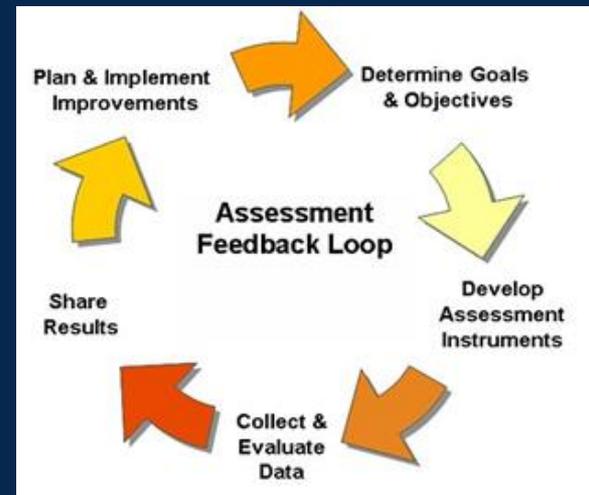




# Assessment Measures & Methods

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# Learning Outcomes

*At the end of the workshop, participants will be able to:*

- Identify common direct and indirect methods*
- Determine how much assessment evidence is sufficient*

# Key Definitions

- **Measure:** A tool by which a student's ability to complete, demonstrate, or perform skills, knowledge, or aptitudes can be determined.
- **Method:** A means of providing evidence that students' knowledge and learning match the goals or expected outcomes of a course or program
  - Methods and measures apply to student learning, support, and performance goals

# Key Definitions

- **Formative Assessment:** Assessment undertaken while a student is in the process of learning
- **Summative Assessment:** Assessment undertaken at the end of a course or program

# Key Definitions

- **Direct Evidence:** Visible and compelling evidence of what students have learned (student artifacts or observations)
- **Indirect Evidence:** Proxy evidence that suggests students are learning
- **Embedded Methods:** Assessment that is built into existing assignments, reports, papers, and exams

# Determining Measures & Methods

## Guiding Questions:

- What learning, support, or performance outcomes are being assessed?
- Will the assessment be formative or summative?
- What information is needed?
- How much information is needed?
  - The purpose of the assessment, including confidence in the findings, determines methods, measures, and extent of information required
  - Measures should be matched with outcomes

# Assessment Methods

A description of methods should include:

- Strategies being deployed to achieve the learning, support, or performance outcome
- What is being measured (knowledge, skills, attitudes, habits)
- How the outcome will be measured (direct or indirect assessment, specific instruments e.g., written assignment and rubric)
- Where the data is obtained (in a course, at some activity, in certification exam outcomes, etc.)
- Description of sampling if less than a full population is included (e.g., at all LEH 3XX courses)
- Information on scoring e.g., use of a rubric

# Assessment Methods

## Biggest challenges:

- Outcomes are not specific or measurable
- Temptation to rely on indirect evidence (time required to administer and analyze a survey is less than that required for scoring papers with a rubric and the preparation that occurs in advance of that scoring)
- Uncertainty about the instrument to be used

# Sample Description

For AY 2XXX-XX, the [name of program] will **assess written communication** to examine the impact of scaffolded assignments in improving student writing. **All students taking [name of courses]** will **respond to an essay question** at the beginning of the semester and at the end of the semester. Essays will be scored by the same faculty team using the **AAC&U's Written Communication Value Rubric**.

# Assessment Method Categories

- Direct Methods (Slides 10 and 11)
- Indirect Methods (Slides 12 and 13)
- Value-Added Assessment (can be direct/indirect)
  - Pre- and post-tests
  - Entrance and exit interviews
- Formative Assessment (can be direct/indirect)
  - One-minute papers
  - Small group discussion
- Summative Assessment (can be direct/indirect)
  - Final exam
  - Capstone project
  - End-of-semester focus group

# Direct Evidence

## Direct Evidence:

- In-person and Video Observation (e.g., for teams: how participants worked toward a goal, interpersonal interaction, individual performance, decision making, etc.)
- Competitions, games, matches, meets, etc.
- Pass rates, wins-losses, \$ raised, etc.
- Student publications and presentations
- Reflection papers
- Portfolios of student work
- Ratings of student performance
- “Clicker” results from in-class discussions
- Score gains on pre- and post-tests

# Direct Evidence

- Focuses on skills, knowledge, attitudes, habits of mind
- Used by external audiences (including accreditors, government, employers, the general public)
  - Assessing processes and understanding inputs and the context can provide insight into direct assessment outcomes

# Indirect Evidence

## **Indirect Evidence:**

- Focus group interviews with students, faculty, coaches, and staff
- Registration, participation, enrollment rates, etc.
- Surveys
- Percent of time spent on given activities/tasks
- Certificates awarded by programs
- Course grades and grade distributions
- Credit accumulation, retention, and graduation rates
- Student participation rates in presentations and publications

# Indirect Evidence

- Focuses on student perceptions
- Can support direct assessment outcomes (e.g., student perceptions about learning are consistent with the findings from a review of student work)
- Can provide contextual information
  - Gaps between direct and indirect evidence identify areas for further examination

# Assessment Confidence

- Use of multiple measures
- Use of direct and indirect evidence
- Assessment occurs periodically to permit for trend analysis
- Decisions based on the use of assessment evidence are resulting in or surpassing the expected outcomes

# Contact Information

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