

# Showing “the Elephant” the Door: Using Assessment Results

## Presenters

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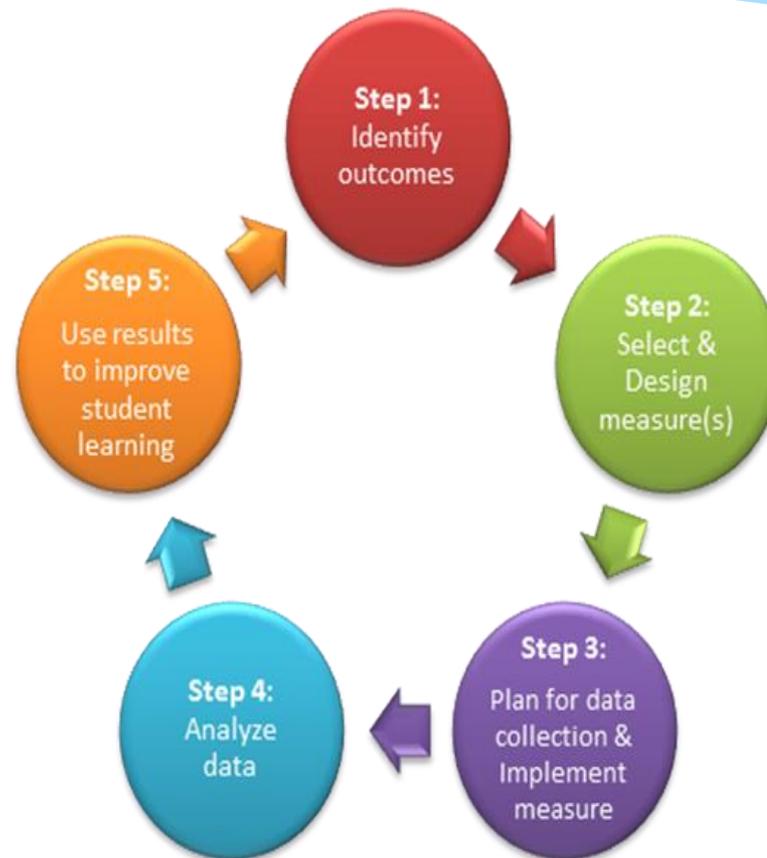
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# Learning Outcomes

**Following today's session, participants will be able to:**

- \* Identify methods of data collection
- \* Ask essential questions to solicit analysis of results
- \* Identify strategies to improve teaching and learning
- \* Interpret assessment data in a collaborative environment

# MDC's Assessment Process



# Data Collection

**\* Prior to data collection, information gathering questions are essential:**

1. Who will be assessed and what is the sample size?
2. Who will collect the data?
3. When will the measures be administered?
4. How will faculty/staff collect data?
5. Where and how will the data be stored?
6. What do faculty/staff plan to do with results?

# Methods of Data Collection

## Direct Measures

- \* Presentations
- \* Portfolios
- \* Capstone Projects
- \* Capstone Papers
- \* Test questions
- \* Writing artifacts

## Indirect Measures

- \* Surveys
- \* Interviews
- \* Focus Groups
- \* Analysis of grades
- \* Analysis of transcripts
- \* Job placement

# Analysis Difficulties

## **Units need to be aware of typical problems:**

1. “Perfect Data” Fallacy: Since most assessment methods are limited, this fallacy forms a solid basis of opposition.
2. “Single Indicator” Fallacy: There is a belief that a single approach exists that can answer all questions.
3. “Face Validity” Problem: This occurs when assessment results are communicated to and used by nontechnical stakeholders. Results must be valid and appear valid.
4. Power of Negative Evidence: Programs fear the impact of negative findings, but findings can induce positive action.

# Purpose of Assessment Results

- \* Assign grades and give feedback to students
- \* Improve what is being done:
  - Curricula
  - Teaching
  - Support programs and infrastructure
- \* Make sure quality is not slipping
- \* Share the story of success to key stakeholders (accountability)

# Questions for Analysis

## Questions that frame how to analyze and summarize assessment results:

- \* Why was the assessment conducted?
- \* Who is the audience for the results?
- \* What are the audience's needs?

# Using Direct Measure Results

## \* Use of data from a direct measure will answer:

1. What does the student know versus what the unit intends the student to know? (Cognitive)
2. What can the student do versus what the unit expects the student to be able to do? (Skills)
3. What does the student care about versus what the unit intends the student to care about? (Affective)

# Using Indirect Measure Results

## \* Use of data from an indirect measure will answer:

1. What does the student report she knows versus what the unit thought the student's perception would be? (Cognitive)
2. What does the student report that he can do versus what the unit intended for the student to be able to do? (Skills)
3. How does the student respond to questions dealing with unit impact on the student's values versus how the unit intended to impact the student's values? (Affective)

# Summarizing Results

## **Common Ways to Summarize Results:**

- \* Tallies— count how many students earned each rating or chose each option
- \* Percentages— easier to understand than raw numbers
- \* Aggregates— summarize results in overall scores
- \* Averages— summarize the central tendency

## **Common Ways to Display Results:**

- \* Tables can summarize tallies succinctly
- \* Line graphs can summarize ordered or scaled results
- \* Bar graphs can summarize virtually any type of assessment results

# Closing the Loop

## **Based on the results, programs may:**

- \* Address gaps in curriculum
- \* Vary teaching strategies and methods
- \* Review course(s) learning outcomes
- \* Increase student exposure in the area addressed in the outcome
- \* Revise components of the assessment process
- \* Offer professional development and training

# Recap

## **Analysis and Use of Assessment Results Should:**

- \* Indicate how the unit will use what it has learned about the assessment process or the learning outcome of interest
- \* Provide a timetable for implementing changes and then following up to see if the change had the intended effect
- \* Describe why the changes will lead to improvements in student learning or the assessment process
- \* Describe the unit's focus for the next assessment cycle

# Scenario Questions

1. What are the major conclusions you would draw about the students' skills (writing #1 and presentation #2)
  1. Scenario 3: What do results say about how well students achieve each of the PLOs?
2. Do the results indicate any strengths; if so, what are the strengths?
3. What concerns, if any, are raised by the results?
4. What are some recommendations for using these results to improve learning?

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