Doing Case Study Research

A Practical Guide for Beginning Researchers

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Part III: Putting It All Together

Scientific Inquiry

Each day we ask questions, large and small, of ourselves and others. A zoologist may ask, "How does a caterpillar evolve into a butterfly?" An educator may ask, "Why does this student behave as he does?" An economist may ask, "What factors shape our society's economic well-being?" A voter may ask, "Who is best qualified to serve as our next president?" Although the types and scope of our questions are limitless, the questions are united by one characteristic—a desire to find an answer. As humans, we are driven to know why things are as they are. When confronted with a novel or perplexing situation, our natural tendency is to ask a question: Who? What? When? Where? Why?

Therefore, in a sense, *all of us are researchers*. Why? Because at its core, research is about answering questions as we attempt to understand the world around us! When you set about the task of finding answers to everyday questions, you are conducting research. Formal research, like that being done for a thesis, a dissertation, or a funded or unfunded project, involves systematic actions that help the researcher add credibility to the questions and answers engaged in his or her research. It involves finding patterns or irregularities in data, which in turn become tentative answers to questions that often form the basis for additional study. Sometimes, answering questions is not as easy as it looks, for several reasons.

First, as humans, we sometimes observe things in different ways or incorrectly. People observing the same event often relate the details of the event very differently, reaching different conclusions about the causes of the event. Second, we often oversimplify things around us. In an attempt to understand a phenomenon, we often reduce it to its essential elements, thereby missing rich details that characterize the true nature of the phenomenon. Third, we sometimes fail to recognize or account for variables that are influencing a situation under investigation. For example, while concluding that a student's poor academic performance results from her laziness, we may fail to realize that the student has a learning disability or a disruptive home life that negatively influences her classroom performance.

CHAPTER 2

Qualitative and Quantitative Research

A particularly useful organizing framework for beginning researchers involves understanding the differences between qualitative and quantitative research. The distinctions between these approaches are numerous. Selection of the approach to use in a specific research effort depends largely on the goals and preferences of the researcher. To help you understand the approaches, consider the following example.

Assume that students at a particular university are disenchanted with the university's policies and practices. Student complaints are common, attrition is high, and morale is low. The university's president decides to research possible causes of this situation. In doing so, the president may decide to follow a more qualitative or quantitative research approach. Using a qualitative approach, the president would use information collected from interviews with specific disenchanted students or other sources to develop an explanation for the problem. Using a quantitative approach, the president might review statistics from other universities or gather and compare numbers reflective of reasons for leaving school from different groups of students (e.g., some planning to leave and some planning to stay). A number of factors might influence the president's decision about which approach to follow.

If time and resources are limited, a quantitative approach may be more appropriate. This is because quantitative research often involves instruments, such as surveys and tests, to measure specific variables, such as the students' source of disenchantment, from large groups of people. These instruments typically produce useful data in short time periods with reasonable investment of personnel and materials. In contrast, a qualitative approach may require individual interviews, focus groups, observations, a review of existing documents, or a number of these. Although these data sources would result in a wealth of rich information, considerable time and resources may be required to adequately represent the area being studied.

PART II

Stages of Doing Case Study Research

CHAPTER 3

Setting the Stage

Many people think of case studies as clinical descriptions of people with unique characteristics or symptoms and of treatments used to help them. Case study research represents a much broader view. It means conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence (Yin, 2003). The topics of case study research vary widely. For example, case studies of programs, events, persons, processes, institutions, social groups, and other contemporary phenomena have been completed. Sometimes people use the term *case study* as a catchall category for research that is not a survey, an observational study, or an experiment and is not statistical in nature (Merriam, 2001). In fact, researchers from many disciplines and many paradigms (qualitative and quantitative) call their work case studies, and they generally agree on several important characteristics that define case study research (Hatch, 2002, p. 30).

First, although case study research sometimes focuses on an individual representative of a group (e.g., a female principal), more often it addresses a phenomenon (e.g., a particular event, situation, program, or activity). For example, a school administrator might want to learn about what happens in his district during a transition from traditional to block scheduling (*event*), a classroom teacher may want to explore factors that influence student attrition at her school (*situation*), a nurse may desire to learn more about employment practices at his hospital (*program*), or a technology specialist may seek greater insights into decision making processes that influence the adoption of software programs in his organization (*activity*). These phenomena represent the focus of most case studies but are not mutually exclusive.

Second, the phenomenon being researched is studied in its natural context, bounded by space and time. The administrator's investigation of block scheduling occurs in a specific school system during a specific time period. The teacher's study of factors influencing student attrition is grounded

in her particular school during a particular academic year. The nurse will examine employment practices only in his hospital and for a specific period of time. The technology specialist will restrict his investigation of software adoption procedures to his own organization's practices since the purchase of a computer mainframe. Clearly, context is important in case study research, and its benefits are a strength of doing intensive investigations of individuals or groups as well as events, situations, programs, activities, and other phenomena of interest.

Third, case study research is richly descriptive, because it is grounded in deep and varied sources of information. It employs quotes of key participants, anecdotes, prose composed from interviews, and other literary techniques to create mental images that bring to life the complexity of the many variables inherent in the phenomenon being studied. For example, the administrator illustrates the transition from traditional to block scheduling with school attendance records, focus group interviews, surveys, and end-of-grade achievement scores. A high school teacher presents statements from her students and their parents to illustrate why some people drop out of school. In her case study, the nurse includes a brief narrative story that exemplifies typical employment procedures at her hospital. The technology specialist cites examples of existing practices that influence organizational decision-making regarding the adoption of software packages. Hence, information is explored and mined in the case study environment for a more thorough examination of the given phenomenon.

Additional similarities and differences sometimes found in other forms of research also characterize case study research. For example, in contrast with experimental research, case study research is generally more exploratory than confirmatory; that is, the case study researcher normally seeks to identify themes or categories of behavior and events rather than prove relationships or test hypotheses. Because it involves collecting and analyzing information from multiple sources, such as interviews, observations, and existing documents, case study research sometimes requires the researcher to spend more time in the environment being investigated than is the case with other types of research. Finally, as with most research, doing case studies creates opportunities for the researcher to explore additional questions by the act of investigating a topic in detail.

Doing case study research means identifying a topic that lends itself to in-depth analysis in a natural context using multiple sources of information. Once the stage has been set, we must determine what is known and not known about the topic to create an important research question.