

# Methods and Measurements

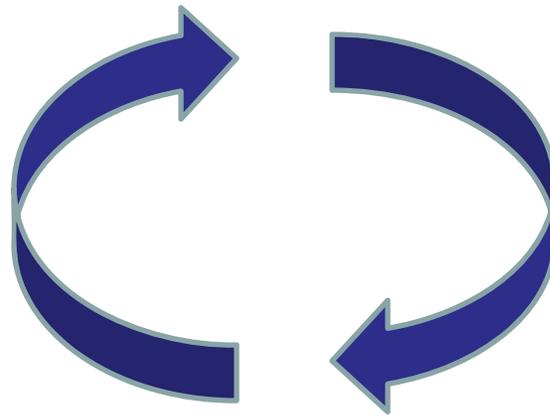
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# The Assessment Cycle

1) Develop or revise divisional, departmental, or program goals, objectives, and outcomes

2) Provide learning experiences (programs, services, activities, classes, etc.)



3) Determine outcomes assessment method(s)

4) Identify, develop, and administer measure(s)

6) Use results to inform decisions and practices; provide evidence for student learning

5) Review assessment results

“Method should respond to **question** and **context**.”

Assessment Reconsidered, 2008

## Choosing a method

1. What is your question?
2. What is your context?
3. What type of data do you need to answer the question?
4. What method will garner that data in that context?

## What type of data do you need?

### Quantitative

- Can generalize to greater population with larger samples
- Easier to report and analyze
- Less influenced by observer or inquirer bias
- Sometimes less time, money

### Qualitative

- Better quality
- More depth/robustness
- Ability to capture “elusive” evidence of student learning and development
- Specific sample

## What method should you use?

Interviews

Document analysis

Observation

Focus groups

Self-reports

Posters and presentations

Tests, exams, quizzes

Surveys – local or

commercial

Reflection

Pre/Post test

Portfolios

Written papers & projects

Peer evaluations

Quasi-experiments

## What to keep in mind

- Comprehensiveness
- More than one source or judgment
- Cultural sensitivity

## Direct vs. Indirect

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

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

## Direct vs. Indirect

**INDIRECT:** Please rate your level of agreement with the following....

*I know where to go on campus if I have questions about which courses to register for in the fall.*

Strongly agree

Somewhat agree

Somewhat disagree

Strongly disagree

**DIRECT:** *Where on campus would you go or who would you consult with if you had questions about which courses to register for the fall?*

## Select a method

Interviews

Document analysis

Observation

Focus groups

Self-reports

Posters and presentations

Tests, exams, quizzes

Surveys – local or

commercial

Reflection

Pre/Post test

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Written papers & projects

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Quasi-experiments

## Measurement “Tools”

### Rubrics

Document review

Journals

Portfolios

Observation

Self-evaluations

Peer evaluations

### Questions

Surveys

Test/quizzes

Interviews

Focus groups

# Measurement Tool: Questions

## Questions can be used for...

Interviews

Document analysis

Observation

Focus groups

Self-reports

Posters and presentations

Tests, exams, quizzes

Surveys – local or

commercial

Reflection

Pre/Post test

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## What makes for a ‘good’ question?

- Clearly understood
- Short (both the question and the answer choices)
- Asking only one question per question
- Make all definitions, assumptions, and qualifiers clear
- Avoid making significant memory demands
- Avoid asking for very precise responses, as well as very broad generalizations
- Avoid biased, loaded, leading questions
- Avoid questions that people are uncomfortable answering honestly
- Let people admit they don’t know or can’t remember

## Surveys

- **Self report of anything, including:**
  - Perception/Opinion (How satisfied were you....)
  - Actions (How many times did you speak with an advisor?)
  - Observation (Do you think ESU is a welcome place for international students?)
- **Tests/Quizzes**
  - Direct measurement of learning
- **Pre/Post**
  - Isolate time period to interaction for confidence

## Example: Resident Assistants

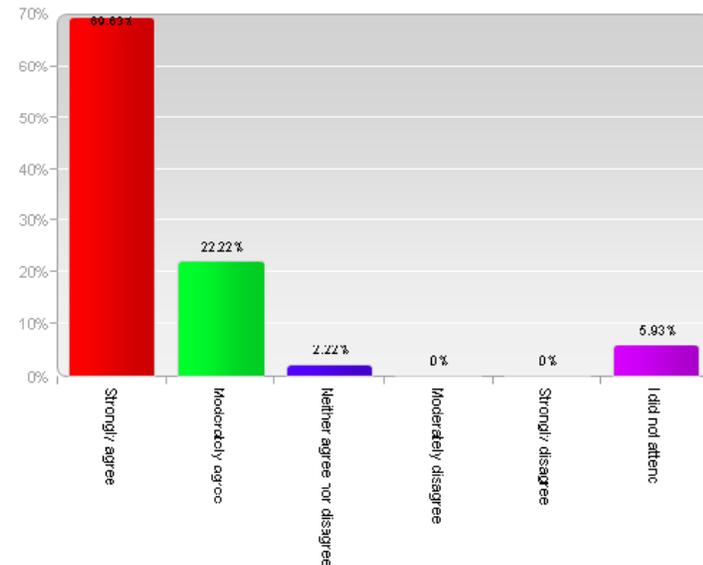
**RA Training Evaluation:** integrates indirect and direct measures of learning

**RA Performance Evaluation:** existing satisfaction survey completed by residents was edited to include learning outcomes assessment

Open-ended responses/essays give students the opportunity to provide information with depth

All results shared with RDs and used to inform supervision and training

Q14. Please indicate your level of agreement with the following statement about the Behind Closed Doors I RA Training on Saturday, August 23: - I can evaluate and select an appropriate response to situations that I may encounter as an RA.



Q16. Based on what you learned in the Behind Closed Doors I session, list three resources that are available to you to assist with responding to emergencies.

## Example: Diversity Retreat

Pre and post survey administered before and after retreat so learning can be “isolated” to retreat time period

Includes self-report of learning, and essays

*I challenge and confront negative stereotypes.*

*I can express myself effectively in a diverse group.*

*I understand my identity and culture and the impact it has on my relationships with others.*

*How do you plan to continue learning about inclusive leadership and communication in a diverse world?*

*How will you behave differently as a result of your experience at the retreat?*

## Interviews or focus groups?

### Interviews

Appropriate for sensitive or private topic

Time consuming

More in depth

### Focus groups

Opportunity for discussion about topic

Difficult to schedule and ensure attendance

Faster and more efficient

Larger sample size

## Selecting participants

Based on:

- Demographics (representative of population, or targeted population)
- Experience and knowledge (ability to provide rich data)
- Convenience (who will show up?)

## Facilitating focus groups

1. Develop list of questions or topics
2. Identify and recruit the appropriate participants
3. Lead discussion and collect data (notetaking and recording)

### Staff:

- One facilitator, one notetaker

### Materials:

- Audio or video recorder (optional)

### Time:

- 1 – 2 hours

### Participants

- 6 – 10 per group

## Example: Wellness Website

Students spent 30 minutes in a computer lab on a wellness website the university was considering purchasing.

After the lab time, students completed a brief survey and then joined a focus group for the next 30 minutes.

- “What did you learn?”
- “How did you learn?” (videos, articles, interactive quizzes)

Discussion was taped and the wellness committee reviewed it to identify if key areas of learning outcomes were met in this initial experience, and if any unintended learning was achieved.

## Facilitating interviews

1. Develop list of questions or topics
2. Identify and recruit the appropriate participants
3. Facilitate interview and collect data (recording)
4. Take notes after listening to recording

### Staff:

- One facilitator

### Materials:

- Audio or video recorder (preferred to taking notes in session)

### Time:

- 30 – 60 minutes

### Participants

- 1 per interview

# Analyzing qualitative responses

## After data collection:

1. Frame the discussion
2. Review the data (tapes, written documents, notes)
3. Take One: Identify categories or themes
4. Discuss themes that have been identified
5. Take Two: Categorize data into themes; Refine themes
6. Measure the frequency of theme iteration

# Measurement Tool: Rubric

## Rubrics are used for....

Interviews

Document analysis

Observation

Focus groups

Self-reports

Posters and presentations

Tests, exams, quizzes

Surveys – local or commercial

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## Data Collection Opportunities

- Students on an Alternative Spring Break blog or journal each day about their experiences.
- College 101 students create a portfolio as part of their classwork.
- Students in a leadership workshop participate in a group exercise.
- Outdoor adventure club members take photos and video of their experience.
- A student attends a meeting with his academic advisor.
- RAs on your floor write a one-minute paper at the start of a staff meeting.
- Students attend a career fair.

## Measurement Tool: Rubric

A rubric is the guide used to score performance assessments in a reliable, fair, and valid manner and is generally composed of dimensions for judging student performance, a scale for rating performances on each dimension, and standards of excellence for specified performance levels.

A set of criteria specifying the characteristics of a learning outcome and the levels of achievement in each characteristic

Reasons to use a rubric:

- Provides consistency
- Gathers rich data

## Rubric Templates

	Beginning	Developing	Accomplished	Exemplary	Comments
Criteria	Specific description of behavior observed	Comments			

	Poor	Below average	Average	Good	Excellent
Criteria		Descriptive comments			

## Other performance scales to use

Frequency (general):

- Always, often, occasionally, rarely, never

Frequency (numeric within period):

- Never, once, twice, three times, four times...
- Never, 1 – 3 times, 4 – 6 times, 5 – 7 times,....

Extent to which performed:

- A great deal, considerably, moderately, slightly, not at all

## Rubric Examples

- <http://wsuctproject.wsu.edu/ctr.htm>
- <http://www.insightassessment.com/HCTSR.html>
- <http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm>
- <http://academic.scranton.edu/departments/assessment/ksom/>

## Using Rubrics

1. Identify the outcome
2. Determine how you will obtain evidence (document review or observation)
3. Develop the rubric tool
4. Define the performance indicators
5. Train evaluators on rubric use; provide opportunities for practice and feedback to maintain consistency
6. Have at least two people evaluate each sample
7. Discuss independent results to come to collaborative rating
8. Allow an opportunity for evaluators to include qualitative information (description or comments)

## Example: Leadership Portfolio

“Portfolios are a type of performance assessment in which students’ work is systematically collected and carefully reviewed for evidence of learning and development.” (Palomba & Banta, 1999, p. 131)

### Example: University of Alabama Leadership Office

- Designed to admit a cohort in their first year and the cohort would participate throughout their college career
- Developed a rubric based on *The Leadership Challenge* (Kouzes & Posner, 1995)

## Example: Leadership Portfolio

	Novice	Apprentice	Proficient	Distinguished
<b>Challenge the Process</b>	<ul style="list-style-type: none"> <li>• Did not seek leadership opportunities</li> <li>• Opportunities provided little to no challenge, growth, change, innovation, and/or improvement</li> <li>• Did not demonstrate willingness to take risk</li> <li>• Avoids being different, failure</li> </ul>	<ul style="list-style-type: none"> <li>• Responded to leadership opportunities presented to them</li> <li>• Opportunities provided minimal challenge, growth, change, innovation, and/or improvement</li> <li>• Demonstrates understanding of risk taking</li> <li>• Does not successfully face and manage fear (of being different, failure)</li> </ul>	<ul style="list-style-type: none"> <li>• Sought leadership opportunities</li> <li>• Leadership opportunities provided some challenge, growth, change, innovation, and/or improvement</li> <li>• Demonstrates willingness to take some risks</li> <li>• Faces and manages the fears (of being different, failure)</li> </ul>	<ul style="list-style-type: none"> <li>• Actively sought specific leadership opportunities</li> <li>• Leadership opportunities provided challenge, growth, change, innovation, and/or improvement</li> <li>• Demonstrates willingness to take risk</li> <li>• Successfully faces and manages the fears (of being different, failure)</li> </ul>

Using Portfolios to Assess the Outcomes of a Leadership Program, presented June 13, 2008 at International Assessment & Retention Conference by Katie Busby, University of Alabama

## Spice up your assessment!

- Use cohorts
- Review photographs or other art forms
- Use existing assessments as jumping off points
- Turn informal assessment into formal assessment
  - Document anecdotal information
  - Consistently ask one question after each session, workshop, interaction with students
  - Incorporate informal assessment into your formal assessment reports and plans

## Upcoming Trainings

### **Survey Design and Questionnaire Writing Guidelines**

Tuesday, March 17, 2:00 – 3:00 pm Eastern

### **Reporting Assessment Results**

Thursday, March 26, 2:00 – 3:00 pm Eastern

Monday, April 20, 2:00 – 3:00 pm Eastern

[www.studentvoice.com/training](http://www.studentvoice.com/training)

# Questions?

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