Assessment Technique Overview

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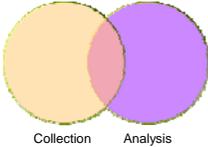

Session Outcomes

- Articulate various assessment techniques
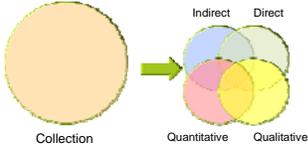- Evaluate and apply techniques to department issues/questions

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Paradox

- Overlap of
  - Collection, analysis, both
  - Quantitative, qualitative, both
  - Direct, indirect, both

Collection   Analysis

Paradox

- Overlap of
  - Collection, analysis, both
  - Quantitative, qualitative, both
  - Direct, indirect, both

Indirect   Direct

Collection   Quantitative   Qualitative

Collection Techniques

1. Testing instruments
2. Quasi-experiments
3. Ratings of skills by advisor
4. Capstone/culminating experiences
5. Observation
6. Narrative/journaling
7. Portfolio
8. Visual collection
9. Tracking
10. Checklists
11. Surveys
12. Interviews
13. Focus groups

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 by Advisor

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

Capstone/Culminating Activity

- Allows student opportunity to apply and demonstrate knowledge and skills from a variety of learning experiences
- May be as part of a course
- May not necessarily be planned event

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
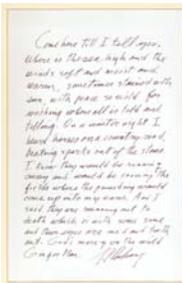
Portfolio

- 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

Visual Collection

- ◘ Captures images as the data to analyze
- ◘ Provides great detail
- ◘ May be easy to alter images
- ◘ Limited number of perspectives

- ◘ Photo Journaling
  http://www.usi.edu/depart/instir
  99%20reflex/index.htm

Visual Collection

"My favorite place to study is my dorm room although it is sometimes difficult to find a place on my desk for the computer so I just type on my bed. My second favorite place is Collis because I see people I know. This is followed by *Starbucks* because you can't beat a Caramel Frappuchino and free wi-fi."
  - Becky

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

Checklists

- ◘ Can be used by collector or collectee to identify actions or activities that have occurred or taken place

- ◘ Often incorporated into surveys

- ◘ Only indicate existence, not any judgment

Checklists

- ◘ Mark activities you attended during orientation:
  - ☐ Meeting with Dean
  - ☐ Meeting with Advisor
  - ☐ "Real Buzz"
  - ☐ "Consensual Sex is Hot"
  - ☐ "Experiences"
  - ☐ Casino Night
  - ☐ Alumni Dinner

Checklists

- ◘ Mark group leadership characteristics candidate demonstrated:
  - ☐ Listened to others
  - ☐ Summarized what was said
  - ☐ Tried to reconcile differing opinions
  - ☐ Resolved conflicts
  - ☐ Tried to build consensus
  - ☐ Helped group move forward

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
- Takes a great deal of time to 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

Analysis Techniques

1. Concept map
2. Quantitative analysis
3. Qualitative analysis
4. Content analysis
5. Rubrics

Quantitative Analysis

- Makes sense of the numbers
- Can be basic (counts) or sophisticated (hierarchical linear modeling)
- Faculty can be helpful

Qualitative Analysis

- Makes sense of the words and stories
- Can be basic (thematizing) or sophisticated (case ordered display meta-matrix)
- More process oriented than quantitative analysis

Content Analysis

- Used to pull themes from existing qualitative data
- Not difficult
- Can be time consuming to develop and hone codes and then perform analysis
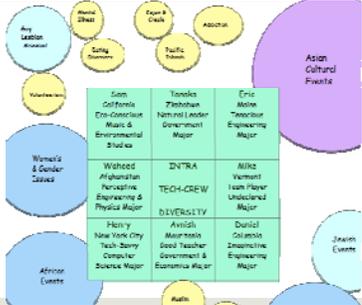- Can be quantified if neede

Concept Map

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

Concept Map

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.	

What's Missing?

- Collection methods
- Analysis methods

New Tools?

- Any new tools to add to your toolkit?
- Thinking about assessment projects you are already doing, which new data collection methods do you think might be useful?

Questions

- Questions or comments?

Application

- Which techniques would you use to answer this question:
  - Are our students changing their attitudes, skills, or knowledge (learning) as a result of interactions with me or my office?

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Application

- Which techniques would you use to answer this question:
  - How effective is my office in fulfilling its mission?

Application

- Which techniques would you use to answer this question:
  - What affects our students' ability to be academically successful?

Conclusion

"That's all Folks!"