QUALITATIVE RESEARCH DESIGNS: GROUNDED THEORY

What Is Grounded Theory, When to Use It, and How It Developed?

A grounded theory design is a set of procedures used to generate systematically a theory that explains, at a broad conceptual level, a process about a substantive topic. You use grounded theory when you seek to generate a theory because one is not available or suitable. It is also useful to study a process, an action, or an interaction. It offers a step-by-step, systematic procedure for the beginning researcher. In using grounded theory, a researcher can stay close to the data at all times in the analysis. This design was developed by sociologists Barney Glaser and Anselm Strauss at the University of California San Francisco in the late 1960s.

Three Types of Grounded Theory Designs

Grounded theory research consists of three types of designs. The systematic procedure of Strauss and Corbin (1998) involved using predetermined categories to interrelate the categories, visual diagrams, and specific propositions or hypotheses to make the connections explicit. The emergent design, consistent with Glaser’s (1992) ideas, relied on exploring a basic social process without preset categories. The constructivist approach of Charmaz (2000) focused on subjective meanings by participants, explicit researcher values and beliefs, and suggestive or tentative conclusions.

Key Characteristics of Grounded Theory Research

Despite these differences, six aspects characterize grounded theory. Grounded theorists employ this design to explore a process around a substantive topic. They theoretically sample using a procedure of simultaneous data collection and analysis. Grounded theorists analyze their data for increasing levels of abstraction by using constant comparative procedures and asking questions about their data. During analysis of the data for categories, grounded theorists identify a core category (or central phenomenon) that will “process out” (Strauss, 1987) into a theory. Grounded theorists explore this process to develop a theory. Throughout the grounded theory procedure, grounded theorists write memos to themselves.

Potential Ethical Issues in Grounded Theory Research

Because of the focus of grounded theory on data analysis, not much discussion of ethics has occurred in the grounded theory literature. However, throughout the process of research, grounded theorists may be confronted with ethical challenges ranging from advancing the purpose of the study, to the power and authority issues of interviewing, and on to building a useful chain of evidence from the data to the generation of the theory that will benefit those the study is intended to serve.

Steps in Conducting a Grounded Theory Study

The steps involved in conducting a grounded theory study are to start with the intent to develop a theory, to locate a process (or action or interaction) to study, to obtain necessary approvals, to sample individuals who have experienced the process, to code data into categories or concepts, and to interrelate the categories to form a theory. Next comes validating the theory and writing the grounded theory report.
Evaluating the Quality of a Grounded Theory Study

Several published criteria exist for evaluating the quality of a grounded theory study. A good grounded theory study presents a theory of a process grounded in the views of participants. This theory is developed from the memos written by the researcher, the linking of concepts or categories, the presentation of the theory as a visual model, and the use of systematic, emerging, or constructivist approaches.

USEFUL INFORMATION FOR PRODUCERS OF RESEARCH

- When planning a grounded theory study, use the steps for conducting a study advanced in this chapter.
- Consider whether your grounded theory study will be systematic, emergent, or constructivist. Make this decision based on reviewing the arguments for each design type and determining whether you prefer a more flexible or prescribed approach to grounded theory research.
- The visuals presented in this chapter can be adapted and used to display several processes and to create tables and diagrams, such as the zigzag data collection process and the constant comparative approach.
- Creating a visual diagram of your theory helps to clearly identify the categories and see their interrelationships.
- Validate your theory by using constant comparative procedures, triangulating during the research, and by employing member checking with participants in your study.

USEFUL INFORMATION FOR CONSUMERS OF RESEARCH

- Educators can use the criteria for evaluating a study to assess the quality of a published study.
- When examining a study to determine if it is a grounded theory project, you might look at the title to determine if the words “grounded theory” are included. Also, most grounded theory projects clearly include an exploration of a process, and the authors should identify this process in the purpose statement or research questions.
- A sign of grounded theory research is that the author employs multiple passes to the field to collect data. A well-refined theory (and categories) consists of saturation and zigzagging back and forth between data collection and analysis to build the categories and theory.
- Look for a visual model of the theory. This model is the centerpiece of the grounded theory study and represents the author’s attempt to visualize the process under study.

ETHNOGRAPHIC RESEARCH

Defining Ethnographic Research, Its Use, and Its Development

An ethnography is a useful design for studying groups in education, their behaviors, beliefs, and language, and how they develop shared patterns of interacting over time. Ethnographic research is a qualitative design for describing, analyzing, and interpreting the patterns of a culture-sharing group. Culture is a broad term used to encompass all human behavior and beliefs. Typically, it includes a study of language, rituals, structures, life stages, interactions, and communication. Ethnographers visit the “field,” collect extensive data through such procedures as observation and interviewing, and write up a
cultural portrait of the group within its setting. Thus, ethnographers stress cultural concepts, and they study a group of individuals at a single site. The researcher examines shared patterns of behaviors, beliefs, and language that have developed over time by engaging in fieldwork such as observing and interviewing people where they live and work. The analysis begins with describing and analyzing the culture-sharing group and interpreting their patterns within the context of culture-at-work. Overall, the ethnographer employs a reflexive inquiry style of being self-conscious about the research and the writing and being respectful of participants. The origins of this approach are found in anthropology, sociology, education, and postmodern, reflexive concerns about interpreting data and writing reports.

**Three Types of Ethnographic Designs**

These historical factors have led to three types of ethnographies: realist, case studies, and critical studies. A realist account is an objective account of a culture-sharing group. It is written in a third-person point of view, reports on the information learned from participants, and places the researcher in the role of providing the final interpretation and presentation of the culture. Case studies focus on a program, event, or activities and provide a detailed description and analysis of a case based on extensive data collection. A critical ethnography is a type of ethnography in which the researchers advocate for groups marginalized in our society and focus on issues such as power and authority.

**Potential Ethical Issues in Ethnographic Research**

Ethical issues in ethnography relate to fieldwork concerns. These ethical issues involve such topics as gaining access to the field, staying in the field, gathering data in the field, and the interactions of being in the field of research.

**Steps in Conducting an Ethnography**

The steps in conducting these ethnographies involve starting with an interest in studying a cultural theme, identifying a bounded site, and examining shared patterns for a group. The researcher poses general research questions to identify shared patterns of behavior, beliefs, or language and also collects extensive fieldwork data. From this data, a general portrait of how the culture-sharing group works is developed through description, analysis, and interpretation. The interpretation and writing are sensitive to the reflexivity of the researcher, and varied forms of writing structures are used.

Conducting an ethnography involves clarifying the intent of the study, selecting an appropriate design, and relating the design to the research problem. Then the researcher needs to seek approval to conduct the study and obtain access to study sites and participants.

Once this is accomplished, the ethnographer collects data using multiple sources of information and spends considerable time in the field. After gathering information, the analysis of data consists of describing, analyzing, and interpreting. Some researchers, when conducting a critical ethnography, will identify changes that need to occur and will actively advocate and plan for them. When writing the final research report, ethnographers and case study writers employ practices consistent with their designs, such as being objective or advocative, generalizing findings, and discussing how they and the participants changed during the research process.

**Criteria for Evaluating an Ethnography Study**

In conducting a good ethnography, a researcher should pay attention to identifying a cultural issue to study, selecting a group to observe or interview over time, and noting shared patterns of behavior, language, and beliefs that the group has developed over time. The account needs to both describe the
group and identify themes. Moreover, the researchers need to provide evidence of being reflexive about their role in the study.

USEFUL INFORMATION FOR PRODUCERS OF RESEARCH

- Clarify the intent you have for your ethnographic research. Consider whether you plan to develop patterns and a portrait of a culture-sharing group, provide an in-depth description and analysis of a “case,” or advocate for an issue based on studying a culture-sharing group.
- Recognize that many ethnographies today are written using a critical perspective.
- If you conduct a case study, determine whether the issue (instrumental) or the case itself (intrinsic) is of primary interest for addressing your research problem.
- When conducting a realist ethnography, identify a cultural theme that you wish to explore. This cultural theme is the central phenomenon of your study.
- As you collect data in the field for a realist ethnography, look for shared patterns of behavior, beliefs, or language that develop over time.
- Engaging in fieldwork and collecting data involve negotiating relationships with participants and key gatekeepers at research sites. Be respectful of sites and individuals as you conduct your study.
- Consider in your ethnography how you will balance description of the culture sharing group or case, analysis of themes about the group or case, and interpretation of the meaning of the description and analysis. Ideally, you should give them equal weight, but this would depend on the purposes and the research questions you plan to address in your study.
- Context is important in ethnographies and case studies. Include it in your description as well as in your themes.
- Authors write about how we interpret the “text,” or written report, in ethnographic research. Recognize and discuss in your report your own position that affects your interpretation, and acknowledge that multiple interpretations exist in any report, such as those of readers and participants in the study.
- Consider the steps in the process of conducting an ethnography and make adjustments in them to reflect the type of design you use. See Table 14.4 as a guide.

USEFUL INFORMATION FOR CONSUMERS OF RESEARCH

- To identify the cultural theme in a realist ethnography, look at the purpose statement and the research question for the central phenomenon being examined.
- Recognize that the final ethnographic report or case study will vary in structure because of the differences among a realist ethnography, a case study, and a critical ethnography.
- Among several factors to use in evaluating an ethnography or case report, especially consider whether the author collects multiple forms of data and spends considerable time in the field gathering information.
- The information researchers may report in an ethnography or case study may be insights from examining a portrait of a culture-sharing group, contributions to understanding cultural themes,
an in-depth exploration of a case that has not been examined before, or a plan for action to change or remedy inequities in education and in our society.

| Procedures for Conducting a Realist Ethnography, a Case Study, and a Critical Ethnography |
|-------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|
|                                                                                               | Realist Ethnography             | Case Study                      | Critical Ethnography             |
| Identify your intent, the appropriate design, and how intent relates to your research problem. | The problem relates to a culture-sharing group and how it works. The problem requires detailed description of the daily lives of people. The problem relates to understanding a cultural theme. Identify your cultural theme. | The problem relates to developing an in-depth understanding of a “case” or bounded system. The problem relates to understanding an event, activity, process, or one or more individuals. Identify the type of “case,” such as intrinsic, instrumental, or collective. | The problem relates to a need to address inequities in our society or schools. The problem calls for action and advocacy. Identify the “critical” issue (e.g., inequality) that you wish to explore. |
| Discuss how you plan to receive approval and gain access to study sites and participants.     | Receive approval from institutional review board. Locate a research site using purposeful sampling procedures. Identify a gatekeeper to provide access. Guarantee provisions for respecting the site. | Receive approval from institutional review board. Locate a research site using purposeful sampling procedures. Identify how many cases you plan to study. Identify a gatekeeper to provide access. Guarantee provisions for respecting the site. | Receive approval from institutional review board. Locate a research site using purposeful sampling procedures. Identify a gatekeeper to provide access. Guarantee provisions for respecting the site. |
| Collect appropriate data emphasizing time in the field, multiple sources of information, and collaboration. | Spend extensive time at the site and with the culture-sharing group. Enter the site slowly and build rapport. Plan to reciprocate for data provided. Emphasize observations and record fieldnotes. | Collect extensive data using multiple forms of data collection (observations, interviews, documents, audiovisual materials). | Collaborate with participants by actively involving them in data collection. Collect multiple forms of data that individuals are willing to provide. |
| Analyze and interpret your data within a design.                                              | Read through data to develop an overall understanding of it. Develop a detailed description of the cultural setting to establish a context for the group being studied. Develop themes about the culture-sharing group. Make interpretations in view of the cultural theme you are studying. | Read through data to develop an overall understanding of it. Describe the case(s) in detail and establish a context for it. Develop issues or themes about the case(s). If more than one case is studied, consider a within-case analysis followed by a cross-case analysis. | Read through data to develop an overall understanding of it. Develop a detailed description of the cultural setting to establish a context for the group being studied. Develop themes that relate to the “critical” issues that are being explored in the ethnography. Identify changes that need to occur, advocate for specific changes, and advance a plan for change. |
| Write and report your research consistent with your design.                                   | Report it as an objective study. As a researcher, remain in the background in the written report. Keep your biases out. Identify how your exploration of the cultural theme advances knowledge. | Report it based primarily on description of the case, or weigh description, analysis, and interpretation differently or equally. Choose to be objective or subjective in your reporting. Include your biases. Generalize to other cases. | Report it as a call to action to address the “critical” issue that you are studying. Include a specific plan of action for change based on your findings. Discuss how you, as well as those you studied, changed (be reflexive). |
NARRATIVE RESEARCH

What Is Narrative Research, When Is It Used, and How Did It Develop?

Narrative research has emerged as a popular form of qualitative research. It has become a viable way to study teachers, students, and educators in educational settings. All of these individuals have stories to tell about their experiences. Narrative inquirers describe the lives of individuals, collect and tell stories about people’s lives, and write narratives of individual experiences. These qualitative studies focus on identifying the experiences of a single individual or several individuals and understanding their past, present, and future experiences. A researcher uses narrative designs when individuals are willing to provide their stories, when their stories follow a chronology.

The Types of Narrative Designs

Narrative research is an overarching category for a variety of types of narrative studies. These may be such types as autobiographies, biographies, life histories, and personal narratives of teachers or students. The specific type of narrative study depends on who writes or records the story, how much of a life is recorded and presented, who provides the story, and whether a theory is used by the researcher.

The Key Characteristics of Narrative Designs

Narrative researchers collect stories from individuals and retell or restory the participants’ stories into a framework such as a chronology of the characters, the setting, the problem, the actions, and a resolution of those actions. In addition, the inquirer may gather field texts and form them into themes or categories and describe, in detail, the setting or context in which the stories are told. Throughout the research process, the researcher emphasizes collaboration between the researcher and the participant.

Potential Ethical Issues in Gathering Stories

Ethical issues may arise at many stages in the process of conducting a narrative study. At the data collection stage, the researcher needs to question whether the story is authentic, determine whether the participants can tell (or recall) the real story, assess who owns the story told, determine if the participant’s voice is included in the final story, stage the project so that the participant, not the researcher, gains as a result of the research, and be cognizant of the lasting impact of the story that is told.

Steps in Conducting a Narrative Study

The steps in conducting a narrative study are to identify a problem suited for narrative research and to select one or more participants to study. Researchers then collect stories from the participant about his or her life experiences and retell the story to form a chronology of events that may include the characters, setting, problem, actions, and resolution. Throughout this process, collaboration occurs with the participant, and the story composed by the researcher tells of the participant’s life experiences.

Evaluating a Narrative Study

A good narrative study reports the stories of lived experiences of an individual, organizes them into a chronology, situates them within the setting or context, derives several themes that the stories address,
and demonstrates a close collaboration in the narrative project between the researcher and the participant.

**USEFUL INFORMATION FOR PRODUCERS OF RESEARCH**

- Individuals planning or conducting a narrative study can employ the steps in the process identified in this chapter.
- Consider the type of narrative design you plan to use. Ask yourself the following questions: Who writes or records the story? How much of a life is recorded and presented? Who provides the story? Is a theoretical lens being used? Can narrative forms be combined?
- The three steps used in restorying provide a structure for processing a transcript and developing a retelling of the participant’s story.
- As you listen to a participant’s story, consider some of the potential issues that may arise, such as whether the story is authentic, whether data are distorted, whether individuals can tell the story, and who owns the story.

**USEFUL INFORMATION FOR CONSUMERS OF RESEARCH**

- Consumers can review the steps in the research process in this chapter to determine how narrative inquirers conduct a study.
- The evaluation criteria discussed here can be used to assess the quality of a narrative study.
- When narrative researchers conduct an inquiry, they need to report that they have checked the accuracy of their findings. Look for reports about triangulating data, member checking, or providing disconfirming evidence for themes.
- The narrative journal article reported in this study provides one example of narrative research. It is used to identify the major characteristics of a narrative study and to model the composition of a narrative study.

**ACTION RESEARCH**

**Definition of Action Research, Its Use, and Its Development**

The purpose of action research is to improve the practice of education, with researchers studying their own problems or issues in a school or educational setting. Educators engage in reflection about these problems, collect and analyze data, and implement changes or a plan of action based on their findings. In some cases, the research solves a local, practical problem, such as a classroom issue for a teacher. In other situations, the research seeks ideological aims, such as to empower, transform, and emancipate individuals and communities.

These projects focused on teachers studying their own practices, educators working with schools, and researchers helping individuals emancipate themselves from social issues in educational settings. Today, action research has grown in importance as a means for enhancing school renewal, promoting teacher development, and testing new ideas.

**Types of Action Research Designs**

Action research is an informal process of research in which educators engage in a study of their own practices. Individual teachers, teams within a school or district, or school–community inquiry groups
undertake this form of research. Two types of action research designs exist. The first design, practical action research, is an approach that involves educators examining a school situation with a view toward improving practice. Rather than a focus on individual teachers solving immediate classroom problems or schools addressing internal issues, the second design, PAR (or critical action research), has a social and community orientation and places emphasis on research that contributes to emancipation or change in our society. The PAR approach seeks to improve the quality of organizations, community, and family lives. It espouses an objective of improving and empowering individuals and organizations in educational settings. Both the practical and the participatory forms of action research have basic principles and models for conducting research.

Key Characteristics of Action Research

Action researchers use a process of inquiry, regardless of design. The teacher or educator becomes the researcher. As the researcher, the practitioner becomes self-reflective about the process. Action researchers often engage others collaboratively in the process as co-participants and enact a dynamic model of inquiry involving iterations of activities, cycling back and forth between identifying a problem, trying a solution, reflecting on information learned, and applying new solutions. During this process, they use a plan of action to guide the use of a new practice. They base this plan on what they learned about the research problem, and they share it with others, such as in informal reports to colleagues, school officials, school boards, and community members.

Potential Ethical Issues in Action Research

Ethical issues are central to conducting action research that involves participants in a substantial way. The action researcher needs to conduct the inquiry in a way that respects the care of the participants, involves them collaboratively in all phases of the research, and is sensitive to obtaining consent and advancing the purpose of the study when all of the phases may not be initially known. It is also important for participants to have the option to withdraw from the study.

Steps in Conducting an Action Research Study

Action researchers begin with a practical problem that they face or someone in a community might face. They help locate resources and information to address the problem, and they engage in data collection that might involve both quantitative and qualitative forms of data. They analyze the data, often done collaboratively with participants, and develop and implement a plan of action.

Evaluating an Action Research Study

Evaluation of an action research study is based on assessing whether it addresses a practical issue, involves the collection of multiple sources of data, proceeds with collaboration and respect for participants, advances a plan of action and, in the end, reflects both the researcher’s and the participants’ growth toward improved changes to practice.

USEFUL INFORMATION FOR PRODUCERS OF RESEARCH

- Design an action research project that matches your time and resources.
- Recognize that the process of conducting an action research study is like a spiral with phases that repeat, such as looking, thinking, and acting, as in the Stringer (2007) model.
- Remember that in action research, you will be the participant in your own research project. You are not studying someone else; instead, you are examining your own practices.
• It is useful to collaborate with others in action research. Consider university personnel, other colleagues, or individuals familiar with this form of research. They may have insight or be able to draw conclusions that you cannot draw.
• Collect data and analyze it so that it will be understandable to the applied audience for action research studies in your school, district, or other educational unit.
• Consider the full array of data collection types for your action research, such as quantitative and qualitative data.
• Construct a plan of action that you can realistically carry out in your school or educational setting.

USEFUL INFORMATION FOR CONSUMERS OF RESEARCH

• Recognize the differences between practical action research and PAR. The former has the intent of addressing a practical problem in education, whereas the latter has a social or community orientation and emphasizes emancipation or change in our society.
• Action researchers study their own situation and attempt to develop solutions to practical (or community) problems. When you review a study, identify the intent of the researcher and look for how the study addresses some issue in which the researcher is involved.
• Action research studies are applied and the results should be action oriented and easy to understand.
• Evaluate whether the action research study made a difference or changed the situation presented in the research problem.

MIXED METHODS

Mixed Methods Research, Its Use, and Its Development

With a better understanding of qualitative research and the advantages of collecting both quantitative and qualitative data, mixed methods research designs are becoming popular in education. From initial multimethod quantitative studies, designs have emerged that incorporate quantitative data (e.g., scores from instruments, scores from observations, and census data) and qualitative data (e.g., open-ended interviews, observations, documents, and visual materials). Today, writers talk about a separate design in education—the mixed methods design—in which investigators collect and analyze at least one quantitative method of data and one qualitative method of data, with attention to sequence and priority. A mixed methods design involves the collection, analysis, and “mixing” of both quantitative and qualitative data to best understand a research problem.

Types of Mixed Methods Designs

Four basic types of mixed methods designs exist. The convergent design includes the collection of both quantitative and qualitative data simultaneously, with the purpose of merging or integrating the data. The explanatory design begins with quantitative data collection and analysis followed by qualitative data collection and analysis. In this way, the researcher follows up on quantitative findings with qualitative explorations. The exploratory design reverses the data collection procedure. The mixed methods researcher first gathers qualitative data and then builds on the analysis of it using quantitative data. The embedded design includes collecting a primary form of data and then a secondary form of data that
plays a supportive role in the study. Both forms of data are often collected simultaneously. In addition, more complex mixed methods designs are becoming more frequently used in this form of inquiry. The transformative design employs the use of a theoretical framework (e.g., feminist research) as an orienting lens for the entire study. The specific mixed methods designs within this framework can be any of the four basic designs or combinations of them. The multiphase design is a mixed methods project conducted over time using multiple phases or projects that build on each other. Any combination of the four basic mixed methods designs can be used.

**Key Characteristics of Mixed Methods Research**

A major characteristic of mixed methods designs is a need to justify or provide a rationale for mixing methods. Researchers also collect both quantitative and qualitative data and provide a priority to one form of the data or the other, and they often sequence collecting both forms of data. Data analysis needs to relate to the type of design, and this analysis may involve such data analysis approaches as transforming data, following up or explaining outlier or extreme cases, or using qualitative themes to develop a quantitative instrument.

**Potential Ethical Issues in Mixed Methods Research**

Ethical issues are becoming part of the conversation for mixed methods research. The most discussion has been written about ethical issues in using a transformative design, and these issues focus on respecting individuals and underrepresented groups. Ethics in mixed methods does need to relate to important issues arising in both quantitative and qualitative research. Moreover, they can relate to mixed methods designs because different types of design raise specific ethical issues that need to be anticipated by the researcher.

**Steps Used in Conducting Mixed Methods Research**

The steps in conducting a mixed methods design involve assessing the feasibility of the study and presenting a rationale for mixing methods. They also involve making decisions about the priority and sequence of the analysis and developing research questions for the study. Researchers then collect both quantitative and qualitative data and analyze them together or separately (or both), depending on the design. The final research report may present the study as one phase or as two phases, based on the research design chosen for the project.

**Evaluating a Mixed Methods Study**

Evaluating a mixed methods study means using mixed methods when it is appropriate, collecting both qualitative and quantitative data, and integrating or combining the two forms of data. The methods used for the qualitative and quantitative procedures need to be rigorous and persuasive. Part of this detail requires framing the study within one of the designs, and presenting a diagram of the procedures. Finally, throughout the project, researchers should use appropriate terms and language of mixed methods research.

**USEFUL INFORMATION FOR PRODUCERS OF RESEARCH**

- When presenting your mixed methods research to others, discuss your design as a distinct design in educational research.
- In the design of a mixed methods study, identify the advantages that will accrue from collecting both quantitative and qualitative data. Let these advantages point you toward the most
appropriate design (e.g., convergent, explanatory, exploratory, embedded, transformative, multiphase) to study your research problem. In this chapter, the advantages of each design are specified.

- Of the designs, recognize that it is easier to conduct a sequential explanatory or exploratory design than a convergent design. With a convergent design, you need to merge both quantitative and qualitative databases (e.g., numbers and text) and possibly collect additional data if the two databases are in conflict.

- Recognize that in selecting a mixed methods design you have taken on a challenging project. Mixed methods research involves extensive data collection and data analysis. Weigh the trade-off between drawbacks of time and resources and the advantages of collecting both quantitative and qualitative data to understand your research problem.

- Use the two factors, priority and sequence, to help you decide what mixed methods research design is appropriate for your study.

- To best present the procedures in your mixed methods design, create a diagram that portrays the steps in the process. Use the guidelines about notation introduced in this chapter to help you design this visual.

**Useful Information for Consumers of Research**

- Because researchers have only recently identified mixed methods as a specific design in educational research, authors of studies may not label their research as mixed methods (although this is becoming more frequent). You might identify a mixed methods study by determining whether the researcher collects both quantitative and qualitative data to examine a research problem.

- When reading a mixed methods study, look for a diagram of the procedures to help you understand the flow of activities in the mixed methods research. If such a visual is not present, you may want to sketch out the sequence of activities, including the time sequence for collecting quantitative and qualitative data, how they were analyzed, and the intent for using both forms of data. Because both quantitative and qualitative data are being collected, you might judge a mixed methods study on the basis of both quantitative and qualitative criteria. Look in journals reporting mixed methods studies for criteria for assessing mixed methods studies.

- To locate useful information from mixed methods studies, look for the detailed picture that emerges from qualitative research and the generalizable results that emerge from quantitative research. This combined impact—the detail and the general—can help you best understand a research problem in education.