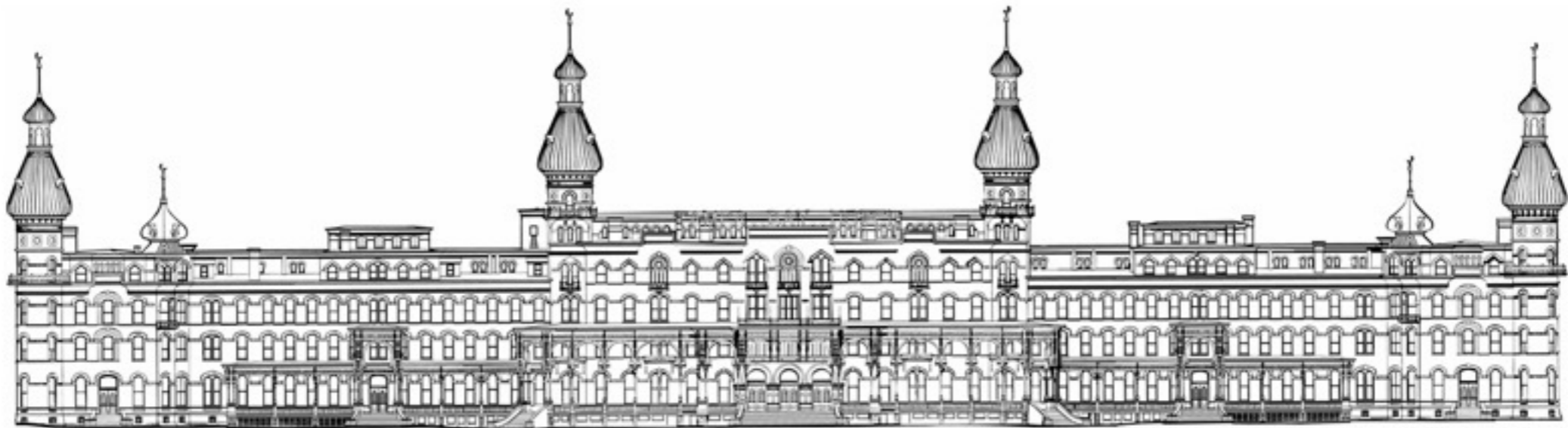


New Teaching Institute

Assessment



The University Of

T A M P A

What Is Assessment?

as·sess·ment (noun):

- The act of **making a judgment** about something:
the act of assessing something

You are making a judgment about the student's

- Competence / ability in **performing** a skill
 - (Psychomotor Domain)
- **Understanding** / grasp of the concepts, content, and strategies
 - (Cognitive Domain)
- **Attitude** about the topic
 - (Affective Domain)

Your judgment about these performances,
understandings, and attitudes are (should be)
based on evidence.

There are four major ways to gather this evidence
(assessment methodologies):

3PT

3PT

- **P**erformance
- **P**ortfolio
- **P**roject
- **T**est

There are also four types of tests:

- **P**retest
- **P**osttest
- **P**actice Test
- **E**ntry-Behavior Tests

3PE?

All **tests** should be **Criterion Referenced** [against an objective/standard] Assessment

(vs. Norm Referenced [against the average behavior])

There are **MANY** ways to assess in face-to-face, hybrid, and online environments, but they all share the core concept of gathering evidence from which to make an evaluative judgment.

Assessment design reflects more than just a need to measure.

Assessment design stems from:

- Our beliefs about how people learn (Learning Theories)
- What we want them to be able to do (objectives)
- How competent they need to be at doing it (Standards)

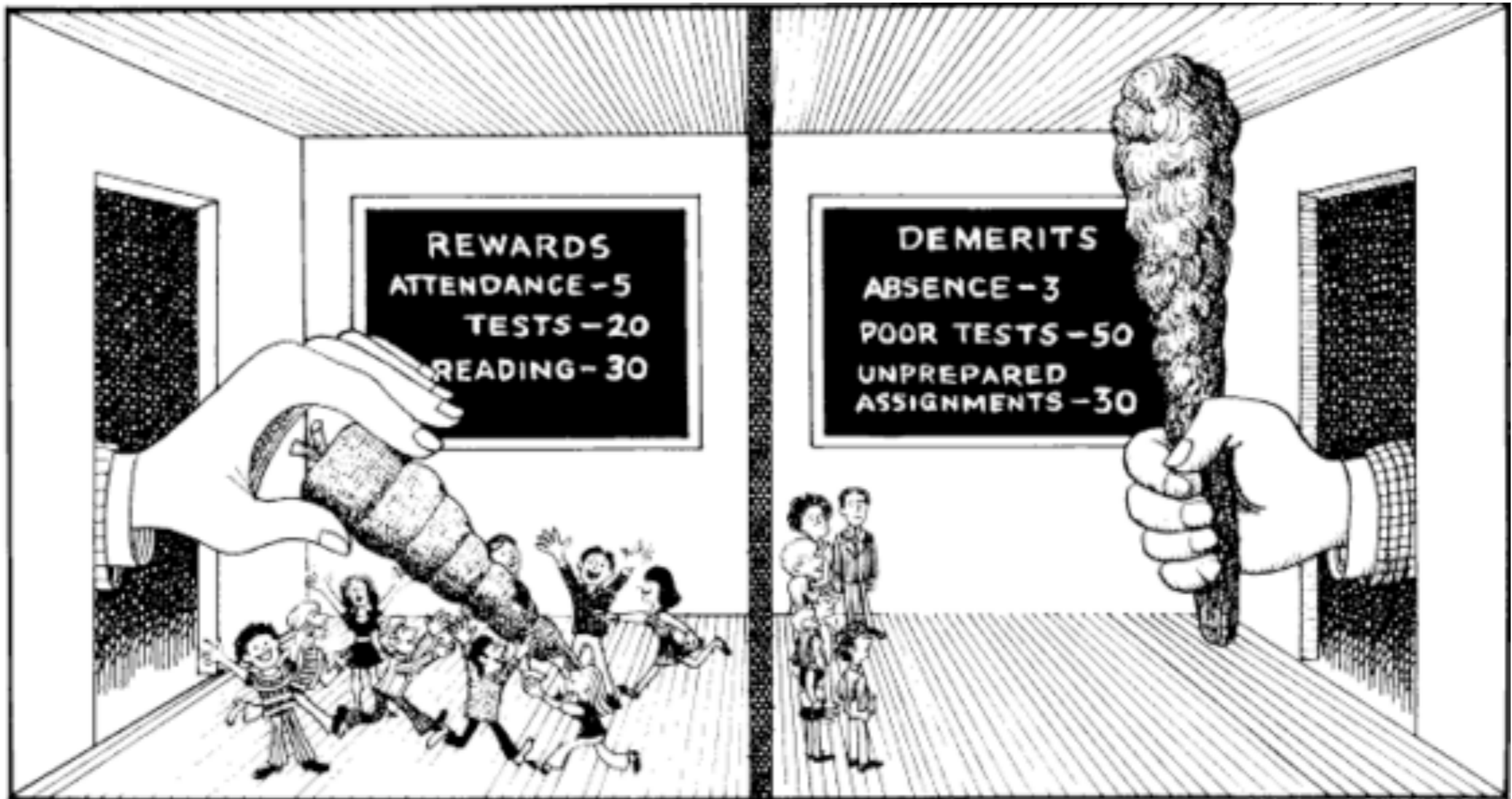
How Do People
Learn?

Different Theories of Learning emphasize different domains / elements in instruction and assessment.

Behaviorism

“Behaviorism equates learning with changes in either the form or frequency of observable performance. Learning is accomplished when a proper response is demonstrated following the presentation of a specific environmental stimulus.”

- Performance emerges from experiences
- Environment is designed to promote certain experiences over others



Behaviorist Instructional Design Emphasis

PERFORMANCE!

- Mastery Learning / Task Analysis
- Observable, Measurable Objectives (performance)
 - e.g., perform, produce, list, execute, recite
- Learner Analysis for obtaining current performance and most effective reinforcers
- Sequencing of Instruction by Objectives
- Feedback for Reinforcement/Rewards



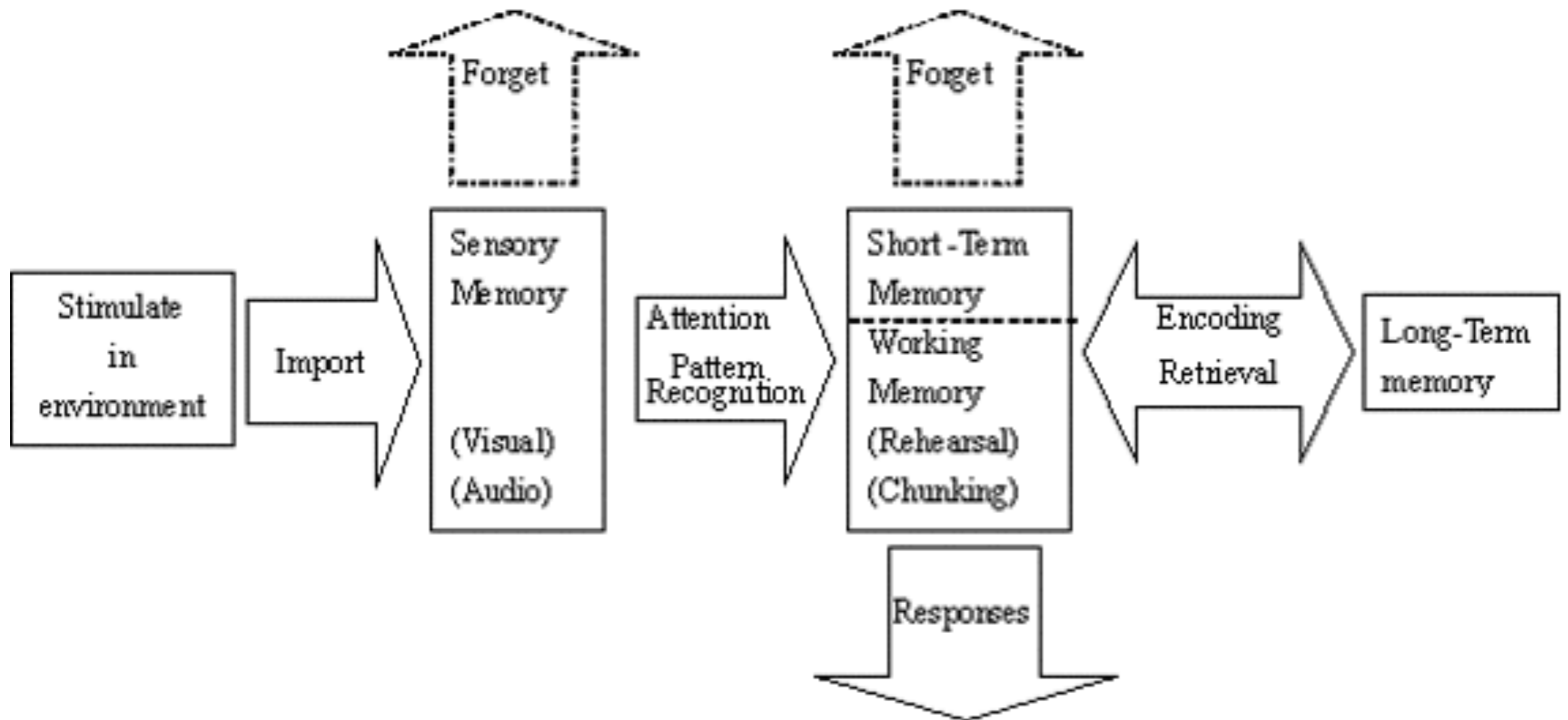
Performances and tests (entry behavior, practice, & post) are probably the most typical behaviorist assessments.

Repetition with feedback/practice unto mastery of task.
Concerned with behavior, not understanding.

Cognitivism

“Cognitive theories focus on the conceptualization of students’ learning processes **[information processing models]** and address the issues of how information is **received, organized, stored,** and **retrieved** by the mind.”

- Knowledge is mapped to be assimilated by the learner
- Knowledge transfer—Learner acquires knowledge



Cognitivist Instructional Design Emphasis

UNDERSTANDING! **(and performance!)**

- Active Learning
- Observable, Measurable Objectives (understanding & Performance)
 - e.g., explain, justify, argue for, rationalize, etc.
- Cognitive Load / Metacognition / Task Analysis for assimilation (Schema)
- Cognitive Strategies (outlining, summaries, synthesizers, advance organizers, etc.)
- Connection with previous material (recall, examples, analogies, etc).
- Reasoning / Problem-Solving / Critical Thinking

Tests (pre-, practice, & post) and performances are probably the most typical cognitive assessments.

Focus not only on the right behavior/answer, but also on understanding the mental processes behind the answer.

Constructivism

- Learning is creating meaning from experience
 - Knowledge can't be “mapped” onto a learner
 - What we know of the world consists of our own interpretations of experiences
 - Meaning is **CREATED** rather than **ACQUIRED**

Constructivist Instructional Design Emphasis

ATTITUDINAL!!

(And UNDERSTANDING!)

(and performance!)

- Authentic Experiences,
- Facilitation, Mentorship, Guidance, Peer Work
- Content in Context,
- Constructing an Understanding through Experience & Validating this through Social Negotiation.



Portfolios and projects are probably the most typical constructivist assessments.

Focus on facilitating experiences, guiding students in
learning to be vs. learning about, .

What Do I Want The
Learners To be Able To Do?
(Objectives)

Assessments are tied directly to objectives!

This is why your objectives
should be very specific!

Domains of Learning

Objectives in different domains call for different types of assessments

Cognitive: Mental tasks

- Solve a problem, apply a rule, etc.

Affective: Attitudinal

- Display a positive outlook, identify yourself as a practitioner, etc.
 - Note: This domain can't be directly observed/assessed, & must be inferred from other performances.

Psychomotor: Physical Tasks

- Perform a task, move in a certain way, etc.

Assessing someone's golf swing is different than assessing their quality of writing.

Domain	Sample Assessments
Cognitive	Short-answer, matching, multiple choice, free recall, application of rules, reflective journal
Psychomotor	Demonstration / Performance, Observation, Rubric
Affective	Observation / Infer from behavior,

(Cennamo & Kalk, 2005)

How Competent Do
They Need To Be?

- What level of competence do the students need to achieve by the end of your course?
- What are the performances, attitudes, and ideas that they need to hold, and how well must they be able to apply them?
- What data do you need in order to make an effective judgment about the student's possession of these?

Insuring someone can safely operate a nuclear facility is different than insuring they are familiar with the key ideas of grammar.

(Although both can have a serious impact on quality of life!)

Hybrid Strategies

- What types of assessment do you use in your face-to-face course, and how can that be used in an online or hybrid space?
- Can you think of anything that can't be assessed/
can't be assessed online?
- What reservations do you have about the online/
hybrid assessment structures available?

“In some cases, we learn more by looking for the answer to a question and not finding it than we do from learning the answer itself.”

–Lloyd Alexander

Resources & References

- Cennamo, K., & Kalk, D. (2005). Real-World Instructional Design. Wadsworth: Belmont, CA
- Dick, Carey, & Carey (2009). The Systematic Design of Instruction (7th). Pearson: New Jersey
- [How People Learn \(2000\)](#) or [Here](#)
- [Ertmer & Newby \(2013\). Behaviorism, Cognitivism, Constructivism: Comparing Critical Features from an Instructional Design Perspective](#)