Now What?
Using Assessment Results to Improve Practice

Office of the Vice President
for Student Life
The University of Iowa

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:
      - Group 1 scores: 190, 195, 199, 200, 200, 201, 205, 210
      - 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

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…

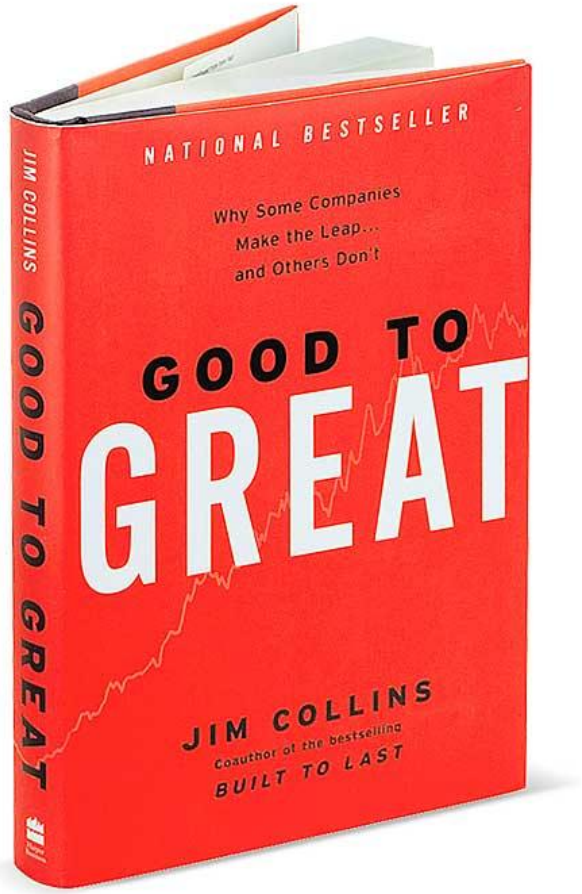
" My job provided me with a sense of belonging.
It gave me a place where I was needed,
a place where I was accepted,
and a place I was expected to be."
--Student employee, Division of Student Services

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

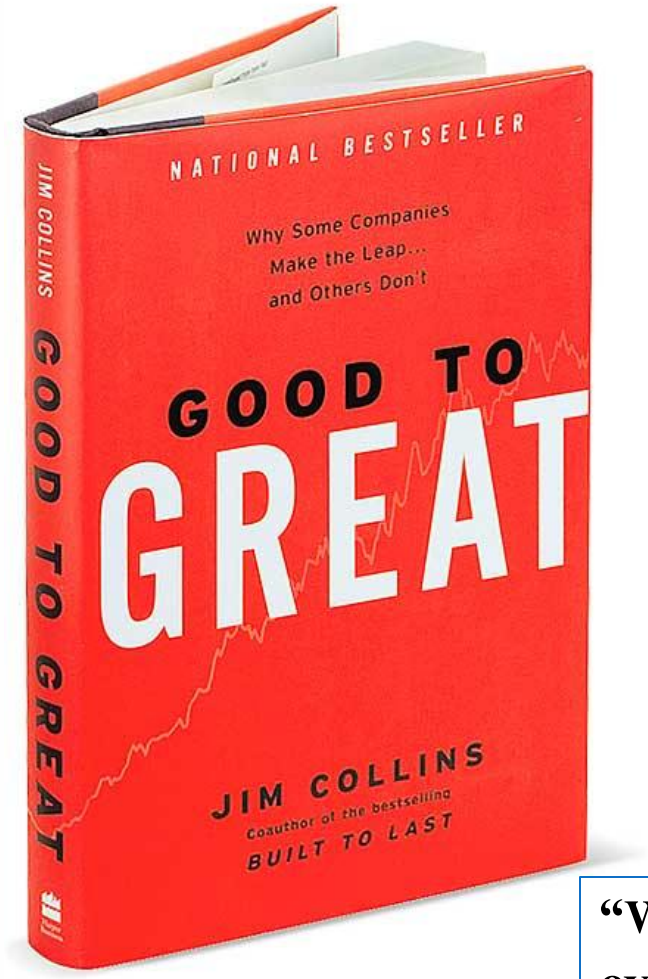
Improving practice

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-to-great 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:

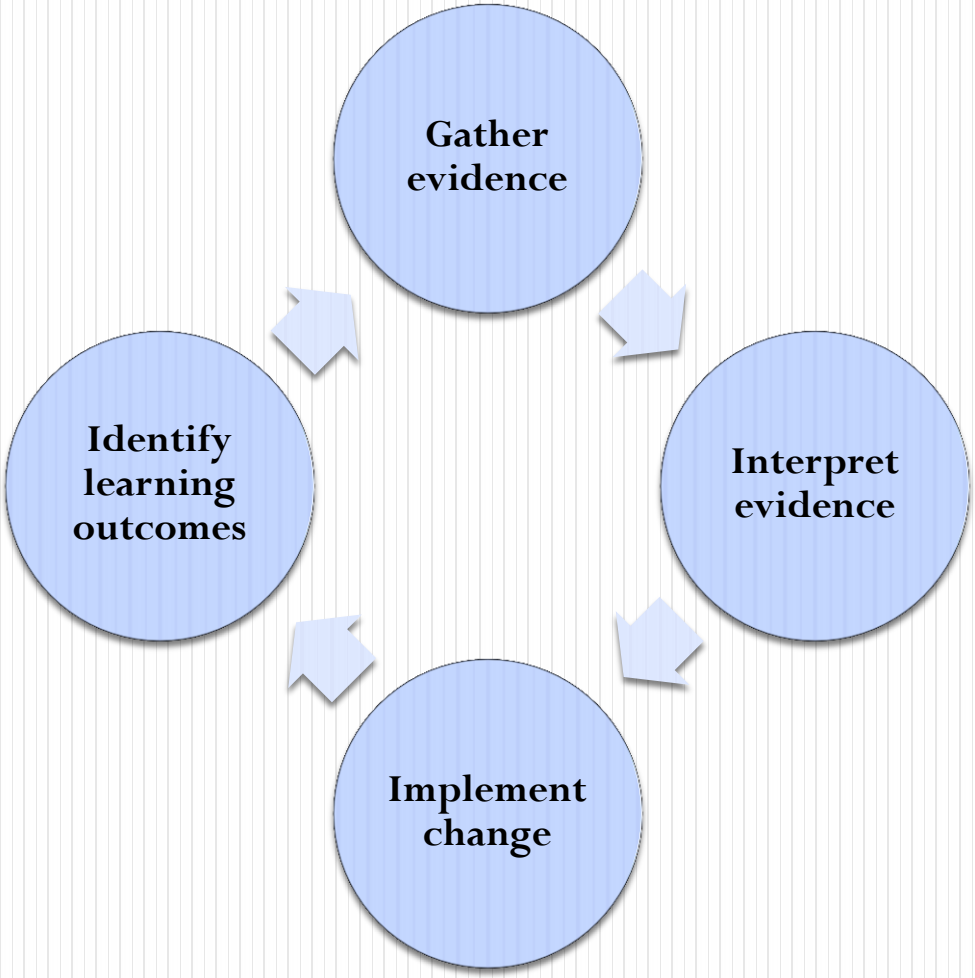
- A culture of disciplined thought and reflection
- Lack of resources did not mean lack of disciplined thought – it made rigor all the more important
- Looking at the "brutal facts": Autopsies without blame

"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."*

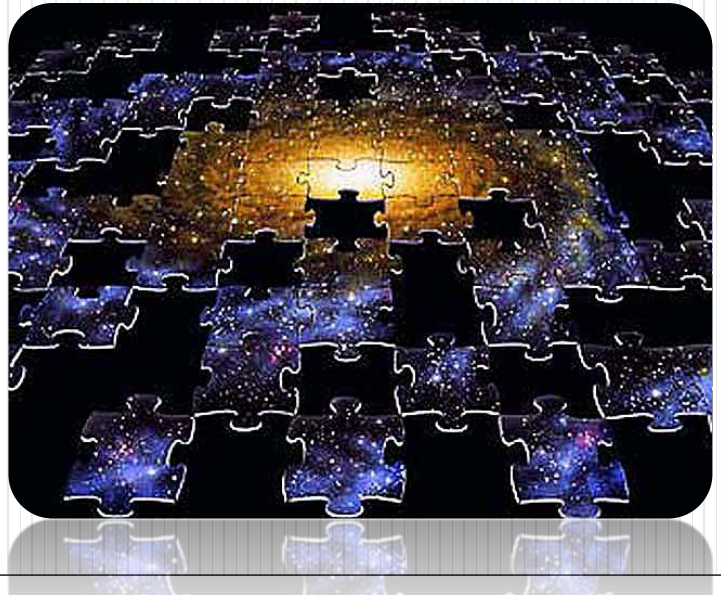
Assessment – a cyclical process



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				
	1st	2nd	3rd	4th	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?