California HSI Alliance

The Assessment Cycle: Establishing a Conceptual Framework

AGEP California - Summer Teaching Institute 2019

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Session Outcomes

- Describe the assessment process as a research mindset to teaching (teaching-as-research).
- Explain how the assessment process is a planning and pedagogical tool
- Articulate the purposes of learning outcomes, pedagogy, and evidence of student learning in the assessment/teaching-as-research framework.

From Teaching to Learning -
A New Paradigm for Undergraduate Education

- Robert Barr & John Tagg (1995)

"In the Instruction Paradigm, the mission of the college is to provide instruction, to teach. The method and the product are one and the same. The means is the end. In the Learning Paradigm, the mission of the college is to produce learning. The method and the product are separate. The end governs the means." (2)

"In the Learning Paradigm, colleges take responsibility for learning at two distinct levels. At the organizational level, a college takes responsibility for the aggregate of student learning and success… The college also takes responsibility at the individual level, that is, for each individual student's learning... Thus, the institution takes responsibility for both its institutional outcomes and individual student outcomes."

(Barr & Tagg 4)

The Instruction Paradigm Mission

- Provide/deliver instruction
- Transfer knowledge from faculty to students
- Offer courses and programs
- Improve the quality of instruction
- Achieve access for diverse students

The Learning Paradigm Mission

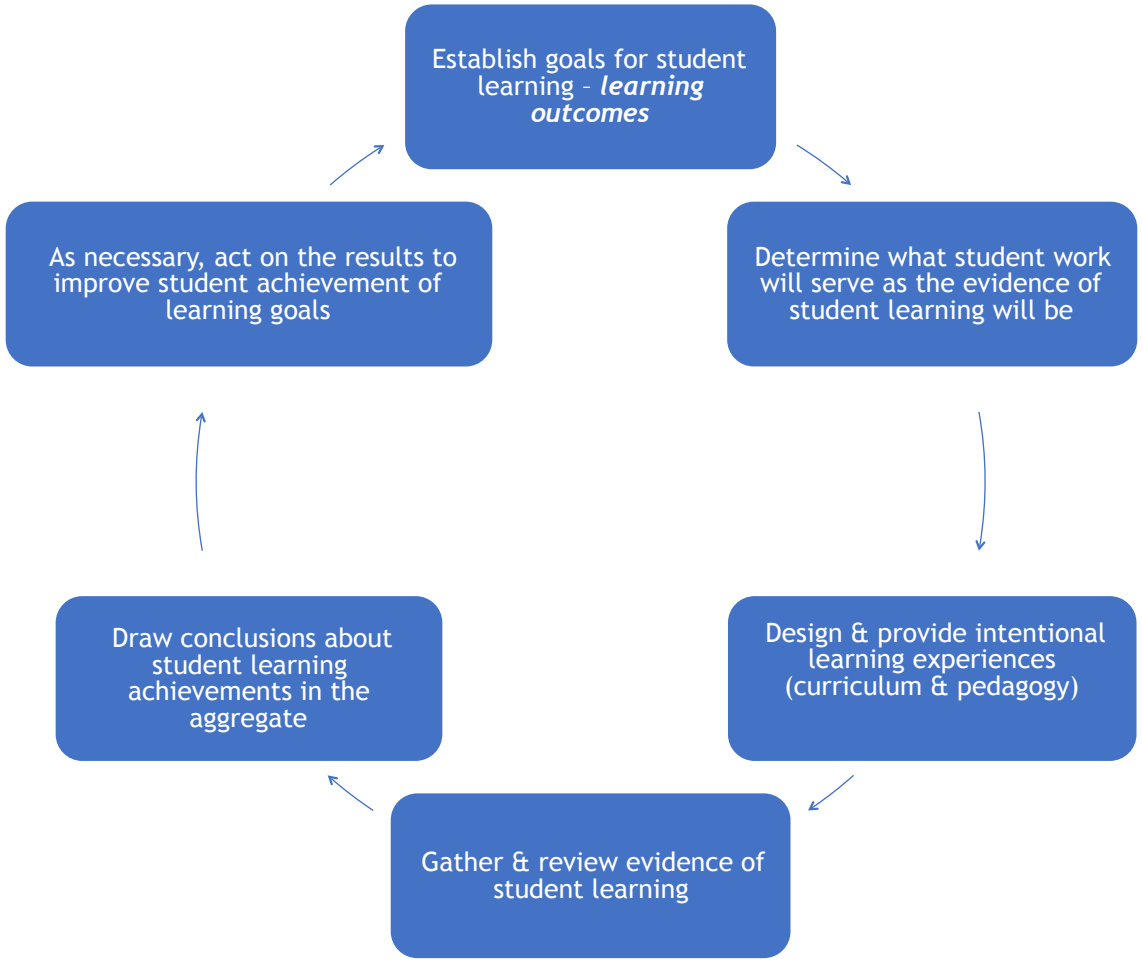
- Produce learning
- Elicit students discovery and construction of knowledge
- Create powerful learning environments
- Improve the quality of learning
- Achieve success for diverse students

Assessment in the Learning Paradigm

"The Learning Paradigm necessarily incorporates the perspectives of the assessment movement." (Barr & Tagg 5)

The "Assessment Movement" was born in the 1990s alongside (and out of) the emphasis on learner-centered instruction, a body of research about the way that students learn (application, connected to prior learning and coherence in learning) and the 1998 Amendments to the Higher Education Act of 1965, Title IV, Part H, Sect. 492(b)(4)(E), requiring institutions to demonstrate student achievement related to specific outcomes in order to receive accreditation"

Assessment Cycle – Student Learning



Hybrid of Suskie (2009) , the CIRTL Teaching-as-Research (TAR) framework, and Backward Design (McTighe &Williams, 1998)

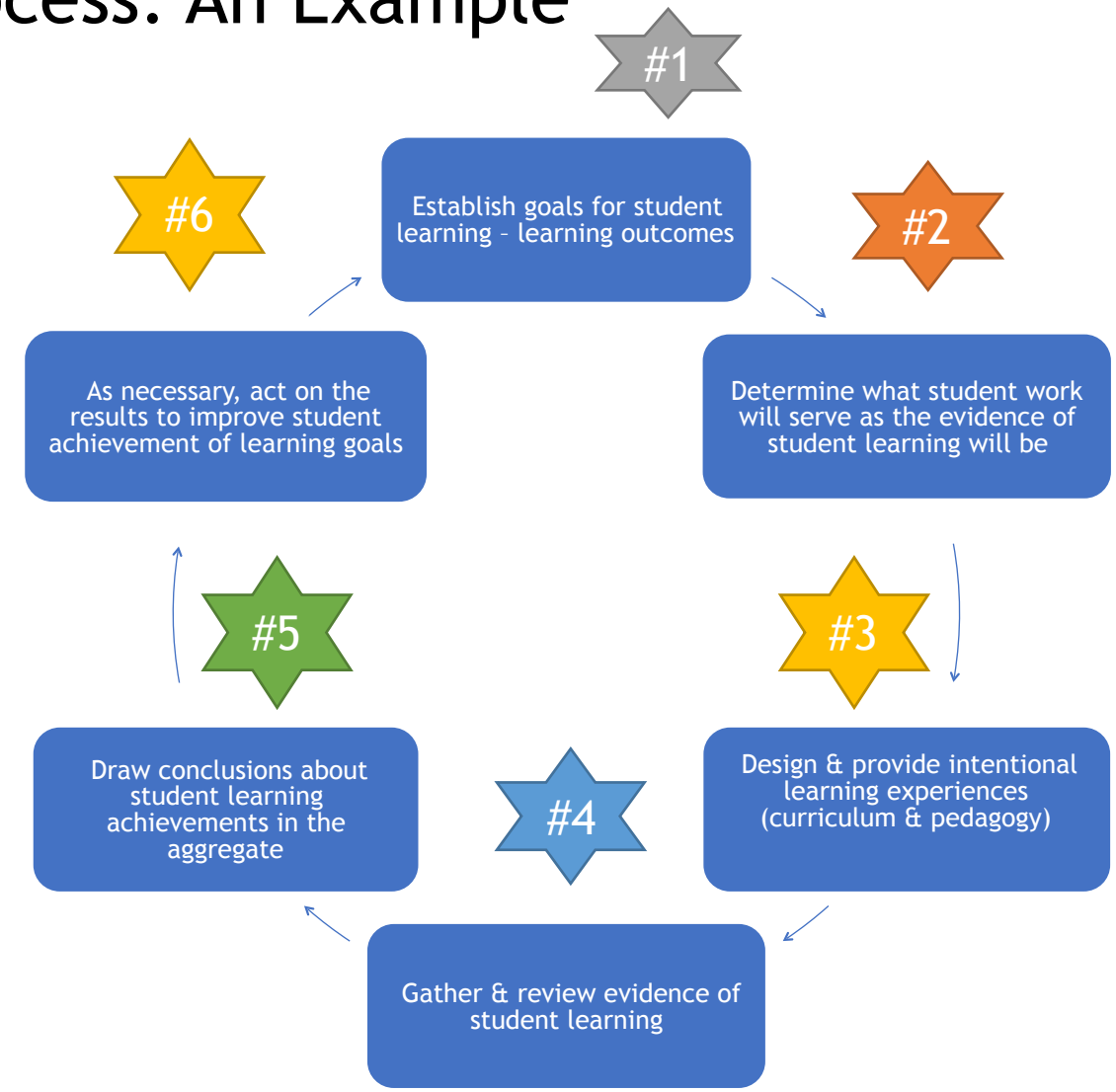
Assessment Process: An Example

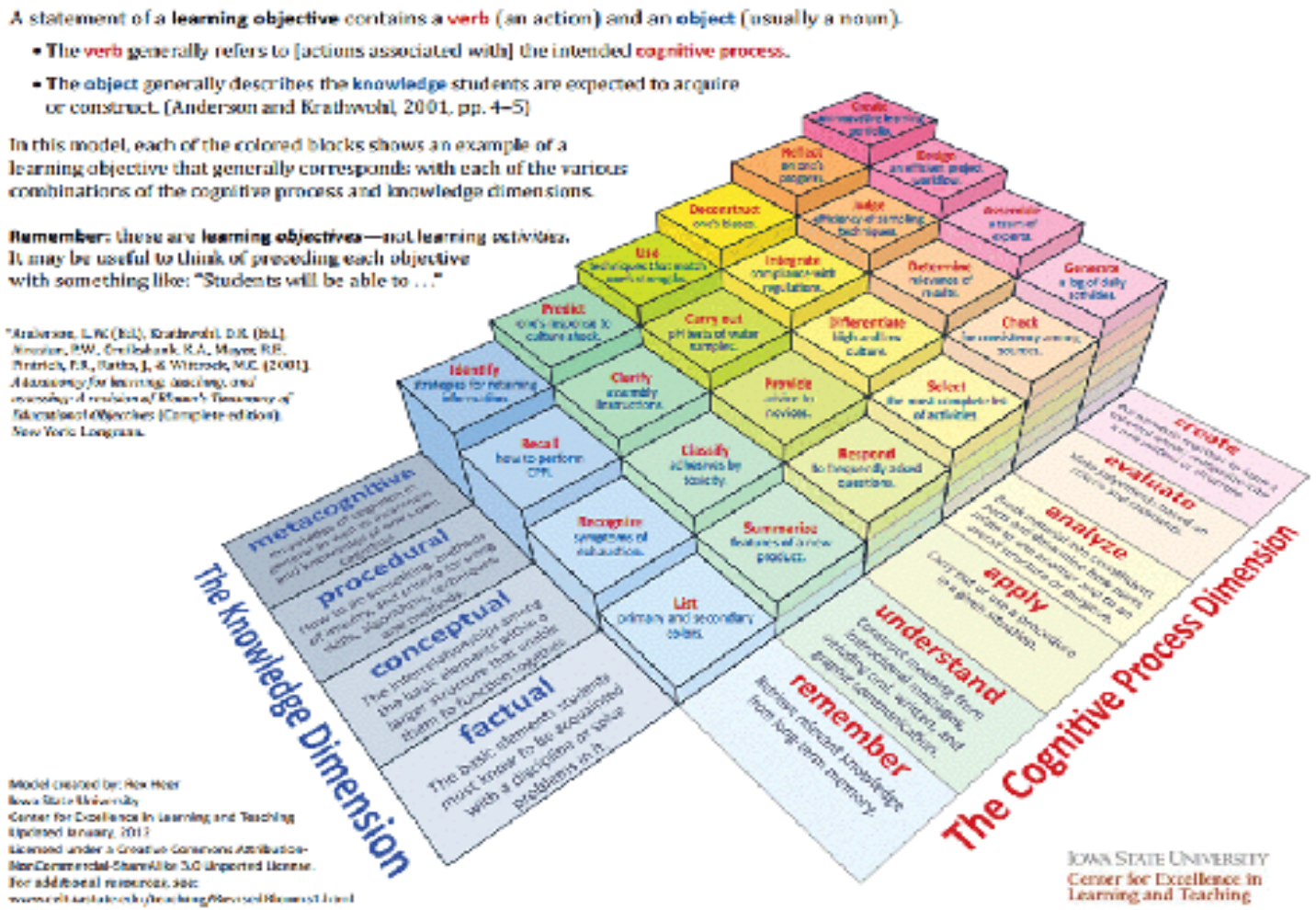
#1 Outcome: Write an effective technical report
#2 Evidence: Technical reports
#3 Design:

- Write reports weekly guided by rubric.
- Detailed feedback provided consistent with rubric
- Track students' use of feedback.

#4 Gather evidence, Draw conclusions, Act on results:

- Mid-semester: examines students' improvements, finds students using feedback are improving more than others.
- Shares this with class to motivate use of feedback to improve.
- Continues to provide detailed feedback through multiple avenues.





Outcomes
(or Objectives)
Expressed as
Verbs and
Objects (Nouns)

Verb –
Cognitive
Process

Object –
knowledge for
students to
acquire

Learning Outcomes in Action – the Learning Paradigm

Course Learning Outcomes - CLOs

CLOs define what a student should be able to do and to understand upon completing a given course.

Program Learning Outcomes PLOs

PLOs define what a student should be able to do and to understand upon earning a degree within a major or completing the courses in another academic program

Assessment as Planning – A Planning cycle applicable at any institutional level or learning experience

- Setting Goals
- Establishing Strategies
- Outlining Tasks
- Evaluating Success

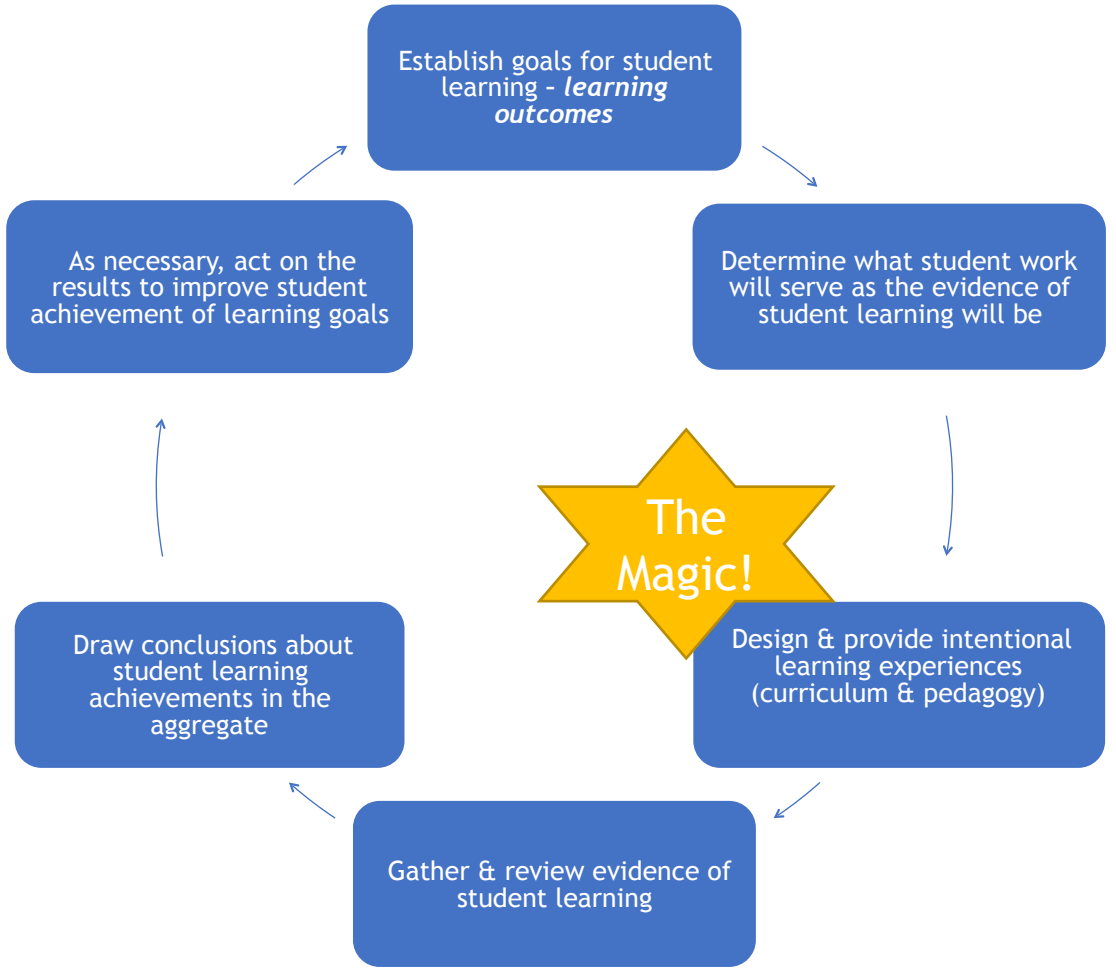
- A Given Class Meeting
- A Unit/Module
- A Course
- A Degree Program

Assessment as Pedagogy

Instructional activities selected to: facilitate development of and to reveal (to the teacher and the students) student learning in relation to instructional goals.

Evidence of student learning is abundant

Harvest it intentionally and strategically



Relationship of Grading & Assessment

- **Grading:** Summarizes learning demonstrated by an individual student, with feedback providing insight into and supporting his/her individual learning
- **Assessment**: Summarizes learning demonstrated by a population of students to provide insights into how well the educational opportunity (class, course, program) is serving students as a whole

Ex. What *might* this tell us?

Results from a mid-semester research paper

60% of students scored as proficient or better in use of citations and evidence in argument

40%scored below proficient

Assessment is “teaching to the test” (Suskie, 2009)

Requires…

- Assessments that are designed to be worth teaching to
- Intended learning outcomes that are higher level
- Opportunities for practice with specific, targeted feedback to students on what is going well, and what to improve upon

Assessment as a Form of Research

Assessment Paradigm

- Outcome
- Instructional Activities / Curriculum
- Collect & analyze evidence of student learning. Draw conclusions, revise instruction or outcomes

Research Paradigm

- Hypothesis – What students will be able to do
- Experimental Design
- Gather data and draw conclusions about hypothesis

Assessment is “action research” (Suskie, 2009)

Assessment as Action Research

- Specific to local environment & student body
- Intended for local improvement
- Data/evidence are sufficiently valid and reliable so as to be “good enough,” “trustworthy enough” to act on

Empirical Research

- Pursue generalizable results
- High quality design and data to meet test of peer review

Evidence of Student Learning

Direct Evidence

- Exams
- Quizzes
- Reports
- Writing Samples
- Presentations

Indirect Evidence

- Surveys
- Reflections
- Minute Questions
- Narrative Comments

The Assessment as Pedagogy Project's action research is focused on *criterion* referenced learning

- **Goal:** To use assessment (evidence of student learning) to iteratively advance student learning toward predefined expectations for learning* over the semester
- The project is *not* to test if one pedagogy or instructional strategy is superior to another

*the criteria associated with learning outcomes as articulated in a rubric, for instance

Related Discussion Topics for Mentor/Fellow Sessions

Past assessment practices/experiences:

- Identify an example of how you have used assessment in your own teaching or have experienced assessment as a student.
- What did this assessment reveal about student learning?