Demystifying Data Decisions and Assessment Technique Overview

April 22, 2014
University of California
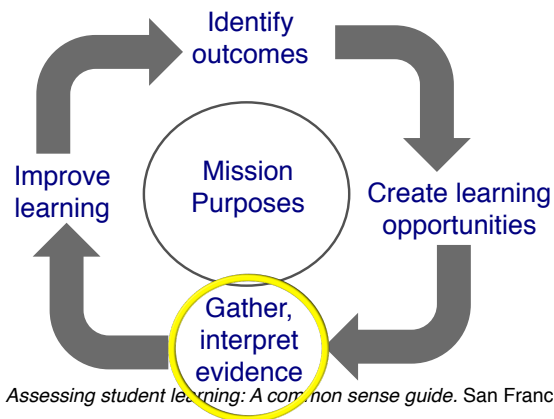**Santa Barbara**
Division of Student Affairs

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Outcomes

- Articulate the key issues related to data decisions

- Identify and describe various assessment techniques

- Evaluate and apply techniques to department issues/questions

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Assessment Cycle

Identify outcomes

Mission Purposes

Create learning opportunities

Improve learning

Gather, interpret evidence

Suskie, L. (2009). *Assessing student learning: A common sense guide.* San Francisco: Jossey-Bass.

Data Decisions

- Don't let the tail wag the dog

- Data collection shouldn't determine assessment

- Assessment should determine data collection

Questions

Assessment Techniques

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

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

Ratings of Skills

- Teacher/advisor/supervisor rates skills of student

- Could be part of formal evaluation process

- Helpful to have criteria for ratings

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

Narrative/Journaling

- 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
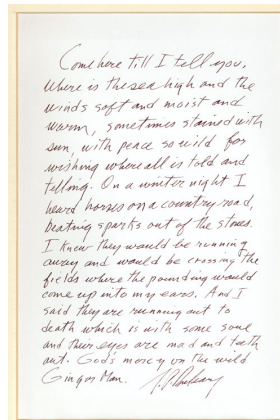
Portfolio

- 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/other students
- Can serve as an archive

Word Cloud

◻ Identify themes in text

Visual Collection

◻ Captures images as the data to analyze

◻ Provides great detail

◻ May be easy to alter images

◻ Limited number of perspectives

Visual Collection

What represents "community" on campus?

Tracking

◻ Simply tracking individuals served/affected

◻ Important to gather data in detailed way for future analysis

◻ Helpful to have an ID number to connect to other institutional databases

◻ Need a systematic electronic format

Surveys

◘ Can be paper or electronic

◘ Used to collect data from many people quickly and easily

◘ Limited resources needed

◘ Unfortunately, this the default

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

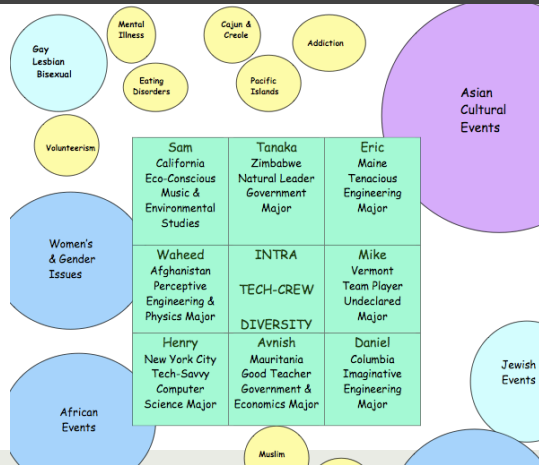◘ Can be time consuming to collect and analyze data

Concept Maps

◘ Used to demonstrate relationships and connections

◘ Can demonstrate critical thinking skills

◘ Allows user to be creative
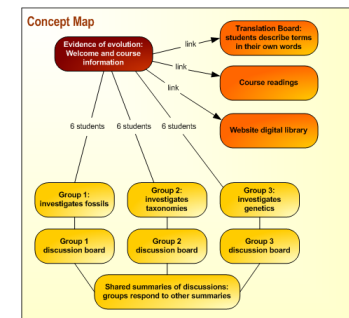
Concept Maps

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

Stevens, D. D. & Levi, A. J. (2005). *Introduction to rubrics: An assessment tool to save grading time, convey effective feedback, and promote student learning.* Sterling, VA: Stylus.

AAC&U VALUE
Critical Thinking Rubric

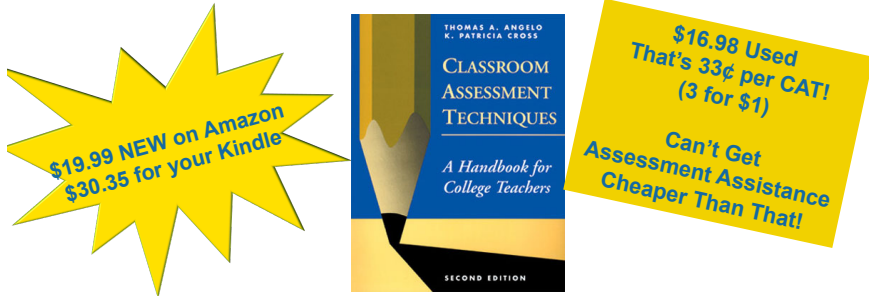|	4	3	2	1
Explanation of issues	Problem/issue relevant to situation in context is clearly stated	Problem/issue relevant to situation is stated and partially described	Problem/issue relevant to situation is stated	Problem/issue relevant to a different situation identified
Evidence	An appropriate (for assignment) variety of reputable sources are selected and used.	An adequate (for assignment) variety of reputable sources are selected and used.	Limited reputable sources are selected and used.	Questionable sources are selected and used.
Influence of context and assumptions	Recognizes significant implications of context and assumptions in developing and presenting a well qualified position.	Responds to some implications of context and assumptions in developing and presenting a qualified position.	Shows emerging awareness of context and assumptions in presenting a position.	Presents position without consideration of assumptions or context.
Own perspective, hypothesis, or position	Student's perspective is multifaceted and exhibits complex and appropriate consideration of other perspectives.	Student's perspective is rational and considered in light of other perspectives.	Student's perspective is clear and an alternative is recognized.	Only student's perspective is apparent.
Conclusions, implications and consequences	A comprehensive conclusion synthesizes sources and has a nuanced consideration of implications and consequences.	Conclusions are integrated from sources with consideration of implications and consequences.	Conclusions acknowledge sources with limited consideration of implications and consequences.	Conclusion is emerging with scant attention to implications and consequences.

Scoring Rubric
(based on AAC&U VALUE teamwork rubric)

Task Description:		
	Highest Level	*Comments*
Contributes to team meetings	Contributions to team meetings have exceptional positive impact.	
Facilitates the contributions of team members	Actively engages all (or nearly all) team members in ways that facilitate their contributions.	
Displays necessary work ethic	Goes above and beyond the call. Completes own assignments in a superior manner, while also assisting team in completing other tasks that contribute to team success.	
Fosters constructive team climate	Treats members respectfully and successfully fosters constructive team climate by saying or doing things which make others feel valued in the group and able to contribute.	
Response to conflict	Addresses conflict directly and constructively, helping to resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	

CAT Overview

- Angelo, T. A., & Cross, K., P. (1993). *Classroom assessment techniques (2nd Edition)*. San Francisco: Jossey-Bass.

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K. PATRICIA CROSS

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That's 33¢ per CAT!
(3 for $1)

Can't Get Assessment Assistance Cheaper Than That!

Focused Listing

- Assesses prior knowledge, recall, and understanding.

- This CAT focuses students' attention on a single important term, name, or concept from a particular lesson or class section and directs them to list several ideas that are closely related to that "focus point."

- Helps educator determine the most effective starting point for an activity.

- Examples?

Empty Outlines

- Assesses prior knowledge, recall, and understanding.

- The instructor provides students with an empty or partially completed outline or an in-class presentation or assignment and gives students limited time to fill in the blank spaces.

- Helps instructor know how well students grasped main points.

- Examples?

Minute Paper

- Assesses prior knowledge, recall, and understanding.

- At the end of an activity students are asked to respond briefly to some 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.

- Examples?

Muddiest Point

- Assesses prior knowledge, recall, and understanding.

- The technique consists of asking students to jot down a quick response to one questions: "What is the muddiest point in _____?" The focus of the Muddiest Point assessment might be any activity.

- Provides information on what students find least clear or most confusing about a an activity or interaction.

- Examples?

One Sentence Summary

- Assesses synthesis and creative thinking.

- This simple technique challenges 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.

- Enables educators to find out how concisely, completely, and creatively, students can summarize a large amount of information.

- Examples?

Documented Problem Solutions

- Assesses problem solving.

- This technique prompts students to keep track of the steps they take in solving a problem – to "show and tell" how they worked it out. By analyzing these detailed protocols – in which each solution step is briefly explained in writing – teachers can gain valuable information on their students' problem-solving skills.

- There are two main aims: 1) assess how students solve problems and 2) assess how well students understand and can describe their problem-solving methods.

- Examples?

Directed Paraphrasing

- Assesses application and performance.

- Directed paraphrasing is an assessment technique designed to assess and help develop the ability to translate highly specialized information into language that clients or customers understand. Students are directed to paraphrase part of a policy or practice for a specific audience and purpose, using their own words.

- Provides feedback on students' ability to summarize and restate important information or concepts in their own words.

- Examples?

Application Cards

- Assesses application and performance.

- After students have heard or read about an important principle, generalization, theory, or procedure, they receive an index card and are asked to write down at least one possible, real-world application for what they have just learned.

- You can know quickly how well students understand the possible applications of what they have learned.

- Examples?

Questions

- Questions or comments?

Conclusion

"That's all Folks!"