#### **CHAPTER 3**

#### **METHODOLOGY**

# Research Design

The research design was a quantitative design. Descriptive statistics was the method of analyzing the data using Pearson's chi-square. The dependent variables were the superintendent tenure and the superintendent applicant pool. The independent variables were the Virginia Standards of Learning that were adopted in June of 1995 (Thayer, 2000), the No Child Left Behind Act of 2001 (U.S. House Document 107-34), and Other Influences.

## Population

The population for this study was superintendents of the 132 public school districts in the Commonwealth of Virginia as well as superintendent search organizations in the Commonwealth of Virginia. The superintendent population was used to answer questions that were related to superintendent tenure, and the superintendent search organizations survey was developed to answer questions related to superintendent applicant pool.

### Instrumentation

Two surveys were developed and organized into appropriate domains. One instrument with three domains was used exclusively for superintendents. The superintendent survey included a set of questions for response on a Likert-type scale. Ratings of one to four were established with one ranking low (strongly disagree) and four ranking high (strongly agree). The three domains of the survey instrument are as follows: Part I of the survey included ten SOL items and ten NCLB items, Part II of the survey

included six Other Influences items, and Part III of the survey included demographic information for the respondents to complete.

Once the superintendent survey was developed and validated, the survey was mailed to all Virginia superintendents with a letter of introduction as well as a statement of purpose for the study. The respondents were informed that their data would be coded using a numbering system and that the information would remain both completely confidential and anonymous. The respondents were provided with the approximate time that it would take to complete the survey and the timeframe in which the survey needed to be completed.

The superintendent search organization survey consisted of two domains. The first domain requested background information on the search organization, and the second domain included a set of six questions for response on a Likert-type-scale.

Ratings of one to four were established with one ranking low (strongly disagree) and four ranking high (strongly agree).

Once the superintendent search organization survey was developed, contact was made with one of the major firms to request participation in the study. Based on the nature of the study, it was determined that information was not available that would assist in addressing the superintendent applicant shortage aspect of this study.

# Content Validity

To ensure content validity of the superintendent survey instrument, the development of the instrument entailed a set of questions outlined in the domains for a subgroup of members of the 2004 Orientation To Residence cohort and an expert panel of assistant superintendents. The cohort and panel were asked to respond to the

appropriateness of each of the questions. Each domain of the instrument was clearly defined. If eighty percent of the cohort and panel indicated that an item was appropriate, the item remained and was used in the survey. The superintendent search organization survey was validated by an expert panel of assistant superintendents. If eighty percent of the panel agreed that an item was appropriate, the item was used in the survey. *Reliability* 

Cronbach alpha was used to determine reliability of the questions within each domain. The Cronbach alpha for the ten SOL questions was .573, and the Cronbach alpha for the ten NCLB questions was .544. The level of measurement was nominal for superintendent tenure, applicant pool, other influences and at the nominal level of measurement for SOLs and NCLB. The reliability was indexed by entering the information into SPSS to provide the coefficient alpha.

## Data Analysis

A forty percent survey return rate from the 132 school superintendents was considered adequate for this study. Seventy-five percent of the superintendent surveys were returned. Once the data was obtained from the superintendents, the data was entered into SPSS 11.0 to develop descriptive statistics using Pearson's chi-square.

A forty percent return rate from the superintendent search organizations was considered adequate for the study. Data was not reported to analyze any findings that would specifically address the applicant pool. Therefore, the two questions pertaining to the superintendent applicant pool are not addressed in this study.