

Quantitative Data Collection Methods

-CASA Session 5-

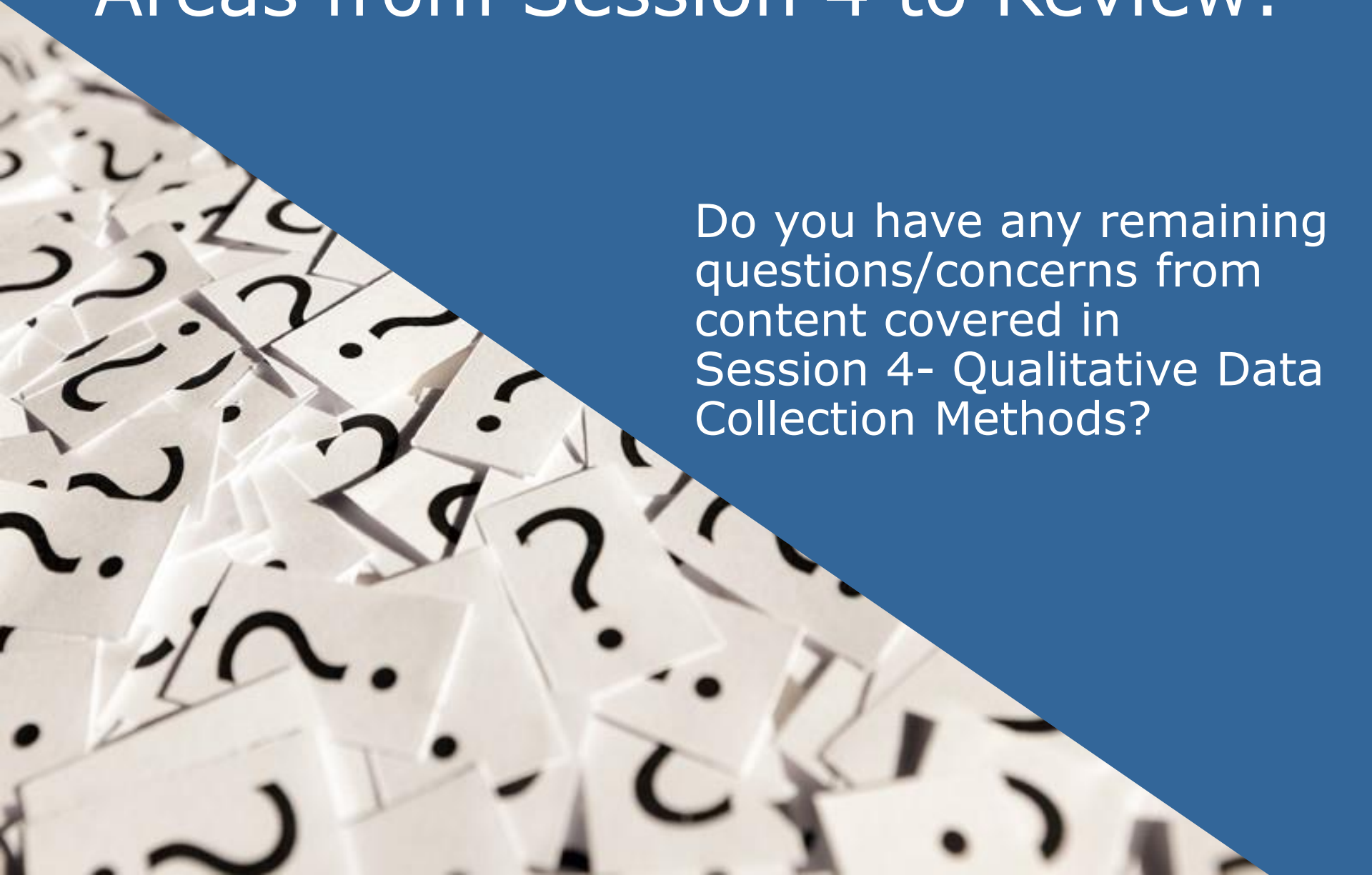


Session 5 Overview

- ~~Session 4 assessment results~~
- Session 5 learning outcomes
- Overview of Qualitative and Quantitative Paradigms
- Quantitative Research & Data Collection Methods
 - Observation
 - Rubrics
 - Existing data
- **BREAK**
- Surveys
- Session Assessment/Mid-course check-in
- For Next Session...

Areas from Session 4 to Review:

Do you have any remaining questions/concerns from content covered in Session 4- Qualitative Data Collection Methods?



Assessment Plan Peer Feedback

At this point in the curriculum, you should have the following assessment plan sections **fully drafted** OR **partially outlined/notated**:

Assessment Purpose

- Assessment Plan Design
- Background and Purpose
- Assessment Question(s)
- Context and Stakeholders

Methods and Implementation

- Assessment Method
- Resources
- Implementation and Design

Planned Analysis and Reporting

- Planned Analysis
- Plan for Reporting
- Implications for Improvement

1) Switch Assessment Plans with a partner

- 1) Rate each section using the assessment plan rubric.
- 2) Provide written notes/suggestions in space provided.

THEN...

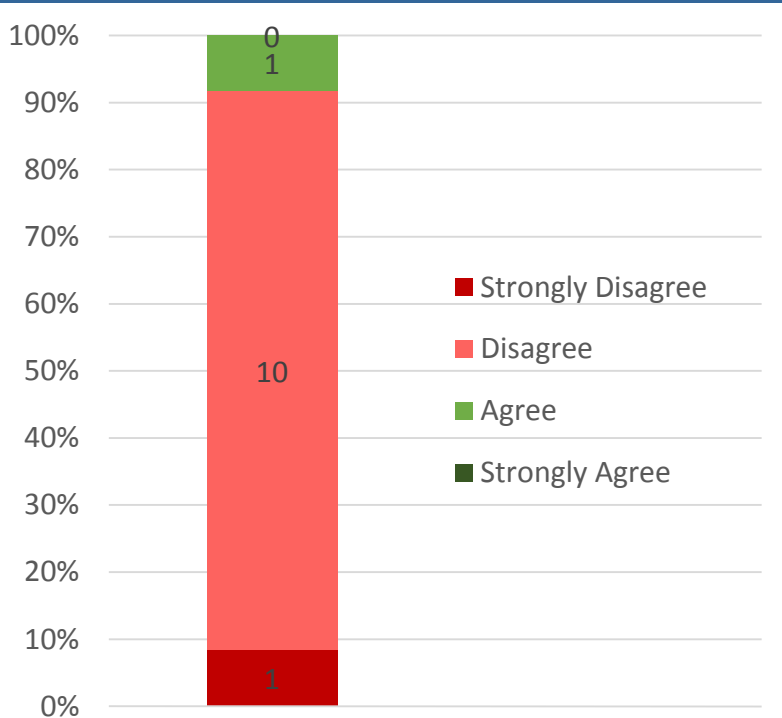
2) Return Assessment Plans and Feedback Sheet

- 1) Discuss your ratings with your partner.
- 2) Identify ways each of you can improve these sections.
- 3) Authors make notes for themselves regarding next steps.



Where we are, where we are going...

Confidence Barometer



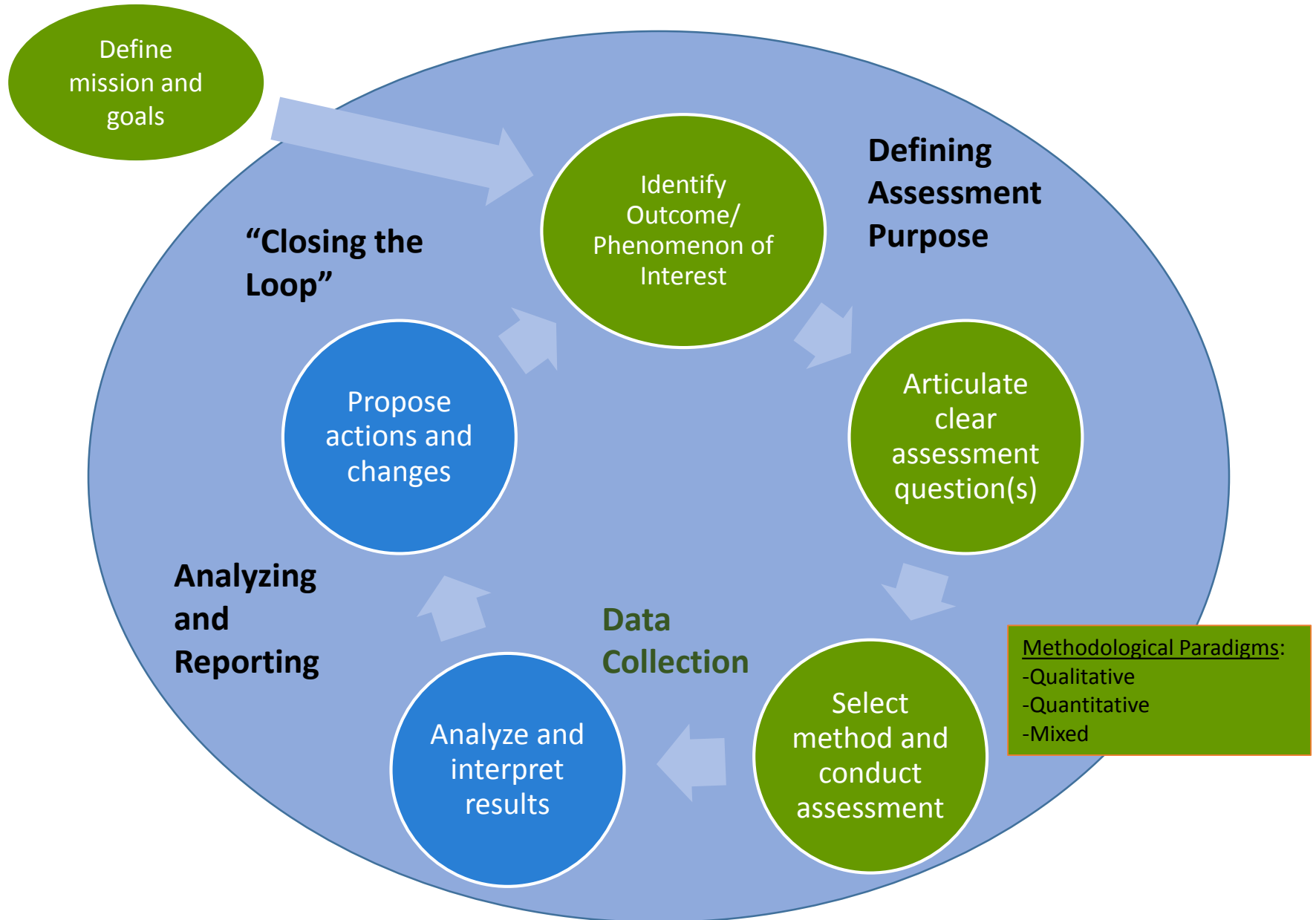
"I am able to look at my assessment questions and choose an appropriate data collection method."

Today's Learning Outcomes

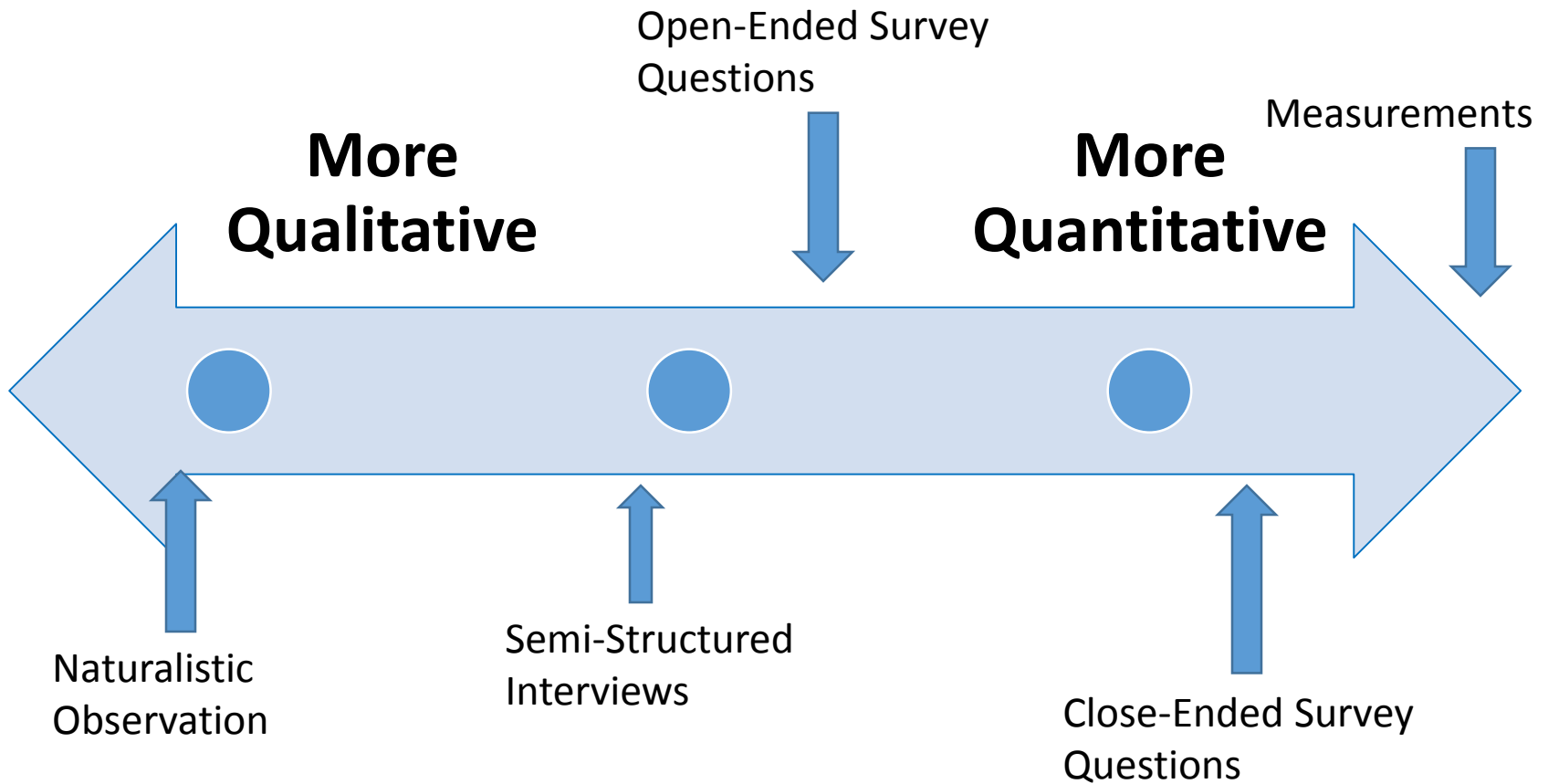
After today, you should be able to:

- Understand the difference between quantitative and qualitative approaches
- Identify different possible quantitative assessment methods
- Understand the logistics involved in various quantitative assessment methods
- Select (if applicable) a quantitative data collection method that appropriately addresses your assessment question(s)

The Assessment Cycle



Continuum of methods



How Do I Approach assessment?

Qualitative Methods	Quantitative Methods
Sources of Data	
Interviews, focus groups, observations, etc.	Surveys, counts, pre-existing data, student records
Focus	
On meanings and details of experiences (Depth)	On generalizable experiences that represents a population (Breadth)
What you Report	
Themes, Quotes	Numbers, charts, graphs, trends (longitudinal data)
Characteristics	
Open-ended questions	Close-ended questions, Measurement of specific variables
Fewer participants (resource intensive per participant)	Large number of respondents (with fewer resources, sometimes)
Distance to research: Closer to context	Distance to research: further from context

Quantitative Data Collection Methods



Observation



Surveys



Rubrics



Existing Data

Observation



What is it: Researcher observes ongoing behavior of a person, group, or phenomenon.

- Naturalistic/Non-participant Observation: Researcher is not a part of the action
 - Pro: Can measure what behavior is really like
 - Con: Don't know reason behind behaviors
- Participant Observation: Researcher becomes a member of the group, a part of the action.
 - Pro: Allows access to information (the why behind behavior)
 - Con: Can lose objectivity, participation influences what you see and measure.



Naturalistic

Participant

Observation (cont.)



- **How to do Observation (quantitatively):**

- Keep a list of who enters/uses your office or attends a program
 - Uses:
 - Schedule of when the most frequent use occurs
 - % of attendance by students of different characteristics (depending on what is collected)
- Observe how often you have to replace an item, refill a jar, etc.
 - Uses:
 - Learn about student behavior, needs
 - Help determine questions to ask
- Note which entrance students use, or the way they access the services (e.g. email, online, phone)
 - Uses:
 - Set up information boards, office/desk locations, etc

Rubrics



- ***What is it: A scoring tool that articulates gradations of quality for a the object/evidence being assessed (e.g., documents, actions, etc.)***
 - Allows multiple raters to apply consistent and objective evaluations.
 - Provides guidelines for participant responses/progress.
- ***Challenges***
 - Articulating the gradations can be challenging.
 - Development of rubrics can be complex and time-consuming.
 - Defining the correct set of criteria to define performance can be difficult.

Rubrics (cont.)



- ***How to Use Rubrics (quantitatively)***

- Determine which dimensions were well executed by the individual or group and which dimensions are in need of improvement
 - Student Organization Event Plans
- Results can be compiled and disseminated to the individual or for department review
 - Assessment Curricula “Assessment Plan” Rubric
- Numeric results can be aggregated to understand participant outcomes, and to assess program effectiveness.

Existing Data

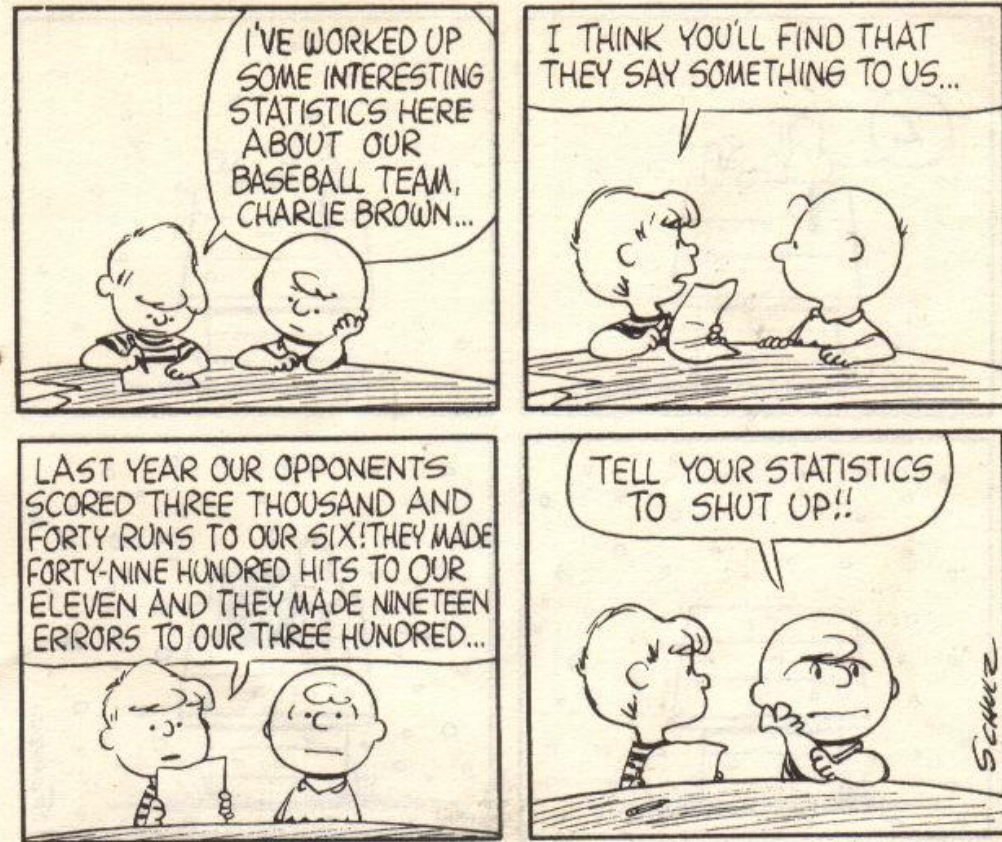


- Data Audit
- Departmental Data
 - Usage
 - Program Evaluations/Surveys
 - Annual Evaluations
 - Program Review
- Institutional Data
 - Student Surveys
 - Demographic Information (Registrar)

- ~~Session 4 assessment results~~
- ~~Session 5 learning outcomes~~
- ~~Overview of Qualitative and Quantitative Paradigms~~
- ~~Quantitative Research & Data Collection Methods~~
 - ~~Observation~~
 - ~~Rubrics~~
 - ~~Existing data~~

• BREAK

- Surveys
- Session Assessment/Mid-course check-in
- For Next Session...



Surveys



- Any gathering of information from an individual or group of individuals using a pre-specified set of questions and responses
- Formal:
 - Digital survey administered after an event
 - Pen and paper comment cards at a front desk
- Informal:
 - Hands raised in response to questions at an event
 - Index cards collected after an event

Types of Survey Questions



- Closed-ended questions (Structured questions)
 - Dichotomous Questions (yes/ no)
 - One-response Questions (Mark one)
 - e.g., satisfaction questions, frequency (how often), quality
 - e.g., major, year in school
 - Multiple responses (check all that apply)
 - e.g., race demographics
 - e.g., classes at the John Wooden Center
- Open-ended text questions (Please describe...)
 - To think about:
 - Character limits (on digital surveys)
 - Time allowed to respond (with paper and digital surveys)

Articulating Clear Survey Questions



- Be **SPECIFIC**
- Focus on **ONE concept** at a time
- Use **simple** language
 - General audience, like the newspaper (not NY Times)
 - DUOA (don't use obscure acronyms!)
- **No leading** questions
- Ask questions that apply to everyone, or include skip patterns
- Avoid language that can be interpreted in different ways
- Be mindful of **response options** (mutually exclusive, exhaustive)

Turning Assessment Questions into Survey Questions



- Assessment Question: How satisfied are UCLA undergraduates with the extent that they feel free to express their political beliefs on campus?
 - Survey questions:
 - “I feel free to express my political beliefs on campus.” (agreement scale)
 - “There are safe spaces on campus to have political debate.” (agreement scale)
 - “How often do you express your political beliefs on campus?” (time scale)

Examples of Scales



- **Agreement**

- Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

- **Frequency (no set time)**

- Always, Often, Occasionally, Rarely, Never

- **Frequency (based on a time frame)**

- More than 5 times, 4-5 times, 2-3 times, Once, Never

- **Helpfulness**

- Extremely helpful, Very helpful, Helpful, Slightly helpful, Not at all helpful

(See Scales Handout)

Response Options for Close-ended Questions



Mutually exclusive choices for a close-ended survey question

When did you learn English?

- A. English is my native language
- B. Before I was 6 years old
- C. When I was 6 to 10 years old
- D. When I was 11 to 15 years old
- E. After turning 16 years old

How many hours did you spend reading this week?

- A. Less than 1 hour
- B. 1-3 hours
- C. 2-4 hours
- D. 3-5 hours
- E. Forever

NOT mutually exclusive

Looking Out for Confusing Survey Questions



We need your help!

Some of these questions have problems but we can't figure them out. Now that you know how to create specific and concise questions, can you help us refine them?

Scale: (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, NA)

1. I used the JWC (John Wooden Center) to work out and to make friends.
2. I am mostly very happy with the JWC services.
3. JWC is sufficient for me to be able to have physical wellness as a student.
4. I am satisfied with the way I am able to take many classes at the JWC but not happy with the times they are offered.
5. I use the JWC every day.
6. Participation in JWC fitness classes has improved my physical fitness.



Putting Survey Questions Together



- Instrument Design
 - Order and flow of questions
 - Group questions similar response options together (Matrix)
 - Stay focused on the goal of assessment
 - *Remember: need to know vs. nice to know*
- Tips
 - Ask important questions at the beginning*
 - Ask sensitive information at the end* (demographics)
 - Keep survey short (15-20 minutes)
 - Reduce the number of clicks/pages on online surveys
 - Aesthetics
 - Use similar scales

** there may be exceptions to the rule!*

Survey Planning



- Who is your targeted sample?
 - All incoming **students**? All **personnel** in Student Affairs? Those who **use** services?
 - Response rate
- Recruitment
 - Email
 - Mail
 - Flyers/ Web advertising (link)
 - Phone/ word of mouth
 - Comment cards
- Logistics
 - Publicity
 - Incentives
 - Budget
 - Online or Paper

Survey Administration



- Survey administration timeline:
 - What needs to be done
 - Who's doing them
 - When do they need to be done
- Preparing survey for administration
 - Programming (submitting survey to Baseline)
 - Printing/Photocopying
- Survey communications
 - Mailing, handing out, emailing
 - Who should the survey come from
 - Reminders
- Response rates

Group Activity

On your mobile phone/tablet/laptop...

Go to: srs.campuslabs.com

Name: [<your name>](#)

Connect ID: [6275](#)

By the way... anyone with a Campus Labs/Baseline login can use this tool to set up their own on-the-go survey.

Session 5 Assessment/Mid-Course Evaluation



Methodological Paradigm		Method	Instrument	Planning Resources on SAIRO's Website
Qualitative	Quantitative			
<input checked="" type="checkbox"/>		Document Analysis	N/A	<ul style="list-style-type: none"> Data Audit WS
<input checked="" type="checkbox"/>		Interview: Focus-Group	Focus-group protocol	<ul style="list-style-type: none"> Interview Planning Checklist Key Aspects of Informed Consent and Communication Documents Conducting Focus Groups
<input checked="" type="checkbox"/>		Interview: Individual	Interview protocol	<ul style="list-style-type: none"> Asking Effective Qualitative Questions Interview Planning Checklist
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Observation	Observation check-list/ protocol	<Talk to Danielle Acheampong in SAIRO>
	<input checked="" type="checkbox"/>	Rubrics	Rubric	<Talk to Allison for resources from other places>
	<input checked="" type="checkbox"/>	Existing Data	N/A	<ul style="list-style-type: none"> Data Audit WS
	<input checked="" type="checkbox"/>	Survey	Survey instrument	<ul style="list-style-type: none"> Writing Effective Survey Questions Matching Survey Scales to Desired Outcomes Common Pitfalls to Good Survey Design Survey Planning Checklist

For next session:

By next month's session, you should have the following assessment plan sections **fully drafted** OR **partially outlined/notated**:

Assessment Purpose

- Assessment Plan Design
- Background and Purpose
- Assessment Question(s)
- Context and Stakeholders

Methods and Implementation

- Assessment Method
- Resources
- Implementation and Design

Planned Analysis and Reporting

- Planned Analysis
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- Implications for Improvement



Remember to bring a hard copy of these sections!

FYI: Next session, you will meet your SAIRO mentor. Be prepared to explain your assessment project to her.