Analyzing and Interpreting Inquiry Study
Data analysis is a process of addressing how interpretations are made. The key concept usually evolves critical thinking and creative problem-solving skills of comparisons, categorization, evaluation, and synthesis of new information.

Interpretation involves intuition, pondering, emotional connections, and sense making.
<table>
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<th>Feature</th>
<th>Open and descriptive.</th>
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| Form          | Documented through thick descriptive narrative accounts.  
|               | Analyzed by looking for pattern or themes. 
|               | Time-consuming. |
| Challenging tasks | Sorting and organizing.  
|               | Classifying for concept formation. 
|               | Processing distinctions. |
SORTING AND ORGANIZING

CLASSIFYING AND CONCEPTUALIZING

SENSE MAKING AND THE INTERPRETATIONS
Definition: a descriptive and nonjudgmental narrative accounts shaped around particular events out in the field of study (notes, journals, letters, and interview).

Collected and analyzed throughout the study, the data resources are assembled in a good filing system for further analyze.

Downside:

- data overload.
- the new researcher's lack of theoretical and substantive background.
Content analysis

- **Utilization:** examine words and phrases in documents and transcription for the purpose of systematically identifying themes or topics.
- **Definition:** examination of written documents or transcripts to identify, organize, index, and retrieve data.
- It involves reading and rereading data, organizing the data, coding the data, revising and reviewing the coding system.
- **Advantage:**
  - can be unobtrusive and cost-effective.
  - can be conducted alone or in groups.
  - Low-tech strategies.
- **Downside:**
  - Limited to analyzing already recorded data.
  - Not effective for testing causal relationships between variables.
Coding data

- **Definition:** an interpretive technique to sort text or visual images into selected categories to illustrate and verify intuitions about the themes and meanings.

- **How:** It organizes, summarizes and structures data into more manageable analysis for understanding.

- **Emphasis:** What specifically does the researchers want to learn from the data.

- **Coding categories:**
  - Inductive coding: allows researchers to link categories to the data.
  - Deductive coding: involves identifying preset codes before examining the data.
Computer-assisted analysis

- Advantage: enhance efficacy when applying codes to the data, editing and revising codes, calculating data, creating possible themes and categories, and sharing and reviewing data.
- Downside: feel distanced from their data and cautioned to take precautions.
• Definition: is the text that are compiled by the researchers and that analyze the meaning and social significance of field texts. It requires complex thinking and critical judgements.

• It contains relationships, various categories of themes, and other analyses of the field texts.

• Contribution: It assists the researchers to refine and link categories to build new theories from actual data.
Triangulation

- Definition: involves comparing and contrasting various aspects of the study in an attempt to reduce any weakness of blind spots.

- Types:
  - **Data source** triangulation: analyze a broad understanding from different people/time/place.
  - **Investigator** triangulation: uses multiple researchers to diminish the bias and preference of one researcher.
  - **Method** triangulation: uses multiple data collections.
  - **Theory** triangulation: uses competing theories in data analysis and interpretation to explain results.
• Various ways to compare and construct information:
  • Data collected from several resource, collected by other investigator, collected in multiple ways, collected in different locations and time period, collected from more perspective.
  • It produces a variety and quantity of data and reveals unique findings and provides a clearer understanding, and strengthens the inferences and interpretation.

• Downside:
  • adds depth to the understanding of issues and strengthens confidence in the findings.
  • Time-consuming.
  • Requires greater planning, organization and resources.
  • Disagreements and conflicts.
Reflexivity

• When teachers become insider researchers, they bring complex knowledge as an insider with regard to the institution.

• Advantage: insiders may not critically reflect on alternatives; may refuse to probe deeper understandings.

• It involves
  • examining theoretical framework within the operating research.
  • manage the research's value and bias.
  • reflect the personal feelings.
Saturation point

- In data collecting, after taking a long break the researchers can lose touch with the data or may result in different setting.

- Solution (for paralysis):
  - Read and reread;
  - Consider the quality of the data;
  - Review the original purpose;
  - Identify key questions.
01 Describe higher level thinking skills required for analyzing and interpreting data

02 Explain the purpose of content analysis and coding

03 Label types of triangulations used in inquiry study
Thank you