

The Interplay of Qualitative and Quantitative Data

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Introduction to Qualitative Data

What is it?

- Not numbers
- Individuals' responses in their own words
 - Feelings
 - Attitudes
- “Insider” perspective

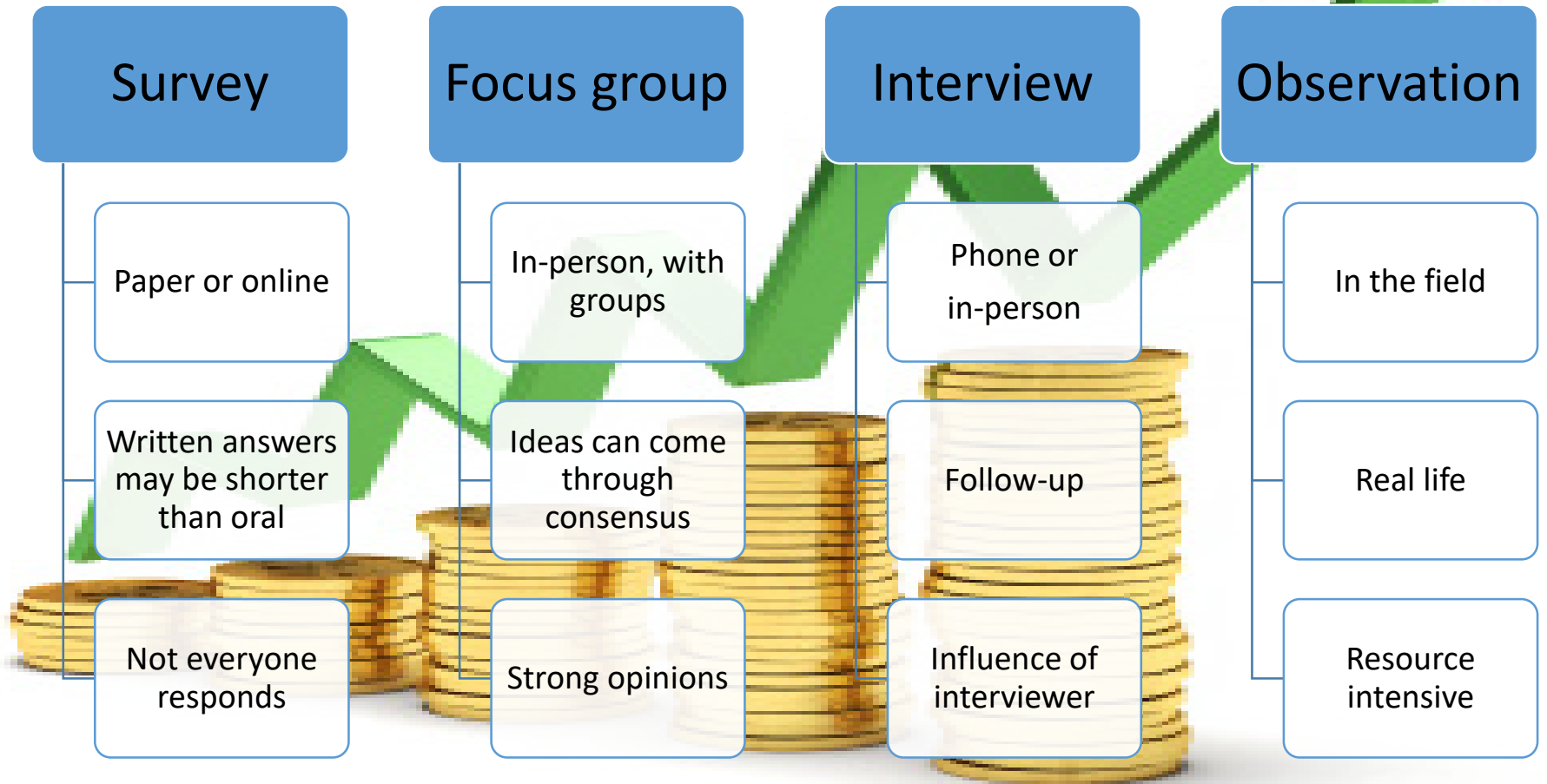
Gathered from responses

- Surveys
- Interviews
- Focus groups
- Observations

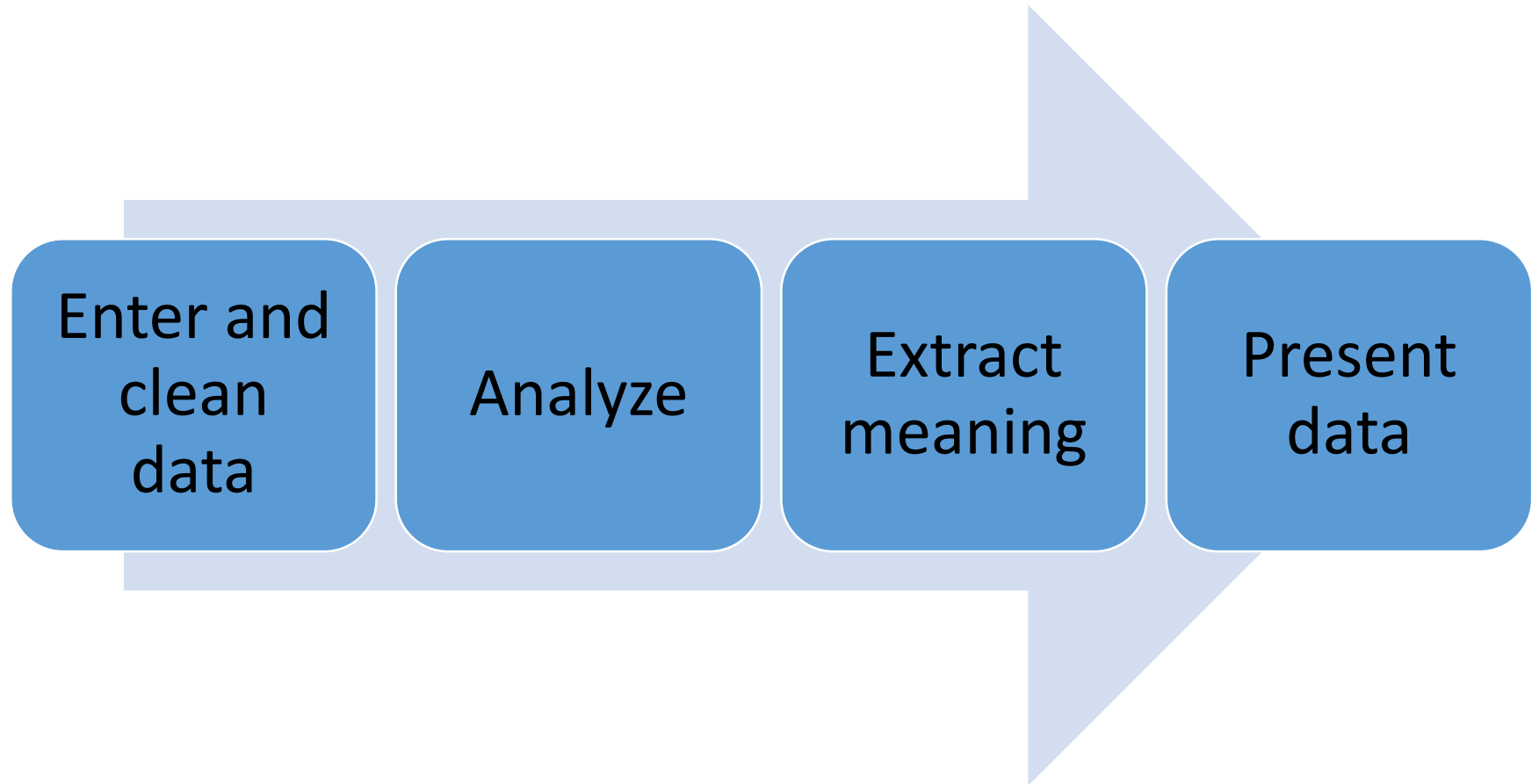
Benefits of Qualitative Data

- Contribute depth and details
- Help illustrate causation
- Capture feelings and thoughts of the participants
- Identify new or emerging topics
- Provide answers to
 - What
 - How
 - Why

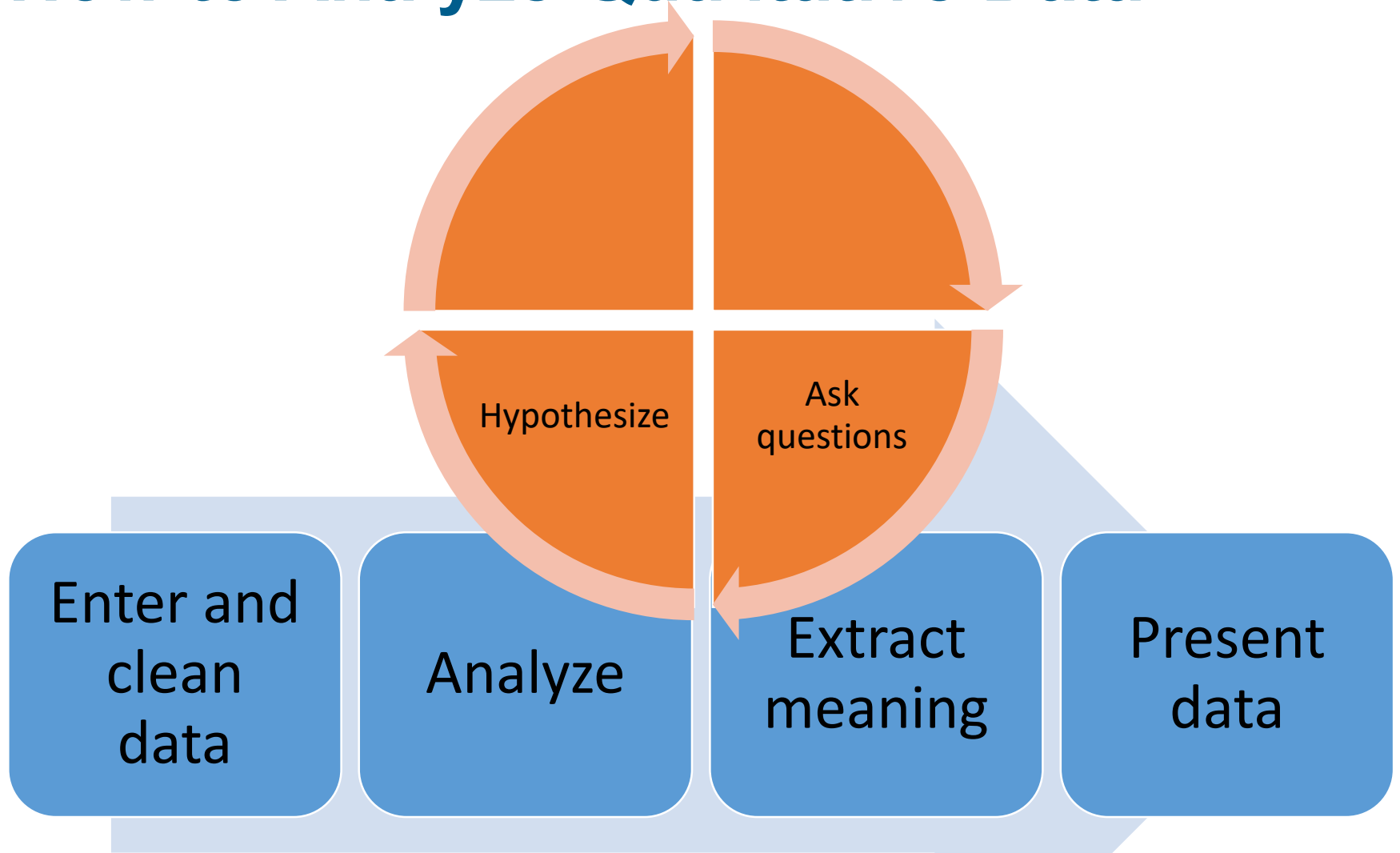
Collecting Qualitative Data



How to Analyze Data



How to Analyze Qualitative Data



Identify the Themes in Your Data

- First, read through all of your data for an overall sense
- Next, go back through the data methodologically to group comments into similar categories (**This will take several passes through the data**)
 1. Consider grouping responses by question
 2. Look for common themes
 3. Label the themes and assign responses
 4. Continue assigning responses to themes and creating new themes until you have captured most responses

Identify Patterns and Associations

- Select
 - What should be emphasized?
- Transform
 - Identify relationships
 - Turn individual responses into patterns, stories
 - How do these stories illuminate the study questions?
- Simplify
 - Find commonalities, differences, themes
 - How do patterns or themes help illuminate the study question(s)?
 - What do deviations mean?
 - What factors might explain deviations?

Take What You Learn Back to the Data

Are there new ideas or patterns that you didn't expect to see in your data?

- Does this reinforce or contradict current knowledge?
 - Do the qualitative findings support the quantitative analyses?
 - If not, what might explain these discrepancies?
- Do you need more data?
 - Do findings suggest additional data should be collected?
 - Do any study questions need to be revised?

Qualitative Data: Things to Consider

- Time
 - Data collection
 - Data analysis
 - Build in time for all steps
- Training
 - Data collection
 - Data analysis
- Generalizability
 - If strong opinions, more likely to provide responses
 - More time/resources, more likely to participate in person

Presenting Qualitative Data

- Qualitative data should be organized in a manner that facilitates the reader's ability to draw conclusions
- There are many ways to display qualitative data including
 - Narrative summaries
 - Tables
 - Illustrative quotes
 - Vignettes

Narrative Summaries

Provide a brief written overview of the main themes that you identified during your qualitative analysis.

Teachers were particularly enthusiastic about the paired curriculum development activity with most explaining that their partner provided useful feedback. Those who did not find the activity helpful most often explained that their partner taught in a different subject area.

Tables

Present patterns in responses, such as identifying similarities, differences, or frequencies

Respondent group	PD activities named	Effective activities	Explanation
Special Education Directors	<ul style="list-style-type: none">• Small group session• Large group session• Networking	<ul style="list-style-type: none">• Small group session• Networking	<ul style="list-style-type: none">• Learned about best practices• Met others in field
Data Managers	<ul style="list-style-type: none">• Large group session• Small group session	<ul style="list-style-type: none">• Large group session	<ul style="list-style-type: none">• Received tips• Received resources
Consultants	<ul style="list-style-type: none">• Small group session• Networking	<ul style="list-style-type: none">• Networking	<ul style="list-style-type: none">• Received tips• Met others doing similar work

Illustrative Quotes

Highlight your main findings and can provide richness and depth

“I was able to reflect on my practice and think about how to **move** my district **forward**.”

Helpful hints:

- Use line breaks and condensed font so information can be understood at a glance
- Consider bold text to emphasize 1-2 key words
- Be sure respondents are aware their words might be used

Vignettes

Illustrate a short example or a meaningful story

Helpful hints:

- It can work well to present vignettes with callout boxes and sidebars
- The content should be able to stand on its own but also complement the text on the rest of the page

Heinemeier & Lammert, 2015
Evergreen, 2017

District A's Story

District A worked with stakeholders to identify a new reading intervention, which they began implementing last year.

Interviews with teachers and administrators in the district indicate they believe students receiving the intervention are happier and more engaged than students who received the prior intervention....

Comparing Data Types

Qualitative data	Quantitative data
“Brings numbers to life” ¹	Adds “precision to words” ²
Offers depth	Offers breadth
Provides rich data	Provides credible data
Explores topics in detail	Includes many participants
Uses flexible data collection	Uses standardized data collection

¹ Nimkoff, 2010

² Suter, 2012

Rationale for Using Both Types of Data

- Qualitative and quantitative data can be complementary
- Used together can increase
 - Reliability of data
 - Validity of findings
 - Insight into how outcomes were achieved
- Combined procedures can help support the results
 - Multiple types of data can validate findings and identify inconsistencies (triangulation)

Mixed Methods Approaches: Examples

- A survey with both closed-ended and open-ended items
- A focus group used to inform the development of a survey
- Analysis of student test scores combined with interviews of district administrators

How have you combined qualitative and quantitative data?

Using a Mixed Methods Approach

Plan from the beginning how you will use each method

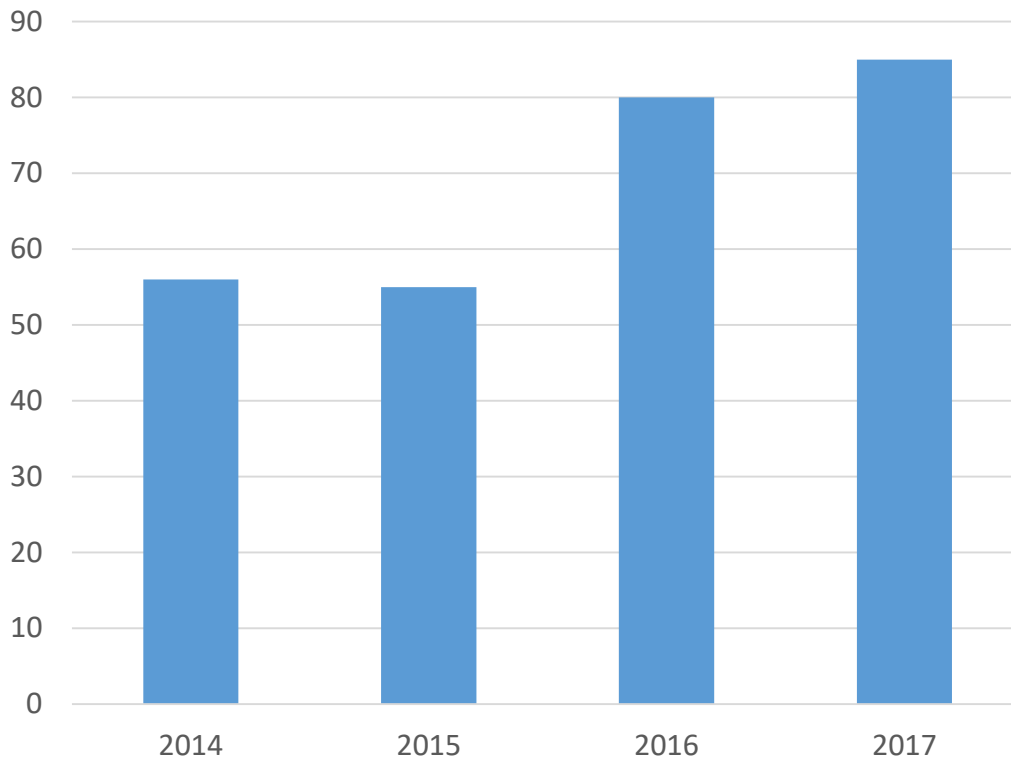
- At which stages of the evaluation will you use which methods?¹
 - Concurrent: approaches used at the same time
 - Sequential: approaches used one after another
- At which levels will you use each method?²
 - Consider school, district, and classroom levels
 - Can combine qualitative and quantitative data at different levels

¹ Bamberger, 2012

² USAID, 2013

Presenting Both Types of Data

District A: Early Literacy Assessment



District A's Story

District A worked with stakeholders to identify a new reading intervention, which they began implementing in 2016.

Interviews with teachers and administrators in the district indicate they believe students receiving the intervention are happier and more engaged than students who received the prior intervention....

Presenting Both Types of Data (cont.)

Table 1. Administrators' responses

I found today's professional development session useful		
	Frequency	Percent
Strongly agree	90	75%
Agree	18	15%
Neither agree nor disagree	6	5%
Disagree	4	3%
Strongly disagree	2	2%

“I was able to reflect on my practice and think about how to **move** my district **forward**.”

Summary and Next Steps

- Qualitative data take time to gather and analyze, but can provide rich information that can't be obtained any other way
- Qualitative data can be helpful in continuous improvement efforts and evaluations, including SSIP evaluation plans
- Join us for the Institute's upcoming TA Workshop where we will
 - Practice analyzing qualitative data
 - Talk about coupling qualitative and quantitative analysis to effectively interpret and present data

References

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