# Now What? Using Assessment Results to Improve Practice



Sarah Hansen,
Director of Assessment, VPSS
Suzanne Fox,
Graduate Assistant

### **Outline**

- Analyzing data
  - Qualitative data
  - Quantitative data
  - Making sense of data
- Communicating results
  - Target audience(s)
  - Formats
  - Combining qualitative and quantitative data
- Improving practice
  - Lessons from *Good to Great* (Collins, 2001)
  - Creating an assessment cycle



# At the end of the workshop, you will be able to...

- Describe the process of analyzing qualitative and quantitative data
- Explain the importance of "storytelling" when reporting assessment results
- Identify strategies for using assessment results to improve practice
- Name the key elements of assessment cycles

# **Analyzing Data**

## **Examples of data**

- Responses to a survey that asks students to rate their level of agreement (1=Strongly Disagree, 5=Strongly Agree) with the following statement: *I have confidence in my ability to develop relationships with others who are different from me*.
- Responses to a survey that asks students to define leadership in their own words.

### **Examples of data**

• A pile of rubrics that rate students ability to state two barriers to physical activity after a fitness consultation

	Does not meet	Meets	
Student can state two barriers to physical activity	Cannot state two barriers to physical activity	Can state two barriers to physical activity	

• Notes and recordings from a focus group in which students responded to the following question: Based on your experience as an official, what do you consider to be the key components of effective communication?

# Approach to analysis depends on the nature of the data

- Qualitative data
  - Responses to a survey that asks students to define leadership in their own words.
  - Notes and recordings from a focus group in which students responded to the following question...
- Quantitative data
  - Responses to a survey that asks students to rate their level of agreement (1=Strongly Disagree, 5=Strongly Agree) with the following statement...
  - A pile of rubrics that rate students on their understanding of the importance of physical activity

# Qualitative data analysis

- The process:
  - Organize the data
  - Give the data a "onceover," noting initial impressions
  - Categorize the data
    - You can (a) determine the categories ahead of time, (b) allow the categories to emerge from the data, or (c) do both
    - You may end up with "categories of categories" (i.e., categories and subcategories)
    - This is an iterative process

# Qualitative data analysis

- The process (continued):
  - Determine the relative significance of each category by counting the number of times it occurs
  - Note responses that do not fit into the categories
  - Find compelling quotes to include in your assessment report
  - Take a step back
    - What do the data tell you about your assessment question?
    - What are the limitations?
    - What are the implications? Does it lead you to make changes or confirm your approach (or both)?
    - What, if anything, will you change about the assessment process?

# Qualitative data analysis

• "Data analysis is the process of bringing order, structure, and meaning to the mass of collected data. It is a messy, ambiguous, time-consuming, creative, and fascinating process. It does not proceed in linear fashion; it is not neat. Qualitative data analysis is a search for general statements about relationships among categories of data" (Marshall & Rossman, 1999; as cited in Elkins, 2009).

# Quantitative data analysis

- The process:
  - Organize the data
  - Give the data a "onceover," noting initial impressions
  - Four analytic strategies:
    - **Description** (frequencies, percentages, mean, median, mode, range, standard deviation)
    - *Differences* (participants vs. non-participants; do certain participants do better than others?)
    - Change (pre/post )
    - *Expectations* (do students meet our expectations of learning/competency)

# Quantitative data analysis

- The process (continued):
  - Alone, neither measures of central tendency (e.g., mean, mode, median) nor measures of variability (e.g., range, standard deviation) tell the whole story
    - Consider:
      - o Group 1 scores: 190, 195, 199, 200, 200, 201, 205, 210
      - o Group 2 scores: 0, 10, 20, 200, 200, 380, 390, 400
      - Scores from Group 1 and Group 2 have the same central tendency but different variability
    - Just reporting the mean can be misleading. For example, average salary for State of Iowa employees is \$51,000. What role might Kirk Ferentz's salary play in this figure? Consider how having the median and mode might be more helpful.

# Quantitative data analysis

- The process (continued):
  - Conduct other *useful* calculations (e.g., sums, percentages)
  - Take a step back
    - What do the data tell you about your assessment question? (What?)
    - What are its implications for policy and/or practice? (So What?)
    - What, if anything, will you change about the program or process? (Now What?)
- Other considerations:
  - Use online survey design software (e.g., Websurveyor), Microsoft Excel, or SPSS to make calculations
  - For help with statistical analysis (e.g., statistical significance, confidence intervals, etc.) see Sarah or other statistics helper!

# **Communicating results**

# Determine your audience(s)

- Administrators
- Partners/collaborators
- Students:
  - Potential users/participants
  - Past users/participants
- Parents
- Funding sources
- Faculty members
- Referral sources

- Colleagues (don't assume that they already know!)
- Community members
- Others?



# Target communication to your audience(s)

- What information is most relevant to \_\_\_\_\_\_\_?
- What communication format might be most effective?





- In communicating to decision-makers, keep in mind...
  - Central nuggets
  - Focus on implications (the So What?)
  - They receive immense amounts of information
    - Bullets
    - Connect results to outcomes (goals)
    - Anticipate questions and provide answers

### **Communication format**

- Report
- Poster or flier
- Presentation
- Newsletter
- Student newspaper
- Website
- Others?

Flier from
University of
North Carolina,
Wilmington

# We've heard YOUT VOICE... and taken action.

### **CHANGE #1**

You said: "An internship is important to my career future"

We responded: The number of internship listings on SeaWork has doubled since last year.

### Thank You

for your feedback and time spent taking surveys about your UNCW experience.



# When possible, combine quantitative data with qualitative data

"...I came to see you over a year ago for smoking cessation help and I used Chantix to quit. I wanted to let you know that next Wednesday will be the one year anniversary of my quit date, and I have not smoked since then. One year free! I just wanted to thank you for your help again. It's a great feeling to have accomplished it!"

Students who participate in tobacco cessation consultations at Health Iowa have a 40% cessation rate.

### A couple of quotes...

"My job provided me with a sense of belonging. It gave me a place where I was needed, a place where I was accepted, and a place I was expected to be." --Student employee, Division of Student Services

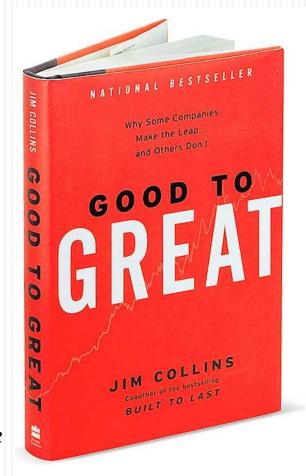
"Nobody ever marched on Washington because of a pie chart." -- Andy Goodman, Storytelling Expert

# The Power of Storytelling

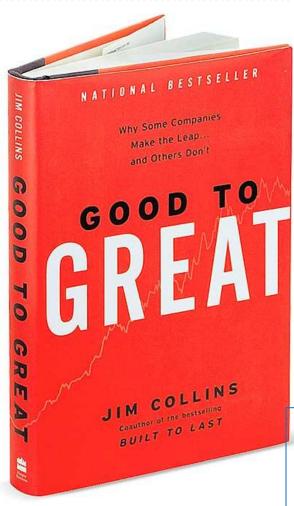
# Improving practice

### Lessons from Good to Great

- Collins (2001) compares companies that went from being good to being great with companies that failed to make the same leap
  - Relevant conclusions: good-togreat companies "confront the brutal facts," "have a culture of discipline," and were transformed through a *cumulative* process



# Creating "Great" learning experiences for our students



The "great" companies shared some common characteristics related to assessment:

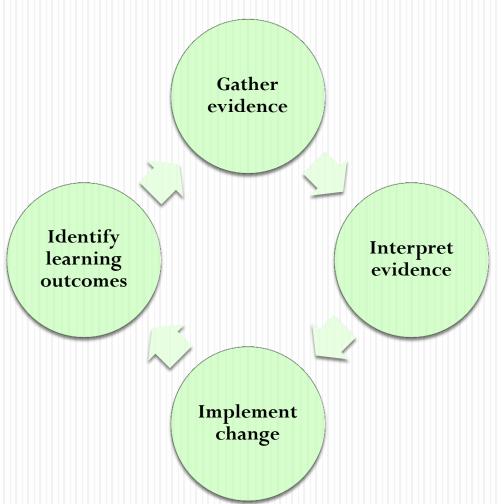
- A culture of disciplined thought and reflection
- Lack of resources did not mean lack of disciplined thought – it made rigor all the more important
- Looking at the "brutal facts":Autopsies without blame

"What matters is that you rigorously assemble evidence – quantitative or qualitative – to track your progress."

### Lessons from Good to Great

- Confront the brutal facts
  - Ask questions to gain understanding
  - Engage in dialogue and debate
  - Conduct autopsies without blame
- Foster a culture of discipline
  - "Once you know the right thing, do you have the discipline to do the right thing and, equally important, to stop doing the wrong thing?"
- Celebrate small successes
  - "The good-to-great transformations never happened in one fell swoop. There was no single defining action, no grand program, no one killer innovation, no solitary lucky break, no miracle moment."

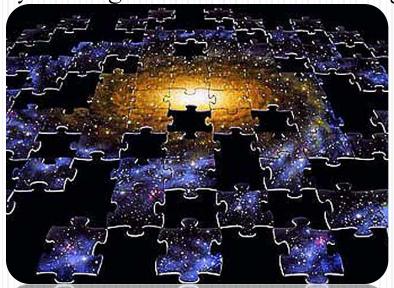
## Assessment – a cyclical process



After you implement change, the assessment process begins again, as you assess whether or not the changes you made had their intended effect

# Creating an assessment cycle – the big picture

- The purpose of an assessment cycle:
  - It is difficult to assess "everything, all the time" while everything is important, we are not in a position to act or make change on "everything, all the time"
  - An assessment cycle can help you determine what to assess and when, thereby making assessment more manageable



# Creating an assessment cycle – the big picture

- Elements of an assessment cycle:
  - Timeline be realistic
  - An organizing framework for determining what to assess and when
    - E.g., departmental learning outcomes, Undergraduate Learning Outcomes

Department Learning Outcome	Year(s) when outcome is assessed				
	1 <sup>st</sup>	$2^{\mathrm{nd}}$	3 <sup>rd</sup>	4 <sup>th</sup>	Every year

### Take Home Points

- Small wins
- A confirmation is a finding, too
- No one knows your data better than you
- Focus on your central nuggets of findings and look for various ways to communicate this (numbers plus narrative)
- Be selfish Focus on using your data first (for improving practice), before communicating it to stakeholders
- Make decisions based on information vs. instinct
- Help is available!

# Questions?

