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

<table>
<thead>
<tr>
<th>Student can state two barriers to physical activity</th>
<th>Does not meet</th>
<th>Meets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student can state two barriers to physical activity</td>
<td>Cannot state two barriers to physical activity</td>
<td>Can state two barriers to physical activity</td>
</tr>
</tbody>
</table>

- 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
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

<table>
<thead>
<tr>
<th>Department Learning Outcome</th>
<th>Year(s) when outcome is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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?