#### CHAPTER 3

#### **METHODOLOGY**

#### Introduction

The purpose of this study was to examine the content, category, and types of interview questions asked by the middle school principals in this suburban school district of teachers seeking employment in their buildings. Some interview practices used by these principals were also investigated. The study answered this basic question: What were the questioning procedures used by the principals in this study and why did they ask certain questions?

Chapter 3 is a descriptive account of how data on each principal's interview questions and practices were collected and analyzed. Primarily, the data were collected using the following two sources: audio tapes of building-level interviews and a questionnaire that was sent via E-mail to each principal. In addition to the method of data collection and analysis, this chapter also includes a description of the subjects that were studied and the settings in which the data collection occurred for both the pilot study and the actual study.

#### Pilot Study

The pilot study was conducted in July 1996. At that time there were seven middle school principals in this school district; currently there are eight. The purpose of the pilot study was to simulate the actual study and, in doing so, explore a way for collecting and analyzing the data for the proposed research study.

## Pilot Study School Division

This southeastern school district in Virginia is one of the 10 largest divisions of 133 located in the state of Virginia. It is one of the fastest growing school divisions in the area, with a student enrollment of nearly 37,000. There are approximately 2400 teachers and over 200 administrators employed by the school district. This school division has a solid reputation educationally as evidenced by the approximately 4000 applicants for elementary and secondary teaching positions. Of this number, at least 150 new personnel join the school division annually. For the eight middle schools, this means adding approximately sixty teachers across the city.

## Selection of Pilot Study Principal

One principal was chosen for the pilot study simply because at the time of the pilot study, he was the only principal with at least one full-time position to fill. This white, midforties male has been principal of this school for ten years. This is his first principalship.

Two days were needed to conduct the interviews. On the first day, two assistants participated in the interviews. On the second day, only one assistant participated.

Following the teacher interviews, the principal and both assistant principals responded to the researcher's postinterview questionnaire that was administered orally. Interviewees were not considered actual subjects but were needed to conduct this study in the way it was designed by this researcher and were selected because they met the requirements needed to satisfy the building need.

# **Data Collection and Instrumentation for Pilot Study**

A personnel administrator contacted the principal to arrange the interviews. While it is not uncommon for principals to collaborate with the personnel administrator on the number of interviewees to send out, there was no initial input from the principal for this position. Other than having the need to fill a reading position, the principal made no special requests regarding any other qualities the interviewees needed to possess. Five interviewees screened and interviewed were then sent from the personnel department to the principal.

#### Screening and Selecting Interviewees for Pilot Study

Screening of an application refers to the process used in the district whereby an application is numerically scored in two of six areas listed on the school division's Applicant Pre-Screening Form (CS-1417) (see Appendix E). Although there are actually six sections on the form, only two sections have a numerical score attached to them. These two areas, "V. Addendum to Application" (includes Written Exercise and Overall Quality of Application) and "VI. References," are assigned a score ranging from 0 (poor) to 5 (excellent) as determined by the personnel administrator reviewing the application. Those applicants who score at least 4.3 on the prescreening are granted the initial interview with a personnel administrator. Other administrators, including principals, assistant principals, or supervisors, often assist the personnel department with initial interviews when requested. Questions for this interview are provided via the standard personnel department interview form used by the school division referred to as "Teacher Interview Sheet -CS-922" (see Appendix E). Again, a score ranging from 0 to 5 is assigned to the interview by

the person conducting the interview. Applicants with a combined screening and initial interview score of at least 4.5 are considered for building-level interviews at the appropriate time, should they meet a principal's building needs. This score means, according to the person(s) who screened the application and conducted the initial interview, that the applicant has demonstrated average writing abilities and has three references that have rated the applicant as either "excellent" or "very good" in ten areas.

As a check and balance system, principals are given the names of the interviewees who have been instructed to call the principal to set up individual interviews. This prevents others who may have heard about the opening but who had not been sent out from the personnel department from misrepresenting themselves as viable candidates sent from the personnel department. In the pilot study, once all interviews had been scheduled, the principal informed the personnel administrator/researcher of the location, dates, and times the interviews would be conducted.

On the date of the scheduled building-level interviews, the researcher went to the school to observe and record the interviews. Initially, there were five interviews scheduled. However, following the conclusion of the last interview, the principal indicated he would not be able to make a choice from among the candidates he had interviewed. He then asked to see at least two more interviewees. Again, these two followed the same procedure as those interviewed previously. The researcher again went to the building to record these two interviews.

Following each interview session, the researcher asked the principal and his assistant several postinterview questions (see Appendix C).

#### Findings of Pilot Study

From the pilot study, the researcher found that the principal and his assistants asked a variety of questions. It also provided the researcher with information but no means to analyze it other than to simply describe what had occurred and to make some assessments about the interviews, since the analysis of data had not been developed prior to the recording of these interviews. After observing the interviews, the researcher then had a basis for deciding how the interview questions and the interview practices used by the principals could be analyzed. Consequently, using Bloom's Taxonomy as a model, an analysis of interview questions based on content (meaning), categories (classifications according to six types as based on the response required by the content question), and type (open-ended or closed) of questions was determined to be the best method for analyzing the data. Also, frequency tables were determined to be the best way to show the numerical analyses of principals' interview questions. The researcher also decided that it was not necessary to use the postinterview questionnaire after each interview; it needed only to be used at the conclusion of all interviews. It was also determined during the pilot study that interviewees were nervous because they were not sure of the researcher's role in the interview process. This was discovered after one of the interviewees shared with the researcher that her presence had made her (the interviewee) nervous. This person had previously worked as a teacher when the researcher served as her assistant principal. As a result, the researcher did not sit in on any interviews included in this study. Instead, principals were asked to audio tape each interview.

## Selection of Study Participants

Although there are eight middle schools in the school district, only seven principals were included in the study. The principal in the pilot study was not included in the final data. Written consent to conduct the study was received from the person designated by the school system to review requests to conduct research. In addition, written consent from each principal who participated was also received. (see Appendix A). Again, while those being interviewed were not actually being studied, it was necessary to include them in the study as a means of collecting the data on the principals. A letter that explained the study and a release form that was to be signed by each interviewer and interviewee gave the researcher permission to tape the interview. The principal facilitated this procedure.

Anonymity was preserved for all participants. Both principals and interviewees were assigned alphabet letters (principals) and alphabet letters and numbers (interviewees). For example, all interviewees interviewed by Principal A are identified in the following manner: Interviewee A1, A2, A3, A4, A5, and so on. All interviewers and interviewees were labeled in the same manner until all participants had been identified. Because of the researcher's scope of authority in the personnel department, it was imperative that ethical safeguards were followed. Principals were assured that all aspects of the study were for informational purposes only and would be reported anonymously, would have no effect on evaluation, and would not become part of the principal's personnel file. Interviewees were also informed via letter that participating in the study was no guarantee of receiving the job offer. They were also informed in the letter that their responses to interview questions would not be printed in an identifiable manner to them. It should be noted that all

principals asked to participate in the study agreed to do so. Furthermore, all interviewees consented to having their interviews recorded. Thus, the researcher achieved 100% participation from all participants sought for the study.

Prior to the start of the study written permission to conduct the study was obtained from the Institutional Review Board (IRB) of Virginia Polytechnic Institute and State University.

# Data Collection and Instrumentation for Study

This research was conducted during the school district's peak staffing months of July and August 1997. Vacancies for the 1997-98 school year were confirmed in May 1997. Principals were informed by the personnel administrator (in this study the researcher and the personnel administrator are one and the same) who is responsible for staffing middle schools of the names of the interviewees who would be contacting the principal to schedule interviews. Principals, in turn, informed the personnel administrator/researcher of the dates and times of the pending interviews. This information was for record keeping only since the researcher would not be participating in the actual interviews. Prior to the start of the first interview, each principal had received a packet from the researcher that contained the following: instructions to the principal for collecting data, letters to the principal and each interviewee explaining the study; release forms to be signed by both to include them in study; and one blank cassette tape for each interviewee. Cassette recorders were already in each school and did not have to be provided. Principals were asked to inform the researcher when the last interview had been conducted so that the tapes could be collected and transcribed. Once the tapes were received, they were quickly transcribed.

Transcripts of the tapes were then reviewed by the researcher and the follow-up questionnaire was subsequently sent to the principals, asking them to respond to questions about the interviews previously conducted (see Postinterview Questionnaire, Appendix C). Included with each principal's questionnaire were the names of the interviewees s/he had interviewed in the event the principals had not maintained a record of whom they had interviewed. As soon as it was determined that the tapes and the transcripts were no longer needed, they were destroyed.

#### Instrumentation

The researcher developed the matrices for arraying data and the postinterview questionnaire after reviewing other studies, journal articles, and books. Assistance in the development of both was provided by the researcher's co-chair and another Virginia Tech graduate school faculty member. Validation of both the matrices and the postinterview questionnaire involved having the items reviewed by the two previously mentioned faculty of Virginia Tech; three personnel administrators (two were formerly middle school principals); one personnel director (also a former elementary principal); a retired elementary and high school principal (also a retired personnel administrator); an assistant superintendent for curriculum and instruction (formerly a director of personnel); and one current elementary principal from another city. Validation of the matrices involved making sure a statistical analyses of principals' interview questions could be clearly presented. Validation of the postinterview questions involved reading the questions to determine if they would provide the researcher with information about not only each principal. Prior interview questions, but also about some interview practices used by each principal. Prior

to the start of the study, there were no changes made to either the matrices or the questionnaire as a result of their review.

The questionnaire was modified after the researcher viewed transcripts of two principals' teacher interviews. Some key themes that had not been considered earlier were then added to the questionnaire. Specifically, questions asking if others had assisted the principal with the interviews, why a particular interviewee was selected for the position, and demographic data about the principals were added.

This researcher was qualified to conduct this study because of her graduate degree in education and her twenty years of experience in public education. During these years of experience, the researcher has spent the last eight years (includes the current year) in public school administration. Four of the first five years were spent as an assistant principal of a middle school. One of the many duties of the researcher while an assistant principal was to participate in panel interviews at the building level when prospective teachers were to be hired. For the last three years, the researcher has worked as a personnel administrator. The primary duty of a personnel administrator in this school district is to interview applicants for teaching positions and decide whether or not to send these applicants to interview at the building level with principals.

## Data Analysis

The audio tapes of the thirty teacher interviews were transcribed during the months of September, October, and November 1997, and were then ready for analysis, which was conducted independently by the researcher and two other raters during the months of December 1997 and January 1998. Once all three people had received the

transcriptions, each independently labeled the interview questions by content and category using the "Notes for Analyzing Data Sheet" developed by the researcher with the assistance of members of her dissertation committee (see Appendix D). Frequency charts were then utilized by the researcher to group these questions, again according to content. After the frequency count, questions were further categorized according to the type of response that the question solicited. Specifically, these questions were classified according to the following categories: **factual** (questions that required the interviewee to tell why, what, when, or where); cognitive ability (questions that asked the interviewee to explain, describe, compare, contrast, define, locate, or match); role play (questions that asked the interviewee to assume the role of one or all of the following: student, teacher, parent, or administrator and respond accordingly to a hypothetical situation); **problem-solving** (questions that asked the interviewee to break down information into parts and look at how they relate to the whole via concepts such as why, how, alike/different, order, identify); synthesis (questions that required the interviewee to take the knowledge and create something new via concepts such as create, suppose, what if, write a story, draw a picture, make, think of, predict, how many ways); and **professional opinion** (questions that required the interviewee to assess information by stating an opinion or critiquing something based on previous knowledge; the interviewee would respond to questions asking him/her to decide, judge, choose, recommend, give an opinion, state a preference, explain). The interview transcriptions were summarized and used in the development of the case analysis. Matrices were used to consolidate and analyze all information, including demographic data for each principal; thus, they provided an organizational pattern for easy review of data.

The final phase of data analysis included the researcher's questionnaire that was sent via electronic mail to individual principals and the assessment of interview practices. The assessment was used to compare what principals did during the interview with what experts in personnel management advise. Both the questionnaire and the assessment offered additional information about the six research questions that was not provided by the taped interviews.

#### <u>Interrater Reliability and Coding of Data</u>

In addition to the researcher, two persons not connected with the study were asked to read transcripts of principals' interviews and to code the interview questions according to content and category. This coding allowed the researcher to then compute the percentages of questions for each of the six categories for individual principals as well as for all principals. The researcher determined which interview questions were actually pertinent to the study by highlighting and numbering each question prior to the raters' receiving them. The reason for highlighting and numbering the questions was to ensure that the interraters and the researcher were all working with the same set of questions.

The two persons chosen to be interraters are public school administrators at the building level. Both persons, a principal and an assistant principal, have earned doctorates in educational administration from Virginia Tech. Both have experience in interviewing, since both have interviewed prospective teachers seeking employment in their respective schools.

The data is presented and analyzed in Chapter 4, with conclusions in Chapter 5.