

CHAPTER III

METHODOLOGY

This study is a partial replication of a study done in Maryland at Montgomery Community college and the University of Maryland at College Park to identify characteristics of college-level course work. The Maryland study focused on freshman English composition and mathematics (Miller, 1996).

The general research approach used in this study is naturalistic inquiry which employs qualitative methods aimed at understanding "naturally occurring phenomena in their naturally occurring states" (Patton, 1980, p. 41). Most qualitative methods of research are derived from the ethnographic and field study traditions in anthropology (Pelto and Pelto, 1978) and sociology (Bruyn, 1966)

For the purpose of this study, ethnographic methods for data collection and analysis have been selected. These methods offer the maximum potential for minimizing some of the threats to validity and reliability inherent in the interview method used. Spradley (1979) has described in some detail structured strategies for data collection and analysis anchored in hands-on work with actual data. Spradley's methods allow other researchers to examine easily the data and the way in which conclusions have been drawn during analysis of the data.

Three strategies of ethnographic inquiry will be used in

this study: (a) elite interviews, which attempt to record what informants recall about their experiences, attitude and beliefs; (b) journals, which allow the researcher a means for recording the researchers personal accounts; (c) document analysis, which attempts to determine "official" stances (Denzin, 1978; Spradley, 1979). The elite interviews were the primary means of data collection.

This study utilized the qualitative research approach of naturalistic inquiry, and specifically the methodology of elite interviewing which allows for in-depth investigations of the attitudes, opinions, experiences, and perceived ideas of individuals involved in a particular phenomenon. This chapter includes a discussion on the elite-interview method, the selection of the participants, and the method used for data collection and analysis; along with the issues of reliability and validity inherent in the elite-interview method.

The procedures followed addressed the three research questions. They were:

1. What are the perceived similarities and differences among community college accounting and business management faculty when they identify the defining characteristic of college-level course work?
2. What are the perceived similarities and differences among four-year college and university accounting and business management faculty when they identify the defining characteristics of college-level course work?

3. Do similarities and differences exist in the perception of community college and four-year university faculty when they identify the defining characteristics of college-level course work?

Elite Interview Method

The purpose of this study was to identify or discover the important defining characteristics of college-level course work. The research strategy was an in-depth interviewing technique known as elite-interviewing.

An elite interview is a specialized case of interviewing that focuses on a particular type of interviewee (Marshall & Rossman, 1995). Elite individuals are considered to be influential, prominent, and well-informed people in an organization or community. Elites are selected for interviews on the basis of their expertise in areas relevant to the research (Marshall & Rossman, 1995)

Elite interviews of two- and four-year college and university professors currently teaching accounting and business management courses provided a useful and appropriate means of gathering focused data. Marshall and Rossman(1995) identified many advantages of elite interviewing. Including : (a) gaining valuable information from participants because of the position they hold, (b) providing an overall view of an organization and its relationship to other organizations, and (c) reporting on an organization's policies, past history, and future plans from a

particular perspective. The qualitative research method of elite interviewing was chosen because it would provide data needed to best answer the research questions. Approval was received from the Institutional Review Board of Virginia Polytechnic Institute and State University for the investigation involving human subjects prior to undertaking the research.

Selection of the Interviewees

Glaser and Strauss (1967), and Denzin (1978), recommended theoretical participant selection for qualitative research. This form of participant selection involves the purposeful selection of those people who offer the most theoretical relevance to the situation and the concepts under study. When comparison groups are used, participant selected from a theoretical perspective serves the purpose of providing simultaneous maximization or minimumization of both the differences and similarities of data that bear on the categories being studied. This control over similarities and differences is vital for discovering categories, and for developing and relating theoretical properties, all necessary for the development of an emergent theory (Glaser & Strauss, 1967 p. 55).

For this study, the interviewees were professors teaching accounting and business management courses at North Carolina two- and four-year post-secondary public institutions. Their input made it possible to compare differences and similarities of perceived characteristics of college-level course work for both

community college faculty and four-year college and university faculty. The participants selected were full-time professors in the North Carolina system of public higher education currently teaching accounting and business management. Individual professors were chosen based on their expertise, through consultation with the department chairpersons and the deans of the schools.

The First Stage of The Interview Process

This stage of the interviews consisted of in-person interviews with participants at the selected community college and four-year university. A set of broad, open-ended interview questions were designed to gather information from the two- and four-year college professors regarding the defining characteristics of college-level courses they teach. The interview protocol appears in appendix A. Probe questions were designed to gather data if the first question did not elicit the desired information. Each probe question was designed to gather information for answering the research questions. All questions, however, were asked in a way that encouraged the interviewee to provide relevant information that would not be limited to particular categories. Structural and probe questions were used to discover the tacit meanings associated with information provided by the professors.

The first question was a descriptive question, aimed at eliciting information in the professor's "natural" language.

This question was designed to encourage the interviewees to talk about and describe the courses and methods of teaching used by them. The following is an example prepared by this researcher of what Spradley (1979) calls an ethnographic explanation leading into a descriptive question:

Let me explain briefly what I plan to do. What I will do is ask a broad, general question. I want you to just answer in all the detail you can provide. I would like for you to describe what you consider to be the defining characteristics of a college-level course.

Categories of information usually emerge from responses to the basic questions. These categories of information were further clarified through the use of structural questions.

Structural questions are designed to provide alternate ways to verify the existence of the category and to obtain additional information that belongs in that category. Each separate piece of information is referred to as a data bit, a piece of text that fits a given category. Following is an example of a structural question that could provide data bits.

You have described a number of characteristics defining a college-level course. Are there any other characteristics perhaps pertaining to student preparation or ability?

Contrast questions are designed to elicit information about differences or similarities in data bits within a domain or between two or more domains. Contrast questions are helpful tools in discovering relationships among and within the

categories or domains of information that have been gathered. The discovery of tacit knowledge, that knowledge which is outside of awareness, represents the essence of this type of research. From tacit knowledge, important patterns emerge that explain the phenomena under study. The following is an example of a contrast question used with a professor who taught business management at both a community college and a four-year college. You have provided detailed information regarding the defining characteristics of a college-level course. What are the similarities or differences, if any, between community college freshman level management courses and the courses taught at a four-year college or university?

In addition to gathering data through in-depth elite interviews, the researcher kept a personal journal making entries immediately following each interview. Observations were recorded in the journal regarding the interviewees behavior during the interview. Also recorded in the journal were the researcher's impressions that could not be captured in the taped or transcribed words of the interviewees.

Once the interviews were completed with the college professors, an interview was conducted with the department chairperson at each college. This individual is responsible for overseeing each academic division. The interview was conducted for the purpose of triangulation of data. This process was used to check data obtained from the professors against a third source to show that an independent source of data agree or at least did

not contradict that which was gathered through other sources, a procedure which is recommended by a number of researchers (Miles & Huberman, 1984; patton, 1980

The Second Stage of the Interview Process

After the interview data had been analyzed, telephone interviews were conducted. These second interviews were used to elicit information needed to confirm patterns and themes that emerged from the analysis of the data. These questions were primarily open-ended and indirect so as not to lead the response of the informant but to confirm the first interview. Finally, document analysis was used in a limited way to confirm information about the courses being taught and assignments used in each course.

Verification of Accuracy of Transcribed Tapes

Interview tapes were transcribed. Three tapes were randomly selected. One tape was then given to each member of a panel of three. Each member of the panel would listen to the tape and read the transcription to verify the accuracy of the transcribed tapes. A sample of the letter for verification is in APPENDIX C.

Pilot Study

This researcher did a pilot study to determine if the interview format set up for this study would provide sufficient information for this study. This researcher found during the pilot study that this format was sufficient. Therefore no

changes had to be made to the format. For the pilot study four interviewees were first contacted by phone. They were a business management and an accounting faculty member from a two year institution and a business management and an accounting faculty member from a four-year institution. The initial contact was to secure their permission to do the interview and establish a time and place for the interview. A letter was then sent to each interviewee explaining the nature of the interview and establishing an agreed upon time and place for the interview.

The interviews were then conducted and recorded. The researcher took notes during the interviews. These notes were reviewed immediately after each interview by the researcher. The tapes were transcribed and analyzed. This process helped confirm the procedures to be used for collecting and analyzing the data for this study.

Data Analysis

Using content analysis, the researcher analyzed data to find patterns that helped to illustrate objective descriptions of what was communicated, and that were relevant to the objectives of the research. Domain analysis was used to identify objectively and systematically data that could be grouped by categories. Domain analysis is a system of analytic induction used to study data for categories of information relevant to the problem being explored (Spradley, 1979). This technique requires the researcher to examine all the data, determine common

patterns, and assign the data to categories of meaning. During the first reading of the transcripts, the researcher began developing a preliminary list of categories, "Taking the specific words and trying to fit them together under some generic code" (Bogdan & Biklen, 1992, p. 176).

The data analysis was a search for categories of meaning within the data being analyzed (Spradley, 1979). Each category consists of three basic elements that include (a) covering terms, which are names for the categories; (b) including terms, which are the items or data bits from interviews which fit inside the category; and (c) identifying semantic relationships, which link the "covering" and "including" terms (Spradley, 1979). Use of this process as used in this study is described below.

Qualitative data analysis is a search for general statements about relationships among categories of data (Marshall & Rossman, 1989). The data analysis strategy of content analysis brings order, structure, and meaning to the mass of collected data. With these two concepts in mind, the researcher developed categories of data as a focusing device, using the interviews from the pilot study as the initial step in the development of these categories, and expanded on these as the data were analyzed.

Coding of Data

Each interview was analyzed and the salient points

highlighted to be later considered for inclusion in domain analysis. For example, as the researcher read through a transcript, certain phrases and terms occurred that related to issues and questions raised in the review of the literature. This data was highlighted. Data cited by the interviewee as defining college-level course work was also highlighted. While the transcripts were being read, the researcher began a preliminary list of categories and in this way began to test the workability of the categories being created (Bogdan & Biklen, 1992). To see relationships readily during data collection and analysis, transcripts of accounting faculty interviews were printed on green paper and transcripts of management faculty interviews on white paper. University faculty interviews were highlighted in red ink; community college faculty interviews in blue ink. In addition, each data bit was coded with the initials of the individual interviewed. If a professor repeated a point several times, it would be recorded, as the same data bit when the comparisons among and across disciplines and institutions were made.

Following a method described by Bogdan & Biklen (1992), the researcher cut up the interview transcripts so that units of data could be placed on poster board according to categories, utilizing domain analysis to determine the correctness of placement. Extensive information needed to be categorized, and arrangement of data into categories was facilitated by having it all assembled in one place. The first attempt at assigning data

to a category is a test to discover the workability of the category. "Categories can be modified, new categories can be developed, and old ones discarded" during this phase of the analysis (Bogdan and Biklen, 1992, p. 176). Data bits were often moved from one preliminary category to another category and consolidated from several preliminary ones. For example, the interview statement "I expect the student to study three hours outside of class for each hour in class" could initially be considered a part of the course requirement category. It in fact, may become part of the category maturity of the student. The data bit regarding the amount of study time outside of class, while a course requirement or expectation, is also what is expected of a mature student. Bogdan and Biklen (1992) pointed out that "it is important to realize that you are not attempting to come up with the right coding system, or even the best. What is right or best differs according to your aims. You might look at the data again after you complete more research projects and code them differently" (page 176). The researcher must make decisions which will limit categories because "analysis is a process of data reduction" (Bogdan & Biklen, 1992, p. 177).

Each transcribed interview was read carefully to determine which of the nine semantic relationships the data would fit. Then it was determined which category the response or part of the response fit in. For example, in the pilot study one community college management instructor commented "it [college level] is the level of thinking, the demands of thinking, of making

connections at the college [level]." This comment obviously cites making connections as a characteristic of college-level course work as well as a level of thinking. The determination of the appropriate category for the first part of the statement was arrived at through data analysis. The researcher decided that "the level of thinking, the demands of thinking" was a characteristic of problem solving through critical thinking, semantic relationship number nine. The less-than-obvious sentence or sentence parts coded into a semantic relationship within a category were recorded on a domain analysis work sheet as follows: (a) the initials of the interviewee, (b) code for the institution and discipline, 3) the data bit, and (c) the semantic relationship and domain applicable to the data bit. This system provided a means of tracking information for future reference.

Theme Identification

Once domain analysis was applied for all interview data collected, the categories that emerged were searched for common themes that were repeated or noted as significant by the interviewees. There was a search for patterns across both community college and university interviewees and across disciplines.

Generating Categories

Developing categories involves noting the similarities in the data. The researcher looked at the emerging categories to determine that they had internal convergence and external divergence (Guba, 1981); in other words, the categories should be internally consistent but different from each other. This involved "making decisions concerning when one unit of data ends and another begins. Often units of data will overlap, and particular units of data will fit in more than one category" (Bogdan & Biklen, 1992, p. 177). The researcher identified the salient, grounded categories of meaning held by participants in the study (Guba, 1981). Patton (1980) describes this inductive analysis as a process that uncovers patterns, themes, and categories, calling it "a creative process that requires making carefully considered judgments about what is really meaningful in the data" (p 313).

Evaluating Emergent Hypotheses

As the categories and patterns emerged, the researcher began the process of evaluating "the plausibility of developing hypotheses," related to the defining characteristics of college-level course work (Marshall & Rossman, 1995, p. 118). Throughout the analysis, part of the process was to evaluate the data for their "informational adequacy, credibility, usefulness, and centrality" (p. 118). As part of the final analysis, the researcher had to decide whether or not the data were useful in illuminating the questions being explored and whether or not they

were central to the issue under study. These decisions were made based on the issues raised in the review of the literature. For example, one section of the literature review was comprised of knowledgeable writers' opinions regarding college-level course work. The researcher compared the findings in this study with these opinions. The researcher also looked for defining characteristics that grew out of the research but were not part of the review of the literature. The emerging of the categories indicated certain common assertions among and between the interviewees. From these assertions hypotheses can be developed that aid in further studies related to defining the characteristics of college-level course work.

In Summary, as a review is made of the methodological issues it is found that threats to validity can be reduced by careful attention to specific procedural safeguards. The elite interview method of research has both advantages and limitations in regard to validity and reliability.

There is always the potential to introduce bias when the study uses impressions and opinions of informants as a major source of data. The following steps were taken to reduce these sources of bias, (a) taping of the interviews, (b) recording in a journal interview situations, (c) triangulation of data through interviews with a third party, and (d) follow up interviews to assure accuracy.