

# Writing Chapter 3

## Chapter 3: Methodology



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# Components of Chapter 3

- Participants
- Procedure
- **Strategies of inquiry**
- **Data collection procedures**
- **Instruments**
- **Data analysis**
- Limitations

# Future or Past tense?

- ◉ Concept Paper and Proposals
  - > Future Tense
- ◉ Final Report
  - > Past Tense

# Participants

- **Target population** and the **sample** that you will use for generalizing about the target population.
- Demographic information such as age, gender, and ethnicity of your sample.
- Procedures for selecting the sample should be outlined, including justification for the sampling method, also known as sampling procedures.

# Participants

## Sampling Techniques in Qualitative Research

### Purposeful Sampling

Selecting cases that are information-rich with respect to the purposes of the study.

### Opportunistic Sampling

Use of findings from one case to inform the researcher's selection of the next case.

### Volunteers in Sampling

When not all participants agree to participate, then the research is left with “volunteer” participants → biased sample

# Permissions That Are Needed

- ◉ Gain permission from Institutional Review Board (IRB)
- ◉ Gain permission from administrators at the research site
  - > Gatekeepers are individuals at the site who provide site access, help researcher locate people and identify places to study.
  - > The gatekeeper may require written information about the project.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.

# Qualitative Permissions

- Qualitative studies are usually conducted at the research site.
- The researcher has personal contact with the participants through in-depth interviewing and prolonged observing.
- Qualitative studies are personal in nature and are not centered on variables or measures.
- Qualitative researchers use video cameras or audio recorders to record in-depth interviews for transcription.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.

# Information for the Site Administrator

- ◉ Why the site was chosen
- ◉ What time and resources are required
- ◉ What will be accomplished at the site
- ◉ What potential there is for your presence to be disruptive
- ◉ What individuals at the site will gain from the study
- ◉ How you will use and report the results

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# Procedures

- The *Procedures* section is based directly on the research questions. Specifically, this is the “how-to” section of the study and will introduce the design of the research and how the data will be collected based on the questions of interest.
- The material should be presented in a step-by-step fashion ( just like a recipe book).
- Another researcher should be able to replicate the study by reading the Procedures section without needing to ask any questions.

# Qualitative Procedures: Components

- ◎ Strategies of Inquiry
- ◎ Data Collection
- ◎ Data Recording
  - > Instruments

# Strategies of Inquiry

1. Identify the specific strategy of inquiry to be used

## 5 Qualitative Research Designs/ Tradition

BIOGRAPHY/ORAL LIFE HISTORY – understanding a person in their context

ETHNOGRAPHY – Primary qualitative research technique, need to understand “others” who are different from us at a collective level – ethnic group, for example how do we understand and relate to others, need for research on why are some people different from other people, get to the bottom of differences

# Research Design/ Tradition (cont.)

GROUNDNED THEORY – understanding causation of a belief or behavior

CASE STUDY – in-depth understanding of a single case – could be an individual

PHENOMENOLOGY – understanding a unique aspect of human phenomena

# Strategies of Inquiry (cont.)

2. Provide some background information about the strategy
  - Application of and brief definition for the discipline origin
3. Discuss the Intended outcome from this type of strategy
4. Discuss the source of this strategy

# Strategies of Inquiry (cont.)

5. Discuss why it is an appropriate strategy
6. Identify how the use of this strategy will shape the type of questions asked, the form of data collection, the steps and data analysis, and the final narrative

# Data Collection Procedures

- This section should include discussion about participants and the site
  - > The setting
  - > The actors (who will be interviewed)
  - > The events (what will the actors will be observed or interviewed doing)
  - > The process (the evolving nature of events undertaken by the actors within the setting)
- Indicate the type or types of data to be collected (e.g., observational, interviews, documents, audio and visual material).

# Qualitative Data Collection Methods (cont.)

- ◉ Interviews
  - > Individual
  - > Focus groups
- ◉ Participant observations
- ◉ Open-ended surveys
- ◉ Content analysis

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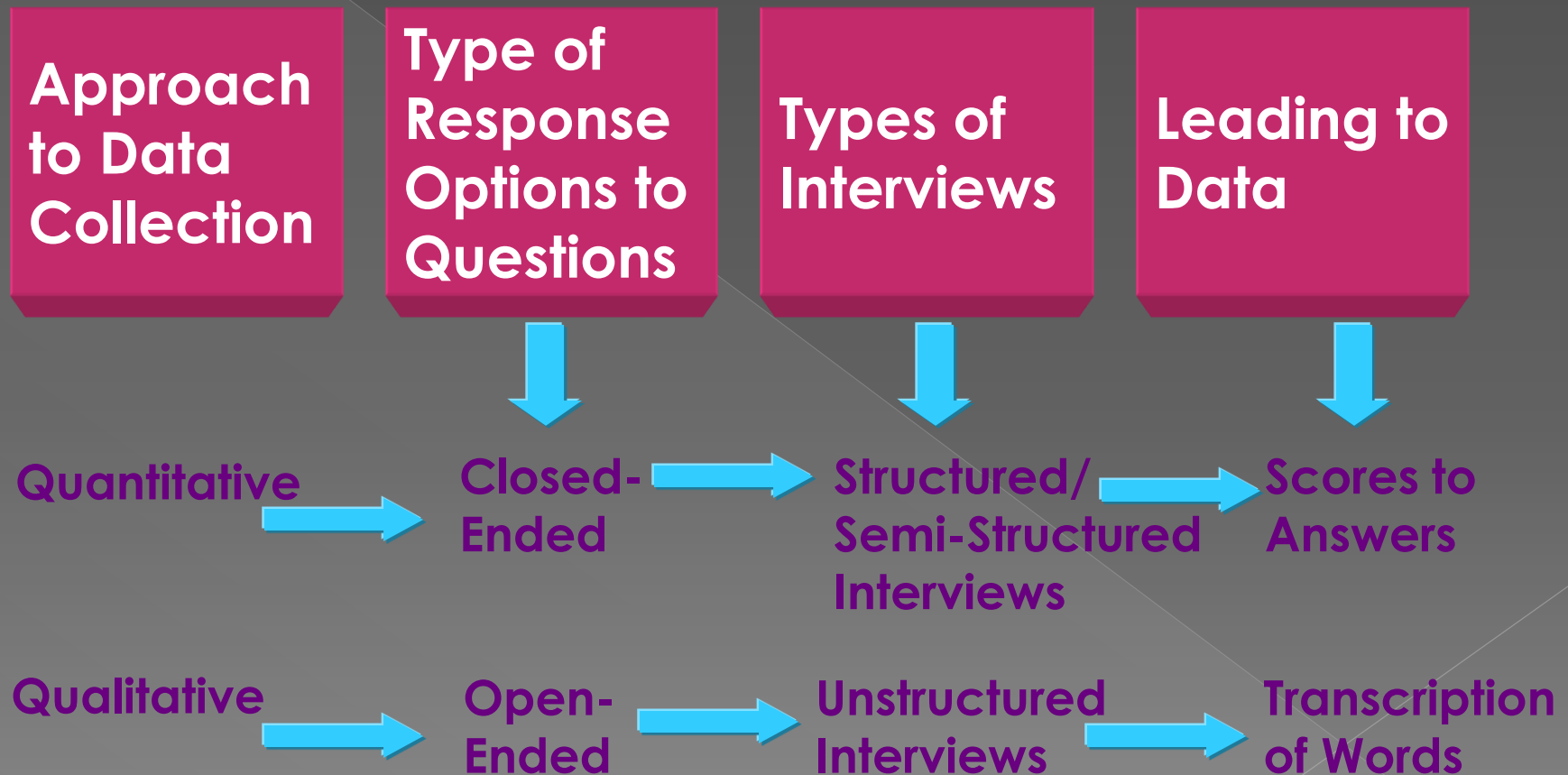


# Interviews

- ◉ Types: One-on-one, phone, e-mail, focus group
- ◉ General open-ended questions are asked to allow the participant to
  - > create options for responding
  - > voice their experiences and perspectives
- ◉ Information is recorded, then transcribed for analysis.

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# Structured, Unstructured and Semi-Structured Interviews



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# Planning to Interview

- ◉ Developing Questions
  - > Mechanics of Question Development
- ◉ Piloting the Interview Questions
- ◉ Planning the Interview
- ◉ Recording the Interview

# Focus Groups

- A small-group interview
- Focus groups are useful when
  - > participants might be more willing to discuss the topic in front of peers (e.g., teen smokers' views on smoking)
  - > Participants' answers can inform others (i.e., participants can feed off one another, or group ideas might be generated that would not be available in one-one-one interviews)
  - > Time constraints or accessibility are issues for the researcher

# Types of Focus Groups

- Traditional (or face-to-face) focus groups
- Online, synchronous focus groups
- Asynchronous focus groups

# Focus Group Considerations

- Researcher acts as facilitator or moderator
- Level of moderation depends on participants
- Difficult to record and moderate; tape recording is generally necessary and a separate note taker (who is neither the researcher nor a participant) is recommended.
- Ethical considerations with regard to confidentiality

Glesne, C. (2006). *Becoming qualitative researchers: An introduction* (3rd ed.). Boston, MA: Pearson.

# Interview Procedures

- ◉ Identify the interviewees.
- ◉ Determine the type of interview you will use (e.g., focus group, one-on-one).
- ◉ Obtain consent from the interviewee to participate in the study.
- ◉ Locate a quiet, suitable place for conducting the interview.
- ◉ During the interview, audiotape the questions and responses.

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# Interview Procedures (cont.)

- ◉ During the interview, have an interview plan using your interview protocol, but be flexible.
- ◉ Use probes to follow up on areas of interest.
  - > Include possible probes in your interview protocol.
  - > During the interview, design probes as you listen to what the participant is talking about.
- ◉ Be courteous and professional when the interview is over.

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# Observations

- ◉ Allow you as the researcher to immerse yourself into a social setting, enabling you to learn firsthand how
  - > the actions of participants are compatible with their words
  - > patterns of behaviors exist
  - > expected and unexpected experiences occur
  - > trust, relationships, and obligations with others are developed.

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# Participant-Observation Continuum

- Participant observation ranges across a continuum from *mostly observing* to *mostly participating*.
- Oftentimes the researcher finds his or herself at different points along the continuum during the data collection process (though this isn't necessary).



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# The Process of Observing

- Obtain the required permissions needed to gain access to the site.
- Ease into the site slowly by looking around, getting a general sense of the site, and taking limited notes, at least initially.
- Identify who or what to observe, when to observe, and how long to observe.
- Determine, initially, your role as an observer.

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# The Process of Observing (cont.)

- Conduct multiple observations over time to obtain the best understanding of the site and the individuals.
- Design some means for recording notes during an observation.
  - > Descriptive field notes describe the events, activities, and people.
  - > Reflective field notes record personal reflections that relate to insights, hunches, or broad themes that may emerge.
- When complete, slowly withdraw from the site.

# Open-Ended Surveys

- Surveys with open-ended questions give participants the opportunity to express their opinions and give detailed answers.
- They are different from closed-ended questions, which give you a set response choice.
- A combination of closed and open questions can be used (e.g., asking a closed-ended question, followed by an open-ended question, to allow the participant to explain his or her choice).

# Documents

- ◉ Public and private records
- ◉ Good sources for text data
- ◉ Obtain permission before using documents
- ◉ Optically scan documents when possible

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# Audiovisual Materials

- ◉ Determine the material that can provide evidence to address your research questions.
- ◉ Determine if the material is available, and obtain permission to use it.
- ◉ Check the accuracy and authenticity of the material if you do not record it yourself.
- ◉ Collect the data and organize it.

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# Instruments

- If established instruments are utilized, this section will detailed each data-collection instrument. Relevant information regarding each instrument should be included (as well as the source or developers of the instrument and any other salient information).



# Data Analysis

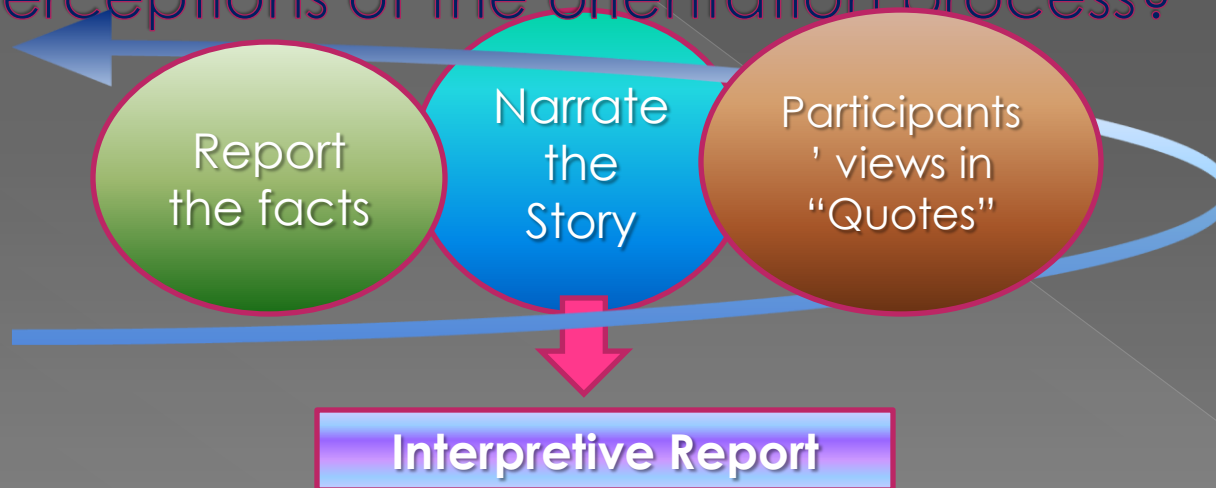
- Data analyses should be based on the **research questions** and the **research design** selected for the study. Specify the procedures for reducing and coding the data. For qualitative studies, the procedures to be followed for the analyses must also be addressed.

## Strategies of Inquiry

### *Example Qualitative Research Questions*

**Central ?** - What are the discourses through which newly hired secondary education teachers make sense of, and become accustomed to, a new work environment?

**Sub ?** - What are the newly hired teacher's perceptions of the orientation process?



**Design.** Qualitative method utilizing an ethnographic approach with a realist design.

# Data Analysis

(see Chapter 9, Creswell, 2008)

Codes the text for  
description to be used  
in the research report

Codes the text for  
themes to be used  
in the research report

The researcher codes the data (locates text  
segments and assigns a code to label them)

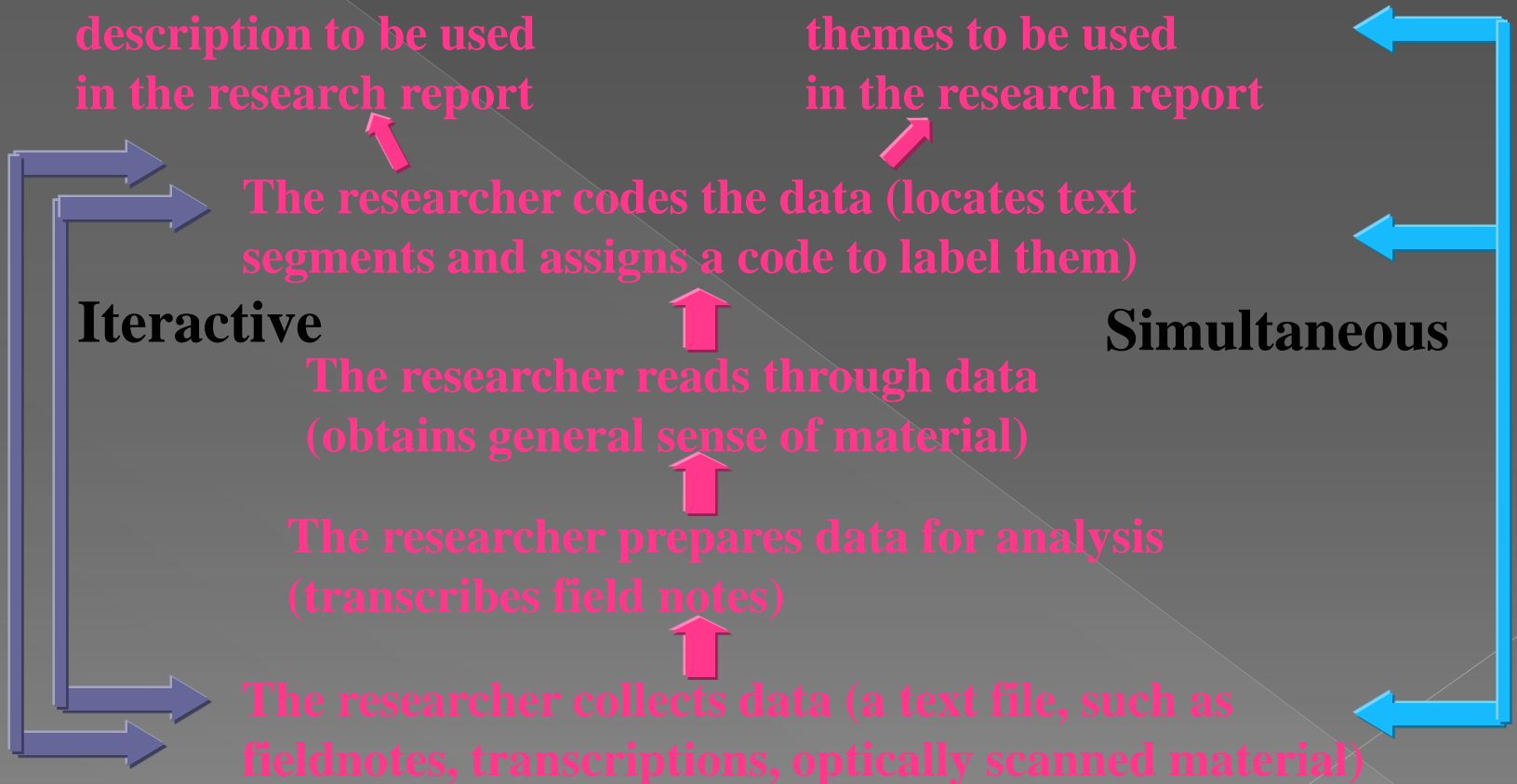
**Interactive**

**Simultaneous**

The researcher reads through data  
(obtains general sense of material)

The researcher prepares data for analysis  
(transcribes field notes)

The researcher collects data (a text file, such as  
fieldnotes, transcriptions, optically scanned material)



## Data Analysis (Qual)

**Design.** Qualitative method utilizing an ethnographic approach with a realist design.

- ◉ The third-person voice was used, because this is a realist design, no personal ideas were included in the report; rather, the facts are presented through the actual words of the participants. Objective data from the interviews and observations were sequentially coded and objectively reported (including the use of personal quotes).
- ◉ Ordinary details of each teacher's work experience were included, and standard categories for cultural descriptions were used. The final interpretive report was then reviewed, which allowed the researcher to provide subjective explanations of the data representing the nature of teacher retention.

# Limitations

## Quantitative and Qualitative

- Sufficient access to the site for data collection
  - > Sufficient time for data collection
  - > Limit initial collection to one or two observations or interviews
  - > Time is needed to establish a substantial database
- Observational role
- Building rapport with participants
- Obtaining permission to use documents and audiovisual materials
- Ethical issues
  - > Anonymity of participants
  - > Convey true purpose of study without deception

## **Methodology (Quantitative)**

### **Participants**

Include the **target population** and the **sample** that you will use for generalizing about the target population. Include the demographic information such as age, gender, and ethnicity of your sample. The procedures for selecting the sample should be outlined, including justification for the sampling method, also known as Sampling Procedures.

### **Instruments**

**Instrument 1.** List the name of the instrument here and include the relevant information for the tool.

**Instrument 2.** Same as above if more than one instrument is being used.

Include the instruments you plan on using to measure the variables in your research questions, also provide the following: (a) the source or developers of the instrument; (b) validity and reliability information; (c) information on how it was normed, and (d) other salient information (e.g., number of items in each scale, subscales, etc.).

### **Procedures**

Refer to **Part III Research Designs** in the Creswell text or the **Reference Guide to Basic Research Designs** and introduce the type of research design you will employ in order to answer the research question(s). Based on the research design specifically discuss how the data will be collected to answer the research question(s). Discuss this as a step-by-step process.

**Data analysis.** Insert data analysis here.

**Thank you for your attention!**

