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ABSTRACT

In comparison with traditional experimental design, which is concerned with what happened, a case study approach is more appropriate for answering the question of why or how something happened. As an alternative complementary-vocational-education-evaluation approach, the case study attempts to describe and analyze some program in comprehensive terms with its idiosyncracies and complexities, frequently as it unfolds over time. Case studies have advantages--opportunities to formulate problems as the evaluation progresses, modify data categories constantly, and reduce distortion of variables--and limitations--need for special training in conducting them and careful definition of case, their length, and their generalizability. Twelve steps comprise the three stages in the case study process: pre-fieldwork; fieldwork; and analysis, verfication, and synthesis. The preliminary steps involved in case study design are setting boundaries, defining the unit of analysis, selecting a site, establishing initial contacts, developing data collection systems, and defining fieldwork procedures. The field work stage involves staff training, logistics of field operations, and data collection using qualitative methods (interviewing, observing, and gathering data unobtrusively). Steps in the final stage--analysis, verification, and synthesis--include analyzing data, reporting the findings, and utilizing the findings. (A case study puzzle and annotated bibliography are appended.) (YLB)

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Research and Development Series No. 189

THE CASE STUDY METHOD:

GUIDELINES, PRACTICES, AND APPLICATIONS FOR VOCATIONAL EDUCATION

by

Janet E. Spirer

CE 025 624

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

1980

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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TABLE OF CONTENTS

(continued)

LIST OF FIGURES

FOREWORD

Evaluation activities have been criticized for not widely being used to improve programs and policies in education and other human resource fields. These criticisms stem from many sources including the realization that the evaluation questions being raised often are not answered by using the traditional evaluation methodologies. As a result, there has been a turn to searching for other evaluation methodologies to complement the ones currently in use in an effort to produce evaluation findings that are more useful to program and policy level decision-makers. One such methodology is the case study. This trend is reflected in journals such as the *Review of Educational Research, American Educational Research Journal, Educational Researcher, Harvard Education Review,* the *Administrative Science Quarterly, Evaluation Review,* and *Anthropology and Education Quarterly,* which have all published case study manuscripts.

This handbook is designed to address these concerns for vocational education. It is organized to provide the reader with an understanding of case study methods, its strengths, limitations, and how to conduct case studies.

The National Center expresses its appreciation to the many individuals who contributed to this handbook. Special thanks are extended to Janet E. Spirer, who prepared the handbook and directed the project. She was assisted by Ron Schilling, graduate research associate, who prepared the annotated bibliography, and Nancy F. Stephens, program assistant. Recognition is given to N. L. McCaslin, associate director for evaluation and policy, and Floyd McKinney, program director, who provided invaluable assistance throughout the project. In addition, several persons provided suggestions on the structure of the handbook in its preliminary stages including Michael Q. Patton, University of Minnesota; Ray Rist, Cornell University; and Robert Stake, University of Illinois. Robert Bogdan, Syracuse University, Yvonna S. Lincoln, University of Kansas, Paul A. Pohland, University of New Mexico, and Deborah Coleman and Michael Crowe, both of the National Center, are to be acknowledged for their careful and thoughtful review of an early draft of the manuscript. Their suggestions were often incorporated into this final manuscript.

A special note of appreciation is extended to Nancy Powell, who typed the manuscript, and Carolyn Hamilton, who provided editorial assistance.

On behalf of the National Center, I want to express appreciation to the Bureau of Occupational and Adult Education, U.S. Office of Education, for sponsoring this evaluation handbook.

Robert E. Taylor
Executive Director
The National Center for Research in
Vocational Education

CHAPTER I

INTRODUCTION

> Be a good craftsman. Avoid a rigid set of procedures. Above all seek to develop and to use the sociological imagination. Avoid fetishism of method and technique. Urge the rehabilitation of the unpretentious intellectual craftsman, and try to become a craftsman yourself. Let every man be his own methodologist . . .
>
> C. Wright Mills
> *The Sociological Imagination*[1]

Over twenty years ago, C. Wright Mills warned against the tendency to transform the appropriate into the orthodox in social research by castigating researchers who have become aligned with one research method or technique to the exclusion of all others. When this happens, often they become so enamored of one method or technique that it becomes an end unto itself. However, "the refusal to recognize that there are different ways of 'knowing' does not mean they do not exist."[2]

Mills encourages the development of the "sociological imagination" as a means to raise questions whereby the evaluator has the capacity to shift from one perspective to another (e.g., single student to classroom, political factors to personal factors, personal biases to group biases). The sociological imagination in each of us is developed over time. It is not possible to compile a handbook on how to develop it. This handbook does provide a framework for how to conduct an evaluation that was spawned from the sociological imagination, using the case study approach.

Purpose of the Handbook

The purpose of this handbook is to introduce vocational educators to the case study method as a means by which programs may be better understood and policies developed which ultimately provide improved delivery of services. Concern over accountability of public funds is reflected in increased federal, state, and local evaluation requirements. Simultaneously, the limitations of experimental designs to adequately evaluate vocational education has led educators to search for alternative evaluation methods. One alternative approach is the case study, which draws on work in qualitative methodology, phenomenology, symbolic interactionism, Gestalt psychology, and ethnomethodology. It may be defined as an intensive, detailed analysis and description of a single organism, institution, or phenomenon in the context of its environment. In other words, it is a way to describe and analyze, for example, some vocational education program, school, or policy in comprehensive terms with its idiosyncracies and in its complexity, often as it unfolds over time.

This handbook aims to introduce the reader to an *alternative* approach to evaluation. It is *not* the intent to berate traditional experimental design. Rather, it is based on the premise that while some evaluation questions may be answered best by traditional experimental design, others have been raised that the traditional experimental design has not answered adequately. For example, the

first two handbooks in this *Evaluation Handbook Series*[3] deal with how to conduct follow-up studies of former vocational education students. However, the types of follow-up studies represented in these handbooks are quantitative in nature; that is, they primarily describe what happened but not why, or how, it happened. To answer the latter evaluation question, the case study method is more appropriate.

The Audience

In sum, the purpose of this handbook is to introduce the case study method to the reader as an alternative approach to asking evaluation questions and collecting evaluation information. Not only is the case study method useful in its own right (i.e., by providing evaluation information not currently available), it is also complementary to ongoing evaluation activities in local vocational education programs, and in state and local education agencies. Teacher educators and students at both the undergraduate and graduate levels might also find this handbook to be informative and useful.

Structure of the Handbook

The text is divided into three major parts which were selected to address two prevalent criticisms of evaluation efforts: the lack of policy relevance and the lack of methodological rigor.

Briefly, Part One is focused on the process of evaluation and how, where, and why the case study method fits. It

- provides the reader with a short overview of the evaluation process and the prevalent criticisms found in the literature;
- introduces the case study as an alternative, yet complementary, evaluation approach which finds its roots in the naturalistic inquiry mode; and
- discusses qualitative data collection methods.

After completing Part One, it is anticipated that the reader will have a solid foundation in case study methods upon which to build further skills and expertise through the readings cited in the selected annotated bibliography (Chapter IX).

Part Two of the handbook differs from Part One in that it is addressed to the practice of the case study method. It is designed to "walk through" each of the three stages of doing a case study. Each stage is divided into steps. Each step is accompanied by sample forms and procedures when applicable and worksheets to help the reader design a case study.

Part Three consists of a summary and a selected annotated bibliography to help the reader find additional materials that may be of interest.

Sources of Information

The information contained in this handbook is drawn from two sources. First, the experiences of others as described in the literature have been reviewed and synthesized. Second, the case study experiences of the author—both with vocational education and Comprehensive Employment and Training Act (CETA) programs—and the evaluation and policy division of the National Center for

Research in Vocational Education have been used as a foundation for the materials contained in Part Two. Briefly, these experiences include case studies of factors affecting changes in placement rates of vocational education programs, interpreting outcome measures of vocational education programs, and the effectiveness of CETA service delivery under Titles I, II, III, and VI.

Case Study Knowledge Profile

Before you begin reading, take a few minutes to think about the case study method and to determine your present level of knowledge by completing the Case Study Profile (Figure 1). This profile is designed to help you:

- think through your evaluation needs;
- become familiar with evaluation issues you may not have considered;
- gain an overview of the contents of this handbook; and
- decide which sections of the handbook you should study in depth, read casually, or skim.

To complete the case study knowledge profile, rate your current level of knowledge of each question by darkening the appropriate circle in the left-hand columns. The page numbers on the right identify the location of the information in the text that is helpful in addressing the question. An example appears below:

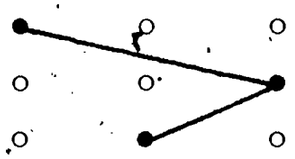
Current Competency	*Questions*	*Page(s)*
None Moderate High		
	1. Why conduct an evaluation?	9
	2. What is the purpose of evaluation?	9–10
	3. What is evaluation?	10

Figure 1

Case Study Profile

	Current Competency			Questions	Page(s)
	None	Moderate	High		
Part One	o	o	o	1. Why conduct an evaluation?	9
	o	o	o	2. What is the purpose of evaluation?	9-10
	o	o	o	3. What is evaluation?	10
	o	o	o	4. What are the shortcomings found in evaluations?	10-11
	o	o	o	5. What is a naturalistic approach in evaluation?	11
	o	o	o	6. What is a case study?	13-15
	o	o	o	7. Why is a case study useful?	15
	o	o	o	8. What are the limitations of a case study approach?	16
	o	o	o	9. How has the case study been used in vocational education evaluation?	17
	o	o	o	10. What is methodology?	19
	o	o	o	11. What is the case study method?	20
	o	o	o	12. What are qualitative methods?	21-22
Part Two	o	o	o	13. How are boundaries set?	27-28
	o	o	o	14. How is the unit of analysis determined?	28-29
	o	o	o	15. How are site(s) selected?	30-32
	o	o	o	16. How are initial contacts established?	33-35
	o	o	o	17. How are data collection procedures developed?	36
	o	o	o	18. How are case study data organized?	37-44
	o	o	o	19. How may staff be trained?	47-50
	o	o	o	20. What logistics must be considered in doing fieldwork?	50-54
	o	o	o	21. What supplies are needed?	54
	o	o	o	22. How will the data be collected?	55-59
Part Three	o	o	o	23. How will the data be analyzed?	61-63
	o	o	o	24. How will the data be reported?	64
	o	o	o	25. How can the findings be used?	65-66

Notes to Chapter I

1. C. Wright Mills, *The Sociological Imagination* (New York: Oxford, 1959), p. 224.

2. Ray C. Rist, "On the Relations Among Educational Research Paradigms: From Disdain to Detente," *Anthropology and Education Quarterly* VIII (1977): 42.

3. Stephen J. Franchak and Janet E. Spirer, *Guidelines and Practices for Follow-up Studies of Former Vocational Education Students* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979) and Stephen J. Franchak and Janet E. Spirer, *Guidelines and Practices for Follow-up Studies of Special Populations* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979).

PART ONE

CHAPTER II

THE EVALUATION PROCESS

In order to place the case study in perspective, Chapter II briefly reviews the evaluation process before a naturalistic approach to evaluation is introduced. This, in turn, should provide a framework for understanding the case study method.

Why Evaluate?

Evaluation is something we do every day—from the toothpaste we choose to purchase to the movies we decide to see. We use a more systematized evaluation process to make choices between, for example, which product brands we should purchase or which programs we should continue to fund, as well as to improve different products or activities.

The educational system is no exception when it comes to conducting evaluations. Throughout the centuries teachers and other interested persons have done their share of evaluating, whether it was student performance, textbooks, or other kinds of instructional materials. More formal evaluation efforts may be traced back thousands of years to the Chinese civil service examinations.

During the sixties and seventies, added importance was placed on evaluation in response to the political and economic milieu as illustrated by:

- The proliferation of Great Society programs in the sixties resulted in a substantial amount of resources being expended without a clear determination of how the programs were being implemented or their overall effectiveness.
- The need to allocate scarce resources among alternatives came to the fore in the seventies with the advent of escalating inflation rates and other economic problems. As taxpayers began to express feelings of being pushed to the limit (e.g., the passage of Proposition 13 in California), and the call for accountability of public expenditures emerged.

Purpose of Evaluation

While these two trends led to increased visibility for evaluation, the evaluation community was trying to define the evaluation process and its purpose. In fact, evaluation was (and is) generally perceived as being in flux and transition. As a result, several terms have been used as synonyms for evaluation over the years—measurement, assessment, appraisal, auditing, grading—and over fifty different evaluation models have been proposed.[4] However, many of the evaluation models draw upon these purposes of evaluation identified by Anderson and Ball:[5]

- To contribute to decisions about program installation;
- To contribute to decisions about program continuation, expansion, or certification;

- To contribute to decisions about program modification;
- To obtain evidence to rally support for a program;
- To obtain evidence to rally opposition to a program; and
- To contribute to the understanding of basic psychological, social, and other processes.

What is Evaluation?

This handbook subscribes to the idea that evaluation is a *process,* not a specific procedure. Thus, it may use many different models and specific procedures depending upon the questions to be answered and the information needs of the audience. Evaluation is *more than objectives-based.*[6] While the attainment of objectives is not ignored, evaluation recognizes that programs have unanticipated outcomes as well. At times, the value or harm of these unanticipated outcomes may be equal to or more important than the objectives. Evaluation is *more than evaluating the results* of a program. That is, evaluation can focus on the dynamics of a program while the program is in progress. Studying the different processes involved in programming (e.g., planning, implementation) at each of the key stages is essential to program success. Evaluation is *more than instructional evaluation.* It can also be concerned with, for example, establishing priorities among instructional programs, the allocation of resources, and so forth. Finally, evaluation is a *management tool.* It provides a basis for making program decisions and for responding to needed program changes. To paraphrase the Phi Delta Kappa definition, evaluation is a process to delineate, obtain, and provide useful information for judging decision alternatives.[7] Also, the evaluator has a responsibility to help decision-makers use the evaluation information.

Shortcomings with Evaluation

While stress has been placed upon the need for the type of information evaluation can provide, a review of the literature[8] reveals that evaluation efforts to date have been inadequate. The literature is replete with reasons for the failure of evaluation efforts. They include the following:

- Since evaluation occurs in an action setting, many questions have been raised about using experimental designs in evaluation activities. For example, the randomization of subjects is often difficult, and it may be inequitable to deny services to eligible participants in order to maintain a randomized experiment.[9] In addition, control groups are often difficult to obtain.
- Programs often have unclear and/or multiple objectives stressing individualized service delivery.[10] This is especially true with vocational education programs, which implement a variety of activities and services covering a multitude of program objectives (e.g., increasing skill levels, providing work experiences, increasing productivity of human resources) which may be competitive.
- The imposition of artificial and arbitrary restraints on the scope of a study may lead to the neglect of other information salient to the question of how programs are implemented.[11]
- Large samples needed to make statistical generalizations may lead to insensitivity to local perturbations and unusual efforts, since typical results are seldom studied in detail.[12]

These shortcomings have been summarized by Crowe and Adams in reference to assessing experiential education programs:

> Classical research paradigms may have limited utility for testing the effects of experiential education programs, especially in the formative developmental stages. While classical research can provide information to individuals, the conditions appear to be such that experiential education is not ready for this in-depth examination. The emphasis on using classical research paradigms in evaluating these programs can lead to experiments that are elegantly designed but often limited in scope and relevance.... The rigidity of the experimental model may, in fact, perform a disservice in educational evaluations.[13]

A Naturalistic Approach

At this point, the reader may wonder how mandated evaluation requirements can be met if many evaluation efforts have been determined to be inadequate. This sense of confusion reflects the current state of evaluation efforts. Although the primary strength of the naturalistic approach has often been perceived by the social sciences as its utility in hypothesis generation, it is the richness of information provided by these naturalistic methodologies that is leading them again to the fore in educational evaluation. These methods have traditionally been used in professions such as law, medicine, and journalism, and have been central to the disciplines of anthropology and sociology. Thus, several different evaluation models have been developed and are currently being tested, some of which are based on naturalistic approaches.[14]

As mentioned before, the intention of this handbook is not to berate the traditional experimental methodology. It is still very much a part of the evaluation picture and provides useful information on some kinds of questions. Rather, the point is that alternatives are available. Hamilton et al.[15] and Patton[16] note that the application of the traditional experimental approach to evaluation of programs is often a cumbersome and inadequate procedure. As Hamilton et al. state:

> We are not, of course, arguing here against the use of experimental, longitudinal, or survey research methods as such. Rather, for the reasons suggested, we submit that they are usually inappropriate, ineffective, or insufficient for program evaluation purposes.[17]

Several alternative paradigms have been offered.[18] Underlying each alternative paradigm is a commitment to naturalism, that is, behavioral specimens are collected that "reflect the actual temporal sequence of the behavior under analysis and ... show how each interactant influenced and was influenced by all others in the behavioral situation."[19] The naturalistic approach views the program from a holistic, inductive perspective, drawing on qualitative methodology, Gestalt psychology, phenomenology, and ethnomethodology. Thus, it uses methods for "getting inside" complex situations so that the researcher can come to understand the situation as it is understood by the participants. Through understanding the points of view of the various actors in a social situation, the dynamics of the social processes at work may become unlocked and visible.

This handbook provides guidelines and applications for one naturalistic approach: the case study. The case study is not a single method per se, but is a product which derives itself from several different ways to collect, analyze, and use evaluation information. Chapter III introduces the case study method, its advantages and disadvantages, and its potential uses.

Notes to Chapter II

4. Sara M. Steele, *Contemporary Approaches to Program Evaluation: Implications for Evaluating Programs for Disadvantaged Adults* (Washington, D.C.: Capitol Publications, 1977).

5. Scarvia B. Anderson and Samuel Ball, *The Profession and Practice of Program Evaluation* (San Francisco: Jossey-Bass Publishers, 1978), Chapter 2.

6. For further discussion of vocational education program objectives and outcomes see: Joanne Farley, *Vocational Educations Outcomes: A Thesaurus of Outcome Questions* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979).

7. Phi Delta Kappa National Study Committee on Evaluation, *Educational Evaluation and Decision Making* (Itasca, Illinois: F. E. Peacock Publishers, 1971).

8. For sample discussions, see: Michael Quinn Patton, *Utilization-Focused Evaluation* (Beverly Hills: Sage Publications, Inc., 1978); David Hamilton et al., *Beyond the Numbers Game* (Berkeley: McCutchen Publishing Corp., 1977); and Egon G. Guba, "The Failure of Educational Evaluation," Carol H. Weiss, ed., *Evaluating Action Programs: Readings in Social Action and Education* (Boston: Allyn & Bacon, 1972).

9. Abraham Stahler, "On the Choice of Control Groups: A Comment," Michael E. Borus, ed., *Evaluating the Impact of Manpower Programs* (Lexington, Mass.: D. C. Heath and Company, 1972).

10. Marcia Guttentag, "Subjectivity and Its Use in Evaluation Research," *Evaluation* 1:2 (1973).

11. Hamilton et al., *Beyond the Numbers Game.*

12. Ibid.

13. Michael R. Crowe and Kay A. Adams, *The Current Status of Assessing Experiential Education Programs* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979), p. 88.

14. For example, Robert Stake's Responsive Model, Robert Rippey's Transactional Model, Robert Wolf's Judicial Model, and Malcolm Parlett and David Hamilton's Illumination Model.

15. Hamilton et al., *Beyond the Numbers Game.*

16. Patton, *Utilization-Focused Evaluation.*

17. Hamilton et al., *Beyond the Numbers Game,* p. 9.

18. For example, see Hamilton et al., *Beyond the Numbers Game;* Patton, *Utilization-Focused Evaluation;* and Egon G. Guba, *Toward a Methodology of Naturalistic Inquiry in Educational Evaluation,* CSE Monograph Series in Evaluation, No. 8. (Los Angeles: Center for the Study of Evaluation, 1978.)

19. Norman K. Denzin, "The Logic of Naturalistic Inquiry," *Social Forces* 50 (1971): 166–182.

CHAPTER III

THE CASE FOR THE CASE STUDY

Ideas about the case study method are changing. While the case study has been used extensively in the medical, legal, and journalistic fields, the social sciences (except anthropology and branches of sociology) have relegated it to a lower status than other research designs primarily because of the lack of control groups and perceived limits in generalizability. Now, however, the case study is being viewed as a way to understand the complexity of a program and its parts. It deals with information about a particular program in a complex, holistic way that reflects the life of that program. "A case study that portrays an educational problem in all its personal and social complexity is a precious discovery."[20] Chapter III is designed to introduce you to the case study method.

The Case Study Defined

A review of the literature reveals many definitions of the case study. Some are highlighted in Figure 2. Several themes run across the definitions that comprise the attributes of the case study method. The themes include:[21]

- The Case Study is Particularistic
- The Case Study is Holistic
- The Case Study is Longitudinal, and
- The Case Study is Usually Qualitative.

Each of these four themes is elaborated below.

- *The Case Study is Particularistic.* Case studies focus on events in one particular setting. As Stake notes, the principle difference between case studies and other methodologies is *not* one of method since case studies can use systematic observation techniques (e.g., interviewing) or be highly abstract and statistical.

> The principal difference is one of *focus*. The case study focuses on the happenings of a single actor, a single classroom, or a single enterprise—usually under natural conditions—so as to understand it, that bounded system, in its own habitat. What is being studied is *the case*. The case is something deemed worthy of close watch. It has character, it has a totality, it has boundaries. It is not something we want to represent by a score. It is not something we want to represent only by an array of scores. It is a complex, dynamic system. We want to understand its own complexity.[26]

- *The Case Study is Holistic.* The case study tries to capture the totality of the phenomenon. In doing so, the case study usually portrays the interplay of the different factors that are brought to bear on the program and tries to present the views of the different groups involved. The intended result is a rich description and understanding of the program, its complexity, and its dynamic nature.

• *The Case Study is Longitudinal.* Case studies usually tell a story over time. This attribute of the case study finds its traditions in ethnographic studies where the researcher or evaluator spends a great deal of time studying a culture by becoming as much a part of it as possible (e.g., Margaret Mead in Samoa). However, at times, the case study is a "slice of life." That is, given the needs of the users and resource constraints, the case study may not be longitudinal, but moments in time.

• *The Case Study is Usually Qualitative.* The case study uses a variety of methods—both quantitative and qualitative—to collect information. "In fact, one of the problems involved in the use of the case approach is the breadth of the specific tools that may be necessary in the gathering of data and the need for the investigator to control them."[27] However, qualitative methods (e.g., personal documents, life histories, interviews, statistical records) are well suited to the case study approach because "case studies use prose and literary technique to describe, elicit images, and analyze situations . . . They present documentation of events, quotes, samples of artifacts, and so on."[28]

Figure 2

Case Study Defined

> Case study is a process of research which tries to describe and analyze some entity in qualitative, complex, and comprehensive terms not infrequently as it unfolds over a period of time.
>
> Wilson[22]

> Case study is not a specific technique. Rather it is a method of organizing data for the purpose of analyzing the life of a social unit.
>
> Franklin and Osborne[23]

> Case study is a study of a bounded system, emphasizing the unity and wholeness of that system, but confining the attention to those aspects that are relevant to the research problem at that time.
>
> Stake[24]

> Case study is an intensive, detailed analysis and description of a single organism, institution, or phenomenon in the context of its environment.
>
> Anderson et al.[25]

In summary, the case study method tries to describe and analyze some program in comprehensive terms with its idiosyncracies and in its complexities not infrequently as it unfolds over time. The methods used to collect the information will vary based upon the information needs of decision-makers.

Usefulness of the Case Study

The growing acceptance of the case study method recognizes (1) the limitations of traditional experimental designs and the disenchantment with the all-too-frequent finding, "no significant differences"; and (2) the need for alternative methods to answer questions about certain types of educational problems. Thus, importance is now being placed on understanding a program in all of its complexity, and the case study method is being perceived as a way to undertake the task.

For example, McCaslin identified fourteen strengths of a naturalistic approach to evaluating vocational education programs. He posits that naturalistic inquiry: [29]

- is a legitimate evaluation methodology in that it is structured, disciplined, systematic, comprehensive, and replicable;
- extends the repertoire of techniques available to the evaluator;
- recognizes the multiplicity of causes associated with given outcomes in vocational education and recognizes that causes and outcomes can interact in a variety of ways;
- recognizes the range of diversity both within and between program results in individualization of evaluation designs;
- allows the evaluation to consider a broader view of vocational education outcomes;
- is a continuous activity undertaken throughout the process of vocational education;
- evaluates vocational education programs as they occur;
- is not constrained to examining only those outcomes amenable to quantification;
- allows the evaluator to collect information on outcomes not known to be important or anticipated during the design of the study;
- is an evaluation methodology likely to be understood by most people;
- provides personal and immediate feedback;
- can be individualized to meet the needs of diverse people;
- diminishes reliance on vocational education students to submit needed information; and
- produces results which may be more useful to decision-makers.

In sum, the case study, which usually relies on qualitative methods, provides a richness of information that reflects the dynamics of the program. From a methodological viewpoint, the case study method should allow evaluators to avoid meaningless or misleading questions because they can (1) formulate problems as the evaluation progresses, i.e., they are not bound to *a priori* questions; (2) modify data categories constantly, making them more suitable to analysis; and (3) reduce the distortion of variables that may be difficult to quantify by using quantitative methods. Last, the case study is perceived as having heuristic value. The information obtained through a case study is both rich and rewarding and may be used to define concepts, generate hypotheses, and ground new theory for further testing.

Limitations of the Case Study

While much of the usefulness of the case study rests upon its intuitive appeal (e.g., the readers expand their experiences by vicariously sharing those of others; readers experience the viewpoints of several different actors by having an evaluator probe, interview, and analyze the program; and readers experience the entire program and all of the factors that have an impact on the program), there are some limitations to the use of the case study which should be kept in mind as a case study is planned.

Case studies may appear to be simple to conduct at first glance, but they are not. It is important, for example, that the evaluators know how to interview, to sample case study sites scientifically, and to design coding systems that allow for the retrieval of the information. The case study method, while designed to be expansionist rather than reductionist, can expand to include almost everything, and rather quickly at that. Thus, the case must be defined and given boundaries. In all evaluation efforts, different segments of the audience will request and relate to different pieces of information. As Wilson stated:

> Usefulness is related to the role of the reader. By its very nature, a case study provides information on the actions and perspectives of members of a variety of groups. However, given the limitations of length, writers of case studies have to decide on whom to concentrate. They can opt for equal treatment of different groups or emphasize certain perspectives. We [Center for New Schools] have discovered that the logic of *writing* a case study may not match the logic of usefulness to the reader. Any given reader will want more detail about perspectives and actions of particular kinds of actors (usually people in his/her own role) that would make sense in the overall case study. An inevitable lack of detail arises from the difficulty of having a balanced case study focus sufficiently on the reader's role.[30]

Associated with the difficulty in matching information to readers is the problem of the length of a case study. In order to present the complexity of a program, and to chronicle the concrete daily activities over time, case study reports tend to be rather lengthy; and, since they require a long time to read, they are often given low priority among the other demands on the reader's time. The third and fourth problems identified above may be alleviated by making certain that the intended audience receive the case study report. Condensed versions of the case study that extract pertinent portions of the report for segments of the audience may be helpful.

Case studies tend to be most interesting to "people who *already* value some of the approaches illustrated. Additionally, if the approaches are valued, case studies are more likely to lead to action."[31]

The last limitation that is found in the literature is generalizability. The question is often raised: How can information from one case study setting be useful in other settings? To rephrase the question, how can we generalize from one case study to several cases? The case study has no handy quantitative measures of generalizability. The issue of generalizability in the end is related to what the user is trying to learn from the case study. The differences in sites do not necessarily make the case study irrelevant in all but the site studied. Rather, the case study should provide enough detail and description about the uniqueness of the case study site so that the user can determine the differences and similarities between the case study site and his/her own site.

The Case Study and Vocational Education

The use of the case study in vocational education is just beginning. For example, in 1978 the National Center for Research in Vocational Education conducted a multi-site case study to identify and describe the factors associated with the differences in job placement rates as reported by states.[32] A second case study was undertaken in 1979 at eight sites to identify and describe the factors that affect placement rates in secondary vocational education programs.[33] During 1980, the case study will be expanded by focusing on the postsecondary level.

Case studies also have been published in the education field and in the human resources area dealing with the world of work. For example, the Northwest Regional Education Laboratory has used the case study method as part of its evaluation of the Experience-Based Career Education Program; Louis Smith and Paul Pohland used a naturalistic approach to study computer-assisted instruction programs; the Center for New Schools used descriptive case studies to evaluate a Documentation and Technical Assistance Project; the Education Commission of the States conducted case studies in fourteen sites focusing on strategies implemented to improve rural education; and the National Institute of Education is currently funding case studies in four sites dealing with rural vocational education programs. Studies of Comprehensive Employment and Training Act (CETA) programs also have used the case study method.[34]

At this point, the reader should feel comfortable with understanding the case study method, its advantages and limitations, and how it fits with other evaluation activities. Chapter IV focuses on different techniques that may be used to collect case study information.

Notes to Chapter III

20. Robert Stake, "Seeking Sweet Water," Case Study Methods in Educational Research (AERA Tape, n.d.).

21. Steve Wilson, "Explorations of the Usefulness of Case Study Evaluations," *Evaluation Quarterly* 3 (1979).

22. Ibid., p. 448.

23. Billy J. Franklin and Harold W. Osborne, *Research Methods: Issues and Insights* (Belmont, California: Wadsworth Publishing Co., 1971), p. 184.

24. Stake, "Seeking Sweet Water," p. 7.

25. S. B. Anderson, S. Ball, R. T. Murphy and Associates, *Encyclopedia of Educational Evaluation* (San Francisco: Jossey-Bass Publishers, 1975).

26. Stake, "Seeking Sweet Water," p. 4.

27. Franklin and Osborne, *Research Methods: Issues*, p. 184.

28. Wilson, "Explorations of the Usefulness," p. 448.

29. McCaslin, N. L. "Naturalistic Inquiry: What are Its Strengths?," Paper presented at the American Vocational Association Annual Convention, 1978: 4-6.

30. Wilson, "Explorations of the Usefulness," p. 450.

31. Ibid., p. 452.

32. F. L. McKinney, K. E. Gray, and M. Abram, *Interpreting Outcome Measures in Vocational Education: A Final Report* (Columbus, Ohio: The National Center for Research in Vocational Education, 1978).

33. Floyd L. McKinney et al., *The Investigations of the Correlates of Placement in Vocational Education Projects: An Interim Report* (Columbus, Ohio: The National Center for Research in Vocational Education, 1980).

34. These studies include, for example, Barocci, T.A. & C.A. Myers, *CETA in Eastern Massachusetts* (Cambridge: Massachusetts Institute of Technology, 1977) [NTIS No. 271308]; William Mirengoff, *Transition To Decentralized Manpower Programs* (Washington, D.C.: National Academy of Sciences, 1976) [NTIS No. PB 263499]; and Ripley, R.B. et al., *The Implementation of CETA in Ohio* (Washington, D.C.; U.S. Department of Labor, 1978).

CHAPTER IV

COLLECTING INFORMATION FOR CONSTRUCTING A CASE STUDY

These are many techniques to collect information, such as questionnaires, surveys, interviews, and observations. The techniques evaluators choose really depends on the fit between what questions they are seeking to answer and which techniques best meet the data-gathering needs implied in the question. Of course, constraints stemming from the available resource level that may be applied to the evaluation and the political environment must be considered as designs are made. This chapter provides the reader with a brief discussion on evaluation methodology and then looks at three different kinds of information-gathering techniques that may be used to collect information for a case study.

A Few Words About Methodology[35]

Two theoretical perspectives have dominated social science methodology: logical positivism and phenomenology. The logical positivists, such as Auguste Comte and Emile Durkheim, seek "the *facts* or *causes* of social phenomena with little regard for the subjective states of individuals. Durkheim advised the social scientist to consider 'social facts,' or social phenomena as 'things' that exercise an external and coercive influence on human behavior."[36] The phenomenologists, such as Max Weber and Irvin Deutscher, on the other hand, are concerned with understanding human behavior from each person's point of view. Thus, the phenomenologist views human behavior as a product of how a person sees the world. Phenomenologists believe that human behavior cannot be understood without understanding the framework within which those being studied interpret their actions, feelings, thoughts, and motives.

The differences between logical positivism and phenomenology are important. Social science in the United States strove to follow the logical positivism stance of objectivity and deductive reasoning by attempting to minimize subjectivity and standardize the interpretations attributed to the data. Phenomenologists, on the other hand, see a number of different structures that may be designed to understand the data they collect. In fact, they espouse the belief that perhaps the most important structures to understand might belong to those being studied, rather than those constructed by evaluators *a priori*.

The logical positivists and the phenomenologists, then, approach different problems and seek different answers. The research methods they use are often different. For example, logical positivists search for facts and causes through demographic analysis and surveys which produce quantitative data that is statistically analyzed to prove or disprove relationships among variables. Phenomenologists, however, often use qualitative methods (e.g., interviews, observations, unobtrusive data) which result in descriptive data that display how those being studied view their world.

What is the Case Study Method?

At this point, it might be assumed that the case study method solely uses qualitative data. This is only partially true as Morris Zelditch stated:

> There is, in fact, a tendency to be either *for* or *against* quantification, as if it were an either/or issue. To some extent the battle lines correlate with a relative concern for 'hardness' versus 'depth and reality' of data. Quantitative data are often thought of as 'hard' and qualitative as 'real and deep'; thus if you prefer 'hard' data you are for quantification, and if you prefer 'real, deep' data you are for qualitative participation observation. What to do if you prefer data that are real, deep, and hard is not immediately apparent.[37]

McCaslin also cautions against those individuals stating the need for 'hard' data and discrediting 'soft' data. He warns that:

> These people often fail to realize that there is bad 'hard' data as well as good 'soft' data. Measurement through numbers alone is not the only way to extend or to solidify our understanding of vocational education.[38]

Zelditch continues:

> A more fruitful approach to the issue must certainly recognize that a field study is not a single kind of information. This approach suggests several crucial questions: *What* kinds of methods and *what* kinds of information are relevant? How can the "goodness" of different methods for different purposes be evaluated?[39]

Thus, the case study, while leaning toward the phenomenology tradition because it is well suited to using qualitative methods, does not rely solely on the methods used by phenomenologists. Qualitative methods can complement the information collected from other methods by confirming findings and locating discrepancies. This can lead the evaluators to study, weigh, and analyze the findings carefully to understand the discrepancies. An evaluation of an Experience-Based Career Education Program (EBCE) by the Northwest Regional Educational Laboratory tried the case study approach as a portion of its evaluation effort. It reported that:

> ... a case study is a useful complement to a total package of methodologies in the evaluation of a program like EBCE. It provides an empirical description of the 'treatment' in a traditional pretest-treatment-post-test design. This documented description of what the program 'is like' is useful in interpreting experimental findings as well as giving an evaluation audience the vicarious experiences of 'being there'.[40]

While there are several published texts that focus on quantitative methods,[41] the number of texts written on the use of qualitative methods is more limited.[42] Therefore, the remainder of this chapter is devoted to introducing three qualitative methods: observing, interviewing, and gathering data unobtrusively.

Qualitative Methods

As Bogdan and Taylor suggest, "qualitative methodologies refer to research procedures which produce descriptive data."[43] When using qualitative methods, settings are described as a whole. There are three techniques that are well suited to gathering this type of information: observing, interviewing, and gathering data unobtrusively. Each technique is introduced below (see Chapter VI for a discussion of how to apply each technique).

- *Observing* — Observing is something we do naturally, and as such it undergirds the two other techniques that will be discussed. By definition, observing refers to that research "characterized by a period of intense social interaction between the researcher and the subjects, in the milieu of the latter. During this period, data are unobtrusively and systematically collected."[44]

  Observing is based upon three activities: looking, listening, and asking. These three activities when interwoven form the complex process of observing:

  > Events and happenings connecting one activity stimulate new action in the other two activities. Things seen and heard stimulate questions to ask as well as indicate new things to look and listen for. Questions asked and answered stimulate new lines of looking and listening, as well as new questions to ask.[45]

- *Interviewing* — Interviewing is more than merely asking questions of people. Interviews may vary from informal moments when you have the opportunity to talk with people involved in the project to a carefully nurtured relationship with a person knowledgeable about the situation in question. Specifically, interviews may be divided into two types: unstructured and structured. Unstructured, or elite,[46] interviewing is probably the most artful way of interviewing. Briefly:

  > It is a purposeful discussion between you and another person, but without specific prestructured questions. The emphasis is on listening as you discuss things that are important to the interviewee [within the context of the program]. The intent of the unstructured interview is to elicit from the person being interviewed a highly personal and detailed account of particular events or sentiments related to the program.[47]

  The structured interview consists of a set of pre-determined questions, like a questionnaire, that are verbally asked of a person. Some questions might anticipate responses that fall into categories (e.g., vocational education service areas of training: trade and industrial, distributive education, home economics; or they may be open-ended, such as "Why did you enter this vocational education program?").

- *Gathering Data Unobtrusively* — When data are collected unobtrusively, the evaluator does not necessarily have any direct contact with individuals such as when observing or interviewing. In this case, the information may be gleaned from:
  - physical traces, or observable signs of the use of objects or space in a setting (e.g., worn carpet around a particular display);
  - artifacts, or objectives that can be identified as resulting from human activity (e.g., lesson plans);
  - records (e.g., minutes of meetings, correspondence, grade books);
  - indices, which are comparisons of statistical data (e.g., ratio of males to females in selected classrooms); and
  - body language.

The first four chapters of this handbook are designed to provide the reader with a framework for understanding the case study approach. Part One discussed (1) the purpose of evaluation and some of its problems, (2) the naturalistic approach to evaluation, (3) the attributes of the case study method, and (4) techniques to collect case study information.

We are now ready to move into Part Two of the handbook—how to conduct a case study. However, before you begin to read Part Two, take a few moments to think about the information contained in Part One since the case study approach may be a new way for you to look at evaluation. Therefore, give some thought to how you might use the case study method in your work. Worksheet 1 should help you do that by focusing on your evaluation responsibilities using the journalistic questions: Who? What? When? Where? and Why? Then, on to Part Two to figure out How!

Worksheet 1

Conceptualizing a Case Study

WHO (is the audience?)	WHAT (information will be collected?)	WHEN (will the case study be done?)	WHERE (what sites will be studied?)	WHY (do a case study?)

Notes to Chapter IV

35. Adapted from Robert Bogdan and Steven J. Taylor, *Introduction to Qualitative Research* (New York: John Wiley and Sons, 1975).

36. Ibid., p. 2.

37. Morris Zelditch, "Some Methodological Problems of Field Studies," Norman K. Denzin, ed., *Sociological Methods: A Sourcebook* (Chicago: Aldine Publishing Company, 1970), p. 496.

38. McCaslin, "Naturalistic Inquiry: What," p. 6.

39. Zelditch, "Some Methodological Problems," p. 497.

40. H. L. Fehrenbacher, T. R. Owens, and J. F. Haenn, *The Use of Student Case Study Methodology in Program Evaluation.* (Portland, Oregon: Northwest Regional Educational Laboratory, 1978), p. 11.

41. For example, Fred N. Kerlinger, *Foundations of Behavioral Research* (New York: Holt, Rinehart and Winston, 1973).

42. For example, Bogdan and Taylor, *Introduction to Qualitative;* Patton, *Utilization-Focused Evaluation;* Denzin, *Sociological Methods;* and Ralph J. Kester, *Using Systematic Observation Techniques in Evaluating Career Education* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979).

43. Bogdan and Taylor, *Introduction to Qualitative,* p. 4.

44. Ibid., p. 5.

45. John Lofland, *Analyzing Social Settings* (Belmont, California: Wadsworth Publishing Co., 1971).

46. In Lewis A. Dexter, *Elite and Specialized Interviewing* (Evanston, Illinois: Northwestern University Press, 1970), p. 5, an elite interview is defined as "an interview with any interviewee —and stress should be placed on the word 'any'—who in terms of the current purposes of the interviewer is given special, non-standardized treatment. By non-standardized treatment, I mean
    - stressing the interviewee's definition of the situation,
    - encouraging the interviewee to structure the account of the situation,
    - letting the interviewee introduce to a considerable extent . . . his/her notions of what he/she regards as relevant, instead of relying upon the investigator's notions of relevance."

47. Kester, *Using Systematic Observation,* p. 24.

PART TWO

CHAPTER V

THE PRE-FIELDWORK STAGE

In any evaluation, several steps need to be taken before the first piece of information is collected formally. This, of course, holds true for a case study. The preliminary steps in designing a case study are: setting boundaries, defining the unit of analysis, selecting a site(s), establishing initial contacts, developing data collection systems, and defining fieldwork procedures. Each step is discussed in more depth below.

Step One: Setting Boundaries

After the broad question of the case study is identified, the evaluator faces what Guba[48] calls "the boundary problem" or, in Patton's terms, "cultural trade-offs".[49] This means that the desirability of studying one or a few questions in great depth or many questions in less depth must be determined. In other words, what will be the limits of the case study? How will the limits be selected? For example, should all parts of a vocational education program in the school be studied or only certain programs? Should all students and/or teachers be studied, or should a specific group be studied? Should all outcomes be studied or certain specific ones?

Boundaries may be set in several ways based upon the information needs of decision-makers. They should not be set by the evaluator alone. For the information obtained from the case study to be utilized, it must answer the questions of the persons who make decisions. Therefore, the latter must play a critical role in identifying the trade-offs and defining the boundaries.

Boundaries may be set by geographical areas (e.g., urban/rural, north/south), themes (e.g., types of vocational education instruction, outcome of a vocational education program), or theoretical and/or substantive interests identified as the case study is first conceived. All of the evaluation questions identified will probably be important questions. Trade-offs will need to be made between the breadth and depth of the case study given the existing financial, time, and other constraints. Once the boundaries for the case study have been established, the second step—determining the unit of analysis—begins.

A few words of caution are in order at this point. If the foundations of the case study are not adequately laid (i.e., involving decision-makers in defining boundaries, defining appropriate and plausible boundaries), the case study will likely fail in its purpose regardless of the quality of the procedures. So spend the necessary time now to lay a solid foundation. Worksheet 1 should be helpful.

Worksheet 1

Setting Boundaries

Have you:	Yes	No
1. identified the broad evaluation question?	o	o
2. established the boundaries?	o	o
3. defined boundaries that are appropriate?	o	o
4. considered the breadth and depth trade-off in defining boundaries?	o	o
5. involved decision-makers in defining the boundaries?	o	o
6. considered information needs of decision-makers in defining boundaries?	o	o

Step Two: Determining the Unit of Analysis

Once a focus of the case study has been determined, it is time to decide on the unit of analysis to be studied. Simply, the unit of analysis is the "thing" that is being studied, such as individual students, types of vocational education programs, school systems, or state education departments. The unit of analysis chosen depends upon what information is desired from the case study. For example, if you are interested in why placement rates vary, the unit of analysis might be students or the specific program areas (e.g., distributive education, trade and industrial) might be the unit of analysis if you want to understand differences in placement across program areas. School systems might be the unit of analysis if you want to understand factors affecting placement in different environments. Whatever unit of analysis is chosen lends itself to specific kinds of data collection and analysis techniques that best suit answering the evaluation questions.

Worksheet 2 is designed to help you decide what unit of analysis is appropriate for a case study.

Worksheet 2

Determining the Unit of Analysis

1. Description of boundary: _____

2. Evaluation question to be answered: _____

3. Possible units of analysis:

   (1) _____

   (2) _____

   (3) _____

4. The most optimal unit of analysis: _____

5. Why was it chosen as the unit of analysis? _____

6. Will the unit of analysis selected be able to give the needed information at the end of the case study? Why?

Step Three: Selecting a Site(s)[50]

After decisions have been made regarding the questions to be answered by the case study and the unit of analysis, it is time to decide on what sampling method to use. Briefly, samples may be drawn that are *random*, i.e., all potential members of the sample have an equal opportunity to be selected by chance; or *purposeful*, i.e., sites are selected because they contain certain characteristics.

Random samples generally are used when you want to generalize the findings from the samples to the entire population. Random sampling increases the likelihood that the information collected in the study is representative of the entire population. Three types of random samples are often used:

- *Simple random sample* – all members of the population have an equal chance of being selected.
- *Cluster sample* – the selection of sample members are chosen from the total population in groups or clusters rather than as individual sites. The clusters selected are often natural or administrative groups of the population (e.g., automotive programs, health programs).
- *Stratified sample* – the population is divided into subpopulations or strata and a sample is selected from each strata (e.g., the automotive programs in small; medium, and large regional vocational high schools).

To summarize, random sampling procedures help to avoid bias in the sample because sites are selected by chance. Simple random samples should allow the evaluator to obtain a relatively representative sample that permits generalizations to the entire population. By using a cluster or stratified sample, the evaluator should have increased confidence in making generalizations to particular subgroups or areas.

Purposeful sampling is used when the evaluator wants to learn something, or understand something about certain select sites, and does not need to generalize the findings to an entire population. To do this, certain information must be available about the site so that the evaluator is aware of the variations among the sites. For example, Marvin Alkin et al. undertook a case study on the utilization of evaluation information in five schools. They stated:

> In locating potential sites, the researchers capitalized on a variety of resources. Personal and professional contacts in public educational agencies were especially helpful in directing our attention to potential sites. The approachability of the site personnel was a clear consideration since we did not have the power or the inclinations to impose ourselves on the case study hosts. As a result, we cannot claim that the five chosen sites were randomly selected. Nevertheless, we sought to avoid 'showcase' programs and were able to balance out our sample with a variety of program types . . .[51]

Several different strategies may be pursued when drawing a purposeful sample. First, *extreme cases* may be sampled when the most information might be gained by studying poor programs and exceptional ones. The case study then attempts to understand the situation under which programs develop, fail, or succeed. In sampling extreme cases, the evaluator needs to identify those sites where the most can be learned; those sites are selected for the sample.

A second type of purposeful sampling is the *typical sample*. In this instance, information is gathered about typical programs, and the findings cannot be dismissed because the program is known to be special in some way. However, the findings cannot be generalized in the traditional sense of the term. One word of caution should be interjected here -- the evaluator must work with decision makers to reach consensus on the attributes of a typical site.

Another sampling strategy is to maximize the *variation* among the sites. For example, samples are often drawn to ensure that all geographical sites (e.g., urban and rural) or demographic features (e.g., site size, type of vocational education programs offered at the site) are represented in the sample.

> By attempting to increase the diversity or variation in the sample, the evaluator will have more confidence in those patterns that emerge as common sites while at the same time being able to describe some of the variation that has emerged to make programs unique as they adapt to different settings.[52]

Fourth, the sample might consist of *critical cases*, i.e., those sites which can make a point dramatically. For example, many new commercial products are test-marketed in Columbus, Ohio, on the assumption that if the product does not sell in Columbus, it will not sell nationwide. The use of the critical case is especially important when resources limit the number of sites under study. By sampling critical cases, the findings may be logically generalized to other sites since the critical case is selected on the assumption that if the finding is true in this case, it is likely to be true in all cases.

Fifth, you may decide to sample *politically important or sensitive* cases which might draw attention to the case study or avoid drawing attention to the case study by intentionally eliminating politically sensitive sites from the sample. This is a variation of the critical case strategy, especially given the fact that the critical factor might be politically sensitive.

Last, samples may be drawn by *convenience*, i.e., those sites which may be studied most easily. This type of sampling is usually the most common, yet the least desirable. While the constraints stemming from costs, time, and other resources are real, they should be considered last, after the best strategy is identified to collect the desired information.

In summary, purposeful sampling increases the usefulness of the findings obtained in small samples because sites are intentionally selected for certain traits, i.e., extreme cases, typical, maximum variation, critical cases, politically important or sensitive cases, or convenience.

Worksheet 3 will help you choose the type of sampling technique to be used in the case study.

Worksheet 3

Selecting a Site(s)

	Yes	No
Will the sample be drawn:		
• randomly?	O	O
• purposefully?	O	O
If a random sample is selected, will it be a:		
• simple random sample?	O	O
• cluster sample?	O	O
• stratified sample?	O	O
• extreme case?	O	O
• typical case?	O	O
• maximum variation?	O	O
• critical case?		
• politically important or sensitive case?	O	O
• convenience?	O	O

Step Four: Establishing Initial Contacts

Once the sites have been selected, it is time to gain their approval for the case study by establishing initial contacts within the site. Many evaluators find this part of the case study to be unnerving, but it does not need to be. A few hints should help. First, when dealing with the "gatekeepers" (those persons who have the power to grant or deny access to the site) and other persons at the site, always tell the truth. Second, carefully explain the purpose of the case study and emphasize that you are interested not in the particular site but rather in sites in general which are similar to the one you are asking permission to study. Third, follow the protocol network. That is, be careful that the "right" persons at the site are contacted initially by looking at from the top down. For example, permission would be needed from an area vocational school director before one of the vocational programs in the school may be studied. Last, remember that the gatekeepers and others have not been as involved in the case study as you. Thus, a general easy-to-understand explanation is more suitable than a complex, long-winded, specific explanation of the case study purposes. As Bogdan notes, "the rule then in trying to get in is to be honest, but vague or imprecise. Present your purposes in a way which will not harm or produce anxiety in your subjects."[53]

At this point, a comment about confidentiality is appropriate. Before the gatekeepers will agree to participate they will want to know what the evaluator plans to do with the information collected and who might have access to it.

> Gatekeepers and other subjects often want assurances of confidentiality in regard to the name and location of their organization, as well as themselves, in any reports that are written. They also want assurance that the information you gather will not be used in any way to harm them. The code that you are going to live by in regard to this should be made clear to them from the start.[54]

Confidentiality may be difficult to ensure in some instances, such as when only one site is under study or the number of participants is few.

> Where confidentiality cannot be protected it is important the the evaluator make it clear to people being interviewed and participants being observed that, while people will not be identified specifically in a report, it may be possible to identify them from the description of what they have done or quotations of what they have said.[55]

Regardless, the way in which confidentiality will be handled *must* be negotiated before any data is collected.

Figure 3 provides an example of establishing initial contacts from an actual case study. After you have read this scenario, design your plan for establishing initial contacts using Worksheet 4.

Figure 3

Establishing Initial Contacts — A Scenario[56]

Initial contact with a potential host was established by the senior researcher either with the site program evaluator, program director, or school district administrator, and arrangements were made for an exploratory meeting between the researchers and program personnel. This meeting served mainly to introduce the researchers to the program administrators, to allow the potential hosts to look us over and assess our intentions. Little attempt was made to actively question the program representatives present; instead, our concern was with answering *their* questions about our research intentions. We tried to project a sincere and nonjudgmental interest in their program and in the way that program evaluation had taken place in their school. We made the point that *they* would benefit from a better understanding of the way that evaluation, as a process, had functioned in serving their needs—and *we* would benefit in a fuller understanding of the evaluation process as it occurs at a variety of school sites.

Anonymity was promised the participants. In the various reports emanating from the study including of course this book, fictitious names have been substituted for the actual names of cities, districts, schools, programs, and individuals, and other potentially identifying elements have been disguised in ways which help preserve the anonymity of the participants without distorting the relevant facts. Individual actors in each case situation can, of course, recognize their coparticipants' identity, so that this mechanism does not shield a participant from his or her colleagues. As an ethical matter, we did seek to safeguard confidences shared with us. (The tension between fidelity to the situation and personal trust and rapport is real and problematic, but in these studies we were able to honor confidences without sacrificing the integrity of the research effort itself.)

Once the program representative came to feel that our interest in what they had to tell us was sincere, and once they became convinced that promises of anonymity were not just a game we were playing, they began to talk about their programs. We did not try to force these initial remarks other than to indicate our interest in learning as much as possible about the program and its history and context as well as the story of the program's evaluation. We did not tape-record these (or any subsequent) meetings, although we occasionally jot down notes if that seemed appropriate and nonthreatening. (These on-the-spot notes were usually elaborated upon and expanded after the field worker had left the interview location.)

Worksheet 4

Establishing Initial Contacts

1. Who are the gatekeepers? _____
2. What is the protocol network? _____
3. What are the options for making the initial contact with the gatekeeper(s)?

   _____
4. How will the case study be explained? _____
5. Will the initial meeting with the gatekeeper(s) be designed to defuse their concerns? How?

   _____
6. How will confidentiality be assured? _____

Step Five: Developing Data Collection Procedures

Chapter III introduced three ways of collecting qualitative information through systematic observation: observing, interviewing, and gathering data unobtrusively. By observing, searching and discovering clues, interviewing, and interpreting evidence, a meaningful picture about the program or persons under study should emerge. That is, answers will begin to appear to questions such as these: What is happening? How are things happening? Under what conditions are they happening? Why are they happening?

Which systematic observation methods are chosen will depend upon the purpose of the study and the decisions made in the prior steps. For example, the unit of analysis initially will help decide what to observe and whom to interview. Through observing and interviewing, other situations or persons will be identified for further observing and interviewing.

Generally, all three systematic observation methods are used in a case study. Each method produces a different way of looking at the same phenomenon, which will confirm or contradict other findings (triangulation) and will lead the case study team to new areas of inquiry. Briefly, triangulation "is simply the process of obtaining information from several different sources (e.g., student and supervisor) or from the same source (e.g., student) using different methods."[57]

There are several publications available that describe these different techniques at great length.[58] Worksheet 5 can be used to help think through the data collection procedures.

Worksheet 5

Developing Data Collection Procedures

1. Which procedures are appropriate? Why? _____
   - Interviewing? _____
   - Observing? _____
   - Gathering data unobtrusively? _____
2. Who will be interviewed? _____
3. What will be observed? _____
4. What unobtrusive data will be collected? _____
5. How will the procedures be triangulated? _____

Step Six: Organizing Data

Just as quantitative data are collected with predesigned codes and put into the computer for analysis, the data from a case study must be collected and stored in a format that makes it easily retrievable. The coding system should be one in which (1) the data are easily available for analysis, (2) is the least time-consuming, (3) is easy to implement, and (4) is cost effective.

Since the coding system must be specifically designed for each case study in order to address the specific evaluation questions, unit of analysis, and data collection methods, it is not possible to borrow an existing coding system. However, "walking through" a sample coding system will reveal the logic behind how and why a coding system is designed and used.

Before a sample coding system is designed we will need to conceive and design a case study. For the purpose of Step Six, we are in the evaluation office of the Oneanda education department. Oneanda is concerned with the placement rates in its secondary level vocational education programs. While the state department has conducted several evaluation studies dealing with placement and has continued to collect follow-up information that is accurate and detailed, they do not know exactly what factors affect placement rates. Thus, the evaluation office has been asked to answer this broad question using a different approach in hope that they will be able to obtain an understanding of the placement process. Through discussions, it appears that a naturalistic approach would enable the evaluators to look at different schools in the state and thereby identify different factors that might affect placement.

Interviewing was selected as the primary data collection device because the evaluators felt that each interviewee should be able to discuss the placement process freely without pre-structures questions. The interviews will be complemented by both observations and data collected unobtrusively (e.g., documents). The observations and unobtrusive data will be used to identify questions that should be asked and to stimulate the evaluators to new lines of inquiry. Also they will be used to confirm or refute information obtained from interviews.

The unit of analysis of the case study was the school. To get the most useful information possible a purposeful sampling technique was selected. A variation sample was chosen because the evaluators believed there were demographic considerations that might highlight the factors that affect placement. Thus, the sites included in the sample were selected on an urban/rural continuum and low placement/high placement continuum. The sampling frame resulted in four cells:

Urban High Placement	Urban Low Placement
Rural High Placement	Rural Low Placement

After the sites were selected, the protocol network was identified and initial contacts were made with the gatekeepers.

Now, let us design a coding system for a case study[59] that seeks to understand what factors affect placement rates in Oneanda. The first step in designing the coding system is to designate a means by which each piece of datum will be classified. In this example, there are five broad categories: background information, placement definitions, placement rates, process, and function of placement rates. Each of the five categories is then subdivided into subcategories which in turn may be further refined. For example, in Figure 4, which illustrates these codes, background information was subcategorized into delivery system, finances, attitude-state, attitude-local, and cooperative education.

Next, a scheme needs to be established to identify the schools participating in the case study, the evaluator collecting the information at the site, the type of person (e.g., teacher, student, administrator) being interviewed or observed and the data collection procedure (e.g., interview, observation, document review). Figure 5 illustrates these codes. By looking at Figure 5, it may be seen that codes were established for the school (or site) being studied, the program, the interviewer, the type of interviewee, and the data collection procedure used (e.g., interview).

Third, each interview, observation, or document reviewed must be assigned a sequential number from a master list. This record will serve as the permanent log of all interviews and observations recorded as well as of all documents reviewed. The master list is divided into three parts: interviews, observations, and documents. Each part is then divided into information obtained at the school and information obtained outside the school (other). A sample master list appears in Figure 6.

Now that codes have been assigned for the data, how does the system work? Simply, each bit of information will be recorded on separate index cards. In that way, the data may be shuffled around in order to look at each piece of datum from different perspectives. For example, if a piece of datum is about common uses of a term, it might be analyzed by all common uses of the term, by those uses of state and local officials, or by all counselors and all principals, or all state advisory council for vocational education staff. To be shuffled around to reveal selected groups, each card must have an identifier on the top before the piece of datum is typed or written. Two sample identifiers appear in Figure 7.

After the first piece of datum has been collected, it may now be coded. Using the examples in Figure 7, before she goes to the interview Weiss will prepare a cover card. Marciano will do the same thing when he begins to review the document. The cover card is more than a record of who was interviewed; it also serves as an easy way of locating a person after an interview for additional information since the address and phone number are readily accessible. Remember, when conducting a case study a lot of people will be interviewed and many documents will be reviewed! It is seldom possible to gather all the information needed in a single interview. Often a follow-up phone call or a second interview is needed. Figure 8 depicts two sample cover cards.

Figure 4

Sample Method To Classify Data #1

Background

B1	Delivery System
	1.1 number
	1.2 vocational education
	1.3 structure
B2	Finances
B3	Attitude – State
B4	Attitude – Local
B5	Cooperative Education

Definitions

D1	General Information
D2	Official Definitions
	2.1 student
	2.2 completer
	2.3 leaver
	2.4 dropout
	2.5 relatedness
	2.6 code
D3	Used
D4	Influences
D5	Communication
D6	Monitored

Placement Process

P1	General Information
P2	Description
P3	Policy
P4	Guidelines
P5	Assistance

Function of Placement Rates

F1	General Information
F2	Philosophy
F3	Coordination
F4	Services, Levels

Utilization of Placement Rates

U1	General Information
U2	Dissemination
U3	Compliance
U4	Used for
	4.1 personnel
	4.2 program

Figure 5

Sample Method To Classify Data # 2

School	
AS	Austin High School
DV	Davis High School
Program	
HE	Home Economics
DE	Distributive Education
TI	Trade and Industry
Evaluator	
E	E. Weiss
F	F. Sanchez
S	S. Washington
R	R. Bernstein
M	M. Marciano
Interviewees	
T	Administration
U	Support Staff
V	Program Staff
W	Teachers
X	Advisory Council
Data Collection Methods	
I	Interview
O	Observation
D	Document

Figure 6

Sample Master List

For interviews in AS (school)

School Level:	1	Industrial Arts teacher (Smith)
	2	Trades and Industry teacher (Wingston)
	3	Principal (Johnson)
	4	Counselor (Gookowski)
	10	
Other:	1	Chamber of Commerce president
	2	Mayor
	3	National Industries Inc. personnel officer
	10	

For observations in AS (school)

School Level:	1	Business and Office class
	2	School lunchroom
	10	
Other:	1	Degree of activity in local employment service office
	10	

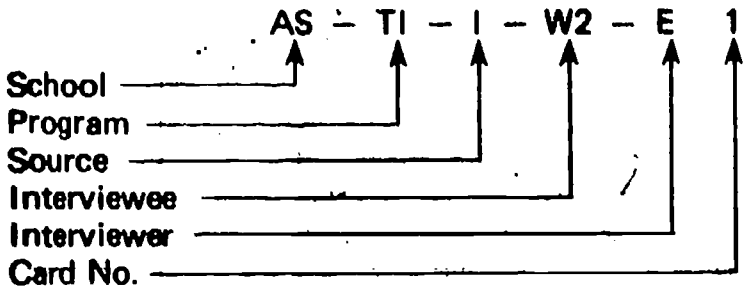
For documents in AS (school)

School Level:	1	Local plan
	2	Follow-up reports
	10	
Other:	1	City economic plan
	2	CETA plan
	10	

Figure 7

Identifying Data

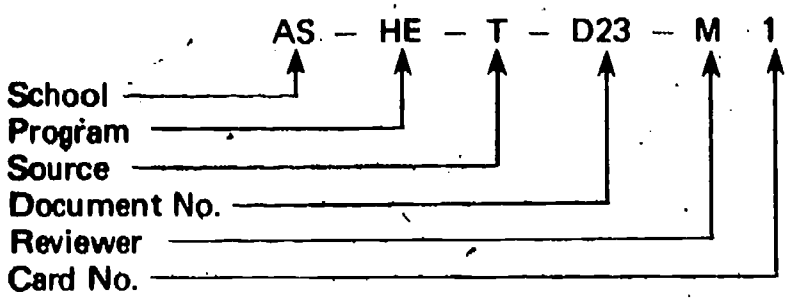
Example: E. Weiss is interviewing a teacher at Austin High School about the trades and industry program.



	Key		*Figure*
School	Austin H.S.	AS	5
Program	Trade & Indus.	TI	5
Source	Administration	W	5
Interviewee	Principal	I12	6
Interviewer	E. Weiss	E	5
Card No.	—	1	*

* each new card is sequentially numbered

Example: M. Marciano is reviewing the student orientation booklet for Austin High School's home economics program.



	Key		*Figure*
School	Austin H.S.	AS	5
Program	Home Economics	E	5
Source	Administration	T	5
Document No.	Student booklet	D23	6
Reviewer	M. Marciano	M	5
Card No.	—	V	*

* each new card is sequentially numbered

Figure 8

Sample Cover Cards

Sample 1

AS – TI – I – W2 – E 1

(Interviewer): E. Weiss
(Interviewee): A. Wingston
Teacher
Austin High School
415 North Street
Newton, Old York 09862
(413) 894-7382

(Date): 3/15/80

Sample 2

AS – HE – T – D23 – M 1

(Citation): Davis High School
Student Orientation Handbook

(Where/how obtained?)
Obtained from home economics teacher

(Reviewer): M. Marciano

(Date): 5/30/80

Weiss' second card will then have a piece of data on it, coded on the left side of the card according to the codes in Figure 4 with the indicator number at the top. Figure 9 illustrates the second card. Subsequent cards will be coded in the same fashion and sequentially numbered.

Figure 9

Sample Information Card

AS – TI – I – W2 – E 2

D6 Re: question monitoring use of terms, teacher feels the "slow kids" are getting shafted because they don't respond as often or with the accuracy of other students due to confusion of follow-up forms.

Worksheet 6 is a check list of preliminary steps to be taken before data collection begins.

Worksheet 6

Organizing Data

Have you:	Yes	No
1) determined the boundaries of the case study?	○	○
2) determined the unit of analysis?	○	○
3) selected the sites in a systematic way?	○	○
4) established initial contacts?	○	○
5) developed a data collection system?	○	○
6) developed a system to organize data?	○	○

Notes to Chapter V

48. Guba, *Toward a Theory.*

49. Michael Quinn Patton, *Qualitative Methods* (Beverly Hills: Sage Publications, Inc., 1980).

50. Although the term site(s) is used here, the same procedure may be used for selecting individuals within a single site. The materials introduced in this step are drawn from Patton, *Qualitative Methods,* Chapter 5.

51. Alkin et al., *Using Evaluations,* p. 36.

52. Patton, *Qualitative Methods.*

53. Robert Bogdan, *Participant Observation in Organizational Settings* (Syracuse: Syracuse University Press, 1972), p. 16.

54. Ibid., p. 16.

55. Patton, *Qualitative Methods.*

56. Alkin et al., *Using Evaluations,* pp. 36-37.

57. S. Malak, J.E. Spirer, and B.P. Land, *Assessing Experiential Learning in Career Education* (Columbus, Ohio: The National Center for Research in Vocational Education, 1979), p. 56.

58. See note 42 for examples of publications.

59. The coding system discussed in Step Six is drawn from coding systems used in case studies at the National Center for Research in Vocational Education.

CHAPTER VI

THE FIELDWORK STAGE

Once the evaluation questions are defined, the unit of analysis chosen, initial contacts established, a data collection system designed, and field work procedures defined, it is time to begin the second stage where the data are actually collected. The fieldwork may also be broken down into a series of steps: staff training, logistics of field operations, and data collection. Each of these steps is elaborated on in the following pages.

Step Seven: Staff Training

Even with careful preparation and complete procedures, the case study evaluators must first learn what they are supposed to do. "The amount and intensity of the training the field staff receives depends on the complexity of the tasks, the skills which they possess, and the degree to which they will be required to work independently . . ."[60]

The training materials should contain step-by-step instructions for what should be done before and upon entering the case study site; sufficient background information to answer questions that might be asked about the case study at the site; a copy and an explanation of the coding system; and clear definitions of the terms and concepts with which the case study deals.

Staff should also be trained in the use of qualitative methods. Not everyone is familiar or comfortable using them. When using qualitative methods, the old adage, "practice makes perfect," applies.

When, where, and how staff are trained will depend upon the training needs, fiscal resources, and time available. For example, a sample training agenda is outlined in Figure 10. Very often, the training may be combined with a pilot test of the case study process with formal training at the site, an opportunity to collect data, and a debriefing. Questions about the coding system and other procedures can be answered at the debriefing.

Regardless of the staff's experience, it is crucial to conduct a training session on the procedures to be used in the case study. It is also a good idea to conduct a training or refresher session on the use of qualitative methods. A sample staff training agenda might look like the one in Figure 10.

The first step in designing training is to identify the needs of the staff. Remember, the best procedures will not be implemented nor will the desired information be obtained if the staff are not adequately trained. Worksheet 7 is an inventory to help identify and prioritize training staff needs. A word of caution: this step is curcial to the successful implementation of the case study, so take the time to clearly think out and plan the training needs. Training needs will vary by groups of evaluators and from one case study to another with the same group of case study evaluators! Therefore, tailor the training to the specific needs of the case study. Space has been left in Worksheet 7 to allow you to do this.

Figure 10

Sample Staff Training Agenda

Day 1

AM: Background/purpose of case study
Review of how sites were selected
Review of schedule and work assignments
Discussion of logistics (e.g., scheduling sites)

PM: Discussion of coding system
Sample coding exercise

Day 2

AM: Introduction to systematic observation techniques
Practice interviewing through role playing
(see Figure 11 for examples)
Debriefing on interviewing

PM: Practice reviewing documents
Debriefing on document review

Day 3

AM: Practice observing at a sample site
Debriefing on observing

PM: Discussion on the use of systematic observation techniques

Day 4

AM: Each evaluator conducts an interview/observation/document review at the sample site

PM: Coding morning effort

Day 5

AM: Review of coding system and case study procedures for modification and revision

PM: Review of assignments

Worksheet 7

Identifying and Prioritizing Training Needs

Rank Order*	Staff training should include:	Yes	No
_____	1) Background information on the purpose of the case study?	o	o
_____	2) Clear definitions of terms and concepts to be used?	o	o
_____	3) Discussion of what to do before entering the site?	o	o
_____	4) Discussion of what to do when on site?	o	o
_____	5) Procedures to be used for the case study?	o	o
_____	6) An explanation of the coding system?	o	o
_____	7) Discussion/review of systematic observation methods?	o	o
_____	8) Practice with systematic observation methods through structured activities (e.g., role playing)?	o	o
_____	9) Practice with systematic observation methods in the field?	o	o
_____	10) Practice using the coding system?	o	o
_____	11) Opportunity to modify		
	a) case study procedures?	o	o
	b) coding system?	o	o
	c) persons to be interviewed?	o	o
_____	12) _____		
	_____	o	o
_____	13) _____		
	_____	o	o
_____	14) _____		
	_____	o	o
_____	15) _____		
	_____	o	o

*From 1 through 15 with 15 meaning most important and 1 meaning least important.

Figure 11

Sample Interview Role Playing

Code: ER = Interviewer
EE = Interviewee

#1. *The Super Talker*

Some people control an interaction by talking too long on whatever topics appeal to them. EE starts with ER's first question and gives a relevant answer. But before ER can ask another question, EE is off on a related topic, and keeps talking just fast enough and loud enough to make it awkward for ER to interrupt.

#2. *The Non-Talker*

Some people control an interaction by not saying very much. EE starts with ER's first question and gives a brief, but relevant, answer. As the interview progresses, EE provides monosyllabic responses.

#3. *The Missing the Boat Talker*

In this case, EE does not quite grasp what is going on, nor why he/she is being interviewed. EE answers all questions and is trying to be cooperative and helpful. He/she is just traveling in a different orbit, so to speak.

#4. *The Wrong Person*

Every once in a while, you find yourself scheduled to talk to the wrong person. The problem is that the EE is very proud that he/she was selected. EE responds to ER's first question and then draws the conversation toward what he/she does.

#5. *The Average Talker*

In this case, the average interview will be conducted. ER will be curious, cooperative, and talkative. However, ER will have to semi-structure the interview to obtain all required information.

Step Eight: Logistics of Fieldwork Operations

In reality, this step is a potpourri of do's and don'ts as you get ready to enter the field. They include for example:

- *Scheduling.* Interviews and formal observation sessions should be scheduled well in advance and it is often wise to confirm the arrangements again shortly before the scheduled time. Scheduling the interview or observation itself is an opportunity to contact those being interviewed or observed. For example, over the telephone you can explain the purpose of the case study and then arrange for an appointment. The appointment should then be confirmed in writing with a general estimate of the amount of time needed. Figure 12 presents a sample memorandum for confirming an interview with a school. Remember, though, that additional appropriate interviews and observation sessions should come to the fore once in the field and should be followed up. Do not lose valuable opportunities to collect data because the opportunity is not on the day's schedule.

The amount of time an actual interview or observation session will last depends upon who is being interviewed or observed, the purpose of the interview or observation, and the total amount of time available for the case study. Do not forget to schedule an adequate amount of time for traveling from one location to another between interviews or observations. An interview schedule like the one illustrated in Figure 13 may be helpful as the individual interview and observation schedules are set.

- *Selecting Who to Interview and What to Observe.* The selection of observation settings and interviewees should be made by the evaluators. While people at the site may suggest who the evaluators should or should not interview or observe, do not let them make the final decisions.

- *Recording Responses.* Whether you take written notes or tape record an interview is up to you. However, remember that those being interviewed or observed should be asked if they mind if notes are being taken—regardless of the medium used.

All notes should be very brief—words, phrases, possibly a drawing. Their purpose is to provide stimulation for recall when the notes are written up. This should be done within a matter of hours after the data are collected. A single word, even one merely descriptive of the dress of the person, or a particular word uttered by someone, usually is enough to 'trip off' a string of images that afford substantial reconstruction of the observed scene.[61] However, while you paraphrase or summarize most of what is obtained through an interview or an observation, do not hesitate to record quotes word-for-word.

Record all responses and observations as they occur as plainly as possible. Explanatory statements may be added as needed. Do not erase any notes since it is less obtrusive and easier to cross out incorrect findings. Last, develop a personal shorthand system that will speed up the note-taking. Remember, the key to being a good interviewer or observer is to listen and watch attentively—and that cannot be done if you are immersed in taking notes.

One final word of warning is appropriate here. Be sure to write up each interview or observation as soon as possible. If they pile up, do not be surprised to find that several interviews or observations get combined or mixed up in your mind, or that you do not recall details very clearly.

- *Participation.* Case study evaluators should play a relatively passive role at the site, i.e., while they may participate with the people being interviewed and observed, the interactions should be undertaken cautiously. While participation may be good in establishing rapport, it can get in the way of observing and interviewing in some circumstances. Bogdan summarizes this trade-off as follows:

Figure 12

Sample Memorandum for
Confirming Interviews in Schools

DATE: _____ / _____ / 19____

TO:

FROM:

The _____ is one of _____ schools in the state of _____ participating in a study to determine the factors affecting the placement of vocational education students in jobs related to their training. The study is being conducted by the _____ _____, a staff member at the _____, is scheduled to interview you.

INTERVIEW

Date _____ Time _____

Place _____

Address _____

Telephone Number _____

The attached sheet provides information about the study. If some emergency prevents you from keeping your appointment, please notify me as soon as possible at _____. It is anticipated that the interview will not exceed _____ minutes.

Thanks for your cooperation. We believe this study will be helpful to the _____ and to others as they work to improve vocational education programs.

Figure 13

Daily Interview/Observation Schedule

Interviewer/Observer: _____

Day: _____

Schedule

_____ a.m./p.m. _____

Address: _____

_____

Phone: _____

_____ a.m./p.m. _____

Address: _____

_____

Phone: _____

_____ a.m./p.m. _____

Address: _____

_____

Phone: _____

_____ a.m./p.m. _____

Address: _____

_____

Phone: _____

> Control your participation, keep in mind that your primary concern is collecting data. The amount of participation should be such that the researcher fits comfortably into the setting and is able to establish the kind of rapport he wishes without disturbing the setting or having his participation interfere with his function as an observer. [62]

• *When in Rome...* It is important to learn the language or jargon that is used at the site. This may only mean becoming familiar with a specific set of acronyms, such as NPCTC (Northland Park Vocational-Technical Center), or understanding some common words have different meanings at that site (e.g., zoo = discipline problems). The language used will provide insights and clues as to how people at the site view and define situations, events, and things.

• *Supplies.* There is one more point that must be raised, though, before the data is collected—supplies. A brief "laundry list" of supplies that might be needed should be of help as you conduct the case study appears below. While you may not need all of these items, do not forget pens, paper, and money!

- ○ pens?
- ○ note pads?
- ○ index cards?
- ○ paper clips?
- ○ stapler?
- ○ rubber bands?
- ○ business cards?
- ○ recording equipment?
- ○ maps of city/county?
- ○ coding system?
- ○ questionnaires?
- ○ written description of the study?
- ○ handouts if necessary?
- ○ credit cards, travelers checks, or cash?
- ○ good humor?
- ○ aspirin?
- ○ pleasant disposition?
- ○ patience?

Worksheet 8 summarizes the major points raised in this step.

Worksheet 8

Logistics of Fieldwork Operation

Have you:	Yes	No
1) identified and set the interview and observation schedules in advance of entering the site?	○	○
2) verified all interviews and observations in writing?	○	○
3) scheduled the necessary amount of time for each interview and observation?	○	○
4) determined who will be interviewed and what will be observed?	○	○
5) taken notes in the field?	○	○
6) written up your notes daily?	○	○
7) maintained caution about taking on the role of a participant at the site?	○	○
8) learned the language specific to the site?	○	○
9) determined what supplies will be needed?	○	○

Step Nine: Data Collection

As discussed in Chapter IV, case study data are often collected through systematic observation methods—interviewing, observing, and gathering data unobtrusively. This portion of the handbook presents some helpful hints for each method.

Interviewing. When conducting an interview, it is important to:

- Arrange that a private setting is secured for the interview
- Explain the degree of confidentiality of responses reported
- Identify the interviewer and whom the interviewer represents
- Explain the purpose of the case study
- Explain the process by which interviews were selected
- Note the importance of the interview and that you need his/her help
- Conduct one-on-one rather than a group interview
- Keep questions brief
- Save tougher questions for last in the interview
- Do not breach confidentiality by revealing who said what in a prior interview
- Pinpoint events, people, and places through examples
- Be prepared, e.g., be on time, have paper and pencil, and know the material to be covered;
- Be flexible
- Avoid posing questions in such a way as to receive a socially desirable response
- Be nonthreatening, self-controlled, polite, and cordial; and
- Stay within the alloted time schedule.

Remember that a good interviewer is a good listener who knows the material to be covered. The interviewer makes certain the interviewee answers the questions, keeps track of the information covered and to be covered, and pursues information in detail by probing. Figure 14 summarizes desirable skills and qualities of an interviewer.

Figure 14

Desirable Skills and Qualities of an Interviewer[63]

A good interviewer must have quite an array of personal qualities and interviewing skills in relating to people, all of which ultimately facilitate eliciting full, relevant, in-depth but broad responses to the interview questions. Many of the abilities listed imply great flexibility, versatility, and keen judgment of how to handle oneself and the interaction at each moment.

In presenting him/herself in the situation and relating to the respondent, the interviewer should do the following:

- Be able to structure his/her role in a realistic, nonthreatening way.
- Be able to observe a situation while being involved in it.
- Be at ease but not overly casual, friendly but not too familiar and chatty, curious and investigative but not too nosy or pushy.
- Show sincere interest in the interviewer and respect for his/her feelings and opinions, empathizing without becoming involved.
- Show curiosity and pleasure in listening without diverting attention to him/her or interjecting his/her own feelings and opinions.
- Stay neutral and uninvolved in feelings or issues.
- Be self-confident but not opinionated, rigid, or moralistic.
- Be self-aware, seeing himself/herself as others do in the situation and noticing how he/she is functioning.
- Be able to keep calm in charged situations, to take rebuffs without flaring back, to tolerate changing moods and divergent opinions while keeping reactions private.
- Be able to keep personal projections at a minimum and yet retain insights.
- Be tolerant of a variety of types of people and situations and be able to relate quickly to each situation or person on his/her own terms.
- Be quick to perceive the details of a new situation, understand the relationships, grasp the terminology, and adjust one's stance and tactics appropriately. This may mean being more reserved and formal in one situation and more open and informal in another.
- Be at ease in an unstructured, open-ended situation yet not allow the interview to become either a casual visit or a discussion of irrelevant subjects.
- Be able to shift roles easily as the situation suggests, from active probing to passive but attentive listening; from eager, curious questioning to reserved observing.
- Be able to draw the respondent out without manipulating his/her responses in any way.
- Have a keen sense of timing, encouraging responses and keeping the interview moving, but allowing spaces of silence for the respondent to think and form his/her response.
- Know how fast to move from superficial to more personal, sensitive subjects.
- Be invested in the interview and the project but keep a sense of balance, objectivity, and perspective.
- Have a sense of humor.

Figure 14 continued

Other interview characteristics are more important relative to dealing with the data during the interview and later in the report. The interviewer should:

- Be conscientious in recording data and in writing reports.
- Have clear writing.
- Have a memory for names and details.
- Be flexible in recording, able to remember accurately when notetaking is inappropriate and to reduce information to brief notes that can still be returned to full form in reporting.
- Quickly grasp the organization, its relationship and terminology, and the interviewee's relationship to it and perspective.
- Be creative in framing questions and responses to draw out new material.
- Be able to think ahead of the informant.
- Be able to draw out data without manipulating responses.
- Be able to analyze feelings.
- Be sensitive to possible productive digressions.
- Seek out wide-ranging implications, think in many directions, be creative.
- Be able to identify rumors and sift them from reliable data.
- Be flexible and open to new, unanticipated responses; be unprejudiced and follow rather than direct the respondent's thinking.
- Include data that contradict hypotheses and may lead to modifications or rejection of them.
- Listen to prejudiced, false, or malicious statements while continuing to support the speaker.
- Keep to the subject in the broadest way; relating data to a theoretical framework without distorting the data.
- Be able to keep the ultimate research objectives always in mind.
- Be able to interpret research projects in line with established policy, both in formal talks and in informal conversation.

Finally, ethical considerations require that the interviewer should:

- Maintain confidences and keep field notes secure.
- Refrain from criticism and gossip.
- Refrain from passing judgments on others' behavior or on social situations.
- Respect others' customs, values, and mannerisms.

Observing. When observing it is important to:

- Watch interactions among people carefully and accurately record them
- Study the physical location (e.g., graffiti on the walls, cleanliness of the building)
- Be sensitive to the effects the observer may have on the observation
- Keep his/her biases under tow
- Be alert to people's body language (e.g., changes in facial expression, tone of voice)
- Be sensitive to the sequence of events being observed
- Be alert to the expected and the unexpected

Gathering Data Unobtrusively. When collecting unobtrusive data, the evaluator should bear in mind the items listed above under interviewing and observing. If documents are reviewed, it is important to:

- Collect all pertinent documents
- Obtain recent as well as older documents that might be pertinent
- Return borrowed documents when promised
- Review documents before you go on site

Worksheet 9 repeats the previous information in a checklist format that may be used to refresh the evaluator's memory before entering the site and once on site.

Worksheet 9

Data Collection

	Will you be certain to:	Yes	No
Interviewing	1) arrange a private setting for the interview?	○	○
	2) explain the degree of confidentiality of responses reported?	○	○
	3) identify the interviewer?	○	○
	4) identify whom the interviewer represents?	○	○
	5) explain the purpose of the case study?	○	○
	6) explain how the interviewer was selected?	○	○
	7) note the importance of the interview and that you need his/her help?	○	○
	8) conduct one-on-one rather than a group interview?	○	○
	9) keep questions brief?	○	○
	10) save tougher questions for last in the interview?	○	○
	11) do not breach confidentiality by revealing who said what in a prior interview?	○	○
	12) pinpoint events, people, and places through examples?	○	○
	13) be prepared?	○	○
	14) be flexible?	○	○
	15) avoid posing questions in such a way as to receive a socially desirable response?	○	○
	16) be nonthreatening, self-controlled, polite, and cordial?	○	○
	17) stay within the allotted time schedule?	○	○
Observing	1) watch interaction among people carefully?	○	○
	2) record interactions accurately?	○	○
	3) observe the physical location?	○	○
	4) recognize the effects the observer may have on the observation?	○	○
	5) keep biases under tow?	○	○
	6) be alert to body language?	○	○
	7) notice the sequence of events being observed?	○	○
	8) be alert to the expected and the unexpected?	○	○
Unobtrusive Data	1) collect all apparently pertinent documents?	○	○
	2) obtain recent documents as well as older documents that might be pertinent?	○	○
	3) return borrowed documents when promised?	○	○
	4) review the documents before you go on site?	○	○

Notes to Chapter VI

60. Judith Fiedler, *Field Research: A Manual for Logistics and Management of Scientific Studies in Natural Settings* (San Francisco: Jossey-Bass Publishers, 1978), p. 93.

61. Leonard Schatzman and Anselm L. Strauss, *Field Research: Strategies for a Natural Sociology* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973), p. 95.

62. Bogdan, *Participant Observation in*, p. 28.

63. Robert L. Wolf and Barbara L. Tymitz, *A Preliminary Guide for Conducting Naturalistic Evaluation in Studying Museum Environments* (Smithsonian Institution, n.d.), pp. 38-40.

CHAPTER VII

THE ANALYSIS, VERIFICATION, AND SYNTHESIS STAGE

As in any other evaluation project, the final stage in the case study is the analysis, verification, and synthesis of the data. Analysis, verification, and synthesis are undertaken so that the utilization of the report is enhanced. Each of these steps in this stage are described in some detail below.

Step Ten: Analyzing Data

Analysis of case study data is an ongoing process that begins as soon as the first piece of datum is collected. This feature, i.e., "analysis as you go," distinguishes the case study from other methodologies in which the data collection and data analysis are discrete activities. Bogdan states:

> . . . as the researcher is in the field and recording his notes, he then begins focusing on certain recurrent themes, which are revealed in observed behavior and verbalization. Certain understandings begin to develop and sociological concepts are drawn upon to make sense out of the situation. Working hypotheses become refined and new concepts are developed. In many cases the analysis of the themes direct the observer in his field work and help determine the areas in which he will spend his time.[64]

As you collect and simultaneously analyze the data, you will find that inferences will be drawn, new questions raised, and themes will develop that will adjust the scope, focus, and schedule of the interviews and observations accordingly. For example, as data are collected from different vantage points, it will confirm or contradict the findings that are being obtained, thus raising new questions for study. Using the Oneanda example, information about the placement process will be obtained through observations and interviews with teachers, parents, students, former students, school administrators, and community leaders. From their different vantage points, opinions will emerge that will confirm or contradict the patterns of findings that develop.

Throughout the data collection phase, data is continuously triangulated in order to obtain the vast accurate reflection of what is actually occurring at the site. Following the completion of the report, the findings may be tested for their accuracy by having the report reviewed by some of the persons at the case study site that were involved in the case study. Alkin et al. describe a verification procedure as follows:[65]

> Unlike many field research efforts, the process of review did not end with the research team. Instead, the case study draft was next circulated to the interviewees themselves for comment and criticism. Each key informant was given a copy of the case study draft to examine, and a personal interview was conducted after allowing the informant one or two weeks to digest the report.
>
> The interviews were conducted in a spirit of open exchange of opinion, advice, and constructive criticism. As might be imagined, the informants did not always agree with the draft reports. Their suggestions and comments zeroed

in on our occasional errors of fact or convincingly refuted mistaken interpretations of events. Other comments were more subject to dispute; where appropriate, further discussions as well as follow-up interviews with other informants were conducted to thrash out the issue in question. Thus, we carried out a rather systematic field validation of the authenticity and accuracy of the case study report.

Based upon the additional information gained in these review sessions, the case study report was edited into final form by the research team. It conformed with each informant's perspective on some points and differed on others. All in all, it was what we judged to be fair and accurate in light of all the data.

The more intensive data analysis occurs after all the data are collected and the researchers have returned to the office. However, data analysis will probably not begin on the first day back in the office since other professional commitments and chores such as typing notes often create a lag between collection and analysis. This situation occurs often enough that the case study evaluator should be aware of it and plan accordingly.

However, do not take a long break before the data are analyzed. It is important that the data be analyzed while they are still fresh and clear in the evaluator's mind. Also, after you start to read the field notes, questions may emerge that require clarification. Needless to say, the longer this occurs from the time you were at the site, the greater are the chances that the situation at the site has changed or the rapport established at the site has diminished.

Generally, the beginning of the data analysis process is to read through all of the data cards carefully in order for the evaluator to again become familiar with the information obtained. A second reading of the data cards should then be conducted for two purposes. First, during the initial data analysis stage (as the data was collected), patterns and themes appeared to emerge. At this point, the evaluator should attempt to test the validity of those patterns and themes. Second, when reviewing the data cards, look for new patterns and themes.

Then look at the data by themes using the coding system to pull out cards with like pieces of information. Do not hesitate to do some recoding at this point by adding some new codes. Remember that the coding system represents the best *guess* at organizing the data. As such, it is far from the gospel and is certainly open to improvement.

The exact procedures used in data analysis vary according to the amount of data collected, the information needs of the audience, and resources available. For example, some case study reports appear as lengthy narratives which rely upon words to describe and explain what occurred at the site. Other case studies rely on content analysis procedures in an effort to quantify the findings or report the frequency with which certain things occur. No one specific data analysis technique will serve all case studies. The technique or techniques chosen, like every other aspect of the case study, must be specifically suited to its needs. Of course, you should have some ideas about how the data will be analyzed before it is collected.

Worksheet 10 is a brief checklist about data analysis to review the material discussed in this step.

Worksheet 10

Analyzing Data

	Yes	No
1) Will data be analyzed as it is collected?	O	O
2) Will an adequate amount of time be allocated for intensive data analysis?	O	O
3) Was thought given to how the data will be analyzed before it was collected?	O	O
4) Would each data card be carefully read for		
a) overall content?	O	O
b) to test the identified themes?	O	O
c) to identify new themes?	O	O
5) Will there be an opportunity to add or to revise the coding system in order to make the data more easily retrievable?	O	O

Step Eleven: Reporting the Findings

Reporting the findings from an evaluation activity in an accurate, clear, usable way is a challenge. Reporting the findings from a case study is no exception. The report should be both a descriptive and analytic presentation of the data. The actual structure of the report should be based upon the purpose of the case study evaluation and the interest of the audience. For example, if a case study was conducted in ten states which focused on factors that influence the entrance of students into nontraditional occupations, it could be reported by major themes that appear across all sites, by hypotheses that have been generated, or by individual states. Each of these three reports may be written from the same set of data that was collected and analyzed. It is the presentation of the findings that differs. The purpose of the case study evaluation and the interests of the audiences will determine how the findings should be reported.

Regardless of the way in which the findings are presented, certain points should be included in any case study evaluation report to insure that the reader has enough information about how the case study was conducted. These include:

- *Evaluation Purpose.* The reader should be informed about the aim of the evaluation effort including the rationale behind the study, the major evaluation questions and why they are important, and what assumptions (if any) were made.
- *Method.* The section should explain why the case study method was chosen, which qualitative data collection methods were used and why, and a description of the case study procedures.
- *Time and Length of the Case Study.* The section should report the dates of the case study, how much time was spent at each case study site, and so forth.

- *Sites.* The site selection process should be clearly explained along with the number of sites selected and a description of their pertinent characteristics. Whether or not specific sites are identified will depend upon prior arrangements made with each site regarding confidentiality.

- *Limitations of the Case Study.* At this point, any limitations of the study which might have affected the findings should be mentioned. Limitations could include, for example, time constraints, elimination of a group of schools or students from the sampling pool, lack of accessibility to some potential sites which resulted in their elimination from the sample, and staffing problems which had an effect on data collection or analysis.

- *Relationships at the Case Study Site.* The relationships between the evaluators and persons at the case study sites should be described in terms of the level of evaluator acceptance and any changes in the level of acceptance.

- *Checks on Data.* This section should focus on how the evaluators ensured that the data collected accurately reflected the situation at each case study site.

- *Presentation of Findings.* This is self-explanatory—let the reader know what the case study found.

- *Conclusions and Recommendations.* The conclusions and resulting recommendations should be based upon the data collected and analyzed. Personal opinions may also be included, but they should be labeled clearly as such.

Both before you begin to write the case study report and after it has been completed, take a few minutes to think about the questions posed in Worksheet 11.

Worksheet 11

Reporting the Findings

Did I:	Yes	No
1) Explain the background of the case study (e.g., purpose, limitations)?	○	○
2) Describe the site completely?	○	○
3) Use accurate, detailed descriptions of actions and behaviors?	○	○
4) Report word-for-word statements where appropriate?	○	○
5) Report whether interaction with informants was effective and whether informants were reliable?	○	○
6) Work effectively with reliable witnesses and informants?	○	○
7) Report on any important trace effects or wear spots?	○	○
8) Use documents to add to my observations?	○	○
9) Report natural and typical conditions?	○	○
10) Report whether I became involved to the extent that it was disruptive or unnatural?	○	○
11) Have pre-formed opinions or "axes to grind"?	○	○
12) Make interpretations that flow directly from the data?	○	○

Step Twelve: Utilizing the Case Study Findings

The extent to which the findings of any case study will be utilized is a question that needs to be considered throughout the design, implementation, and reporting of the case study. The literature is replete with claims that evaluation information is not used. The case study may be even more prone to pitfalls that will reduce its visibility. Some suggestions for enhancing the probability of using case study findings are:

- The people for whom the information is intended should be involved in the initial stages of planning. They should be involved in clarifying such issues as what their evaluation information needs are (and how the needs are subsequently translated into evaluation questions), whether or not a case study is the methodology that will best answer the evaluation questions, if adequate resources are available (e.g., time, staff, money) to conduct the case study, and will the sites selected provide meaningful information. Although decision-makers will not be involved in the data collection and analysis phases of the case study, their part in the beginning of the undertaking is crucial to their eventual use of the findings.

- The proper audience should receive the case study report. The proper audience includes all the stakeholders, i.e., persons who have an involvement and interest in the broad evaluation question and/or the sites being studied. For example, all persons involved in the conceptual portions of the study would be part of the appropriate audience as well as other parties who express an interest in the study as it is being conducted.

- It is unlikely that the audience will find the time to read lengthy case study reports. Different approaches may be taken to resolve this problem. For example, it often is useful to condense the material into a summary (often known as an executive summary) that briefly identifies the purpose of the study, the evaluators, the methodology and time frame, the findings, and the conclusions and recommendations. Another method is to extract pertinent material from the complete report for people in certain positions, such as teachers, counselors, or administrators. If it is important to reach the general public, the findings should be condensed and reported in a readable style, perhaps adding photographs and graphic designs.

- The use of the report may often be enhanced by holding meetings at which the evaluators can report their findings and answer questions. This process tends to increase the likelihood that the case study report will be read.

The four suggestions above comprise only a partial list. For example, critical to the issue of using any evaluation finding is timeliness. If the evaluation information is not available at the time a decision is made, it will not be used. Case study findings are no exception.

Each individual situation will have its own best methods to help increase the use of the data. Take a few moments to think through your own situation and the best ways to increase utilization of the case study findings—or the findings from any other evaluation effort, for that matter. Worksheet 12 is designed to help you think through the process.

Worksheet 12

Utilizing the Case Study Findings

	Yes	No
1) Have you looked at your situation and identified the best ways to increase the utilization of the findings?	○	○
2) Was the appropriate audience involved in the conceptual phase of the case study?	○	○
3) Has the proper audience received the report?	○	○
4) Will different formats of the report be needed for different parts of the audience?	○	○
5) Will meetings between the evaluators and each part of the audience be scheduled to discuss the report?	○	○

Notes to Chapter VII

64. Bogdan, *Participant Observation in*, p. 58.

65. Alkin et al., *Using Evaluations*, p. 41.

PART THREE

CHAPTER VIII

THE CASE STUDY PUZZLE

This handbook is designed as an introduction to a methodology that may be used to evaluate vocational education programs. To make the handbook as user-oriented as possible, the text was divided into three major parts. Part One briefly reviewed the process of evaluation, the case study approach, and different data collection methods. In Part Two, the reader was "walked through" twelve steps that comprise the case study process. Part Three consists of a case study puzzle and a selected annotated bibliography.

Try your hand at the case study puzzle to see how many of the terms introduced in the handbook you remember by consulting the clues. The terms appear forward, backward, up, down, and diagonally —but in all cases they form a straight line. For example, clue 1, *interviewing, observing, and documents,* are examples of *qualitative* methods.

A super sleuth should identify 11 to 15 terms correctly. If you identify between six and ten terms it might be a good idea to review the chapters. Less than five terms, well, it is time to start at page one again. Good luck. The correct answers appear on the page following the puzzle.

CLUES

1) interviewing, observing, documents . . .

2) delineating, obtaining, and providing information for decision-making

3) viewing the total picture

4) if it is not deductive, then it is _____

5) a school of psychology

6) an alternative evaluation methodology

7) they try to understand behavior from the person's viewpoint

8) they seek facts or causes of phenomena

9) looking, listening, asking

10) elite or structured

11) data conducted without being noticed

12) sites are chosen by identifying a _____

13) collecting data from different sources or by different means

14) data may be organized as a system

15) once collected, data should be _____

16) audiences should be involved in early stages to increase the ____ of data

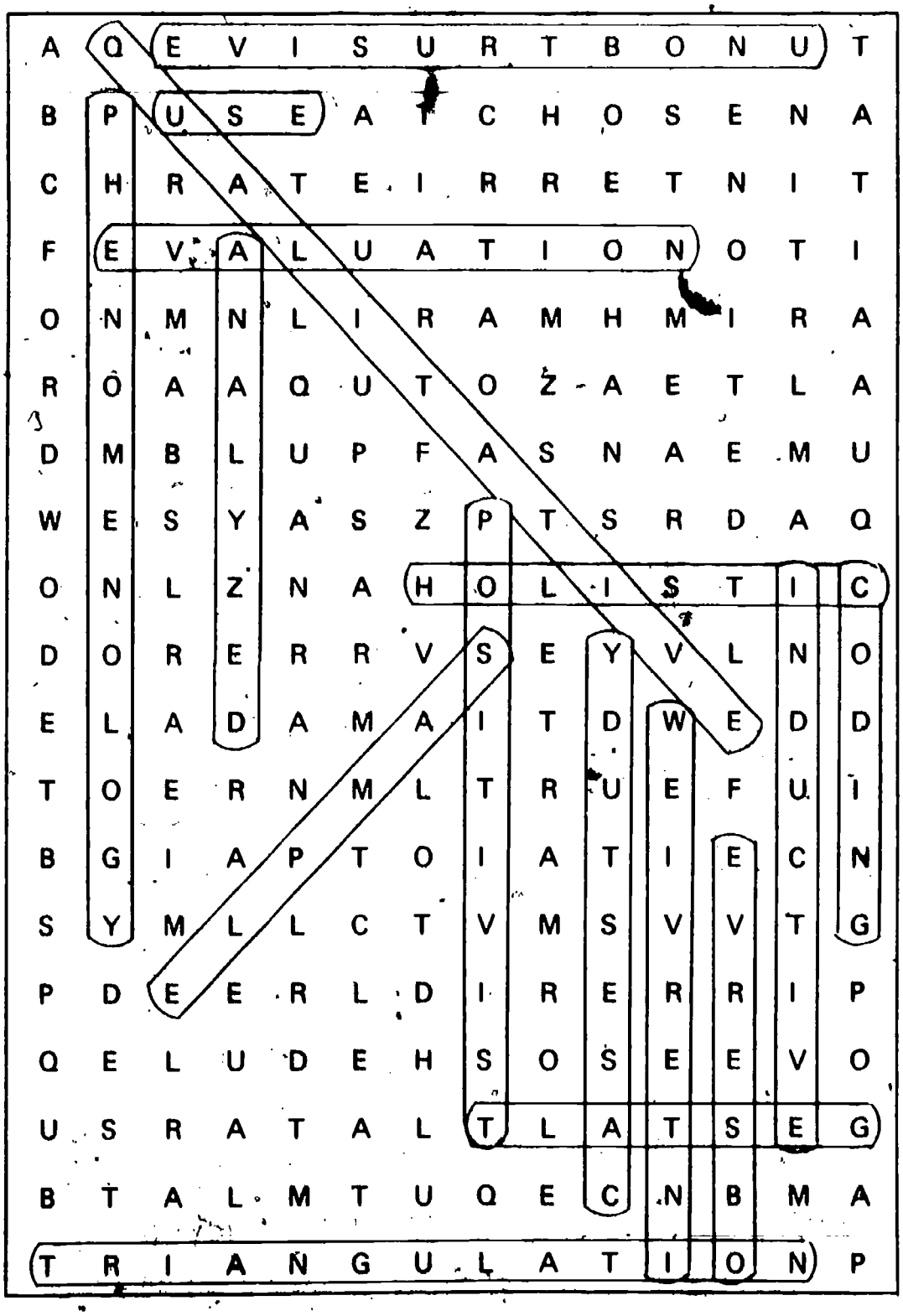
CASE STUDY PUZZLE

A	Q	E	V	I	S	U	R	T	B	O	N	U	T
B	P	U	S	E	A	T	C	H	O	S	E	N	A
C	H	R	A	T	E	I	R	R	E	T	N	I	T
F	E	V	A	L	U	A	T	I	O	N	O	T	I
O	N	M	N	L	I	R	A	M	H	M	I	R	A
R	O	A	A	Q	U	T	O	Z	A	E	T	L	A
D	M	B	L	U	P	F	A	S	N	A	E	M	U
W	E	S	Y	A	S	Z	P	T	S	R	D	A	Q
O	N	L	Z	N	A	H	O	L	I	S	T	I	C
D	O	R	E	R	R	V	S	E	Y	V	L	N	O
E	L	A	D	A	M	A	I	T	D	W	E	D	D
T	O	E	R	N	M	L	T	R	U	E	F	U	I
B	G	I	A	P	T	O	I	A	T	I	E	C	N
S	Y	M	L	L	C	T	V	M	S	V	V	T	G
P	D	E	E	R	L	D	I	R	E	R	R	I	P
Q	E	L	U	D	E	H	S	O	S	E	E	V	O
U	S	R	A	T	A	L	T	L	A	T	S	E	G
B	T	A	L	M	T	U	Q	E	C	N	B	M	A
T	R	I	A	N	G	U	L	A	T	I	O	N	P

ANSWERS TO PUZZLE

1. qualitative
2. evaluation
3. holistic
4. inductive
5. gestalt
6. case study
7. phenomenology
8. positivists
9. observe
10. interview
11. unobtrusive
12. sample
13. triangulation
14. coding
15. analyzed
16. use

CASE STUDY PUZZLE: ANSWERS



CHAPTER IX

SELECTED ANNOTATED BIBLIOGRAPHY

Chapter IX contains over thirty-five additional resources to which you might refer to enhance your knowledge of and skills in naturalistic approaches to evaluation. While the resources selected are not a complete listing of those available, they should serve as a good place to begin reading.

Acland, Henry. "Are Randomized Experiments the Cadillacs of Design?" *Policy Analysis* 5 (2) (Spring, 1979):223-241.

This article discusses the merits of randomized experimental designs as a means to obtain information about program effectiveness. Using the emergency school assistance program as an example, he argues the need to move past current methodological prescriptions in order to do good research.

Alkin, M.C.; Daillak, R.; and White, P. *Using Evaluations.* Beverly Hills: Sage Publications, Inc., 1979.

This book discusses the utilization of evaluation information and a naturalistic evaluation approach. Five case studies of school programs are reported and discussed, examining the influence of evaluation upon program decision-making and program operation. The authors attempt to explain why and how evaluation did or did not have an impact on program decision-making.

Banaka, William H. *Training In Depth Interviewing.* New York: Harper and Row, Publishers, 1971.

This book is a training aid for persons learning how to conduct interviews or improve their interviewing skills by focusing on understanding the interaction process occurring in an interview. It describes a series of detailed guides for each phase of the interview process: planning; setting up a practice interview; summarizing the data; content and process analysis; and evaluating interviewing skills. Interpersonal theory and specific evaluation of interview behaviors is interwoven through the book. An interactional approach is used; emphasizing objective, analytical, and subjective sensitivity skills related to the interviewer and to the interviewee; and the impact these have on the other. An annotated bibliography is included at the end of the book.

Bodgan, Robert. *Participant Observation In Organizational Settings.* Syracuse: Syracuse University Press, 1972.

The reader is introduced to participant observation and the stages in this type of research: the pre-fieldwork stage, the fieldwork stage, and the intensive analysis stage. The discussions in each stage focus on "how to" conduct participant observations.

Bodgan, Robert, and Taylor, Steven J. *Introduction to Qualitative Research Methods: A Phenomenological Approach to the Social Sciences.* New York: John Wiley and Sons, 1975.

This book deals with the sociological methods and techniques of qualitative research. It is presented in two parts, plus field notes and an extensive bibliography. The introduction deals with qualitative methods in general and with a number of theoretical underpinnings such as ethnomethodology. Part One concentrates on how to conduct qualitative research, pre-fieldwork activities, collecting data, and analyzing data. Part Two discusses the writing up and presentation of findings and illustrates ways in which research findings can best be presented.

Bradburn, N.M.; Sudman, S.; and Associates. *Improving Interview Method and Questionnaire Design.* San Francisco: Jossey-Bass Publishers, 1979.

This publication (from the National Opinion Research Center Series in Social Research) addresses the reluctance of many people to give full and honest answers when asked about such threatening topics as sexual behavior, bankruptcy, criminal arrests, or alcohol consumption. It reports findings from a series of experimental studies and presents detailed information on the amount of distortion that occurs with questions of varying degrees of threat and with different survey procedures. Also, it outlines practical techniques for increasing respondents' willingness to cooperate and for reducing their misreporting of behavior; and enables survey users to critically evaluate survey results and identify potential sources of error.

Cook, Thomas D., and Reichardt, Charles S. (eds.). *Qualitative and Quantitative Methods in Evaluation Research.* Beverly Hills: Sage Publications, Inc., 1979.

Eight papers comprise this collection which focus on qualitative versus quantitative methods, the need for qualitative methods in evaluation research, degrees of freedom and the case study, reconciling qualitative and quantitative data, a rapprochement of quantitative and qualitative methods, use of photographs, ethnographic contributions to evaluation research, and linking process and impact analysis.

Denzin, Norman K. *Sociological Methods: A Sourcebook.* Chicago: Aldine Publishing Company, 1970.

This book consists of a series of articles concerned with the problems related to developing theory and implementing valid inquiry. Specifically, it discusses empirical research from a naturalistic perspective. The nature of social inquiry, sampling technique, measurement, interviews, design and analysis, and social experiments are raised. Survey, participant observation, life-histories, unobtrusive measures, triangulation and contingencies, and problems in the execution of social research are also discussed.

Denzin, Norman K. "The Logic of Naturalistic Inquiry." *Social Forces* 50 (1971): 166-182.

One form of empirical inquiry, naturalistic behaviorism, is presented and compared to other theories in this article. A framework for organizing naturalistic studies also is provided. Special attention is given to show how the investigator obtains samples; selects and uses naturalistic induction; analyzes various case types; provides explanatory models of the interaction; and records and analyzes his/her own behavior.

Dexter, Lewis A. *Elite and Specialized Interviewing.* Evanston: Northwestern University Press, 1970.

This book is designed for social scientists engaged in the collection of information through 'elite' interviewing. The author describes an elite interview as "the giving of special, non-standardized treatment" to the interviewee. It describes how interviews can be conducted, the ways in which questions can be posed, ways replies can be recorded, and the method of drawing

inferences. Particular topics deal with: interview procedure; oral history interviewing; the kind of truth one can expect to get from an interview; and an assessment of interviewee's responses and reactions. An annotated bibliography is included.

Douglas, Jack D. *Investigative Social Research: Individual and Team Field Research.* Beverly Hills: Sage Publications, Inc., 1976.

How different methods of social research are used to obtain different types of information with various types of social groups is discussed. He claims that the selection of the methodology largely is chosen by how we view the environment. A major portion of this book describes how the major forms of natural involvement and field research methods are used to gain appropriate information. Attention is also given to the problems society poses for field researchers in their studies, particularly those related to evasiveness, secrecy, deceit, frontwork, and conflicts, plus ways in which can be circumvented.

Eisner, Elliott T. *The Perceptive Eye: Toward the Reformation of Educational Evaluation.* Stanford: Stanford Evaluation Consortium, Department of Education, Stanford University, 1975. (ED 128 408).

It is suggested that a supplement to the use of scientific procedures of describing, interpreting, and evaluating educational settings is required rather than a purely scientific approach. Such a new, non-scientific approach can be applied, providing that it incorporates 'educational connoisseurship' and 'educational criticism'. The paper defines the meaning of those terms and describes the ways in which each can be used to evaluate educational settings.

Fehrenbacher, H.L.; Owens, T.R.; and Haenn, J.F. *The Use of Student Case Study Methodology In Program Evaluation.* Research Evaluation Development Paper Series No. 10. Portland, Oregon: Northwest Regional Educational Laboratory, 1978.

This paper discusses the case study method, uses of the case study, and provides specific procedures for conducting a case study. The latter portion illustrates the uses of the case study method for evaluating an Experience-Based Career Education (EBCE) program and contains an illustrative case study.

Fiedler, Judith. *Field Research: A Manual for Logistics and Management of Scientific Studies in Natural Settings.* San Francisco: Jossey-Bass Publishers, 1978.

This general introduction to field research outlines the methodology associated with the design, planning, and management of investigations of real-life settings. Fiedler discusses techniques that facilitate fieldwork and offers a rationale for determining the needs for and utilization of resources in the field. Each stage of field research management is discussed. These include site relations, communication, field staff management, cost estimates, budgeting, supplies, and documentation.

Guba, Egon G. *Toward a Methodology of Naturalistic Inquiry in Educational Evaluation.* CSE Monograph Series in Evaluation, No. 8. Los Angeles: Center for the Study of Evaluation, University of California, 1978.

The nature of naturalistic inquiry, ways in which it differs from conventional inquiry, how it is similar to other contemporary methodologies, and the need for this type of research are presented in the first section of the monograph. The second section discusses reactions to conventional inquiry methodologies and the development of models based upon and compatible with naturalistic inquiry concepts. The third section concerns itself with three major methodological problems that should be considered by those wishing to use this type of approach; defining the boundary, with focusing and with assuring authenticity.

Hamilton, D.; MacDonald, B.; King, C,; Jenkins, D.; and Parlett, M. (eds.). *Beyond the Numbers Game: A Reader in Educational Evaluation.* Berkeley, California: McCutchen Publishing Corporation, 1977.

This is a collection of readings related to alternative or illuminative (nontraditional) modes of evaluation. Section one discusses this approach in reference to the study of innovative programs. Section two covers the process of curriculum development, particularly with respect to choosing and formulating educational objectives and organizing learning objectives around the educational objectives. The third section presents alternative ways of evaluating educational programs by five experts in the field. A series of papers on alternative methodologies are compiled in the fourth section. These describe 'illuminative' evaluation approaches which are 'adaptive' and 'responsive'. The emphasis is on the methodological aspects associated with those used in social anthropology. Section five attempts to answer the question of whether illuminative studies are more useful, informative, or profound than traditional forms when the earlier theories described in the book are put into practice. A series of sample reports, using different styles and types of evaluation procedures, are given to show the method and theory in action.

House, Ernest R. *The Logic of Evaluative Argument.* CSE Monograph Series in Education, No. 7. Los Angeles: Center for the Study of Evaluation, University of California, 1977.

This monograph provides a theoretical analysis of evaluation. The first section discusses evaluation as an argument. The equivocality of evidence, evaluation as an art of persuasion, recipients of information, premises of agreement, quantitative and qualitative issues, and the development of an argument are covered in the first section. The second section covers the logic of argument, exemplary studies, naturalistic evaluation, and objectivity, validity, and impartiality issues.

Kester, Ralph J. *Using Systematic Observation Techniques in Evaluating Career Education.* Columbus, Ohio: The National Center for Research in Vocational Education, 1979.

This handbook introduces the reader to three systematic observation techniques—observing, interviewing, and gathering data unobtrusively—that may be used to evaluate career education programs. It provides practical guidelines on how to use each technique; things to consider when using the techniques; how to organize, analyze, and justify the data; and how to enhance systematic observation skills.

Jason, Martin H., and Schwartz, Henrietta S. *A Guidebook to Action Research for the Occupational Educator.* Department of Adult, Vocational and Technical Education, State Board of Education, Illinois Office of Education, 1976.

This guidebook on conducting action research arose out of an action research workshop conducted for occupational educators in Chicago high schools. Various methods of conducting research with examples applicable to vocational education are given throughout the text. Step-by-step procedures are presented covering such topics as setting research hypotheses, sampling procedures, testing hypotheses, research design, evaluating curriculum, survey research, the case study, anthropological and ethnographic research, and preparing the research report. This practical guide to applied educational research methodology should be of considerable help to teachers, counselors, and administrators.

Johnson, John M. *Doing Field Research.* New York: The Free Press, 1975.

This book provides a detailed description and analysis of sociological field research methods. It is concerned with outlining how investigations are carried out with groups in particular social settings. The first section of the book discusses the major arguments in the traditional methodological literature about the problems of conducting field research. The second section describes

some of the more applied problems, namely: ways of gaining and managing entry; methods used in developing personal relations and trust; personal relationships in field research and their influence on data collection; and ways of constructing a national account of field research. The third section compares the traditional conceptions of field research practice and the author's experience within the context of current debates about social science objectivity.

McCall, George J., and Simmons, J.L. (eds.). *Issues in Participant Observation: A Text and Reader.* Reading, Massachusetts: Addison-Wesley Publishing Company, 1969.

This analytical review of methodological issues brings together in one volume a range of selected articles covering eight key areas. They concern: the nature of participant observation; field relations; data collection, recording, and retrieval; the quality of data; generation of hypotheses; the evaluation of hypotheses; publication of results; and comparison of methods.

Patton, Michael Quinn. *Utilization-Focused Evaluation.* Beverly Hills: Sage Publications, Inc., 1978.

This is based upon the results of experiences gained from: studies of utilization; conducting evaluation studies; current theories of formal organization and organizational dynamics; decision-making theory and policy analysis; and evaluation research literature. It attempts to provide a comprehensive and pragmatic approach to program assessment by means of an overall framework. Each chapter develops further aspects of this theme. The definition of utilization of evaluation, the processes of utilization with respect to decision-making practices; focusing and framing evaluation questions; goal clarification; implementing the evaluation study; alternative paradigms of evaluation measurement and design; and the analysis, interpretations, dissemination, and utilization of the findings are some of the themes discussed.

Patton, Michael Quinn. *Qualitative Evaluation Methods.* Beverly Hills: Sage Publications, Inc., 1980.

This book emphasizes strategies for generating valid, useful and credible qualitative information for decision-making. Divided into three parts, it focuses on different approaches to field observation, interviewing, and data analysis. It also includes examples of different research strategies, samples of qualitative instruments, and excerpts from reports.

Rist, Ray C. "Blitzkrieg Ethnography: On the Transformation of a Method into a Movement". *Educational Researcher* 9(2) (February, 1980): 8-10.

This article discusses the increased popularity of ethnography in respect to the costs and benefits that accrue. For example, as costs have stemmed from education's over-reliance on quantitative methods when they were "appropriate or unable to answer the questions at hand. So also qualitative research faces growing costs. The more reliance on the method as an end in itself, the less it is a meaningful research tool."

Schatzman, Leonard, and Strauss, Anselm L. *Field Research: Strategies for a Natural Sociology.* Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.

The principal focus of this book is on field researchers. It describes the way in which researchers interact and deal with the field situations, the problems they face, and the options that are open to them. Methodological and philosophical issues relating to field research precede a series of strategies concerning: entering an organization, watching, listening, recording, analyzing, and communicating. Instrumentation for measuring the intervening mechanisms, research design, and ethics are some of the issues covered in the epilogue.

Sechrest, Lee (ed.). *Unobtrusive Measurement Today*. San Francisco: Jossey Bass Publishers, 1979.

This source book is a collection of six articles dealing with unobtrusive measures. After an overview of the promise of unobtrusive measures, the authors discuss the use of direct observations: how to design unobtrusive field experiments; a reconciliation between unobtrusive and cross-cultural research approaches; nonverbal behaviors as unobtrusive measures; and trace measures.

Siedman, Eileen. "Why Not Qualitative Analysis?" *Public Administration Review*. (July/August, 1977): 415-417.

The author argues that qualitative analysis, in contrast to quantitative analysis, can be used to restore the legitimacy of subjectivity and give credibility and weight so that decisions and actions can be accurately assessed. Program analysis, she claims, is an art which incorporates both qualitative and quantitative measures. Program success should be determined by comparing legislative intent to the results as viewed by the recipient. That is, by assessing "reality", rather than just analyzing information.

Stake, Robert E. "The Case Study Method in Social Inquiry." *Educational Researcher*. 7(1978): 5-8.

In this article, the role of the case study method in social inquiry is discussed. He argues that the case study will continue to be a useful means of exploration for those who are searching for explanatory laws. He posits that "... because of the universality and importance of experiential understanding, and because of their compatibility with such understanding, case studies can be expected to continue to have an epistemological advantage over other inquiry methods as a basis for naturalistic generalization".

Tikunoff, William J., and Ward, Beatrice A. (eds.). "Exploring Qualitative/Quantitative Research Methodologies in Education," *Anthropology and Education Quarterly*, VIII (1977):37-163.

This issue consists of eleven articles and nine critiques which provide an overview of research methodologies, the next steps in qualitative data collection, assessing language development, why do-demonstrations?, how to identify effective teaching, and assessing race relations in the classroom.

Van Maanen, John (ed.). "Qualitative Methodology," *Administrative Science Quarterly*. 24(1979): 519-702.

This issue of *ASQ* highlights qualitative methodology. Fourteen articles address such topics as ethnography, organizational ethnography, qualitative research techniques in economics, data analysis, triangulation, surveying, quantitative versus qualitative data, and unobtrusive measures.

Wax, Rosalie H. *Doing Fieldwork: Warnings and Advice*. Chicago: University of Chicago Press, 1971.

Theoretical presuppositions of fieldwork are covered in the first chapter of this book. She stresses the importance of the investigator obtaining an insider's view of the culture and that this involves becoming 'socialized' so that a more comprehensive understanding can be gained. Such understanding is considered an essential precondition of research and enables a more adequate explanation to be made. Other chapters in the introductory section describe some of the difficulties that may be encountered during the resocialization process, some interesting social research conducted in earlier times in Europe and America, and the difficulties and ambiguities encountered while in the field. The remaining portion of the book reports on three major case studies: fieldwork in the Japanese American relocation centers; fieldwork on the Thrashing Buffalo reservation; and fieldwork among the Six Friendly Tribes. The autobiographical materials are intended as case studies in the training of future fieldworkers.

Webb, E.J.; Campbell, D.T.; Schwartz, R.D.; and Sechrest, L. *Unobtrusive Measures: Nonreactive Research in the Social Sciences.* New York: Rand McNally, 1966.

This book describes and encourages the use of a wide range of unobtrusive measures for gathering research data. The authors recommend the use of supplementary methods for testing the same social science variable or, as they describe the process, "... [researchers should use] multiple operationism, a collection of methods combined to avoid sharing the same weaknesses." They claim that such alternative approaches are designed to supplement and cross-validate the interview process. Various nonreactive measures are discussed, such as: the selective erosion of titles; the accretion rate of whiskey consumption; the shrinking diameter of a circle of children; pupil dilation; library withdrawals; distortion in the size of certain drawings; and the degree of selective clustering in lecture halls.

Willems, Edwin P., and Raush, Harold L. (eds.). *Naturalistic Viewpoint in Psychological Research.* New York: Holt, Rinehart, and Winston, Inc., 1969.

This is a collection of ten papers expressing different viewpoints related to naturalistic research. The main theme is concerned with developing a methodology of naturalistic inquiry, rather than a discussion of philosophical issues and specific techniques per se, although those are discussed to some degree. Three broad methodological areas are presented in the next ten chapters. The first of the three discuss more general aspects of ecological research and naturalistic methodology. The authors argue that there is an urgent need for expansion, research, and development of improved techniques for observation and analysis in the behavioral sciences. A number of criteria that can be considered also is presented. The second area concerns itself with establishing more clearly defined sections within naturalistic research, namely: the study of subhuman primates; clinical psychology; research on attitudes and opinions; and the cultural study of personality. In section three, the emphasis is on developing an ecological theory of intervention by discussing how individuals become effective and survive in varied social environments. The concluding section summarizes the issues and highlights the unsolved problems.

Willis, George (ed.). *Qualitative Evaluation: Concepts and Cases in Curriculum Evaluation.* Berkeley: McCutchen Publishing Corporation, 1978.

This book attempts to link together significant practical and theoretical examples of qualitative approaches to evaluation. Topics about such approaches are raised from a phenomenological perspective and relate particularly to the evaluation of classroom interactions. The book discusses how qualitative research rests upon quite different assumptions, uses different techniques, and a variety of criteria uncommon to those of conventional research methods. A series of case studies are presented which describe how the researchers can become involved directly in the educational process; be sensitive to the events taking place; operate within the objectives of the study; and be able to synthesize and report the events clearly, accurately, and objectively. The book is divided into three sections. The first section describes the theory behind qualitative evaluation. A selection of exemplary case studies, including a discussion of the method used in each case, are presented in the second section. An overview of the major issues presented in the case studies is presented in the third section.

Wilson, Steve. "Exploration of the Usefulness of Case Study Evaluations." *Evaluation Quarterly* 3(1979): 446-459.

Wilson examines critically the usefulness of the case study approach to educators and parent groups. Particular attention is paid to the definition of case studies, the relevance this approach is claimed to have for practitioners, and issues which influence its usefulness. Limitations relating to the time to read and the length of the reports as well as the values and theoretical orientations of the readers are said to determine the degree to which the findings will be accepted, can be generalized, and will be used in decision-making.

Wilson, Stephen et al. *The Use of Ethnography in Educational Evaluation.* Chicago: Center for New Schools, 1974.

The author discusses the use of methodology and findings using ethnography in evaluating an innovative educational program. A description is given of the evaluation model used to clarify the context in which ethnography is used. The use of ethnography is also discussed from two perspectives: problems arising from the discrepancy between the assumption and processes of ethnography and those of evaluation; and problems arising during the implementation of the evaluation.

Wolf, R.L.; Andis, M.F.; Tisdal, C.E.; and Tymitz, B.L. *New Perspectives in Evaluating Museum Environments: An Annotated Bibliography.* Department of Psychological Studies, Office of Museum Programs, Smithsonian Institution, 1979.

This annotated bibliography outlines evaluation methods that are relevant to a museum context. The bibliography has been divided into four sections, each having a brief explanation of the nature of the books and articles included and their relevance to naturalistic museum evaluation. These sections concern: background and rationale; collection strategies; analysis strategies; and sample studies and reports.

Wolf, Robert L.; and Tymitz, Barbara L. *A Preliminary Guide for Conducting Naturalistic Evaluation in Studying Museum Environments.* Department of Psychological Studies, Office of Museum Programs, Smithsonian Institution (n.d.).

This is a guide describing naturalistic evaluation procedures applied to museum settings. The first of a series, it provides an overview of naturalistic evaluation procedures and describes a range of interview strategies with the goal of making evaluators more sensitive to the subtleties of perceiving and understanding the environment.

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