DOCUMENT RESUME

ED 313 981 HE 023 085

AUTHOR Whitt, Elizabeth J.; Kuh, George D.

TITLE Qualitative Methods in Higher Education Research: A Team Approach to Multiple Site Investigation. ASHE Annual Meeting Paper.

SPONS AGENCY Lilly Endowment, Inc., Indianapolis, Ind.; Marriott Corp.. Bethesda, MD. Education Services Div.; National Association of Student Personnel Administrators, Inc.

PUB DATE Nov 89

NOTE 43p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Atlanta, GA, November 2-5, 1989).

PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *College Students; Enrichment Activities; Evaluation Methods; Extracurricular Activities; Higher Education; Qualitative Research; *Research Methodology; School Activities; Student Interests; *Teamwork

IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

A team approach to the use of qualitative methods in a study of high quality out-of-class experiences for undergraduate students at 14 institutions of higher education is described. Four research questions examined: the physical and organizational features characterizing the institutions; the nature of institutional policies related to out-of-class activities; opportunities available for student involvement; and how elements of institutional culture and subcultures influence student involvement. Issues of qualitative research addressed include team composition, data collection, observations, data analysis, establishing trustworthiness and credibility, transferability of findings, and dependability and confirmability. Among conclusions were that multisite qualitative research using multiple investigators is time consuming and expensive, and that the composition of the research team is critical. Such research does work, however, and in this case provided rich and accurate descriptions of individual institutions and factors and conditions across institutions that seem to contribute to high-quality out-of-class experiences. Contains 34 references. (SM)

Qualitative Methods in Higher Education Research: A Team Approach to Multiple Site Investigation

Elizabeth J. Whitt
Iowa State University

George D. Kuh
Indiana University

Presented at the Annual Meeting of the Association for the Study of Higher Education, Atlanta, November 1989

The research on which this paper is based was supported by grants from the Lilly Endowment, Inc., the National Association of Student Personnel Administrators, and the Education Services Division of the Marriott Corporation.

ASHE
ASSOCIATION
FOR THE
STUDY OF
HIGHER EDUCATION

Texas A&M University
Department of Educational
Administration
College Station, TX 77843
(409) 845-0393

This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Ritz-Carlton, Buckhead in Atlanta, Georgia, November 2-5, 1989. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

INTRODUCTION

> Qualitative data tend to overload the researcher badly at almost every point; the sheer range of phenomena to be observed, the recorded volume of notes, the time required for write-up, coding, and analysis can all be overwhelming (Miles, 1979, p. 590).

This caveat from Miles (1979) notwithstanding, qualitative research methods are receiving increasing attention as being particularly useful for exploring and understanding some of the "hard-to-measure" (Crowson, 1987, p. 1) characteristics of institutions of higher education (e.g., cultures, values, norms, beliefs) (Crowson, 1987; Peterson, 1985). At the same time, relatively few qualitative studies of colleges or universities have been conducted (Crowson, 1987; Tierney, 1985). Examples of qualitative investigations involving multiple sites and multiple investigators are expecially rare, despite their potential for providing in-depth understanding, as well as broad comparisons, of institutional contexts (Crowson, 1987; Herriott & Firestone, 1983).

The purposes of this paper are (a) to describe a team approach to the use of qualitative methods in a study of high quality out-of-class experiences for students at 14 institutions of higher education, and (b) to add to knowledge about the processes, pleasures, and pitfalls of the use of such an approach in higher education research. First, we provide a brief overview of the purposes of the study. Second, the theoretical framework used in the study is identified, followed by a description of research methods, including data sources, data collection, and

data analysis. Finally, we discuss our findings and conclusions with regard to the research process.

OVERVIEW OF THE STUDY

Although considerable attention has been given to assessing the academic outcomes of college (Adelman, 1987; Ewell, 1985), few studies have focused on student life outside the classroom. If 48 hours of a typical college student's week are devoted to attending class and studying (Boyer, 1987), about two-thirds of the time in a given week is spent on other activities. Nevertheless, out-of-class experiences are taken for granted or lightly regarded as a positive educational force on many campuses. However, students who actively participate in both academic and out-of-class activities become better integrated in the academic and social life of the institution (Chapman & Pascarella, 1983; Tinto, 1986) and tend to be happier, are more likely to persist to graduation, and exhibit higher levels of achievement and personal development than students who are not involved (Astin, 1977; Pascarella, 1980; Tinto, 1987). Boyer (1987) concluded that "the effectiveness of the undergraduate experience relates to the quality of campus life and is directly related to the time students spend on campus and the quality of their involvement in activities" (p. 180).

For our purposes, a high quality out-of-class experience was defined as students' active participation in out-of-class activities which complement the academic purposes of the institution. Astin (1977, 1985), Boyer (1987), and others (e.g.,

NASPA, 1987) have identified some elements of out-of-class experiences that support the academic program (e.g., residential honors programs, cooperative education-work programs). This study was designed to extend the work of Astin, Boyer and the Carnegie Foundation, and Pace (1980, 1982, 1984) by looking at a group of institutions reputed to provide high quality out-of-class experiences for students, and takes into account institutional history, campus traditions, student participation in out-of-class experiences, and other factors. More specifically, the following research questions guided the study: (a) What physical and organizational features characterize these institutions?; (b) What is the nature of institutional policies related to out-of-class activities?; (c) What opportunities are available for student involvement?; and (d) How do elements of institutional culture and subcultures (e.g., assumptions, values, traditions, language) influence student involvement?

THEORETICAL FRAMEWORK

The inquiry methods used in this study were qualitative, producing data in the form of words and analyzing data by means of the use of human instruments (i.e., the inquirers) (Lincoln & Guba, 1985). The recognition on the part of many researchers that organizations are complex entities with characteristics (e.g., loose coupling (Weick, 1980), organizational cultures (Dill, 1982; Kuh & Whitt, 1988; Morgan, 1986; Schein, 1985) that are difficult to measure or quantify has encouraged an interest in qualitative research methods (Crowson, 1987). Qualitative

methods are considered to be superior to other research methods for identifying values, assumptions, expectations, and behavior (Goetz & LeCompte, 1984; Van Maanen, 1979a), such as those of faculty, students, and administrators that may influence the out-of-class experiences of students.

Fundamental principles of qualitative research include: (a) a search for understanding, (b) investigator proximity, (c) inductive analysis, and (d) an appreciation of the value-laden nature of inquiry (Crowson, 1987). A description of each of these principles follows.

The "central goal" (Crowson, 1987, p. 4) of qualitative research is understanding, rather than identification of causes or generalizability. That is, the investigator seeks to look at and appreciate the setting studied from the perspectives of the persons within it and strives to interpret what is seen in light of those persons' frames of reference. In addition, the investigator's findings and interpretations must be presented in such a way that both "insiders" (i.e., participants of the setting) and "outsiders" achieve greater understanding of the setting and its cultures (Schein, 1985).

In order to attain understanding, the investigator must study behaviors as they occur and hear the thoughts and words of participants first-hand (Crowson, 1987; Van Maanen, 1979a). "Immersion" (Crowson, 1987, p. 7) in the setting enables the researcher to gather multiple perspectives and observe many and varied behaviors and events. In this way she or he can provide

the thick description needed for outsiders (and insiders) to understand the setting.

Analysis of qualitative data is intended to build understanding inductively--that is, building understanding from observed data--rather than deductively (i.e., formulating hypotheses and identifying data categories or variables a priori)(Crowson, 1987; Lincoln & Guba, 1985). Because at the outset of the investigation the researcher is not aware of all of what he or she does not know (Lincoln & Guba, 1985), the development of preconceived hypotheses or explanations of what is going on is likely to inhibit consideration of all possible meaningful behavior and events. An inductive approach allows the setting and the researcher's growing knowledge of the setting to direct the research process.

There has been some debate about whether the researcher should have done any prior theorizing (e.g., using predetermined conceptual or theoretical frameworks) before entering the setting to be studied (Crowson, 1987; Lincoln & Guba, 1985; Miles & Huberman, 1984). Some (cf, Lincoln & Guba, 1985) assert that the use of such frameworks is as inhibiting to "noticing" as hypotheses. In the study described here, we began data collection with a conceptual framework in mind, recognizing that "the investigator's theoretical point of view does color a study and will shape the inductive vision of reality that appears in the researcher's findings" (Crowson, 1987, p. 9).

In a similar vein, principles of qualitative research

include recognition that inquiry is value-laden, rather than value-free. The researcher is bound by the values of his or her inquiry paradigm (e.g., positivist or naturalist) and cultural context, as well as the values extant in the research setting; these values influence what the researcher sees and the meanings he or she makes of what is seen (Crowson, 1987; Lincoln & Guba, 1985; Van Maanen, 1979b). The influence of investigator and contextual values can be offset to some extent by rigorous and prolonged focus on the perspectives of insiders (Crowson, 1987). The more time the investigator can spend in the setting and the more thorough her or his investigation of "natives" views, the more likely it is that those views will be portrayed accurately. Steps taken in this study to cope with this and other methodological problems will be described in the next section.

RESEARCH METHODS

In this section, we describe the methods used in the study, including composing the research team, selecting data sources, collecting and analyzing data, and establishing trustworthiness.

The Research Team

Effective field research using qualitative methods requires that the inquirers be familiar not only with appropriate inquiry techniques but also with the phenomena under study. Thus, understanding is not only a goal of qualitative research, but "a necessary precondition of useful fieldwork" (Crowson, 1987, p. 13). Having some familiarity with the setting--or type of setting--, people, and processes to be studied helps the

investigator to be prepared for at least some of what she or he should look for or might see. Also, a knowledgeable investigator is more likely to be credible to the "natives" in the setting (Crowson, 1987) and so may have to spend less time obtaining their cooperation and winning their trust.

At the same time, too much familiarity can be inhibiting; unusual events or patterns may be ignored and/or alternative explanations or questions may be dismissed. The use of multiple investigators ameliorated this concern somewhat because each of us had a unique viewpoint and so saw things differently, as well as saw different things. The process of incorporating varied perspectives into a single set of case reports and conclusions will be discussed in the section on data analysis.

In addition, the ambitious scope of this particular project required multiple investigators. One or two individuals could not have conducted the number of interviews and observations required to provide a rich description of fourteen "involving colleges".

With these qualifications in mind, the research team was composed of nine members: four faculty, including a former college president and university provost, a former academic dean and department chair, the head of a preparation program in college student affairs administration, and a former dean of students; three student life administrators, including one chief student affairs officer with 25 years of experience at private institutions of higher education (IHEs), one associate vice

president for student affairs at an urban university who also had extensive experience with residence life, and one dean of students who served at both commuter and residential universities; and two graduate students, one of whom had experience in student affairs administration at a women's college and at large public universities.

Also, the team included three women and one black man. We discovered that there were situations (e.g., individual interviews with senior students, a site visit to a predominantly white university during a time of racial tensions, visits to the women's college and the historically black college) where female or black investigators were able to establish more effective rapport and make the respondents feel more at ease and more open to sharing their feelings and attitudes.

Data Sources

In May and June, 1988, a modified Delphi technique was used to identify a small number of IHEs reputed to provide high quality out-of-class experiences for undergraduates. Fifty-eight experts were identified to represent a variety of viewpoints and constituencies in higher education. The experts included higher education scholars with long-standing interest in the college student experience (e.g., Astin, Pace, Riesman) (n=20); directors of regional accreditation associations (n=6); representatives of associations or agencies with special interest in higher education and the undergraduate experience (e.g., American Council of Education, American Association of Higher Education,

Education Commission of the States, National Association of Student Personnel Administrators, Campus COMPACT) (n=14); college and university presidents, including representatives of single-sex, historically black,. and urban institutions (n=7); and chief student affairs officers, several of whom were current or former presidents of the American College Personnel Association or the National Association of Student Personnel Administrators (n=11). Of the 58 experts originally identified, eleven were unable to participate (e.g., due to illness, due to a stated lack of knowledge about out-of-class experiences); therefore, 47 of the expert panel members participated in one or both rounds of the nomination process.

The experts were asked to identify IHEs noted for the high quality out-of-class experiences they provided for undergraduates. They were to choose up to five institutions in the following categories: (a) residential colleges with fewer than 5000 students; (b) residential colleges/universities with 5000 or more students; (c) urban-commuter institutions--i.e., those with a high proportion of commuting and part-time students; (d) single-sex colleges; and (e) historically black colleges. These categories were selected as representative of the diversity of four-year institutions in the American higher education system.

In the first round, 252 institutions were nominated: 78 small residential institutions, 67 large residential institutions, 49 urban-commuter institutions, 33 single-sex

colleges (some of which were removed because they were no longer single sex--e.g., Haverford), and 25 historically black colleges. A list of those institutions receiving two or more nominations (n=107: 27 small residential, 29 large residential, 21 urban-commuter, 16 single-sex, 14 historically black) was sent to the panel of experts. They were asked to identify those that they believed provided high quality out-of-class experiences for undergraduates. In the second round, 85 institutions were nominated by four or more experts: 20 small residential, 23 large residential, 16 urban, 15 single sex, and 11 black.

After the nominating process was completed, approximately one-fourth (n=12) of the experts was interviewed by phone about the criteria they had used in making nominations. This information was used by the research team in making decisions about the institutions to be visited.

The research team met for three days in August 1988 in order to select, from among those institutions nominated by the expert panel members, the colleges and universities to be included in the study. Focusing primarily on the results of the second round of nominations and expert interviews, the team engaged in a series of discussions to identify institutions to visit. Three decision rules emerged during the discussions. First, the team decided that, because some publications had already focused on some of the institutions that received many nominations (e.g., Haverford--Heath, 1968; Swarthmore--Clark, 1970), the study would be more likely to expand knowledge about higher education and the

undergraduate experience by including some colleges and universities about which less had been written. Second, an effort was made to include institutions from different geographical regions of the United States; we assumed that regional context influences, in some ways, both the student body and the institution and, hence, the student experience (Kuh & Whitt, 1988). Finally, we attempted to achieve a balance between public and private institutions, assuming that form of control also affects student experiences (Astin, 1977).

Fourteen institutions were selected for inclusion in the study: four small residential colleges (Berea, Earlham, Evergreen State, Grinnell), four large residential universities (University of California at Davis, Iowa State, Miami University of Ohio, Stanford), four urban-commuter institutions (University of Alabama-Birmingham, University of Louisville, University of North Carolina at Charlotte, Wichita State University), one single-sex college (Mount Holyoke), and a historically black institution (Xavier University of New Orleans).

No scientific sampling process is claimed. However, through the polling and interviewing of experts, and the development and review of the final list of nominations by the research team, we were satisfied that this set of colleges and universities could offer useful information about high quality out-of-class experiences for undergraduate students.

In late August and early September, the chief student affairs officer at each institution was contacted to describe the

study and the process by which the 14 institutions were selected, and to seek permission to include their institution in the study. All of the institutions agreed to participate. The oral agreement was confirmed with a letter and a request for written information about the institution (e.g., institutional histories, catalogs, admissions publications, descriptions of student characteristics); these materials would be reviewed prior to the campus visit. Also, a list of persons to be interviewed (e.g., president, chief academic officer, chief student affairs officer, faculty, students) was provided. The means by which this list was generated will be discussed in the section on data collection.

The first round of site visits was conducted by teams of two to four (depending on the size of the institution) investigators from mid-September through early December, 1988; the teams typically spent three or four days at each institution, again, depending on the size of the institution and scheduling constraints. After the first round of visits, the research team met to decide if there were institutions that required a second visit in order to learn all we thought we needed to know. Second visits were made to 12 institutions by teams of two to four investigators between January and May, 1989.

Data Collection

Data collection and analysis were conducted concurrently. In this way, we were able to use existing data to inform collection and interpretation of additional data (Lincoln & Guba,

1985; Miles & Huberman, 1984). For example, in the process of data analysis, we were able to identify additional questions that needed to be asked or gaps in our understanding of a particular institution. Qualitative methods of data collection were used, including interviews, observations, and document analysis.

Respondents

Because all of the events and people in a setting cannot be studied, some sort of sampling process must be used, although this necessarily limits the scope of the research and provides some focusing of the researchers' attention (Crowson, 1987; Miles & Huberman, 1984). Initial selections of what to observe and whom to interview were guided by our theoretical framework and knowledge of IHEs and undergraduate student experiences with the recognition that our sources of information would increase and change as the study proceeded (Crowson, 1987).

The institutional contact person (e.g., chief student affairs officer) was asked to schedule the initial round of interviews. Our selection of interview respondents was based on status sampling (Dobbert, 1984). In this instance, status sampling required that interviews be conducted with the president, chief academic and student affairs officers and their principal assistants, faculty members, professional staff who worked directly with students, student leaders, and other students. The principle of inclusion was stressed to the contact person; that is, we needed to gather information from as many perspectives as possible (Miles & Huberman, 1984; Schein, 1985).

For example, we wanted to be certain that we talked with students who held formal leadership roles as well as some who were not well-integrated into the student social system. We also wanted to talk with faculty who may not have had much contact with students outside of class, as well as those who served as advisors to student organizations.

Once at the site, we employed a variant of snowball sampling (Crowson, 1987; Dobbert, 1984) to expand our pool of respondents. At the conclusion of each interview, respondents were asked to identify others whose opinions and/or out-of-class activities and experiences differed from their own (e.g., students who seemed less (or more) involved in campus life, faculty who had been at the institution for a longer (or shorter) period of time). We also did impromptu interviews in cafeterias, library foyers, student centers, residence halls, and other living units (e.g., fraternity and sorority houses).

All respondents were asked to sign a consent form giving their permission to use information obtained from them in the study, including a commitment to seek additional permission to quote them directly. Respondents were assured that their participation was voluntary and that they could withdraw from the study at any time (Dobbert, 1984), although no one did.

Interviews

Interviews were conducted to obtain respondents' constructions, as well as to confirm and expand information already obtained (Lincoln & Guba, 1985). Although the degree of

structure imposed on the interviews varied from less to more as the investigation proceeded (and we knew more about what we needed to know) (Crowson, 1987; Lincoln & Guba, 1985), a set of questions was developed for each category of respondent (i.e., president, student, etc.). Initial questions were developed from the research questions and purposes and the interview protocols were used by all investigators at all of the sites. Questions were added and deleted by the team as interviewing progressed and additional questions were necessary for clarification (e.g., in response to contradictory information about faculty involvement with students out of class) or to obtain additional information (e.g., about differences across institutional types). Thus, the respondents generated additional questions for the study.

Individual interviews and focus groups (Merton, Fisk, & Kendall, 1956; McMillin, 1989) were the primary methods of data collection. Focus groups are semi-structured discussion groups that meet only once and concentrate on a specific topic (e.g., factors related to students' out-of-class experiences). Focus groups have been found to be particularly useful for obtaining in-depth information about attitudes, values, and beliefs which may not be apparent in observations of behavior or individual interviews, as well as for generating ideas and insights at the outset of a study (McMillin, 1989). The interaction and discussion among focus group members in response to open-ended questions from an interviewer can elicit rich information about respondents' experiences and interpretations as respondents'

comments and insights build from, and upon, one another (McMillin, 1989).

We found that the focus groups were a very fruitful source of information as the ideas or opinions of one individual would trigger new ideas or similar or contradictory opinions from others. The focus groups turned out to be, for the most part, lively group discussions rather than interviews. The main tasks of the investigator were keeping the group on the topic (e.g., by asking another question when someone paused to take a breath, or by summarizing the sense of the discussion) and making sure that everyone had an opportunity to speak, while at the same time taking notes and monitoring the tape recorder. Almost every group had at least one or two particularly outspoken members and at least one or two people who had to be drawn out, a situation that required the investigator to perform the role of gatekeeper.

Interviews were recorded by means of a tape recorder so that all information could be retrieved. Transcripts were made of interviews that were deemed to be especially useful (e.g., student leaders, minority students, faculty). Interview data were compiled by the investigators on interview summary forms (Miles & Huberman, 1984) in order to identify themes, questions, and reactions generated by each interview. This information was used to develop additional questions and during data analysis.

Observations

A secondary source of data was observations of programs, events, and activities that took place during the campus visits.

Observations were considered to be secondary because they were typically used to generate topics for interviews (Barley, 1983). Observations fell into three categories: (a) regularly-scheduled events (e.g., convocations, concerts), (b) spontaneous events (e.g., frisbee matches), and (c) events conducted for the purpose of our visit (e.g., residence hall tours). As the study proceeded, we were able to identify more effectively the events and activities that would be fruitful sources of information (e.g., student interactions in public gathering places, meetings of student organizations).

We did not actively participate in the events observed; rather, we recorded notes and impressions (Dobbert, 1984). Points for clarification and questions were addressed later to appropriate individuals. Data from observations were recorded on observation summary forms (Miles & Huberman, 1984) in order to facilitate the process of identifying further questions and emergent themes.

Documents

Documents were another secondary source of information, and, like observations, provided topics and questions for interviews. Documents were also used to describe and understand the institutional context (Dobbert, 1984). Investigators obtained documents in advance of the visits. The following documents were found to be particularly useful: handbooks (e.g., policy, procedure, faculty, student, and staff), promotional pamphlets (e.g., admissions viewbooks, student organization recruitment

brochures), institutional mission and goal statements, institutional histories, and other documents that referred to the integration of students' out-of-class experiences with the academic mission of the institution. In addition to printed documents, we reviewed video tapes and slide presentations used for institutional advancement and recruitment purposes.

Relevant documents also became apparent during the campus visits. These included student newspapers, planning documents, and "table tents" and posters advertising events and activities.

Data gathered from document analyses were recorded on document summary forms (Miles & Huberman, 1984). Information from the forms was used to generate questions for respondents as well as to develop constructions of the institutional context for the purposes of data analysis.

The forms used to summarize interviews, observations, document analyses were developed, using Miles and Huberman (1984) as a guide, by two of the team members prior to the first two campus visits. Each of the three forms was a different color, so that they could be easily identified (the study generated a lot of paper). The forms were changed slightly (e.g., providing more space to deal with questions and responses) in response to feedback after these visits. A large stack of blank forms was mailed to each investigator.

One of the team members assigned to a site visit served as site visit coordinator. This person was responsible for working with the campus contact person to arrange interviews, lodging,

and airport transportation (if necessary). The site visit coordinator also worked with site team members to decide who would do which interviews, and dealt with any scheduling problems that arose. There were cases in which delayed flights or campus emergencies interfered with the interview schedule; we learned early to be flexible (e.g., conduct phone interviews, combine two individual interviews) and to assume that things would not always go as planned.

Data Analysis

The process of analyzing the data collected in this study was complicated, not only because of the large amount of data obtained by nine investigators at fourteen institutions, but also because of our need to focus simultaneously on analysis of data within the individual institutional sites and across sites. Our experience reflected Miles' (1979) caution that "when several fieldworkers' efforts must be coordinated . . . much energy is required to make data systematically 'comparable'" (p. 590). Our decision at the outset of the study to use common summary forms and data coding facilitated both within-site and cross-site data analysis. A description of these processes follows.

Within-site Analysis

A coding scheme was developed to identify categories for the purpose of organizing and retrieving data (Miles & Huberman, 1984) and to mitigate against producing "an incoherent, bulky, irrelevant, meaningless set of observations" (Miles, 1979, p. 591). Categories encompassed a single theme, containing those

units of data that related to the same content (Lincoln & Guba, 1985). A preliminary list of category codes was formulated by the research team from the conceptual framework, objectives, and questions of the study. These categories were: (a) the role of institutional agents regarding out-of-class experiences, (b) description and role of student subcultures, (c) description and role of institutional history and traditions, (d) description and role of institutional policies and practices, (e) description and role of institutional mission, (f) characteristics of student involvement in out-of-class life, (g) tentative explanations and speculations, and (h) other (creating additional categories as necessary). Each of the categories was discussed by the team so that all could understand and agree upon the category definitions (Miles & Huberman, 1984).

At the end of each day of a campus visit, the members of the site team met (usually over dinner) to talk about their experiences. These meetings were intended (a) to generate questions for future interviews, (b) to identify events, activities, or documents that should be observed, or respondents who should be interviewed, (c) to begin (or, in the case of later first-round or second-round visits, continue) the process of identifying themes and patterns in the data collected--that is, to begin to analyze the data, and (d) to give tired researchers an opportunity to "re-charge" by recounting the highlights and unusual experiences of their day. The on-site team meetings were recorded, either on tape or in written notes, for use in writing

the case report and planning for the second round of visits.

After each site visit, each investigator recorded his or her interview and field notes on interview summary forms (Miles & Huberman, 1984). The forms provided space to record questions and responses; issues and themes that emerged in the interview; salient or interesting points; and additional questions to be pursued. In addition, each investigator completed a case analysis form, in which data from interviews, observations, and documents were placed in the categories developed by the group.

These forms, as well as interview tapes and notes, were forwarded to the investigator designated as the site coordinator. The first task of the site coordinator was to compile all of the site data, including notes from team meetings on-site. The coordinator then assigned the data to categories; case analysis forms from the other investigators were used as a means to assess the completeness of these categories. If necessary, additional categories were developed in order to include all of the site data (Miles & Huberman, 1984). Categorization at this point served two purposes. First, having the site data in categories enabled the development of a case report that summarized findings and conclusions for the first visit. Second, categorization of the site data provided a basis for analysis of data across sites, a process which is described below.

The case report of the first visit served as an "interim site summary" (Miles & Huberman, 1984, p. 75), synthesizing what was known about the site and identifying remaining questions to

be explored. The case report was then circulated among all members of the research team in order to inform data collection at other sites. The report was also sent to respondents at the site in order to allow them to confirm or deny the investigators' constructions of their words and feelings (Lincoln & Guba, 1985; Miles, 1979). "Corrected" case reports were returned to the project director by the contact person at the site and respondents' suggestions were incorporated into revised case reports.

Perhaps as a result of our purpose--to discover what is happening at places that are doing something well--we tended to focus on the positive: what is special about this institution? what have been the highlights of your experience here?, and so on. Thus, feedback from some respondents was that we were <u>too</u> positive and too polite in our first-round reports. The debriefing process, as well as second-round interviews, provided us with what respondents felt was more a more balanced picture of their institutions.

During the second round of site visits, debriefing (Lincoln & Guba, 1985) meetings were held with groups of respondents, many of whom had been interviewed in the first round. They were asked about their reactions to the case report: Did it fit their view of the "reality" of their institution? Were there important people and events that had been ignored in the first round? Had the investigators misinterpreted or misunderstood something that had been communicated? What else did we need to know in order to

understand and accurately represent the undergraduate experience at their institution? Our interactions with respondents in the debriefing sessions enabled us to further develop our understanding of the institutions from the perspectives of insiders and to alter the case reports as necessary to conform more closely to those perspectives. Further discussion of respondent debriefings can be found in the section on trustworthiness.

After the second round of visits, the process used to record and analyze site data during the first round was repeated. New data were incorporated into the revised case reports and these reports were once again sent to respondents at the site for their reactions and suggestions. A "final" case report was developed for each site after all feedback had been received (there may never be such a thing as a final report; we still receive, and incorporate, occasional BITNET comments and suggestions from persons at the sites).

Cross-site Analysis

Data from all of the first-round campus visits were compiled and analyzed at a meeting of the research team in December, 1988. For the purposes of cross-site analysis, data from the individual sites were "standardized" (Miles & Huberman, 1984, p. 152) by means of common categories and common reporting formats (i.e., summary forms, analysis forms, case reports). Analysis of the standardized data took place in four stages: (a) development of a meta-matrix, (b) clustering of data, (c) identification of

patterns, and (d) development of propositions (Miles & Huberman, 1984).

In developing meta-matrices, "the basic principle is the basic inclusion of all relevant data" (Miles & Huberman, 1984, p. 152). For the purposes of this study, a meta-matrix was developed by the project director from summaries of within-site analyses. Data from each institution were described by categories: (a) the role of institutional agents regarding out-of-class experiences, (b) description and role of student subcultures, (c) description and role of institutional history and traditions, (d) description and role of institutional policies and practices, (e) description and role of institutional mission, (f) characteristics of student involvement in out-of-class life, (g) tentative explanations and speculations. Institution-specific categories were subsumable into the original set of categories.

Once the meta-matrix was prepared, the research team members proceeded to cluster data in order to identify commonalities and differences in categories across sites (Miles & Huberman, 1984). In addition, commonalities and differences were described according to the five types of institutions: small residential, large residential, urban-commuter, single-sex, historically black. Thus, we were able to discover that, except in the case of urban-commuter institutions, the various institutional types had many more elements in common than differences.

The cluster of "things in common" was then examined in order

to identify patterns or themes emerging in each category. From those themes, a set of propositions was developed to describe and explain, however tentatively, factors and conditions associated with high quality out-of-class experiences for undergraduates. Those propositions, then, were discussed in debriefings with respondents and evaluated during the second round of site visits.

In mid-March, 1989, after half of the second round visits were completed, the team met to analyze data from those visits and reconsider the propositions identified in December. As a result of new information (both from second round interviews and member checks with respondents), the original set of factors and conditions was expanded and altered. For example, in December we had identified egalitarianism as a condition of an environment in which high-quality out-of-class experiences are present. In March, we recognized that, at some of the institutions, strong and clear--and non-egalitarian--distinctions were made among roles and statuses--distinctions that were consistent with institutional mission and that also appeared to contribute to student involvement. Thus, we revised our original proposition to focus on interpersonal distinctions in a variety of forms, all of which were consistent with the mission of the institution in which they were found.

At our final team meeting in June, we looked at the data from the rest of the second round visits and incorporated additional information and insights into our propositions; at that point, our task was mostly one of filling in and refining,

rather than adding to or deleting from, the factors and conditions. The bulk of our time at that meeting was spent in trying to identify the policy and practice implications of our findings.

At this point, a few words about "group process" are necessary. The foregoing description can be interpreted to portray a systematic, methodical, even dry, process of group analysis. Not so. Our team discussions were intense, lively, and challenging, characterized as much by arguments as by agreement, as much by taking side roads as sticking to our planned route. Four rules did, however, emerge from our discussions: (a) everyone was expected to contribute to the process of analysis, (b) decisions (e.g., conclusions to be drawn from the data, propositions) made during data analysis were made by consensus, (c) thinking aloud was encouraged, and (d) every attempt should be made to avoid taking things personally (e.g., if, despite the rules, someone's "bad" idea was attacked). On occasion, feathers were ruffled, but problems were confronted and dealt with openly; periodic breaks to get away from one another (to run, take naps, etc.) were helpful.

Team members took turns playing the roles of gatekeeper, encourager, questioner, and recorder (all of these meetings were taped as well). Some people talked more than others, some preferred to take notes and summarize, some had a high need to stay on task while others needed to ramble (although even the most task-oriented among us came to recognize that taking tours

down side roads often led us to fruitful new territories). The project director was charged with making sure that we accomplished what we needed to, although we always needed more time together than we had. Follow-up "meetings" took place by phone or BITNET after we returned to our home institutions.

Establishing Trustworthiness

The principles of qualitative research described earlier--e.g., seeking understanding, allowing the research design to emerge, using a human instrument to study natural settings, primary reliance on interviews with respondents--create problems for the researcher who seeks to conform to traditional standards of scientific inquiry (Crowson, 1987). For example, replicability (necessary to establish reliability) is probably impossible and even, by the standards of some inquiry paradigms, undesirable (Lincoln & Guba, 1985). Also, oral data can be particularly misleading as respondents knowingly or unknowingly try to place their experiences, ideas, and institution in the best possible light (Van Maanen, 1979b). The complexities and contradictions of institutions of higher education further mitigate attempts to accurately portray "reality" to the satisfaction of both natives and outsiders (Crowson, 1987). "The central difficulty lies in the need to maintain the flexibility, opportunism, idiosyncracy, and holism required to maximize the inductive potential of an inquiry, while providing the many checks that lead the skeptical reader toward a sense of confidence in the study's report" (Crowson, 1987, p. 40).

With these difficulties in mind, we adopted the standard of trustworthiness (Crowson, 1987; Lincoln & Guba, 1985) to answer the question, "how can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to, worth taking account of?" (Lincoln & Guba, 1985, p. 290). Criteria for trustworthiness include credibility (i.e., the constructions arrived at are credible to the respondents), transferability (i.e., the study may be useful in another context), dependability (i.e., the reporting of results considers possible changes over time), and confirmability (i.e., the data can be confirmed by someone other than the inquirer) (Lincoln & Guba, 1985). Means for meeting the criteria for trustworthiness are described below.

Credibility

Three of the mechanisms cited by Lincoln and Guba (1985) for establishing credibility (triangulation, peer debriefing, and member checks (debriefings with respondents)) were used in this study. Triangulation is a technique for judging the accuracy of data, and requires the use of multiple data sources and/or multiple methods of data collection. Multiple sources of data may include multiple "copies" of one kind of source (e.g., multiple respondents) and different sources of the same information. In this study, data were obtained from five different types of institutions of higher education. In addition, at every institution, respondents in nine general categories (i.e., students, presidents, chief academic officers,

chief student affairs officers, faculty, student affairs staff, institutional historians, alumni/ae, and trustees) were interviewed. All nine types of respondents at all five types of institutions were asked to provide information about the out-of-class experiences of undergraduates, the role of institutional agents and policies in those experiences, and the connection, if any, between out-of-class experiences and the academic mission of the institution.

Debriefing of the inquirer by a peer is used: (a) to ensure that the inquirer is aware of her or his personal perspectives and perceptions--the researcher's "perceptual screen" (Van Maanen, 1979b, p. 548)--and the impact they have on the study; (b) to develop and test next steps to be taken; and (c) to test hypotheses which are emerging from the data. Debriefing sessions were particularly critical for this study as nine "human instruments" were involved. First, visits to Wichita State and Grinnell were conducted by two teams of investigators in mid-September. All nine members of the research team then met by conference telephone call to discuss the first visits, and make adjustments to interview protocols and other data-gathering techniques.

Throughout the study, team members at each site met at the end of each day of interviews to discuss findings, plan for additional questions and respondents, and discuss tentative (and temporary) conclusions. Follow-up telephone (and BITNET) conferences were held in order to further discuss data and

impressions.

Debriefings were also conducted at research team meetings, held four times during the course of the study. These debriefings were used to test ideas, obtain feedback on methods (e.g., interview techniques, use of categories), and discuss next steps.

Member checks are, in effect, debriefing sessions with respondents for the purpose of testing the data, analytical categories, interpretations, and conclusions; in short, for judging the overall credibility of the findings of the study (Lincoln & Guba, 1985). Debriefings with respondents occurred throughout the study and were informal as well as formal. At the end of most interviews, the investigators reviewed with the respondents what they had heard the respondents say, seeking immediate feedback and clarification of the interview. Also, after the first round of site visits, we began to "recycle" data among the respondents at each institution. Respondents from each category received a case report about their institution developed by the site team. Conversations were held with respondents, either by phone or in person during the second site visit, to obtain reactions to the questions, comments, concerns, and experiences described by respondents in the first round. This process served to focus later interviews and reinforce the constructions that were emerging through data analysis. Case reports developed from the second round of visits were also circulated among respondents for their reactions, which were then

incorporated in to final case reports.

Finally, copies of our preliminary propositions regarding factors and conditions associated with high quality out-of-class experiences of undergraduates were sent to respondents at all 14 sites. Their reactions to the propositions were used in the process of developing conclusions for the study as well as to inform the second round of site visits.

Transferability

To address the issue of transferability (i.e., can the findings of the study be used in another context?), the inquirer must demonstrate the degree of similarity between the sending (i.e., the setting of the study) and receiving (i.e., the setting to which the study may be applied) contexts (Lincoln & Guba, 1985). Therefore, she or he must provide a thick description of the sending context so that someone in a potential receiving context may assess the similarity between them and, hence, the transferability of the findings. Thick description entails the broadest and most thorough information possible (Lincoln & Guba, 1985). In reporting the findings and conclusions of the study, we have provided as accurate descriptions of the settings and respondents as concern for confidentiality allowed, as well as an extensive discussion of factors and conditions and themes across institutions, including statements from which they were derived.

Dependability and Confirmability

In order to meet criteria for dependability (i.e., the reporting of results considers possible changes over time), the

inquirer must provide evidence of the appropriateness of the inquiry decisions made throughout the study (Lincoln & Guba, 1985). Confirmability (i.e., the data can be confirmed by someone other than the inquirer) of the data is demonstrated by showing that the findings are based on the data and that the inferences drawn from the data are logical (Lincoln & Guba, 1985). Dependability and confirmability can be established by means of an audit, in which an external auditor examines both the processes and the products of the study. During the course of the study, we have developed an audit trail (Lincoln & Guba, 1985) comprised of: (a) raw data, including tapes, interview notes, and documents; (b) products of data reduction and analysis, including field notes, interview and document summary forms, and case analysis forms; (c) products of data reconstruction and synthesis, including category descriptions, case reports, and ongoing reports of findings and conclusions; (d) process notes, including notes on methodological decisions and trustworthiness criteria; and (e) materials relating to the intention and disposition of the research team, including notes of debriefings, staff meeting minutes and tapes, and staff correspondence.

FINDINGS AND CONCLUSIONS

Now that the study has been completed, four conclusions can be drawn about the research approach and methods we used. First, multisite qualitative research using multiple investigators is time-consuming. The collection of data for a rich description of

one site and information needed for institutional comparisons requires extended time on site by several investigators, doing interviews and observing the life of the campus. Some would say, perhaps, that our two rounds of three- and four-day visits cannot be considered "extended" time on site. We would certainly agree that there is more we could have learned with more time and money (a topic we will discuss below), but we are satisfied that our results are credible to participants in the setting and add to knowledge about how involvement in out of class experiences promotes student learning and personal development.

The process of getting thorough and complete (or as complete as possible) feedback from respondents at the site also demanded a lot of time. Sending reports to the respondents, waiting for them to have time to read the reports, and waiting for their written comments took weeks (and even, in some cases, months). Thus, patience and commitment to the necessity of this input are crucial.

In addition, analysis of data across sites and the process of eliciting factors and conditions that contribute to high quality out-of-class experiences for students demanded four two- and three-day team meetings in which site reports and individual constructions were thoroughly discussed. The process of achieving some shared vision--that is, shared among ourselves as well as shared between investigators and "natives"--of the places we visited and their commonalities and differences was protracted and intense.

Our visits also involved significant time and effort on the part of the institutions we visited. Our contact persons developed interview schedules, mailed sets of documents to site team members, arranged for meeting rooms and (in many cases) lodging, made sure that we were picked up from and delivered to airports, and helped us to cope with any crises that arose (e.g., cancelled interviews, dead tape recorder batteries). The hospitality and assistance of the people at the sites was a tremendous help to us and was a highlight of the study experience.

Second, multisite research involving a team of investigators can be (and was) expensive in terms of money as well as time. The study was funded by three grants (from the Lilly Endowment, the National Association of Student Personnel Administrators, and the Education Services Division of the Marriott Corporation), one of which was very substantial. Without external funding for travel and lodging for nine team members; half-time secretarial assistance (for document management, project correspondence, tape transcriptions, and preparation of project reports); two half-time graduate assistants (for travel arrangements, library research); tapes, batteries, and ten leased tape recorders; and copying costs, we could not have done such a large-scale and in-depth study. What we could have done with less money, what we could have done without, or even what we could have done with more funds, are debateable questions. Researchers interested in doing this type of study should tailor their budgets to their

research purposes and work from there to seek funding. Something to keep in mind is the ever-changing cost of air travel and the tremendous variation in fares, depending on when and where you must fly.

Third, the composition of the research team was absolutely critical to the success of the study. The study would not have been possible if all of the team members had not committed themselves to investing the time and effort needed to achieve our purposes as well as meet the demands of qualitative research; we all knew at the outset that we faced a complex and lengthy task, although just how complex and how lengthy emerged only as the study proceeded. Thus, another important qualification for involvement in this type of research (besides familiarity with the phenomena under study) is willingness to commit time not only to site visits, but to all of the processes of data reduction and analysis and writing and thinking and sharing and debating that follow.

All of these tasks tested our stamina as well as our time schedules. Working with a focus group, doing an effective interview, and trying to understand a new setting require a lot of energy. However trite this may seem, anyone undertaking such a study should be conscientious about getting enough sleep and exercise and eating well.

Some of the team members had more time to give to the project than others and so they were involved in more site visits and more of the follow-up writing tasks. Some of the team

members were less conscientious than others about completing summary forms and responding to requests for information. This will happen in any group project, and decisions need to be made in advance about how, or whether, the group (or the project director) will respond. It should be noted, however, that all team members participated in the group meetings at which cross-site analysis occurred.

More important, perhaps, than time, the team members (knowingly or unknowingly) committed themselves to learn (about qualitative research methods, about the sites, about themselves--their assumptions, values, attitudes--, about other team members), to suspend judgment (about the institutions in the study, about the ideas and assumptions of other team members), and to share openly their ideas, questions, and feelings. For 10 months, we worked together almost constantly, a situation that occasionally tried our patience and senses of humor, but also provided each of us with a tremendously powerful and satisfying learning experience.

Finally, despite the demands of this type of research, we believe that it works--that it has enabled us to obtain rich and accurate descriptions of the individual institutions and to identify factors and conditions across institutions that seem to contribute to high quality out-of-class experiences for undergraduate students. Evidence of our success, and the effectiveness of the method, can be found in (a) feedback from students, faculty, and administrators at all of the sites that

our case reports are "very accurate" portrayals of their institutions, and (b) positive and affirming responses from various audiences (e.g., at conferences of the National Association of Student Personnel Administrators, American College Personnel Association, American Educational Research Association; site respondents) to the factors and conditions we have identified.

An additional benefit of our research has been the process of self-examination and self-discovery that our visits and reports have precipitated at the institutions we visited (e.g., "I hadn't really thought about this before."). Our process of discovery and understanding has affected both the knower and the known.

REFERENCES

Adelman, C. (Ed.) (1986). Assessment in American higher education: Issues and contexts. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Astin, A.W. (1977). Four critical years. San Francisco: Jossey-Bass.

Astin, A.W. (1985). Involvement: The cornerstone of excellence. Change, 17, 35-39.

Barley, S.R. (1983). Semiotics and the study of occupational and organizational cultures. Administrative Science Quarterly, 28, 393-413.

Boyer, E. (1987). College: The undergraduate experience in America. Carnegie Foundation for the Advancement of Teaching. New York: Harper and Row.

Chapman, D.W., & Pascarella, E.T. (1983). Predictors of academic and social integration of college students. Research in Higher Education, 19, 295-322.

Clark, B.R. (1970). The distinctive college: Antioch, Reed, and Swarthmore. Chicago: Aldine.

Crowson, R.L. (1987). Qualitative research methods in higher education. In J.C. Smart (Ed.), Higher education: Handbook of theory and research, vol. III, pp. 1-55. New York: Agathon Press.

Dill, D.D. (1982). The management of academic culture: Notes on the management of meaning and social integration. Higher Education, 11, 303-320.

Dobbert, M.L. (1984). Ethnographic research: Theory and application for modern schools and societies. New York: Prager.

Ewell, P. (1985). Assessment: What's it all about. Change, 17, 32-36.

Goetz, J.P., & LeCompte, M.D. (1984). Ethnography and qualitative design in educational research. Orlando, FL: Academic Press.

Heath, D.H. (1968). Growing up in college: Liberal education and authority. San Francisco: Jossey-Bass.

Herriott, R.E., & Firestone, W.A. (1983). Multisite qualitative policy research: Optimizing description and

generalizability. Educational Researcher, 12, 14-19.

Kuh, G.D., & Whitt, E.J. (1988). The invisible tapestry: Cultures in American colleges and universities. ASHE-ERIC Report Series, No. 1. Washington, DC: Association for the Study of Higher Education.

Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

McMillin, J.H. (1989). Focus group interviews: Implications for educational research. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Merton, R.K., Fisk, M., & Kendall, P.L. (1956). The focused interview. New York: Free Press.

Miles, M.B. (1979). Qualitative data as an attractive nuisance: The problems of analysis. Administrative Science Quarterly, 24, 590-601.

Miles, M.B., & Huberman, A.M. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage.

Morgan, G. (1986). Images of organization. Beverly Hills, CA: Sage.

National Association of Student Personnel Administrators (1987). A perspective on student affairs. Iowa City, IA: American College Testing Program.

Pace, C.R. (1980). Measuring the quality of student effort. In Improving teaching and institutional quality. 1980 Current Issues in Higher Education, No. 1 (pp. 10-16). Washington, DC: American Association for Higher Education.

Pace, C.R. (1982). Achievement and the quality of student effort. Los Angeles, CA: University of California-Los Angeles, Higher Education Research Institute.

Pace, C.R. (1984). Measuring the quality of college student experiences. Los Angeles, CA: University of California-Los Angeles, Higher Education Research Institute.

Pascarella, E.T. (1980). Student-faculty informal contact and college outcomes. Review of Educational Research, 50, 545-595.

Peterson, M.W. (1985). Emerging developments in postsecondary organization theory and research. Educational Researcher, 14, 5-12.

Schein, E.H. (1985). Organizational culture and leadership. San Francisco: Jossey-Bass.

Tierney, W.G. (1985). Ethnography: An alternative evaluation methodology. Review of Higher Education, 8, 93-105.

Tinto, V. (1986). Teories of student departure revisited. In J.C. Smart (Ed.), Higher education: Handbook of theory and research, vol. I. New York: Agathon Press.

Tinto, V. (1987). Leaving college. Chicago: University of Chicago Press.

Van Maanen, J. (1979a). Reclaiming qualitative methods for organizational research: A preface. Administrative Science Quarterly, 24, 520-526.

Van Maanen, J. (1979b). The fact of fiction in organizational ethnography. Administrative Science Quarterly, 24, 539-550.

Weick, K.E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, 21, 1-19.