

# Survey Success!

## Designing Surveys

ACPA Assessment Conference  
Charlotte, NC



Kim Yousey-Elsener, Ph.D.  
Associate Director, Assessment Programs  
StudentVoice

[kyouseyelsener@studentvoice.com](mailto:kyouseyelsener@studentvoice.com)

Special Thanks to: Peter Swerdzewski  
[pswerdz@me.com](mailto:pswerdz@me.com)

## Strengths and Challenges:

### Strengths

Allows for collecting lots of data relatively quickly and easily

Data analysis is simple for most assessments

Lots of tools to assist in survey design and administration

Administration doesn't require a lot of resources

### Challenges

Students are HIGHLY surveyed

Response rates are becoming a huge issue on campus

Non-responsive answers (you can't follow up, if you don't get the answers you need)

Limited in the types of questions you can ask

Skills sets needed for higher level analysis

## Creating Surveys = *Common Sense*

By the end of this session, you will understand:

- (1) how to prepare to create a survey
- (2) how to write effective survey items
- (3) how to pull the items together into a comprehensive product.
- (4) Recognize common survey pitfalls.





# Steps in Creating a Survey

Step 1: Use survey objectives to create a survey blueprint for specification of the survey

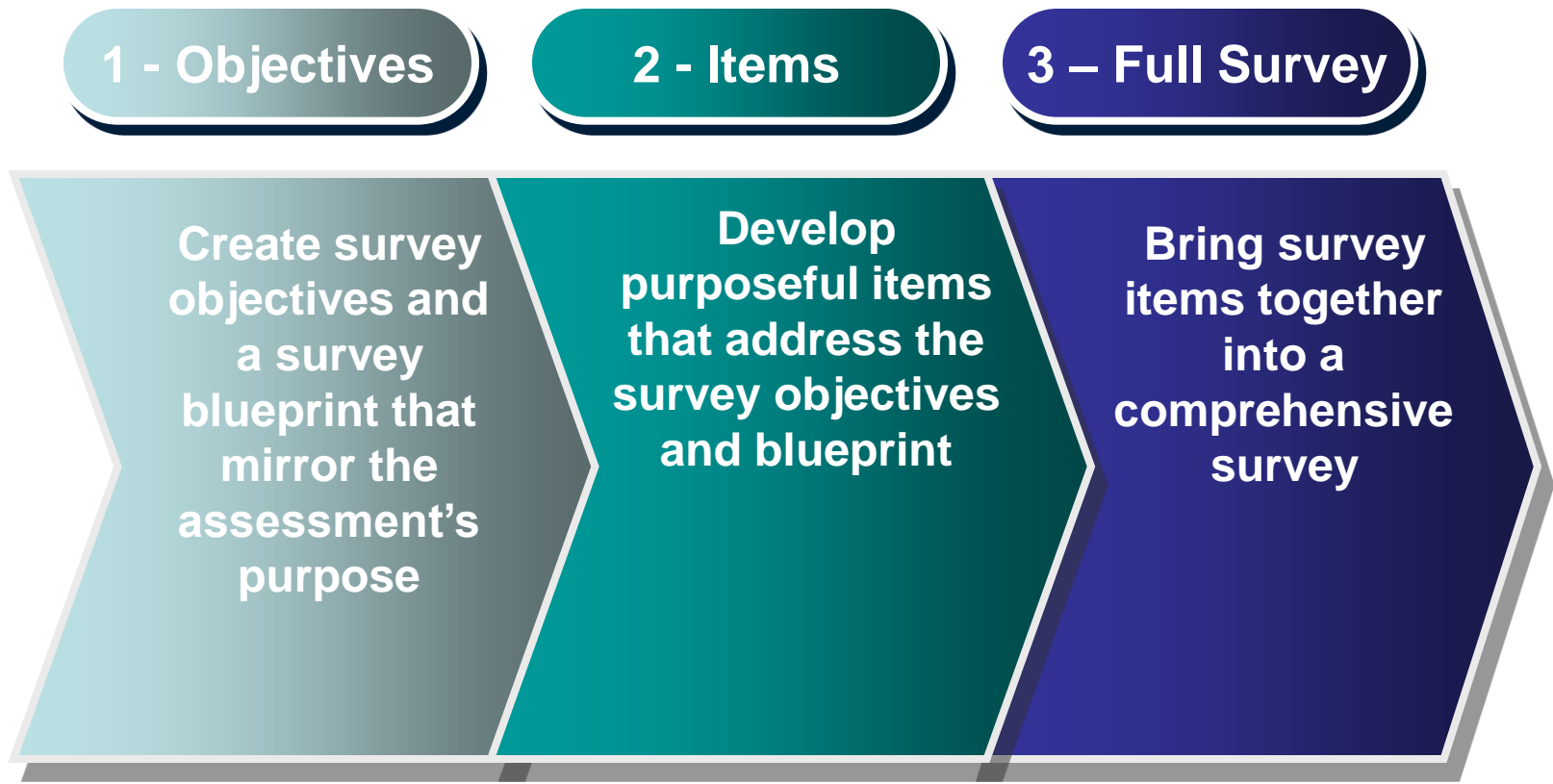
Step 2: Write survey items

Step 3: Pull the items together into a comprehensive survey

Step 4: Pilot the Survey and make needed changes

Step 5: Administer the Survey

# The Survey Process



# Survey Objectives

Lead the assessment process

- Clear goals/objectives make it easier to create instruments, analyze data, and report results

Communicate the intentions of the assessment to future students, administrators, parents

Serve as guides for planning future assessments or recreation at a later date

# A Framework For Survey Objectives



Start with your learning objective or project goal:

- Enjoy the program → **Satisfaction**
- Learn something from the program → **Learning**
- Behave differently because of the program → **Behavior**
- Believe his or her time/money/energy was well-spent → **Return on Investment**
- Change values → **attitude, beliefs, etc.**

## Survey Blueprint

A **survey blueprint** is a table that lists each objective according to how important it is or how much time is spent covering that objective





## Developing a Survey Blueprint

List objectives in a table

Choose number of total survey items (e.g.,  
determine the survey length)

Designate number of items per objective

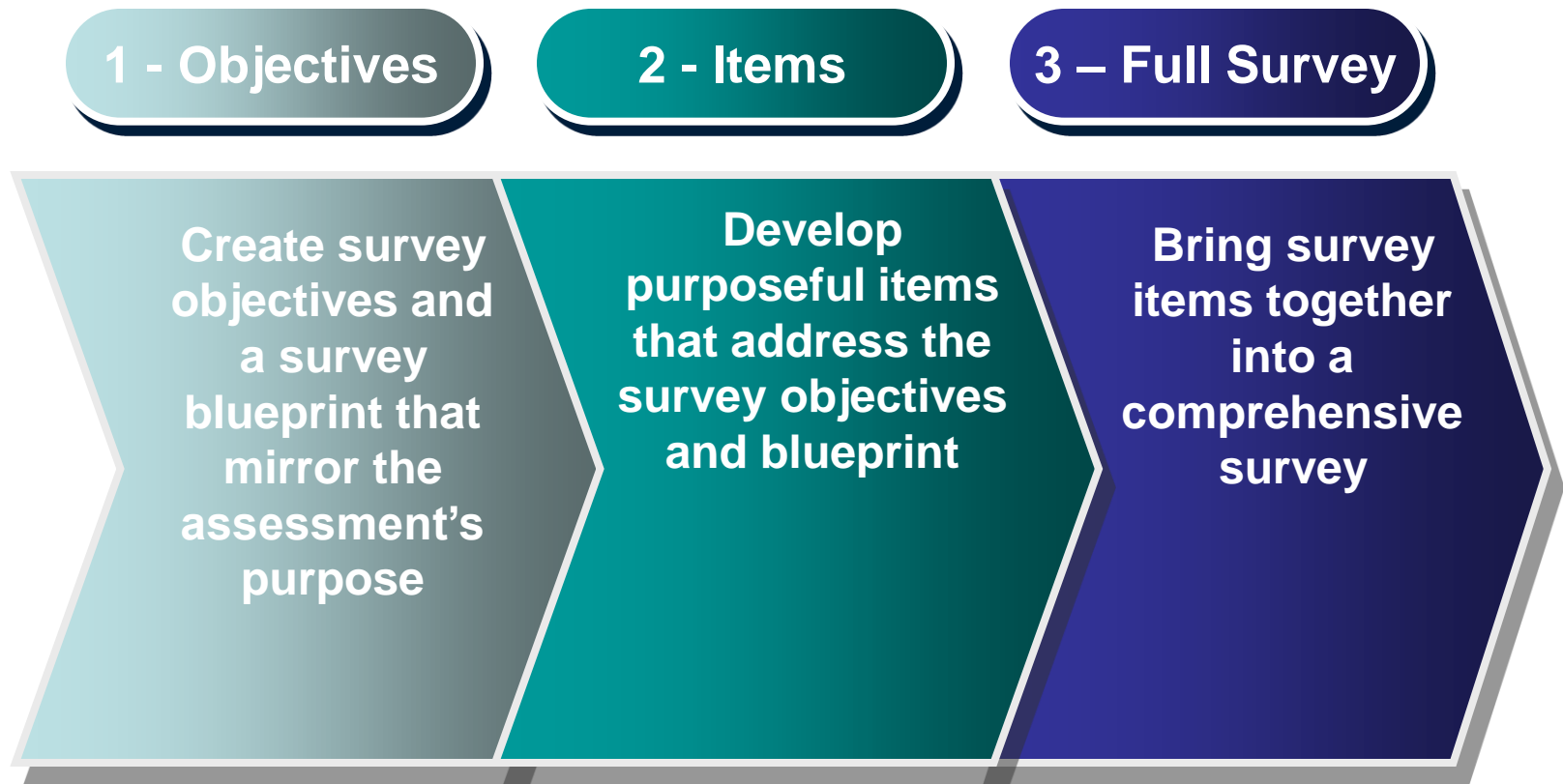
- Consider proportion of total survey
- Base on importance of objectives
- Should relate to amount resources that would be allocated based on the responses

# Survey Objectives

## Sample Blueprint: Leadership Training

Priority	%	Aspect
1	55%	Identify what students already know about leadership techniques so the program can address new content
2	35%	Determine ways in which students say they can best benefit from the target material
3	10%	Learn what students would want to get out of a leadership training program

# The Survey Process



## Items: The “Big Idea”

- Focus on information you need to find out
- Avoid: trivial questions, ones you cannot act upon, ones you do not want to know the answer to
- Each questions should tie into objectives.
- You want to be sure that the items you create are measuring your survey objective, and NOT students' biases, motivation, reading ability, or other factors
- Link verb used with objective with type of question
- To assess *future behavior*, try couching questions in scenarios or past situations



## Types: Multiple Choice

- Yes/No
- Single response
- Multiple response (e.g., Check all that apply, Select 3)
- Ranking



# Types: Multiple Choice

Multiple choice items can have a **stem**, **options**, **correct answer**, and **distractors**

The main offices of the Student Resource Center are located in this building: **(stem)**

O  
p  
t  
i  
o  
n  
s

- a. The Silver Center **(distractor)**
- b. The Palladium **(distractor)**
- c. Bobst Library **(distractor)**
- d. **The Kimmel Center (correct answer)**

## Types: Scale Items

- Rating scales that measure attitudes, behaviors, and beliefs (Rosenthal, 2006)
- Use at least four-five options (you can always combine responses later)
- Describe each option with words whenever possible
- Use a middle option when appropriate
- If you think there will be a “ceiling” or “floor” effect, use more options



## Response Scales

### Frequency:

Always → Never

Daily, Weekly, Monthly, Once a Sem., Once a yr., Never

More than 5 times, 4-5 times, 2-3 times, 1 time, less than 1, never

### Likelihood:

Definitely Like Me → Not at all Like Me

Always True of Me → Never True of Me

### Proficiency:

Excellent → Extremely Poor

### Importance:

Very Important → Unimportant

### Agreement:

Completely Agree → Completely Disagree

### Amount (good for confidence questions):

All → None

### Ease:

Very Easy → Very Difficult

### Quality:

Excellent, Good, Average, Below Avg., Poor





## Types: Open Ended Questions

Ask a limited number

Ask only when you absolutely need to (e.g. for objectives that ask to explain, apply, compare)

Place throughout survey, rather than all at end

Takes time to analyze

When possible, give choices with an “Other (please specify)” option

## Other Types:

Matching

Fill In the Blank

Matrix

Rating (better to ask for top 1-2 choices)

## Items: Basic Style and Format Tips



- Avoid excess words
- Use specific, appropriate vocabulary
- Avoid bias (age, ethnicity, gender, disabilities)
- Underline and bold negative or other important words
- See what is already created
- Have others review your items
- Proofread, proofread, proofread

## Items: Tips for Writing the Stem

- Each question should be meaningful to respondents
- Specific questions provide specific information
- Keep the stem as short as possible
- Place the main idea of the question in the stem, not the item options
- Don't provide clues to a response you're looking for (e.g., grammatical clues)
- Don't use negative stems too frequently
- Have one-part stems (aka don't ask two questions in one)

# Items: Tips for Writing Response Options

Develop as many effective options as possible, but three are sufficient (Rodriguez, 2005)

- Better to have fewer options than to write BAD options to meet some quota!

Keep options independent

Keep options similar (in format)

Use “all of the above” and “none of the above” sparingly!

Use “always” or “never” sparingly!

## Things to Avoid:

Socially desirable responding – based on social norms

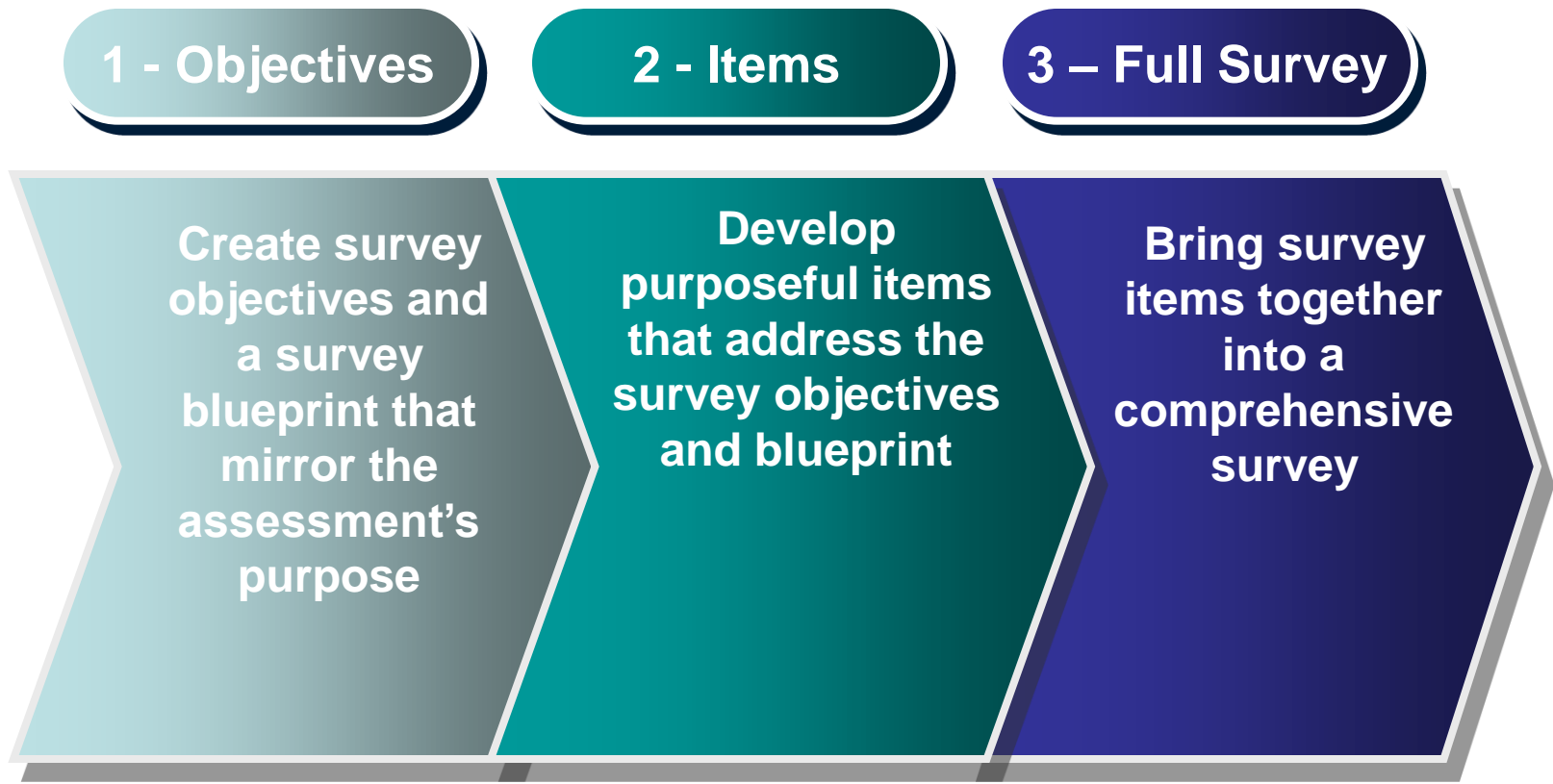
- Can never be eliminated
- Consider sensitive topics like race, drug and alcohol use, sexual activity, and other areas with clear social expectations

Leading questions – suggesting there is a correct answer

Double-barreled questions – asking more than one question

Double negatives – including negative phrasing which makes responding difficult

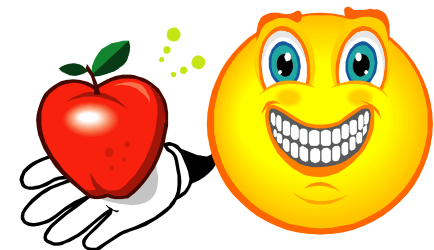
# The Survey Process



## Pulling it Together: Introduction

Include a written introduction with:

- Importance of the survey (why, who)
- How results will be used
- The confidentiality of responses (vs. anonymous)
- How long it will take to complete the survey
- Any incentives you are providing
- Who to contact with questions





## Pulling it all Together: Order

Use item order to get the most accurate responses possible

Start with “ease-in” items. Starting with tough/challenging items will increase the abandon rate

If long, put important items first

Keep a logical order: There is no advantage to having survey items totally randomized

Intersperse different item types – you don’t want all the open-ended items at the end

Whenever possible, leave demographic items until the end

## Pulling it all Together: Length

Keep it as short as possible

Use matrix to combine questions when possible

People tend to tune-out after 15 minutes; less for Web-based surveys.

Remember: You don't have to answer all your assessment questions at once. Consider saving some items for later.



# Pulling it all together: Piloting Items

Live piloting for time and clarity

Live piloting for review of content

Cognitive interviewing

For computer-based surveys: check for data integrity, and back-end formatting

**PILOT YOUR SURVEY.**

## Response Rates

- Survey response rates have been falling
  - Difficult to contact people
  - Refusals to participate increasing
- National survey response rates fell from about 60% in the 1960s to just above 20% in the 1980s
- Nonresponse may not be random
- 2 strategies for correcting low response rates:
  1. Weight the data for nonresponse
  2. Implement strategies to increase response rates

## Response Rate

- Potential of multiple surveys can reduce response rates
- Non-respondents cite time concerns as reason
- Effects of survey fatigue may be moderated by salience of survey content
- Number of previous surveys may have an impact on current survey response
- Survey fatigue may have biggest impact on surveys administered back-to-back
- Feeling of “I have done enough” (reciprocity)

## Techniques for Improving Response Rates

- Survey length
- Invitations & reminders
- Incentives
- Confidentiality statements



# Data Collection Methods

	Pros	Cons
<b>Web</b>	<ul style="list-style-type: none"> <li>• No data entry</li> <li>• Accuracy is excellent</li> <li>• Technology benefits (e.g., display rules, required questions)</li> <li>• Immediate results</li> <li>• Anonymous</li> </ul>	<ul style="list-style-type: none"> <li>• Audience is not usually captive</li> <li>• Possible misinterpretation (can't ask ?s)</li> <li>• Technology issues</li> <li>• Response sample unrepresentative</li> </ul>
<b>Mobile</b>	<ul style="list-style-type: none"> <li>• No data entry</li> <li>• Accuracy is good</li> <li>• Technology benefits (e.g., display rules, required questions)</li> <li>• Captive audience</li> <li>• Administrator is available for ?s</li> </ul>	<ul style="list-style-type: none"> <li>• Technology issues</li> <li>• Response sample unrepresentative</li> <li>• Limited formatting</li> <li>• Anonymity is questionable</li> </ul>
<b>Paper</b>	<ul style="list-style-type: none"> <li>• Captive audience</li> <li>• Administrator is available for ?s</li> <li>• No technology issues</li> </ul>	<ul style="list-style-type: none"> <li>• No benefits of technology</li> <li>• Accuracy can be compromised</li> <li>• Data entry necessary</li> <li>• Anonymity is questionable</li> </ul>

**Break for Questions**

**AND**

**Pop Quiz or Time to work?**



## What is wrong with this stem?

True or False: Kimmel has the best food at NYU and also is the best place to hang out with other students.

## Revised

Break this item into two parts

True or False: Kimmel has the best food at NYU.

True or False: Kimmel is the best place at NYU to hang out with other students.

## How can this item be revised?

During what year did you have the best residential experience at NYU?

- A. Your Freshman Year
- B. Your Freshman and Sophomore Years
- C. Your Sophomore Year
- D. Your Junior Year
- E. Your Senior Year

## New and Improved Version

During what year did you have the best residential experience at NYU?

- A. Your Freshman Year
- B. Your Sophomore Year
- C. Your Junior Year
- D. Your Senior Year

## Another One. . .

The president of the university is also a :

- A. Anthropologist
- B. Astronomer
- C. Lawyer
- D. Mathematician

## Better Version. . .

In addition to being the president of the university, the president of the university is also:

- A. An anthropologist
- B. An astronomer
- C. A lawyer
- D. A mathematician

## And another. . .

How satisfied are you with the programs offered by the university's diversity office?

1 – Very satisfied

2 – Somewhat

3 – Dissatisfied

4 – Infrequently

5 – Very satisfied

6 – I don't really use the Web site of the diversity office

## Better Version. . .

How satisfied are you with the programs offered by the university's diversity office?

1 – Very Dissatisfied

2 – Dissatisfied

3 – Neither Dissatisfied nor Satisfied

4 – Satisfied

5 – Very Satisfied

N/A – I have never attended a program sponsored by the university's diversity office



## And Yet Another...

Please describe all the ways that you have used our office in the past year:

---

---

---

## Better Version...

Listed below are the primary programs and resources offered by our office. Please check all that you have used in the past semester

- [list all programs and resources]
- [provide an “other” box that allows respondents to fill in additional programs]

## Time to generate your items!

Each table choose an objective

Select content from this objective for which you would like to generate an item

- Do you want to assess satisfaction, learning/affect/beliefs, behavior, return on investment?

Choose item type

Create item stem (and response options, if applicable)

# Questions ?

## References

- Brace, I. (2004). *Questionnaire design: How to plan, structure and write survey material for effective market research*. London: Kogan Page Limited.
- Bradburn, N.M., Sudman, S. & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design – for market research, political polls, and social and health questionnaires*. San Francisco: Jossey-Bass.
- Downing & Haladyna (2006). *Handbook of test development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Fink, A. & Kosecoff, J. (1998). *How to conduct surveys: A step-by-step guide* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.

- Fink, A. (1995). *The survey handbook*. Thousand Oaks, CA: Sage Publications, Inc.
- Fowler, F.J. (1993). *Survey research methods*. Newbury Park, CA: Sage Publications, Inc.
- Fowler, F.J. (1995). *Improving survey questions: Design and evaluation*. Thousand Oaks, CA: Sage Publications, Inc.
- Haladyna, T. M. (1999). *Developing and validating multiple-choice test items*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Porter, S. (2004). *Overcoming Survey Research Problems*. *New Directions for Institutional Research*, 121.
- Rea, L.M. (1992). *Designing and conducting survey research: A comprehensive guide*. San Francisco: Jossey-Bass.

- Rodriguez, M. C. (2005). Three options are optimal for multiple-choice items: A meta-analysis of 80 years of research. *Educational Measurement: Issues and Practice, 24*, 3-13.
- Schuh, J.H. (2009). *Assessment methods for student affairs*. San Francisco: Jossey-Bass. (Instrumentation Chapter)
- Stage, F.K. (Eds.). (1992). *Diverse methods for research and assessment of college students*. Alexandria, VA: ACPA.
- Suskie, L. (1997). *Questionnaire survey research: What works (2nd ed.)* Tallahassee, FL: AIR.
- Tourangeau, R., Rips, L.J., & Rasinski, K. (2000). *The psychology of survey response*. New York: Cambridge University Press.