

## CHAPTER NINE

### Qualitative Procedures

Qualitative procedures demonstrate a different approach to scholarly inquiry than methods of quantitative research. Qualitative inquiry employs different philosophical assumptions; strategies of inquiry; and methods of data collection, analysis, and interpretation. Although the processes are similar, qualitative procedures rely on text and image data, have unique steps in data analysis, and draw on diverse strategies of inquiry.

In fact, the strategies of inquiry chosen in a qualitative project have a dramatic influence on the procedures, which, even within strategies, are anything but uniform. Looking over the landscape of qualitative procedures shows diverse perspectives ranging from social justice thinking (Denzin & Lincoln, 2005), to ideological perspectives (Lather, 1991), to philosophical stances (Schwandt, 2000), to systematic procedural guidelines (Creswell, 2007; Corbin & Strauss, 2007). All perspectives vie for center stage in this unfolding model of inquiry called qualitative research.

This chapter attempts to combine many perspectives, provide general procedures, and use examples liberally to illustrate variations in strategies. This discussion draws on thoughts provided by several authors writing about qualitative proposal design (e.g., see Berg, 2001; Marshall & Rossman, 2006; Maxwell, 2005; Rossman & Rallis, 1998). The topics in a proposal section on procedures are characteristics of qualitative research, the research strategy, the role of the researcher, steps in data collection and analysis, strategies for validity, the accuracy of findings, and narrative structure. Table 9.1 shows a checklist of questions for designing qualitative procedures.

### THE CHARACTERISTICS OF QUALITATIVE RESEARCH

For many years, proposal writers had to discuss the characteristics of qualitative research and convince faculty and audiences as to their legitimacy. Now these discussions are less frequently found in the literature and there is some consensus as to what constitutes qualitative inquiry. Thus, my suggestions about this section of a proposal are as follows:

**Table 9.1** A Checklist of Questions for Designing a Qualitative Procedure

_____	Are the basic characteristics of qualitative studies mentioned?
_____	Is the specific type of qualitative strategy of inquiry to be used in the study mentioned? Is the history of, a definition of, and applications for the strategy mentioned?
_____	Does the reader gain an understanding of the researcher's role in the study (past historical, social, cultural experiences, personal connections to sites and people, steps in gaining entry, and sensitive ethical issues)?
_____	Is the purposeful sampling strategy for sites and individuals identified?
_____	Are the specific forms of data collection mentioned and a rationale given for their use?
_____	Are the procedures for recording information during the data collection procedure mentioned (such as protocols)?
_____	Are the data analysis steps identified?
_____	Is there evidence that the researcher has organized the data for analysis?
_____	Has the researcher reviewed the data generally to obtain a sense of the information?
_____	Has coding been used with the data?
_____	Have the codes been developed to form a description or to identify themes?
_____	Are the themes interrelated to show a higher level of analysis and abstraction?
_____	Are the ways that the data will be represented mentioned—such as in tables, graphs, and figures?
_____	Have the bases for interpreting the analysis been specified (personal experiences, the literature, questions, action agenda)?
_____	Has the researcher mentioned the outcome of the study (developed a theory, provided a complex picture of themes)?
_____	Have multiple strategies been cited for validating the findings?

- Review the needs of potential audiences for the proposal. Decide whether audience members are knowledgeable enough about the characteristics of qualitative research that this section is not necessary.
- If there is some question about their knowledge, present the basic characteristics of qualitative research in the proposal and possibly discuss a recent qualitative research journal article (or study) to use as an example to illustrate the characteristics.
- Several lists of characteristics might be used (e.g., Bogdan & Biklen, 1992; Eisner, 1991; Hatch, 2002; LeCompte & Schensul, 1999; Marshall & Rossman, 2006), but I will rely on a composite analysis of several of these writers that I incorporated into my book on qualitative inquiry (Creswell, 2007). My list captures both traditional perspectives and the newer advocacy, participatory, and self-reflexive perspectives of qualitative inquiry. Here are the characteristics of qualitative research, presented in no specific order of importance:
  - Natural setting—Qualitative researchers tend to collect data in the field at the site where participants experience the issue or problem under study. They do not bring individuals into a

lab (a contrived situation), nor do they typically send out instruments for individuals to complete. This up close information gathered by actually talking directly to people and seeing them behave and act within their context is a major characteristic of qualitative research. In the natural setting, the researchers have face-to-face interaction over time.

- **Researcher as key instrument**—Qualitative researchers collect data themselves through examining documents, observing behavior, or interviewing participants. They may use a protocol—an instrument for collecting data—but the researchers are the ones who actually gather the information. They do not tend to use or rely on questionnaires or instruments developed by other researchers.
- **Multiple sources of data**—Qualitative researchers typically gather multiple forms of data, such as interviews, observations, and documents, rather than rely on a single data source. Then the researchers review all of the data, make sense of it, and organize it into categories or themes that cut across all of the data sources.
- **Inductive data analysis**—Qualitative researchers build their patterns, categories, and themes from the bottom up, by organizing the data into increasingly more abstract units of information. This inductive process illustrates working back and forth between the themes and the database until the researchers have established a comprehensive set of themes. It may also involve collaborating with the participants interactively, so that participants have a chance to shape the themes or abstractions that emerge from the process.
- **Participants' meanings**—In the entire qualitative research process, the researcher keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or writers express in the literature.
- **Emergent design**—The research process for qualitative researchers is emergent. This means that the initial plan for research cannot be tightly prescribed, and all phases of the process may change or shift after the researcher enters the field and begins to collect data. For example, the questions may change, the forms of data collection may shift, and the individuals studied and the sites visited may be modified. The key idea behind qualitative research is to learn about the problem or issue from participants and to address the research to obtain that information.
- **Theoretical lens**—Qualitative researchers often use lens to view their studies, such as the concept of culture, central to ethnography, or gendered, racial, or class differences from the theoretical orientations discussed in Chapter 3. Sometimes the study may be organized around identifying the social, political, or historical context of the problem under study.
- **Interpretive**—Qualitative research is a form of interpretive inquiry in which researchers make an interpretation of what they see, hear, and understand. Their interpretations cannot be separated from their own backgrounds, history, contexts, and prior understandings. After a research report is issued, the readers make an interpretation as well as the participants, offering yet other interpretations of the study. With the readers, the participants, and the researchers all making interpretations, it is apparent how multiple views of the problem can emerge.
- **Holistic account**—Qualitative researchers try to develop a complex picture of the problem or issue under study. This involves reporting multiple perspectives, identifying the many factors involved in a situation, and generally sketching the larger picture that emerges. A visual model of many facets of a process or a central phenomenon aid in establishing this holistic picture (see, for example, Creswell & Brown, 1992).

## STRATEGIES OF INQUIRY

Beyond these general characteristics are more specific strategies of inquiry. These strategies focus on data collection, analysis, and writing, but they originate out of disciplines and flow throughout the process of research (e.g., types of problems, ethical issues of importance; Creswell, 2007b).

Many strategies exist, such as the 28 approaches identified by Tesch (1990), the 19 types in Wolcott's (2001) tree, and the 5 approaches to qualitative inquiry by Creswell (2007). As discussed in Chapter 1, I recommend that qualitative researchers choose from among the possibilities, such as narrative, phenomenology, ethnography, case study, and grounded theory. I selected these five because they are popular across the social and health sciences today. Others exist that have been addressed adequately in qualitative books, such as participatory action research (Kemmis & Wilkinson, 1998) or discourse analysis (Cheek, 2004). For the five approaches, researchers might study individuals (narrative, phenomenology); explore processes, activities, and events (case study, grounded theory); or learn about broad culture-sharing behavior of individuals or groups (ethnography).

In writing a procedure for a qualitative proposal, consider the following **research tips**:

- Identify the specific approach to inquiry that you will be using.
- Provide some background information about the strategy, such as its discipline origin, the applications of it, and a brief definition of it (see Chapter 1 for the five strategies of inquiry).
- Discuss why it is an appropriate strategy to use in the proposed study.
- Identify how the use of the strategy will shape the types of questions asked (see Morse, 1994, for questions that relate to strategies), the form of data collection, the steps of data analysis, and the final narrative.

## THE RESEARCHER'S ROLE

As mentioned in the list of characteristics, qualitative research is interpretative research, with the inquirer typically involved in a sustained and intensive experience with participants. This introduces a range of strategic, ethical, and personal issues into the qualitative research process (Locke et al., 2007). With these concerns in mind, inquirers explicitly identify reflexively their biases, values, and personal background, such as gender, history, culture, and socioeconomic status, that may shape their interpretations formed during a study. In addition, gaining entry to a research site and the ethical issues that might arise are also elements of the researcher's role.

- Include statements about past experiences that provide background data through which the audience can better understand the topic, the setting, or the participants and the researcher's interpretation of the phenomenon.
- Comment on connections between the researcher and the participants and on the research sites. "Backyard" research (Glesne & Peshkin, 1992) involves studying the researcher's own organization, or friends, or immediate work setting. This often leads to compromises in the researcher's ability to disclose information and raises difficult power issues. Although data collection may be convenient and easy, the problems of reporting data that are biased, incomplete, or compromised are legion. If studying the backyard is necessary, employ multiple

strategies of validity (as discussed later) to create reader confidence in the accuracy of the findings.

- Indicate steps taken to obtain permission from the Institutional Review Board (see Chapter 4) to protect the rights of human participants. Attach, as an appendix, the approval letter from the IRB and discuss the process involved in securing permission.
- Discuss steps taken to gain entry to the setting and to secure permission to study the participants or situation (Marshall & Rossman, 2006). It is important to gain access to research or archival sites by seeking the approval of **gatekeepers**, individuals at the research site that provide access to the site and allow or permit the research to be done. A brief proposal might need to be developed and submitted for review by gatekeepers. Bogdan and Biklen (1992) advance topics that could be addressed in such a proposal:
  - Why was the site chosen for study?
  - What activities will occur at the site during the research study?
  - Will the study be disruptive?
  - How will the results be reported?
  - What will the gatekeeper gain from the study?
- Comment about sensitive ethical issues that may arise (see Chapter 3, and Berg, 2001). For each issue raised, discuss how the research study will address it. For example, when studying a sensitive topic, it is necessary to mask names of people, places, and activities. In this situation, the process for masking information requires discussion in the proposal.

## DATA COLLECTION PROCEDURES

Comments about the role of the researcher set the stage for discussion of issues involved in collecting data. The data collection steps include setting the boundaries for the study, collecting information through unstructured or semistructured observations and interviews, documents, and visual materials, as well as establishing the protocol for recording information.

- Identify the *purposefully selected* sites or individuals for the proposed study. The idea behind qualitative research is to **purposefully select** participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research question. This does not necessarily suggest random sampling or selection of a large number of participants and sites, as typically found in *quantitative* research. A discussion about participants and site might include four aspects identified by Miles and Huberman (1994): the *setting* (where the research will take place), the *actors* (who will be observed or interviewed), the *events* (what the actors will be observed or interviewed doing), and the *process* (the evolving nature of events undertaken by the actors within the setting).
- Indicate the type or types of data to be collected. In many qualitative studies, inquirers collect multiple forms of data and spend a considerable time in the natural setting gathering information. The collection procedures in qualitative research involve four basic types, as shown in Table 9.2.

**Table 9.2** Qualitative Data Collection Types, Options, Advantages, and Limitations

Data Collection Types	Options Within Types	Advantages of the Type	Limitations of the Type
Observations	<ul style="list-style-type: none"> <li>• Complete participant—researcher conceals role</li> <li>• Observer as participant—role of researcher is known</li> <li>• Participant as observer—observation role secondary to participant role</li> <li>• Complete observer—researcher observes without participating</li> </ul>	<ul style="list-style-type: none"> <li>• Researcher has a first-hand experience with participant.</li> <li>• Researcher can record information as it occurs.</li> <li>• Unusual aspects can be noticed during observation.</li> <li>• Useful in exploring topics that may be uncomfortable for participants to discuss.</li> </ul>	<ul style="list-style-type: none"> <li>• Researcher may be seen as intrusive.</li> <li>• Private information may be observed that researcher cannot report.</li> <li>• Researcher may not have good attending and observing skills.</li> <li>• Certain participants (e.g., children) may present special problems in gaining rapport.</li> </ul>
Interviews	<ul style="list-style-type: none"> <li>• Face-to-face—one-on-one, in-person interview</li> <li>• Telephone—researcher interviews by phone</li> <li>• Focus group—researcher interviews participants in a group</li> <li>• E-mail Internet interview</li> </ul>	<ul style="list-style-type: none"> <li>• Useful when participants cannot be directly observed.</li> <li>• Participants can provide historical information.</li> <li>• Allows researcher control over the line of questioning.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides indirect information filtered through the views of interviewees.</li> <li>• Provides information in a designated place rather than the natural field setting.</li> <li>• Researcher's presence may bias responses.</li> <li>• Not all people are equally articulate and perceptive.</li> </ul>

Data Collection Types	Options Within Types	Advantages of the Type	Limitations of the Type
Documents	<ul style="list-style-type: none"> <li>• Public documents, such as minutes of meetings, or newspapers</li> <li>• Private documents, such as journals, diaries, or letters</li> </ul>	<ul style="list-style-type: none"> <li>• Enables a researcher to obtain the language and words of participants.</li> <li>• Can be accessed at a time convenient to researcher—an unobtrusive source of information.</li> <li>• Represents data which are thoughtful in that participants have given attention to compiling them.</li> <li>• As written evidence, it saves a researcher the time and expense of transcribing.</li> </ul>	<ul style="list-style-type: none"> <li>• Not all people are equally articulate and perceptive.</li> <li>• May be protected information unavailable to public or private access.</li> <li>• Requires the researcher to search out the information in hard-to-find places.</li> <li>• Requires transcribing or optically scanning for computer entry.</li> <li>• Materials may be incomplete.</li> <li>• The documents may not be authentic or accurate.</li> </ul>
Audio-Visual Materials	<ul style="list-style-type: none"> <li>• Photographs</li> <li>• Videotapes</li> <li>• Art objects</li> <li>• Computer software</li> <li>• Film</li> </ul>	<ul style="list-style-type: none"> <li>• May be an unobtrusive method of collecting data.</li> <li>• Provides an opportunity for participants to directly share their reality.</li> <li>• It is creative in that it captures attention visually.</li> </ul>	<ul style="list-style-type: none"> <li>• May be difficult to interpret.</li> <li>• May not be accessible publicly or privately.</li> <li>• The presence of an observer (e.g., photographer) may be disruptive and affect responses.</li> </ul>

NOTE: This table includes material taken from Merriam (1998), Bogdan & Bikien (1992), and Creswell (2007).

• **Qualitative observations** are those in which the researcher takes field notes on the behavior and activities of individuals at the research site. In these field notes, the researcher records, in an unstructured or semistructured way (using some prior questions that the inquirer wants to know), activities at the research site. Qualitative observers may also engage in roles varying from a non-participant to a complete participant.

• In **qualitative interviews**, the researcher conducts face-to-face interviews with participants, interviews participants by telephone, or engages in focus group interviews, with six to eight

interviewees in each group. These interviews involve unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants.

- During the process of research, the investigator may collect **qualitative documents**. These may be public documents (e.g., newspapers, minutes of meetings, official reports) or private documents (e.g., personal journals and diaries, letters, e-mails).
- A final category of qualitative data consists of **qualitative audio and visual materials**. This data may take the form of photographs, art objects, videotapes, or any forms of sound.
- In a discussion about data collection forms, be specific about the types and include arguments concerning the strengths and weaknesses of each type, as discussed in Table 9.2.
- Include data collection types that go beyond typical observations and interviews. These unusual forms create reader interest in a proposal and can capture useful information that observations and interviews may miss. For example, examine the compendium of types of data in Table 9.3 that can be used, to stretch the imagination about possibilities, such as gathering sounds or tastes, or using cherished items to elicit comments during an interview.

## **DATA RECORDING PROCEDURES**

Before entering the field, qualitative researchers plan their approach to data recording. The proposal should identify what data the researcher will record and the procedures for recording data.

- Use a *protocol* for recording observational data. Researchers often engage in multiple observations during the course of a qualitative study and use an **observational protocol** for recording information while observing. This may be a single page with a dividing line down the middle to separate *descriptive notes* (portraits of the participants, a reconstruction of dialogue, a description of the physical setting, accounts of particular events, or activities) from *reflective notes* (the researcher's personal thoughts, such as "speculation, feelings, problems, ideas, hunches, impressions, and prejudices" Bogdan & Biklen, 1992, p. 121). Also written on this form might be *demographic information* about the time, place, and date of the field setting where the observation takes place.

Table 9.3 A List of Qualitative Data Collection Approaches

SOURCE: Adapted from Creswell (2007).

<p><b>Observations</b></p> <ul style="list-style-type: none"> <li>• Gather field notes by conducting an observation as a participant.</li> <li>• Gather field notes by conducting an observation as an observer.</li> <li>• Gather field notes by spending more time as a participant than as an observer.</li> <li>• Gather field notes by spending more time as an observer than as a participant.</li> <li>• Gather field notes first by observing as an outsider and then moving into the setting and observing as an insider.</li> </ul>
<p><b>Interviews</b></p> <ul style="list-style-type: none"> <li>• Conduct an unstructured, open-ended interview and take interview notes.</li> <li>• Conduct an unstructured, open-ended interview, audiotape the interview, and transcribe it.</li> <li>• Conduct a semistructured interview, audiotape the interview, and transcribe the interview.</li> <li>• Conduct a focus group interview, audiotape the interview, and transcribe it.</li> <li>• Conduct different types of interviews: email, face-to-face, focus group, online focus group, telephone interviews</li> </ul>
<p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Keep a journal during the research study.</li> <li>• Have a participant keep a journal or diary during the research study.</li> <li>• Collect personal letters from participants.</li> <li>• Analyze public documents (e.g., official memos, minutes, records, archival material).</li> <li>• Examine autobiographies and biographies.</li> <li>• Have participants take photographs or videotapes (i.e., photo elicitation).</li> <li>• Chart audits</li> <li>• Medical records</li> </ul>
<p><b>Audio-visual Materials</b></p> <ul style="list-style-type: none"> <li>• Examine physical trace evidence (e.g., footprints in the snow).</li> <li>• Videotape or film a social situation or an individual or group.</li> <li>• Examine photographs or videotapes.</li> <li>• Collect sounds (e.g., musical sounds, a child's laughter, car horns honking).</li> <li>• Collect e-mail messages.</li> <li>• Collect cell phone text messages.</li> <li>• Examine possessions or ritual objects.</li> <li>• Collect sounds, smells, tastes, or any stimuli of the senses.</li> </ul>

• Use an **interview protocol** for asking questions and recording answers during a qualitative interview. This protocol includes the following components:

- A heading (date, place, interviewer, interviewee)
- Instructions for the interviewer to follow so that standard procedures are used from one interview to another
- The questions (typically an ice-breaker question at the beginning followed by 4-5 questions that are often the subquestions in a qualitative research plan, followed by some concluding statement or a question, such as, "Who should I visit with to learn more about my questions?")
- Probes for the 4-5 questions, to follow up and ask individuals to explain their ideas in more detail or to elaborate on what they have said
- Space between the questions to record responses
- A final thank-you statement to acknowledge the time the interviewee spent during the interview (see Creswell, 2007)

- Researchers record information from interviews by making handwritten notes, by audiotaping, or by videotaping. Even if an interview is taped, I recommend that researchers take notes, in the event that recording equipment fails. If audiotaping is used, researchers need to plan in advance for the transcription of the tape.
- The recording of documents and visual materials can be based on the researcher's structure for taking notes. Typically, notes reflect information about the document or other material as well as key ideas in the documents. It is helpful to note whether the information represents primary material (i.e., information directly from the people or situation under study) or secondary material (i.e., secondhand accounts of the people or situation written by others). It is also helpful to comment on the reliability and value of the data source.

## DATA ANALYSIS AND INTERPRETATION

Discussion of the plan for analyzing the data might have several components. The process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the data (some qualitative researchers like to think of this as peeling back the layers of an onion), representing the data, and making an interpretation of the larger meaning of the data. Several generic processes might be stated in the proposal that convey a sense of the overall activities of qualitative data analysis, such as the following drawn from my own thoughts (Creswell, 2007) and those of Rossman and Rallis (1998):

- It is an ongoing process involving continual reflection about the data, asking analytic questions, and writing memos throughout the study. I say that qualitative data analysis is conducted concurrently with gathering data, making interpretations, and writing reports. While interviews are going on, for example, the researcher may be analyzing an interview collected earlier, writing memos that may ultimately be included as a narrative in the final report, and organizing the structure of the final report.
- Data analysis involves collecting open-ended data, based on asking general questions and developing an analysis from the information supplied by participants.
- Often we see qualitative data analysis reported in journal articles and books that is a generic form of analysis. In this approach, the researcher collects qualitative data, analyzes it for themes or perspectives, and reports 4-5 themes. I consider this approach to be basic qualitative analysis; today many qualitative researchers go beyond this generic analysis to add a procedure within one of the qualitative strategies of inquiry. For example, *grounded theory* has systematic steps (Corbin & Strauss, 2007; Strauss & Corbin, 1990, 1998). These involve generating categories of information (open coding), selecting one of the categories and positioning it within a theoretical model (axial coding), and then explicating a story from the interconnection of these categories (selective coding). *Case study* and *ethnographic research* involve a detailed description of the setting or individuals, followed by analysis of the data for themes or issues (see Stake, 1995; Wolcott, 1994). *Phenomenological research* uses the analysis of significant statements, the generation of meaning units, and the development of what Moustakas (1994) calls an essence description. *Narrative research* employs restorying the participants' stories using structural devices, such as plot, setting, activities, climax, and denouement (Clandinin & Connelly, 2000). As these examples illustrate, the processes as well as the terms differ from one analytic strategy to another.

- Despite these analytic differences depending on the type of strategy used, qualitative inquirers often use a general procedure and convey in the proposal the steps in data analysis. An ideal situation is to blend the general steps with the specific research strategy steps. An overview of the data analysis process is seen in Figure 9.1. As a **research tip**, I urge researchers to look at qualitative data analysis as following steps from the specific to the general and as involving multiple levels of analysis.

**Figure 9.1** Data Analysis in Qualitative Research



This figure suggests a linear, hierarchical approach building from the bottom to the top, but I see it as more interactive in practice; the various stages are interrelated and not always visited in the order presented. These levels are emphasized in the following steps:

**Step 1.** *Organize and prepare* the data for analysis. This involves transcribing interviews, optically scanning material, typing up field notes, or sorting and arranging the data into different types depending on the sources of information.

**Step 2.** Read through all the data. A first step is to obtain a *general sense* of the information and to reflect on its overall meaning. What general ideas are participants saying? What is the tone

of the ideas? What is the impression of the overall depth, credibility, and use of the information? Sometimes qualitative researchers write notes in margins or start recording general thoughts about the data at this stage.

Step 3. Begin detailed analysis with a coding process. **Coding** is the process of organizing the material into chunks or segments of text before bringing meaning to information (Rossman & Rallis, 1998, p. 171). It involves taking text data or pictures gathered during data collection, segmenting sentences (or paragraphs) or images into categories, and labeling those categories with a term, often a term based in the actual language of the participant (called an *in vivo* term).

Before proceeding to Step 4, consider some remarks that will provide detailed guidance for the coding process. Tesch (1990, pp. 142-145) provides a useful analysis of the process in eight steps:

1. Get a sense of the whole. Read all the transcriptions carefully. Perhaps jot down some ideas as they come to mind.
2. Pick one document (i.e., one interview)—the most interesting one, the shortest, the one on the top of the pile. Go through it, asking yourself, “What is this about?” Do not think about the substance of the information but its underlying meaning. Write thoughts in the margin.
3. When you have completed this task for several participants, make a list of all topics. Cluster together similar topics. Form these topics into columns, perhaps arrayed as major topics, unique topics, and leftovers.
4. Now take this list and go back to your data. Abbreviate the topics as codes and write the codes next to the appropriate segments of the text. Try this preliminary organizing scheme to see if new categories and codes emerge.
5. Find the most descriptive wording for your topics and turn them into categories. Look for ways of reducing your total list of categories by grouping topics that relate to each other. Perhaps draw lines between your categories to show interrelationships.
6. Make a final decision on the abbreviation for each category and alphabetize these codes.
7. Assemble the data material belonging to each category in one place and perform a preliminary analysis.
8. If necessary, recode your existing data.

These eight steps engage a researcher in a systematic process of analyzing textual data. Variations exist in this process. As a **research tip**, I encourage qualitative researchers to analyze their data for material that can address the following:

- Codes on topics that readers would expect to find, based on the past literature and common sense
- Codes that are surprising and that were not anticipated at the beginning of the study
- Codes that are unusual, and that are, in and of themselves, of conceptual interest to readers (e.g., in Asmussen and Creswell, 1995, we identified *retriggering* as one of the codes/themes in

the analysis that suggested a new dimension for us to a gunman incident on campus and that seemed to connect with experiences of others on campus)

- Codes that address a larger theoretical perspective in the research

As an alternative conceptualization, consider the list by Bogdan and Biklen (1992, pp. 166-172) of the types of codes that they look for in a qualitative database:

- Setting and context codes
- Perspectives held by subjects
- Subjects' ways of thinking about people and objects
- Process codes
- Activity codes
- Strategy codes
- Relationship and social structure codes
- Preassigned coding schemes

One further issue about coding is whether the researcher should (a) develop codes *only* on the basis of the emerging information collected from participants, (b) use predetermined codes and then fit the data to them, or (c) use some combination of predetermined and emerging codes. The traditional approach in the social sciences is to allow the codes to emerge during the data analysis. In the health sciences, a popular approach is to use predetermined codes based on the theory being examined. In this case, the researchers might develop a **qualitative codebook**, a table or record that contains a list of predetermined codes that researchers use for coding the data. This codebook might be composed with the names of codes in one column, a definition of codes in another column, and then specific instances (e.g., line numbers) in which the code was found in the transcripts. Having such a codebook is invaluable when multiple researchers are coding the data from different transcripts. This codebook can evolve and change during a study based on close analysis of the data, even when the researcher is not starting from an emerging code perspective. For researchers who have a distinct theory they want to test in their projects, I would recommend that a preliminary codebook be developed for coding the data and permit the codebook to develop and change based on the information learned during the data analysis. The use of a codebook is especially helpful for fields in which *quantitative* research dominates and a more systematic approach to *qualitative* research is needed.

Returning to the general coding process, some researchers have found it useful to hand code qualitative transcripts or information, sometimes using color code schemes and to cut and paste text segments onto note cards. This is a laborious and time-consuming approach. Others tend to use qualitative computer software programs to help code, organize, and sort information that will be useful in writing the qualitative study. Several excellent computer software programs are available, and they have similar features: good tutorials and demonstration CDs, ability to incorporate both text and image (e.g., photographs) data, the feature of storing and organizing data, the search capacity of locating all text associated with specific codes, interrelated codes for making queries of the relationship among codes, and the import and export of qualitative data to *quantitative* programs, such as spreadsheets or data analysis programs.

The basic idea behind these programs is that using the computer is an efficient means for storing and locating qualitative data. Although the researcher still needs to go through each line of text (as in transcriptions) and assign codes, this process may be faster and more efficient than hand coding. Also, in large databases, the researcher can quickly locate all passages (or text segments) coded the same and determine whether participants are responding to a code idea in similar or different ways. Beyond this, the computer program can facilitate comparing different codes (e.g., How do males and females—the first code of gender—differ in terms of their attitudes to smoking—a second code) These are just a few features of the software programs that make them a logical choice for qualitative data analysis over hand coding. As with any software program, qualitative software programs require time and skill to learn and employ effectively, although books for learning the programs are widely available (e.g., Weitzman & Miles, 1995).

Most of the programs are available only on the PC platform. The computer software programs that my staff and I use in my research office are these:

- MAXqda (<http://www.maxqda.com/>). This is an excellent PC-based program from Germany that helps researchers systematically evaluate and interpret qualitative texts. It has all of the features mentioned earlier.
- Atlas.ti (<http://www.atlasti.com>). This is another PC-based program from Germany that enables a researcher to organize text, graphic, audio, and visual data files, along with coding, memos and findings, into a project.
- QSR NVivo (<http://www.qsrinternational.com/>) This program, from Australia, features the popular software program N6 (or Nud.ist) and NVivo concept mapping in combination. It is available only for Windows PC.
- HyperRESEARCH (<http://www.researchware.com/>). This is a program available for either the MAC or PC. It is an easy-to-use qualitative software package enabling users to code, retrieve, build theories, and conduct analyses of the data.

Step 4. Use the coding process to generate a description of the setting or people as well as categories or themes for analysis. *Description* involves a detailed rendering of information about people, places, or events in a setting. Researchers can generate codes for this description. This analysis is useful in designing detailed descriptions for case studies, ethnographies, and narrative research projects. Then use the coding to generate a small number of *themes* or categories, perhaps five to seven categories for a research study. These themes are the ones that appear as major findings in qualitative studies and are often used to create headings in the findings sections of studies. They should display multiple perspectives from individuals and be supported by diverse quotations and specific evidence.

Beyond identifying the themes during the coding process, qualitative researchers can do much with themes to build additional layers of complex analysis. For example, researchers interconnect themes into a story line (as in narratives) or develop them into a theoretical model (as in grounded theory). Themes are analyzed for each individual case and across different cases (as in case studies) or shaped into a general description (as in phenomenology). Sophisticated qualitative studies go beyond description and theme identification and into complex theme connections.

Step 5. Advance how the description and themes will be *represented* in the qualitative narrative. The most popular approach is to use a narrative passage to convey the findings of the analysis. This might be a discussion that mentions a chronology of events, the detailed discussion of several themes (complete with subthemes, specific illustrations, multiple perspectives from individuals, and quotations) or a discussion with interconnecting themes. Many qualitative researchers also use visuals, figures, or tables as adjuncts to the discussions. They present a process model (as in grounded theory), advance a drawing of the specific research site (as in ethnography), or convey descriptive information about each participant in a table (as in case studies and ethnographies).

Step 6. A final step in data analysis involves making an **interpretation** or meaning of the data. Asking, “What were the lessons learned?” captures the essence of this idea (Lincoln & Guba, 1985). These *lessons* could be the researcher’s personal interpretation, couched in the understanding that the inquirer brings to the study from her or his own culture, history, and experiences. It could also be a meaning derived from a comparison of the findings with information gleaned from the *literature or theories*. In this way, authors suggest that the findings confirm past information or diverge from it. It can also suggest *new questions* that need to be asked—questions raised by the data and analysis that the inquirer had not foreseen earlier in the study. One way ethnographers can end a study, says Wolcott (1994), is to ask further questions. The questioning approach is also used in advocacy and participatory approaches to qualitative research. Moreover, when qualitative researchers use a theoretical lens, they can form interpretations that call for action agendas for reform and change. Thus, interpretation in qualitative research can take many forms, be adapted for different types of designs, and be flexible to convey personal, research-based, and action meanings.

## **RELIABILITY, VALIDITY, AND GENERALIZABILITY**

Although validation of findings occurs throughout the steps in the process of research (as shown in Figure 9.1), this discussion focuses on it to enable a researcher to write a passage into a proposal on the procedures for validating the findings that will be undertaken in a study. Proposal developers need to convey the steps they will take in their studies to check for the accuracy and credibility of their findings.

Validity does not carry the same connotations in qualitative research as it does in quantitative research, nor is it a companion of reliability (examining stability or consistency of responses) or generalizability (the external validity of applying results to new settings, people, or samples; both are discussed in Chapter 8). **Qualitative validity** means that the researcher checks for the accuracy of the findings by employing certain procedures, while **qualitative reliability** indicates that the researcher’s approach is consistent across different researchers and different projects (Gibbs, 2007).

How do qualitative researchers check to determine if their approaches are consistent or reliable? Yin (2003) suggests that qualitative researchers need to document the procedures of their case studies and to document as many of the steps of the procedures as possible. He also

recommends setting up a detailed case study protocol and database. Gibbs (2007) suggests several **reliability procedures**:

- Check transcripts to make sure that they do not contain obvious mistakes made during transcription.
- Make sure that there is not a drift in the definition of codes, a shift in the meaning of the codes during the process of coding. This can be accomplished by constantly comparing data with the codes and by writing memos about the codes and their definitions (see the discussion on a qualitative codebook).
- For team research, coordinate the communication among the coders by regular documented meetings and by sharing the analysis.
- Cross-check codes developed by different researchers by comparing results that are independently derived.

Proposal writers need to include several of these procedures as evidence that they will have consistent results in their proposed study. I recommend that several procedures be mentioned in a proposal and that single researchers find another person who can cross-check their codes, for what I call **intercoder agreement** (or cross-checking). Such an agreement might be based on whether two or more coders agree on codes used for the same passages in the text (it is not that they code the same passage of text, but whether another coder would code it with the same or a similar code). Statistical procedures or reliability subprograms in qualitative computer software packages can then be used to determine the level of consistency of coding. Miles and Huberman (1994) recommend that the consistency of the coding be in agreement at least 80% of the time for good qualitative reliability.

Validity, on the other hand, is one of the strengths of qualitative research, and it is based on determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account (Creswell & Miller, 2000). Terms abound in the qualitative literature that speak to this idea, such as *trustworthiness*, *authenticity*, and *credibility* (Creswell & Miller, 2000), and it is a much-discussed topic (Lincoln & Guba, 2000).

A procedural perspective that I recommend for research proposals is to identify and discuss one or more strategies available to check the accuracy of the findings. The researcher actively incorporates **validity strategies** into their proposal. I recommend the use of multiple strategies, and these should enhance the researcher's ability to assess the accuracy of findings as well as convince readers of that accuracy. There are eight primary strategies, organized from those most frequently used and easy to implement to those occasionally used and more difficult to implement:

- *Triangulate* different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes. If themes are established based on converging several sources of data or perspectives from participants, then this process can be claimed as adding to the validity of the study.
- Use *member checking* to determine the accuracy of the qualitative findings through taking the final report or specific descriptions or themes back to participants and determining whether these participants feel that they are accurate. This does not mean taking back the raw transcripts to check for accuracy; instead, the researcher takes back parts of the polished product, such as the themes, the case analysis, the grounded theory, the cultural description,

and so forth. This procedure can involve conducting a follow-up interview with participants in the study and providing an opportunity for them to comment on the findings.

- Use *rich, thick description* to convey the findings. This description may transport readers to the setting and give the discussion an element of shared experiences. When qualitative researchers provide detailed descriptions of the setting, for example, or provide many perspectives about a theme, the results become more realistic and richer. This procedure can add to the validity of the findings.
- Clarify the *bias* the researcher brings to the study. This self-reflection creates an open and honest narrative that will resonate well with readers. Reflectivity has been mentioned as a core characteristic of qualitative research. Good qualitative research contains comments by the researchers about how their interpretation of the findings is shaped by their background, such as their gender, culture, history, and socioeconomic origin.
- Also present *negative or discrepant information* that runs counter to the themes. Because real life is composed of different perspectives that do not always coalesce, discussing contrary information adds to the credibility of an account. A researcher can accomplish this in discussing evidence about a theme. Most evidence will build a case for the theme; researchers can also present information that contradicts the general perspective of the theme. By presenting this contradictory evidence, the account becomes more realistic and hence valid.
- Spend *prolonged time* in the field. In this way, the researcher develops an in-depth understanding of the phenomenon under study and can convey detail about the site and the people that lends credibility to the narrative account. The more experience that a researcher has with participants in their actual setting, the more accurate or valid will be the findings.
- Use *peer debriefing* to enhance the accuracy of the account. This process involves locating a person (a peer debriefer) who reviews and asks questions about the qualitative study so that the account will resonate with people other than the researcher. This strategy—involving an interpretation beyond the researcher and invested in another person—adds validity to an account.
- Use an *external auditor* to review the entire project. As distinct from a peer debriefer, this auditor is not familiar with the researcher or the project and can provide an objective assessment of the project throughout the process of research or at the conclusion of the study. The role is similar to that of a fiscal auditor, and specific questions exist that auditors might ask (Lincoln & Guba, 1985). The procedure of having an independent investigator look over many aspects of the project (e.g., accuracy of transcription, the relationship between the research questions and the data, the level of data analysis from the raw data through interpretation) enhances the overall validity of a qualitative study.

**Qualitative generalization** is a term that is used in a limited way in qualitative research, since the intent of this form of inquiry is not to generalize findings to individuals, sites, or places outside of those under study (see Gibbs, 2007, for his cautionary note about qualitative generalizability). In fact, the value of qualitative research lies in the particular description and themes developed *in context* of a specific site. *Particularity* rather than *generalizability* (Greene & Caracelli, 1997) is the hallmark of qualitative research. However, there are a few discussions in the qualitative literature about generalizability, especially as applied to case study research in which the inquirer studies several cases. Yin (2003), for example, feels that qualitative case study results can be generalized to some *broader theory*. The generalization occurs when

qualitative researchers study additional cases and generalize findings to the new cases. It is the same as the *replication logic* used in experimental research. However, to repeat a case study's findings in a new case setting requires good documentation of qualitative procedures, such as a protocol for documenting the problem in detail and the development of a thorough case study database (Yin, 2003).

## THE QUALITATIVE WRITE-UP

A plan for a qualitative procedure should end with some comments about the narrative that emerges from the data analysis. Numerous varieties of narratives exist, and examples from scholarly journals illustrate models. In a plan for a study, consider advancing several points about the narrative.

The basic procedure in reporting the results of a qualitative study are to develop descriptions and themes from the data (see Figure 9.1), to present these descriptions and themes that convey multiple perspectives from participants and detailed descriptions of the setting or individuals. Using a qualitative strategy of inquiry, these results may also provide a chronological narrative of an individual's life (narrative research), a detailed description of their experiences (phenomenology), a theory generated from the data (grounded theory), a detailed portrait of a culture-sharing group (ethnography), or an in-depth analysis of one or more cases (case study).

Given these different strategies, the findings and interpretation sections of a plan for a study might discuss how the sections will be presented: as objective accounts, fieldwork experiences (Van Maanen, 1988), a chronology, a process model, an extended story, an analysis by cases or across cases, or a detailed descriptive portrait (Creswell, 2007).

At the specific level, some **writing strategies** might be as follows:

- Use quotes and vary their length from short to long embedded passages.
- Script conversation and report the conversation in different languages to reflect cultural sensitivity.
- Present text information in tabular form (e.g., matrices, comparison tables of different codes).
- Use the wording from participants to form codes and theme labels.
- Intertwine quotations with (the author's) interpretations.
- Use indents or other special formatting of the manuscript to call attention to quotations from participants.
- Use the first person "I" or collective "we" in the narrative form.
- Use metaphors and analogies (see, for example, Richardson, 1990, who discusses some of these forms).
- Use the narrative approach typically used within a qualitative strategy of inquiry (e.g., description in case studies and ethnographies, a detailed story in narrative research).
- Describe how the narrative outcome will be compared with theories and the general literature on the topic. In many qualitative articles, researchers discuss the literature at the end of the study (see the discussion in Chapter 2).

### **Example 9.1** *Qualitative Procedures*

The following is an example of a qualitative procedure written as part of a doctoral proposal (Miller, 1992). Miller's project was an ethnographic study of first-year experiences of the president of a 4-year college. As I present this discussion, I refer back to the sections addressed in this chapter and highlight them in boldfaced type. Also, I have maintained Miller's use of the term *informant*, although today, the more appropriate term, *participant*, should be used.

### **The Qualitative Research Paradigm**

The qualitative research paradigm has its roots in cultural anthropology and American sociology (Kirk & Miller, 1986). It has only recently been adopted by educational researchers (Borg & Gall, 1989). The intent of qualitative research is to understand a particular social situation, event, role, group, or interaction (Locke, Spirduso, & Silverman, 1987). It is largely an investigative process where the researcher gradually makes sense of a social phenomenon by contrasting, comparing, replicating, cataloguing and classifying the object of study (Miles & Huberman, 1984). Marshall and Rossman (1989) suggest that this entails immersion in the everyday life of the setting chosen for the study; the researcher enters the informants' world and through ongoing interaction, seeks the informants' perspectives and meanings. [Qualitative assumptions are mentioned.]

Scholars contend that qualitative research can be distinguished from quantitative methodology by numerous unique characteristics that are inherent in the design. The following is a synthesis of commonly articulated assumptions regarding characteristics presented by various researchers.

1. Qualitative research occurs in natural settings, where human behavior and events occur.
2. Qualitative research is based on assumptions that are very different from quantitative designs. Theory or hypotheses are not established a priori.
3. The researcher is the primary instrument in data collection rather than some inanimate mechanism (Eisner, 1991; Frankel & Wallen, 1990; Lincoln & Guba, 1985; Merriam, 1988).
4. The data that emerge from a qualitative study are descriptive. That is, data are reported in words (primarily the participant's words) or pictures, rather than in numbers (Fraenkel & Wallen, 1990; Locke et al., 1987; Marshall & Rossman, 1989; Merriam, 1988).
5. The focus of qualitative research is on participants' perceptions and experiences, and the way they make sense of their lives (Fraenkel & Wallen, 1990; Locke et al., 1987; Merriam, 1988). The attempt is therefore to understand not one, but multiple realities (Lincoln & Guba, 1985).
6. Qualitative research focuses on the process that is occurring as well as the product or outcome. Researchers are particularly interested in understanding how things occur (Fraenkel & Wallen, 1990; Merriam, 1988).
7. Idiographic interpretation is utilized. In other words, attention is paid to particulars; and data is interpreted in regard to the particulars of a case rather than generalizations.

8. Qualitative research is an emergent design in its negotiated outcomes. Meanings and interpretations are negotiated with human data sources because it is the subjects' realities that the researcher attempts to reconstruct (Lincoln & Guba, 1985; Merriam, 1988).

9. This research tradition relies on the utilization of tacit knowledge (intuitive and felt knowledge) because often the nuances of the multiple realities can be appreciated most in this way (Lincoln & Guba, 1985). Therefore, data are not quantifiable in the traditional sense of the word.

10. Objectivity and truthfulness are critical to both research traditions.

However, the criteria for judging a qualitative study differ from quantitative research. First and foremost, the researcher seeks believability, based on coherence, insight and instrumental utility (Eisner, 1991) and trustworthiness (Lincoln & Guba, 1985) through a process of verification rather than through traditional validity and reliability measures. [Qualitative characteristics are mentioned.]

### **The Ethnographic Research Design**

This study will utilize the ethnographic research tradition. This design emerged from the field of anthropology, primarily from the contributions of Bronislaw Malinowski, Robert Park and Franz Boas (Jacob, 1987; Kirk & Miller, 1986). The intent of ethnographic research is to obtain a holistic picture of the subject of study with emphasis on portraying the everyday experiences of individuals by observing and interviewing them and relevant others (Fraenkel & Wallen, 1990). The ethnographic study includes in-depth interviewing and continual and ongoing participant observation of a situation

(Jacob, 1987) and in attempting to capture the whole picture reveals how people describe and structure their world (Fraenkel & Wallen, 1990). [The author used the ethnographic approach.]

### **The Researcher's Role**

Particularly in qualitative research, the role of the researcher as the primary data collection instrument necessitates the identification of personal values, assumptions and biases at the outset of the study. The investigator's contribution to the research setting can be useful and positive rather than detrimental

(Locke et al., 1987). My perceptions of higher education and the college presidency have been shaped by my personal experiences. From August 1980 to May 1990 I served as a college administrator on private campuses of 600 to 5,000. Most recently (1987-1990), I served as the Dean for Student Life at a small college in the Midwest. As a member of the President's cabinet, I was involved with all top level administrative cabinet activities and decisions and worked closely with the faculty, cabinet officers, president and board of trustees. In addition to reporting to the president, I worked with him through his first year in office. I believe this

understanding of the context and role enhances my awareness, knowledge and sensitivity to many of the challenges, decisions and issues encountered as a first year president and will assist me in working with the informant in this study. I bring knowledge of both the structure of higher education and of the role the college presidency. Particular attention will be paid to the role of the new president in initiating change, relationship building, decision making, and providing leadership and vision.

Due to previous experiences working closely with a new college president, I bring certain biases to this study. Although every effort will be made to ensure objectivity, these biases may shape the way I view and understand the data I collect and the way I interpret my experiences. I commence this study with the perspective that the college presidency is a diverse and often difficult position. Though expectations are immense, I question how much power the president has to initiate change and provide leadership and vision. I view the first year as critical; filled with adjustments, frustrations, unanticipated surprises and challenges. [Author reflected on her role in the study.]

## **Bounding the Study**

### **Setting**

This study will be conducted on the campus of a state college in the Midwest. The college is situated in a rural Midwestern community. The institution's 1,700 students nearly triple the town's population of 1,000 when classes are in session. The institution awards associate, bachelor and master's degrees in 51 majors.

### **Actors**

The informant in this study is the new President of a state college in the Midwest. The primary informant in this study is the President. However, I will be observing him in the context of administrative cabinet meetings. The president's cabinet includes three Vice Presidents (Academic Affairs, Administration, Student Affairs) and two Deans (Graduate Studies and Continuing Education).

### **Events**

Using ethnographic research methodology, the focus of this study will be the everyday experiences and events of the new college president, and the perceptions and meaning attached to those experiences as expressed by the informant. This includes the assimilation of surprising events or information, and making sense of critical events and issues that arise.

## **Processes**

Particular attention will be paid to the role of the new president in initiating change, relationship building, decision making, and providing leadership and vision. [Author mentioned data collection boundaries.]

## **Ethical Considerations**

Most authors who discuss qualitative research design address the importance of ethical considerations (Locke et al., 1982; Marshall & Rossman, 1989; Merriam, 1988; Spradley, 1980). First and foremost, the researcher has an obligation to respect the rights, needs, values, and desires of the informant (s). To an extent, ethnographic research is always obtrusive. Participant observation invades the life of the informant (Spradley, 1980) and sensitive information is frequently revealed. This is of particular concern in this study where the informant's position and institution are highly visible. The following safeguards will be employed to protect the informant's rights: 1) the research objectives will be articulated verbally and in writing so that they are clearly understood by the informant (including a description of how data will be used), 2) written permission to proceed with the study as articulated will be received from the informant, 3) a research exemption form will be filed with the Institutional Review Board (Appendixes B1 and B2), 4) the informant will be informed of all data collection devices and activities, 5) verbatim transcriptions and written interpretations and reports will be made available to the informant, 6) the informant's rights, interests and wishes will be considered first when choices are made regarding reporting the data, and 7) the final decision regarding informant anonymity will rest with the informant. [Author addressed ethical issues and IRB review.]

## **Data Collection Strategies**

Data will be collected from February through May, 1992. This will include a minimum of bi-monthly, 45 minute recorded interviews with the informant (initial interview questions,

Appendix C), bimonthly two hour observations of administrative cabinet meetings, bi-monthly two hour observations of daily activities and bi-monthly analysis of the president's calendar and documents (meeting minutes, memos, publications). In addition, the informant has agreed to record impressions of his experiences, thoughts and feelings in a taped diary (guidelines for recorded reflection, Appendix D). Two follow-up interviews will be scheduled for the end of May 1992 (See Appendix E for proposed timeline and activity schedule). [The author proposed to use face-to-face interviews, participate as observer, and obtain private documents.]

To assist in the data collection phase I will utilize a field log, providing a detailed account of ways I plan to spend my time when I am on-site, and in the transcription and analysis phase (also comparing this record to how time is actually spent). I intend to record details related to my observations in a field notebook and keep a field diary to chronicle my own thinking, feeling, experiences and perceptions throughout the research process. [The author recorded descriptive and reflective information.]

### **Data Analysis Procedures**

Merriam (1988) and Marshall and Rossman (1989) contend that data collection and data analysis must be a simultaneous process in qualitative research. Schatzman and Strauss (1973) claim that qualitative data analysis primarily entails classifying things, persons, and events and the properties which characterize them. Typically throughout the data analysis process ethnographers index or code their data using as many categories as possible (Jacob, 1987). They seek to identify and describe patterns and themes from the perspective of the participant(s), then attempt to understand and explain these patterns and themes (Agar, 1980). During data analysis the data will be organized categorically and chronologically, reviewed repeatedly, and continually coded. A list of major ideas that surface will be chronicled (as suggested by Merriam, 1988). Taped interviews and the participant's taped diary will be transcribed verbatim. Field notes and diary entries will be regularly reviewed. [Author described steps in data analysis.]

In addition, the data analysis process will be aided by the use of a qualitative data analysis computer program called HyperQual. Raymond Padilla (Arizona State University) designed HyperQual in 1987 for use with the Macintosh computer. HyperQual utilizes HyperCard software and facilitates the recording and analysis of textual and graphic data. Special stacks are designated to hold and organize data. Using HyperQual the researcher can directly "enter field data, including interview data, observations, researcher's memos, and illustrations...(and) tag (or code) all or part of the source data so that chunks of data can be pulled out and then be reassembled in a new and illuminating configuration" (Padilla, 1989, pp. 69-70). Meaningful data chunks can be identified, retrieved, isolated, grouped and regrouped for analysis. Categories or code names can be entered initially or at a later date. Codes can be added,

changed or deleted with HyperQual editor and text can be searched for key categories, themes, words or phrases. [Author mentions the proposed use of computer software for data analysis.]

## **Verification**

In ensuring internal validity, the following strategies will be employed:

1. Triangulation of data—Data will be collected through multiple sources to include interviews, observations and document analysis;
2. Member checking—The informant will serve as a check throughout the analysis process. An ongoing dialogue regarding my interpretations of the informant's reality and meanings will ensure the truth value of the data;
3. Long terms and repeated observations at the research site—Regular and repeated observations of similar phenomena and settings will occur on-site over a four month period of time;
4. Peer examination—a doctoral student and graduate assistant in the Educational Psychology Department will serve as a peer examiner;
5. Participatory modes of research—The informant will be involved in most phases of this study, from the design of the project to checking interpretations and conclusions; and
6. Clarification of researcher bias—At the outset of this study researcher bias will be articulated in writing in the dissertation proposal under the heading, "The Researcher's Role."

The primary strategy utilized in this project to ensure external validity will be the provision of rich, thick, detailed descriptions so that anyone interested in transferability will have a solid framework for comparison (Merriam, 1988). Three techniques to ensure reliability will be employed in this study. First, the researcher will provide a detailed account of the focus of the study, the researcher's role, the informant's position and basis for selection, and the context from which data will be gathered (LeCompte & Goetz, 1984). Second, triangulation or multiple methods of data collection and analysis will be used, which strengthens reliability as well as internal validity (Merriam, 1988). Finally, data collection and analysis strategies will be reported in detail in order to provide a clear and accurate picture of the methods used in this study. All phases of this project will be subject to scrutiny by an external auditor who is experienced in qualitative research methods. [Author identified strategies of validity to be used in the study.]

## **Reporting the Findings**

Lofland (1974) suggests that although data collection and analysis strategies are similar across qualitative methods, the way the findings are reported is diverse. Miles and Huberman (1984) address the importance of creating a data display and suggest that narrative text has been the most frequent form of display for qualitative data. This is a naturalistic study. Therefore, the results will be presented in descriptive, narrative form rather than as a scientific report. Thick description will be the vehicle for communicating a holistic picture of the experiences of a new college president. The final project will be a construction of the informant's experiences and the meanings he attaches to them. This will allow readers to vicariously experience the challenges he encounters and provide a lens through which readers can view the subject's world. [Outcomes of the study were mentioned.]

## **SUMMARY**

This chapter explored the steps that go into developing and writing a qualitative procedure. Recognizing the variation that exists in qualitative studies, the chapter advances a general guideline for procedures. This guideline includes a discussion about the general characteristics of qualitative research if audiences are not familiar with this approach to research. These characteristics are that the research takes place in the natural setting, relies on the researcher as the instrument for data collection, employs multiple methods of data collection, is inductive, is based on participants' meanings, is emergent, often involves the use of a theoretical lens, is interpretive, and is holistic. The guideline recommends mentioning a strategy of inquiry, such as the study of individuals (narrative, phenomenology), the exploration of processes, activities and events (case study, grounded theory), or the examination of broad culture-sharing behavior of individuals or groups (ethnography). The choice of strategy needs to be presented and defended. Further, the proposal needs to address the role of the researcher: past experiences, personal connections to the site, steps to gain entry, and sensitive ethical issues. Discussion of data collection should include the purposeful sampling approach and the forms of data to be collected (i.e., observations, interviews, documents, audiovisual materials). It is useful to also indicate the types of data recording protocols that will be used. Data analysis is an ongoing process during research. It involves analyzing participant information, and researchers typically employ general analysis steps as well as those steps found within a specific strategy of inquiry. More general steps include organizing and preparing the data, an initial reading through the information, coding the data, developing from the codes a description and thematic analysis, using computer programs, representing the findings in tables, graphs, and figures, and interpreting the findings. These interpretations involve stating lessons learned, comparing the findings with past literature and theory, raising questions, and/or advancing an agenda for reform. The proposal should also contain a section on the expected outcomes for the study. Finally, an additional important step in planning a proposal is to mention the strategies that will be used to validate the accuracy of the findings, demonstrate the reliability of procedures, and discuss the role of generalizability.

## **Writing Exercises**

1. Write a plan for the procedure to be used in your qualitative study. After writing the plan, use Table 9.1 as a checklist to determine the comprehensiveness of your plan.
2. Develop a table that lists, in a column on the left, the steps you plan to take to analyze your data. In a column on the right, indicate the steps as they apply directly to your project, the research strategy you plan to use, and data that you have collected.

## **ADDITIONAL READINGS**

Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.).

Thousand Oaks, CA: Sage.

Catherine Marshall and Gretchen Rossman introduce the procedures for designing a qualitative study and a qualitative proposal. The topics covered are comprehensive. They include building a conceptual framework around a study; the logic and assumptions of the overall design and methods; methods of data collection and procedures for managing, recording, and analyzing qualitative data; and the resources needed for a study, such as time, personnel, and funding. This is a comprehensive and insightful text from which both beginners and more experienced qualitative researchers can learn.

Flick, U. (Ed.). (2007). *The Sage Qualitative Research Kit*. London: Sage.

This is an eight-volume kit edited by Uwe Flick that is authored by different world-class qualitative researchers and was created to collectively address the core issues that arise when researchers actually do qualitative research. It addresses how to plan and design a qualitative study, the collection and production of qualitative data, the analysis of qualitative data (e.g., visual data, discourse analysis), and the issues of quality in qualitative research. Overall, it presents a recent, up-to-date window into the field of qualitative research.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Sometimes those who write about qualitative research take a philosophical stance toward the topic and readers are left without an understanding of the procedures and practices actually used in designing and conducting a qualitative study. My book takes five approaches to qualitative inquiry—narrative research, phenomenology, grounded theory, ethnography, and case study—and discusses how the procedures for conducting these forms of inquiry are both similar and different. In the end, readers can more easily choose which of the five would best suit their research problems as well as their personal styles of research.