

# Survey Design: Basics and Best Practices

Wyntre Stout, M.S.

Research Analyst

Office of Institutional Research & Strategic Analytics



Lehigh University  
Student Affairs Assessment Symposium  
January 9, 2020

# Overview

1

Premise

2

Groundwork: Survey Planning

3

Writing Good Survey Questions

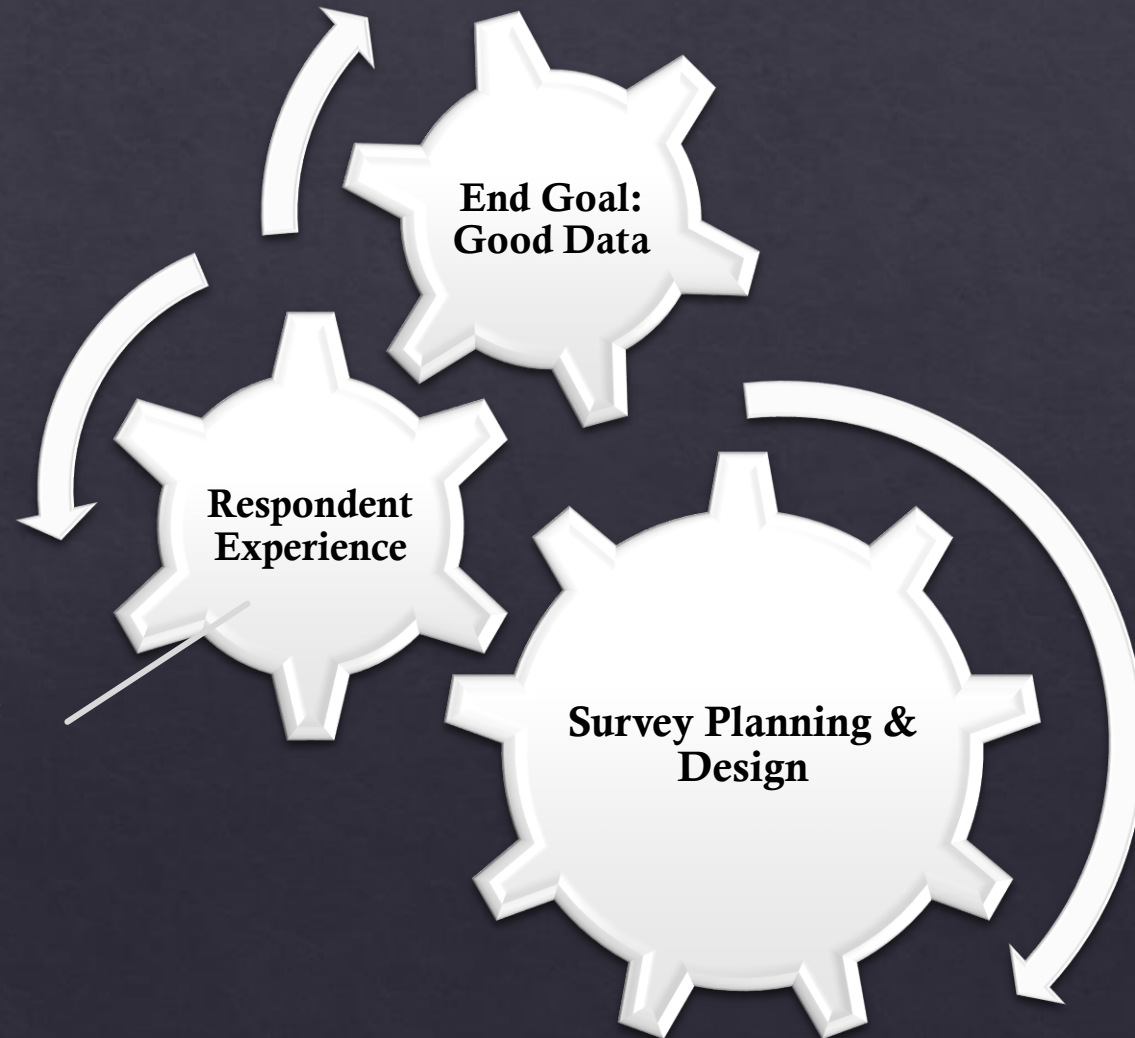
4

Strategies to Increase Response Rates

5

Wrap-up & Questions

# Premise



## Surveys that people will complete

Humans tend to operate on a 'conservation principle' – we aim to expend as little cognitive energy as possible!

- Questions should be easy to answer
- Measures should be taken to mitigate survey fatigue

# Premise

**Survey fatigue** occurs when respondents become overwhelmed with the questions or number of surveys that they are asked to take.

Survey fatigue not only reduces response rates, but it also compromises the quality of the data that respondents provide – they have become bored or tired of answering survey questions.

People tend to operate on a 'conservation principle' – we aim to expend as little cognitive energy as possible!

- Questions should be easy to answer
- Measures should be taken to mitigate survey fatigue

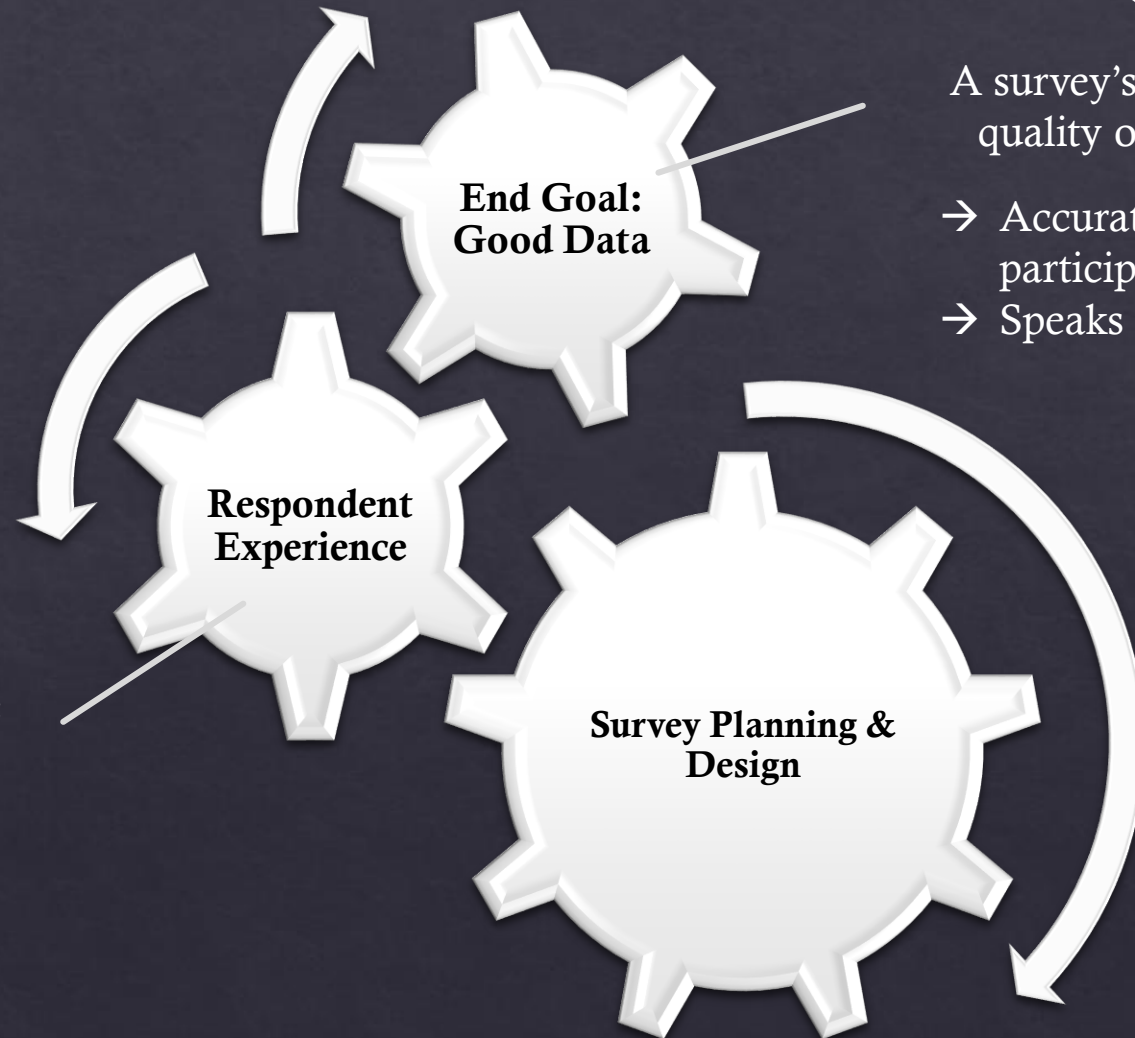


# Premise

## Quality data

A survey's usefulness rests on the quality of the data it produces

- Accurately reflects participants' experience
- Speaks to questions of interest



## Surveys that people will complete

People tend to operate on a 'conservation principle' – we aim to expend as little cognitive energy as possible!

- Questions should be easy to answer
- Measures should be taken to mitigate survey fatigue

# Groundwork: Survey Planning

- ◇ Carefully define the purpose of the survey
- ◇ Identify the core questions to be answered
  - ◇ The clarity of these questions determines the usefulness of the data that will be gathered
    - ◇ Must be precisely defined
    - ◇ Answerable with survey data
  - ◇ Resist the urge to stray from the core purpose of the survey!
- ◇ Identify the population of interest and the respondents that can provide the necessary information
- ◇ Check to see if there are any validated surveys available that already address these questions – if not, you'll need to create your own survey



# Writing Good Questions

## ◇ Scope of survey questions:

### Characteristics

- How old are you?
- What is your race/ethnicity?

### Attitudes

- How satisfied are you with your social life at Lehigh?
- How comfortable are you with the campus climate?

### Experiences

- Have you ever seriously considered transferring?
- Which of the following activities did you participate in during your senior year?

## ◇ Good survey questions:

- ◇ Are specific and precise
- ◇ Are clear and easy to understand
- ◇ Require minimal effort to answer
- ◇ Are closely connected to the purpose of the survey

# Writing Good Questions

## Types of questions to use frequently

- Likert-scale
- Categorical

## Types of questions to use sparingly

- Open-ended
- Multiple-response

4. Overall, how satisfied have you been with your undergraduate education at Lehigh?

Very dissatisfied 1      Generally dissatisfied 2      Generally satisfied 3      Very satisfied 4

28. With which academic college are you primarily affiliated at this time?

- College of Arts & Sciences
- College of Business & Economics
- P.C. Rossin College of Engineering and Applied Science
- Intercollegiate Program

22. If you could pass along one piece of advice to future Lehigh students, what would it be?

8. Which of the following describes the kind of experiences you had at LEHIGH (SELECT ALL THAT APPLY)

- |   |  |
|---|--|
| <input type="checkbox"/> I explored my full potential | <input type="checkbox"/> I found Lehigh intellectually challenging |
| <input type="checkbox"/> I pursued my personal goals  | <input type="checkbox"/> I was able to build my confidence         |
| <input type="checkbox"/> I built my own future        | <input type="checkbox"/> I developed as a leader                   |
| <input type="checkbox"/> I thrived socially           | <input type="checkbox"/> I enhanced my existing strengths          |
| <input type="checkbox"/> I thrived academically       | <input type="checkbox"/> I enhanced my career potential            |



# Writing Good Questions: Likert-Scale

- ◇ Consider using an odd number of response options with a neutral middle-ground

18. To what extent do you agree with the following statements?

	← Strongly disagree	Disagree	Undecided	Agree	→ Strongly Agree
Giving back to Lehigh is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with how donations from students and alumni are used at Lehigh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- ◇ Be consistent with response options throughout the survey
  - ◇ At the least, use the same number of response options
  - ◇ Going the same direction - ideally negative-to-positive
- ◇ Consider including a “Not Applicable” if relevant (or “Prefer not to answer” for sensitive questions)

# Writing Good Questions: Categorical

- ◇ Answer options should be exclusive and exhaustive
  - ◇ Watch out for overlapping response options

How old are you?

Less than 18 years old

18 to 25 years old

25 to 30 years old

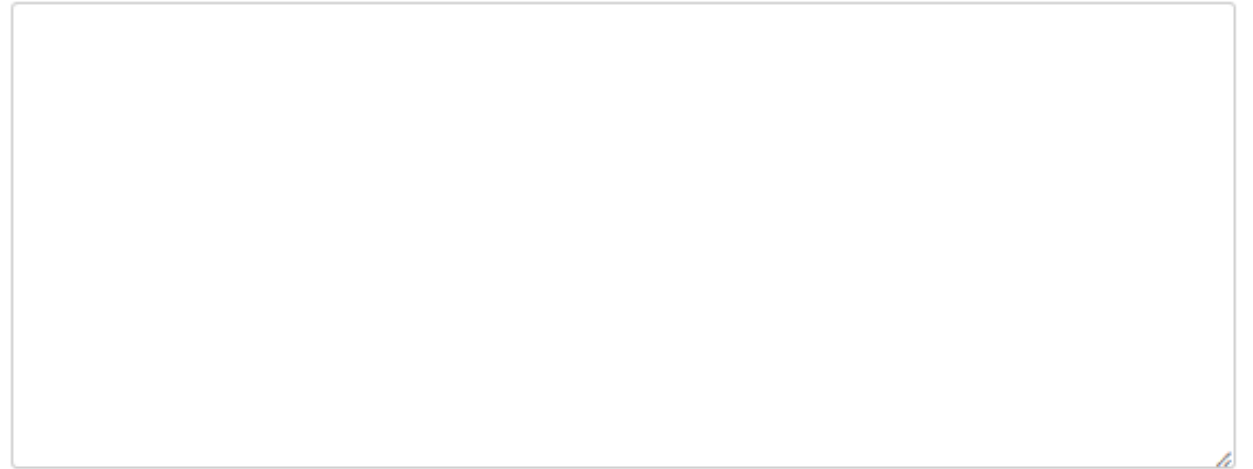
Over 30 years old

- ◇ Consider including an “other” option with text-entry

# Writing Good Questions: Open-ended

- ◇ Open-ended questions should be used sparingly
  - ◇ Are taxing to respondents
  - ◇ Require additional time investment to code
- ◇ However, they elicit rich data and can be very valuable
  - ◇ It's best to include 1-2 open-ended questions at the end of the survey
  - ◇ They provide opportunities for respondents to express anything they want to share

17. Please share any additional thoughts on the campus climate:

A large, empty rectangular text box with a thin black border, intended for respondents to provide their answers to the question above. The box is currently blank.

# Writing Good Questions: What to Avoid

- ◆ **Double-barreled questions**

- ◆ Watch out for “and” “but” “or”

Do you have a budget and did you stick to it over the last week?”

- ◆ Split any compound questions into separate questions

- ◆ **Loaded questions**

Where do you like to party?

- ◆ **Leading questions**

How easy was it for you to arrange a time to meet with your faculty mentor? Keep in mind that faculty often advise more than 45 students each.

- ◆ **Acronyms, abbreviations, and jargon**

# Writing Good Questions

- ◇ Be as precise as possible
  - ◇ Specify exactly what you're inquiring about
  - ◇ Consider specifying a time frame

## Poor questions

- Which of the following activities did you participate in?
- Who helped you the most during your college career?



## Better questions

- Which of the following activities did you participate in during your senior year?
- Name the faculty or staff person at Lehigh who has helped you the most in your college career.

# Writing Good Questions

- ◆ Verify that the survey is mobile-friendly and questions can easily be completed from a cell phone
- ◆ Ensure that there are no unnecessary questions
  - ◆ Only include questions directly related to the purpose of the survey
  - ◆ Consider other means of gathering demographic information
- ◆ Use branching/display logic so that respondents don't have to answer questions irrelevant to them
- ◆ Consider adding reminders to complete unanswered questions (but don't force respondents to answer questions!)



# Writing Good Questions

Have someone else take the survey to proof questions



- ◆ Bonus tip: do a pilot/test run – collect a couple of responses then take a look at the data
- ◆ Check for any issues with items or formatting that would cause problems with analyses
- ◆ Pay attention to question names/labels as building this in early-on is often helpful

The screenshot shows the Qualtrics Survey Editor interface for a survey titled "Senior Survey 2019". The main content area displays a question titled "Student Survey Collection" with the following text: "Please submit a form for each of the large-scale surveys that your office sends out to the Lehigh student body on a regular basis." Below this, there are bullet points: "- Surveys of 500 or more students are considered large-scale; you do not need to submit a form for surveys administered to less than 500 students.", "- We're interested in recurring surveys; one-time surveys do not need to be provided.", and "- Please include surveys for this academic year and the last two academic years." There is also a paragraph of explanatory text and a link to "Change settings". The question type is set to "Short answer text".



The screenshot shows a Microsoft Excel spreadsheet with a grid of data. The columns are labeled with question IDs (Q1, Q2, Q3, etc.) and the rows represent individual survey responses. The data consists of numerical values, likely representing Likert scale responses. The spreadsheet is titled "benefits.individual\_effective" and includes a menu bar with options like File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help, and Acrobat.

# Strategies to Increase Response Rates

◆ Consider incorporating the survey into other activities

◆ Offer incentives

◆ Appealing incentives:

◆ Token gift for all respondents



◆ Something respondents aren't able to get for themselves

◆ Something very expensive

◆ Less appealing incentives:

◆ Single item with low odds of winning



◆ Things most respondents already have





# Strategies to Increase Response Rates

- ◆ Send invitation from a known, trusted source
- ◆ Provide a “why” (but keep it brief!)
  - ◆ Why participation is important
  - ◆ How responses will be used
- ◆ Offer assurances of privacy
  - ◆ Confidentiality encourages honest responses
  - ◆ Be careful if promising anonymity
  - ◆ See guidelines from Institutional Review Board (IRB) on confidentiality



# Strategies to Increase Response Rates

- ◇ Provide information about the survey timing
  - ◇ Time to complete (hopefully short!)
  - ◇ Deadline
- ◇ Send reminders
  - ◇ 1-2 reminders about 1 week apart
  - ◇ A final “last chance” reminder
    - ◇ Unique subject line
    - ◇ Reiterate importance and deadline to complete survey

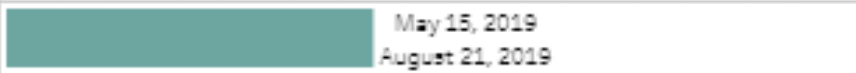
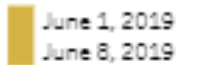
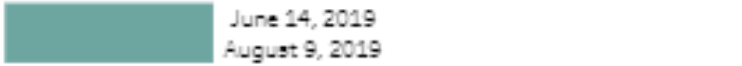

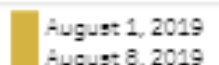
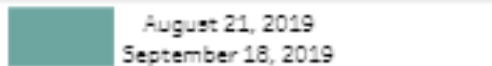
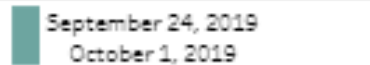
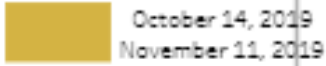
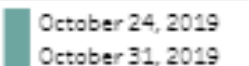
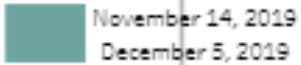
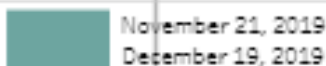
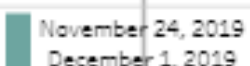
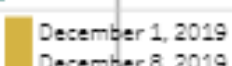





# Strategies to Increase Response Rates

- ◇ **Select launch dates strategically**
  - ◇ **Avoid:**
    - ◇ **Breaks/holidays**
    - ◇ **Exams**
    - ◇ **Weekends**
    - ◇ **The beginning/end of a semester**
  - ◇ **Avoid overlaps with other surveys**

## Lehigh University Student Survey Schedule: 2019-2020 Academic Year

For more information about a survey, hover your cursor over its block. Only recurring, large-scale (going to 500+ students) surveys are displayed here. Dates are approximate.

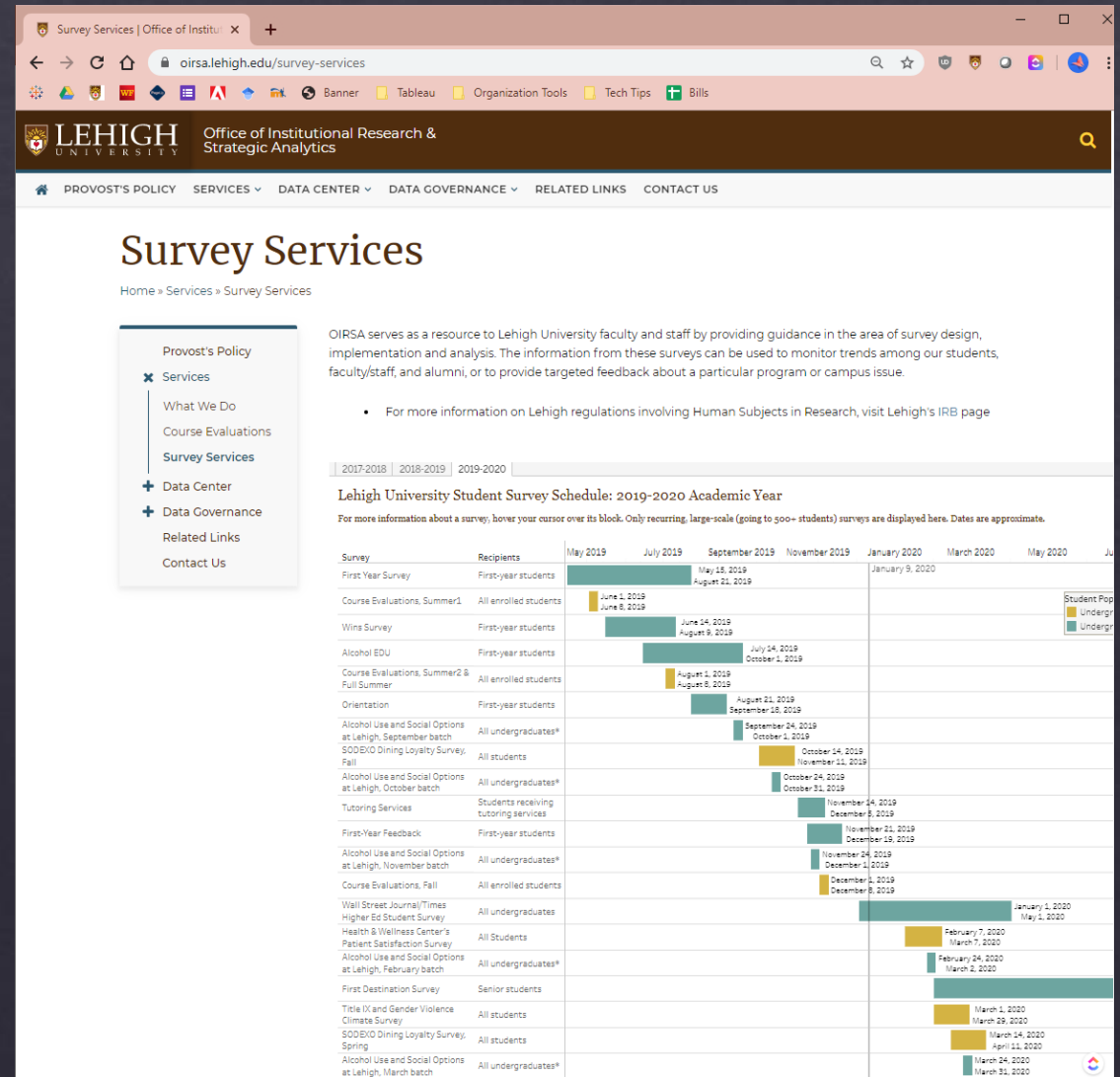
Survey	Recipients	May 2019	July 2019	September 2019	November 2019	January 2020	March 2020	May 2020
First Year Survey	First-year students					December 31, 2019		
Course Evaluations, Summer1	All enrolled students							
Wins Survey	First-year students							
Alcohol EDU	First-year students							
Course Evaluations, Summer2 & Full Summer	All enrolled students							
Orientation	First-year students							
Alcohol Use and Social Options at Lehigh, September batch	All undergraduates*							
SODEXO Dining Loyalty Survey, Fall	All students							
Alcohol Use and Social Options at Lehigh, October batch	All undergraduates*							
Tutoring Services	Students receiving tutoring services							
First-Year Feedback	First-year students							
Alcohol Use and Social Options at Lehigh, November batch	All undergraduates*							
Course Evaluations, Fall	All enrolled students							
Wall Street Journal/Times Higher Ed Student Survey	All undergraduates							

Student  
 U  
 U

# Strategies to Increase Response Rates

- ◆ Select launch dates strategically
  - ◆ Also avoid:
    - ◆ Breaks/holidays
    - ◆ Exams
    - ◆ Weekends
    - ◆ The beginning/end of a semester
  - ◆ Avoid overlaps with other surveys:
- ◆ Take organization-wide measures to reduce survey fatigue
- ◆ Ensure survey is designed with the respondent's experience in mind

[OIRSA.Lehigh.edu/survey-services](https://OIRSA.Lehigh.edu/survey-services)



# Final Thoughts

- ◇ Document everything for future reference
  - ◇ Recruitment procedures
  - ◇ Instrument & scoring key
  - ◇ Response rate
- ◇ Utilize the data you collect to its full potential: analyze and disseminate survey findings



**Feel free to contact me with any questions!**

**Wyntre Stout, M.S.**

**Research Analyst**

**Office of Institutional Research & Strategic Analytics**

**[was214@Lehigh.edu](mailto:was214@Lehigh.edu)**



**Sources:**

Do's and Don'ts in Survey Design and Reporting, Association for Institutional Research webinar

Conducting a Quality Research Project, Association for Institutional Research webinar

Writing Survey Questions, Percontor workshop