Learning Outcome Assessment Methods





Direct vs. Indirect

Indirect Methods

Any process employed to gather data which **asks subjects to reflect** upon their knowledge, behaviors, or thought processes.

In the workshop, I learned to be an effective leader:

Agree | Neutral | Disagree

Direct Methods

Any process employed to gather data which requires subjects to display their knowledge, behavior, or thought processes.

Describe three characteristics of effective leadership.



Testing Instruments



- Use of pre-created instruments to measure particular traits or domains
- Examples: Myers-Briggs Type Indicator, Moral Development Inventory, Collegiate Learning Assessment (CLA), Measurement of Academic Proficiency and Progress (MAPP)
- Participants are given score and compared to normative data
- Can be useful if measuring a specific area



Portfolio

- Way of documenting progression towards goals
- Can be electronic or paper
- Used for a variety of learning outcomes
- Provides opportunity for reflection by student
- Allows for feedback from staff/faculty/students
- Can serve as an archive





Ratings of Skills

- Teacher/advisor/supervisor rates skills of student
- Could be part of formal evaluation process
- Helpful to have criteria for ratings





Interviews

- Used to obtain detailed information and allow for direct follow-up
- Can be in person or on the phone
- Can gather rich data
- Need to develop trust with interviewee
- Can be expensive and time consuming
- Takes a great deal of time to transcribe notes and analyze data





Focus Groups

- Can be done in person or online
- Allow for direct follow-up
- Need to develop trust between moderator and participants
- Provide depth of answers, but lack breadth
- Can be time consuming to collect and analyze data

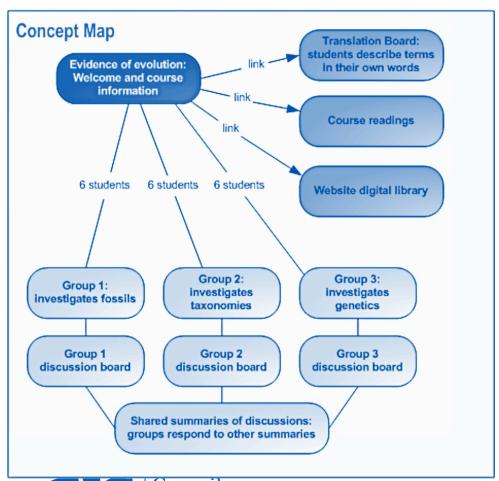




Observation

- Used to gather qualitative data in an unobtrusive way
- Need ongoing access to group you want to collect data from
- May take great deal of time to transcribe notes and analyze data

Concept Map



- Used to demonstrate relationships and connections
- Can demonstrate critical thinking skills
- Allows user to be creative

Quasi-Experiments

- Seek to control variables by assessment design
- Can give confident results when implemented
- Can be resource intensive
- Not used often in education
- Pre-post test is most popular design



33% Complete

Question 7 -

Can you describe your fraternity/sorority standards?



						Mean	Difference	Std Dev	N	Top 2	Bottom 2	Rank
NPHC New Member Retreat Rubric Post-	test					3.06	-0.79*	1.20	17	41.18%	23.53%	
NPHC New Member Retreat Rubric Pre-	est					2.27		1.08	26	11.54%	50.00%	
	2.10	1 2.34	1 2.58	1 2.82	3.06		* Indicates statistical significance, p < .05					

	NPHC New Member Retreat Rubric Post-test	NPHC New Member Retreat Rubric Pre-test
Beginner (Awareness or base level knowledge): Can't articulate the values to self or others	17.65%	34.62%
Transition (From novice to intermediate)	5.88%	15.38%
Intermediate (Apply the concept somewhat): Can recite the values, but lacks ability to define in own words	35.29%	38.46%
Transition (From intermediate to advanced)	35.29%	11.54%
Advanced (Intentional and effective application): Can clearly explain the values in own words to others	5.88%	0.00%
Total Respondents	17	26

Narrative/Journaling

Come here till I tell you, Where is the sea high and the winds soft and moist and warm, sometimes stained with sun, with peace so wild for wishing where all is told and telling. On a writer night I heard horses on a country road, beating sparks out of the stones. I know they would be running away and would be crossing the fields where the pointing would come up into my ears. And I said they are running out to death which is with some soul and their eyes are mad and teeth aut. God's more y on the weld

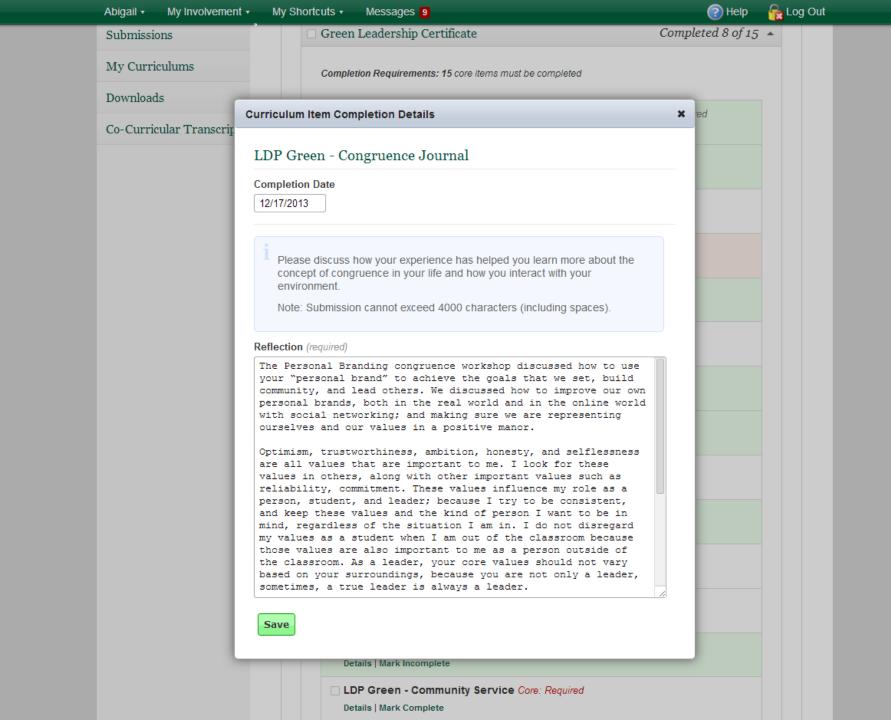
- Allows student to reflect on experience
- Can be analyzed using a rubric or content analysis
- Demonstrates writing skills, critical thinking skills, and can also provide insight into other types of learning
- Need to consider intent for student and intent for assessment



Tips for Capturing Reflections

- Open-ended questions
- Provide a prompt
- Tell them in advance
- Allow time
- Provide a suggested length
- Don't worry about spelling and grammar
- Go back to the outcome!





Surveys and Quizzes

- Can be paper or electronic
- Used to collect data from many people quickly and easily
- Options:
 - Multiple choice
 - True/False
 - Scenarios
 - Fill in the blank
 - Short answer

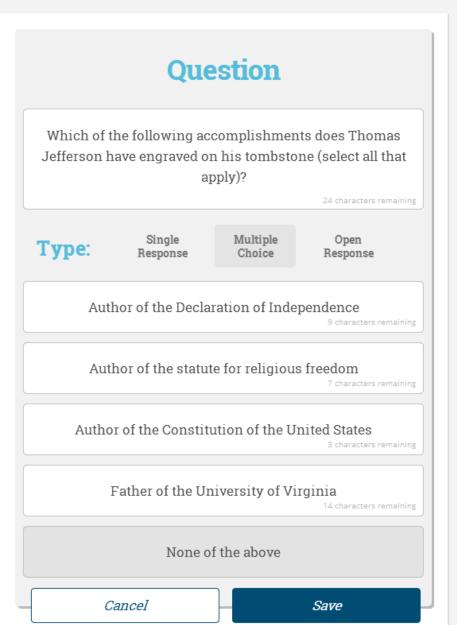
- ✓ Fill-in the blank questions provide best evidence of learning
- ✓ Be careful with true/false and multiple choice otherwise you risk assessing test taking skills instead of learning!
- ✓ Can be used in pre/post setting (taking focus off of perception)



Sessions

Results

Connect ID: 1034 <



Rubrics

- Set of criteria to judge student demonstration of learning
- Completed by rater or learner
- Can be holistic or component
- Can be an effective assessment tool, but underutilized



AAC&U Creative Thinking V	alue Rubric					
Creative thinking is both the capacity to (1 - Benchmark	2 - Milestone	3 - Milestone	4 - Capstone	
experience of thinking, reacting, and woi thinking, and risk taking. Reprinted [or Ex and tools for Using Rubrics, edited by Te	Acquiring Competencies This step refers to acquiring strategies and skills within a particular domain.	Model: Successfully reproduces an appropriate exemplar.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Reflect: Evaluates creative process and product using domain-appropriate criteria.	
AAC&U Ethical Reasoning \text{V} Ethical Reasoning is reasoning about rig values and the social context of problem perspectives might be applied to ethical identity evolves as they practice ethical of Reprinted [or Excerpted] with permission edited by Terrel L. Rhodes. Copyright 20	Taking Risks May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e., going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating	Stays strictly within the guidelines of the assignment.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Incorporates new directions or approaches to the assignment in the final product.	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	
AAC&U Reading Value Rub						
Reading is "the process of simultaneous language" (Snow et al., 2002). (From ww permission from Assessing Outcomes au Copyright 2010 by the Association of Am	Solving Problems	Only a single approach is considered and is used to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and	

AAC&U Problem Solving Va

- · Acknowledges (mentions in **Embracing** passing) alternate, divergent, or Contradictions contradictory perspectives or
- · Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.
- · Incorporates alternate, divergent, or contradictory perspectives or ideas in an

exploratory way.

- \odot
- · Integrates alternate, divergent,
 - or contradictory perspectives or ideas fully.

can articulate reason for choosing solution.

- Assess prior knowledge, recall, & understanding
 - Focused Listing: direct students to list several ideas that are closely related to a single important term, name, or concept. Helps determine the most effective starting point for an activity.
 - Empty Outlines: provide students with an empty or partially completed outline and give students limited time to fill in the blank spaces. Helps know how well students grasped main points.



- Assess prior knowledge, recall, & understanding
 - One-minute Paper: ask students to respond briefly to a variation of "what was the most important thing you learned in class." Provides manageable amounts of timely and useful feedback for a minimal investment of time and energy.
 - Muddiest Point: ask students to jot down a quick response to one questions: "What is the muddiest point in ____?"
 Provides information on what students find least clear or most confusing about a an activity or interaction.



- Assesses synthesis and creative thinking
 - One-Sentence Summary: Challenge students to answer the questions "Who does what to whom, when, where, how, and why?" about a given topic, and then to synthesize those answers into a single informative, grammatical, and long summary sentence. Helps find out how concisely, completely, and creatively, students can summarize a large amount of information.



- Assesses application and performance
 - Application Cards: After students have heard or read about an important principle, generalization, theory, or procedure, give them an index card and ask them to write down a real-world application for what they have just learned. Quickly identify how well students understand the possible applications of what they have learned.



Assessment Methods

• What methods would you use to assess the outcomes you created?

