

TEACHER SELECTION:

A DELPHI STUDY

By

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ABSTRACT

The hiring of teachers is one of the most important responsibilities of principals (Emley & Ebmeier, 1997; Place & Drake, 1994). When errors in hiring occur, consequences are felt by staff, students, parents, community, and the overall operation and functioning of the school (Emley & Ebmeier, 1997).

Unfortunately, not much empirical research has been conducted to date to support how to hire quality teachers effectively. “The research to date has not sufficiently addressed questions such as (1) what criteria need to be assessed; (2) which of those criteria are judged to be the most important by those using them in the process; and (3) what variables influence principal priorities.” (Place & Drake, p. 87)

The implementation of the No Child Left Behind Act (NCLB, 2002) has mandated that all teachers meet the definition of being highly qualified. This mandate poses unique challenges to principals in the identification of teachers who possess the characteristics considered essential in the teacher selection process. The purpose of this study was to develop consensus among nationally recognized principals regarding the traits considered essential for teachers, the best interview questions to target these traits, and other sources utilized to identify these essential traits.

The research methodology that was used to develop consensus consists of a three-round Delphi study. By definition, the Delphi technique is “a group process involving an interaction between

the researcher and a group of identified experts on a specified topic, usually through a series of questionnaires” (Skutsch & Hall, 1973). The knowledge and experiences of the panel of expert principals provided the underlying premise from which group consensus was built.

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DEDICATION

With thoughtful gratitude and love, I dedicate this work to my family.

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CHAPTER 1

“Education is the gateway to a hopeful future for America’s children. America relies on good teachers to pass on the knowledge and skills our young people need to achieve their dreams” (Bush, 2004).

INTRODUCTION

Shortly after George W. Bush took office in 2001, the issue of educational reform received national attention. Based on President Bush’s feelings that many of our country’s children were falling through the cracks, the Elementary and Secondary Education Act of 1965 (ESEA, 1965) was reauthorized. Thus, the No Child Left Behind Act of 2001 was passed (NCLB, 2002).

Teachers are at the cornerstone of this legislation and subsequent accountability measures. In speeches and written commentary, President Bush and former Secretary of Education Rod Paige have emphasized the importance of America’s teachers and their profound impact on our children. It is with this prominence placed on quality teaching that brings administrators to consider how to hire the best teachers for the children in America’s schools.

Research shows that a link does exist between effective teachers and student achievement. Darling-Hammond (2000) identified five teacher traits that directly impact student achievement. These include: “(1) general academic and verbal ability, (2) subject matter knowledge, (3) knowledge about teaching and learning as reflected in teacher education courses, (4) teaching experience, and (5) the combined set of qualifications measured by teacher certification” (Darling-Hammond & Youngs, 2002, p. 16).

Teacher Shortage

Researchers have indicated for years that a drastic teacher and administrator shortage exists in the profession of education. One reason, according to Haberman (1995) attributes this shortage to ineffective hiring strategies. School districts seem unable to identify traits that are indicative of persons who will become quality teachers. If these traits could be recognized, targeted, and successfully identified in the interview process, perhaps districts would be more successful in hiring personnel who demonstrate traits of those who have experienced a successful teaching career.

A second reason a teacher shortage exists is because many teachers leave the field of teaching within the first five years of their career. There are four main reasons that these beginning teachers leave the teaching profession. These reasons include school staffing actions, job dissatisfaction, other employment opportunities, and family or personal reasons (National Center for Education Statistics, 1994-1995 Followup Survey). It is important to note these reasons; however, teachers often do not provide their true reason for leaving the profession. This could be interpreted as a weakness in the data.

Of particular interest are the teachers who left the profession because they were dissatisfied, which is one of the main areas identified as a reason teachers leave the profession. Under the umbrella of job dissatisfaction, teachers have indicated by exit interviews that they are dissatisfied due to the following reasons: poor salary, student discipline problems, poor administrative support, poor student motivation, lack of faculty influence, class sizes too large, no opportunity for advancement, classroom intrusions, and inadequate time (NCES, 1994–1995 Followup Survey).

A third reason for the teacher shortage is related to teacher supply and demand. The

increase in student enrollment, movements to reduce class size, age of retirement of many teachers, and an overall decrease in the number of students completing teacher education programs are factors that contribute to the decreased supply and increased demand for teachers. Specifically, since 1984 both student enrollments and teacher retirements have increased (Snyder, Hoffman, & Geddes, 1997). Some school systems have been forced to lower their standards for teacher quality as a result (National Commission on Teaching and America's Future, 1997).

In his 2002 Secretary's Annual Report on Teacher Quality (United States Department of Education, 2002), the former U.S. Secretary of Education Rod Paige argued for the total renovation of teacher education systems. This renovation included placing a higher emphasis on content knowledge, having a decreased focus on education coursework, making student teaching optional, and increasing the focus on alternative licensure programs. A limitation of this report surrounds the issue that although more trained teachers will be potentially available, these teachers may not be effective teachers (Darling-Hammond & Youngs, 2002).

As a result of A Nation at Risk (National Commission on Excellence in Education, 1983), the teacher testing movement was initiated due in large part to pressure from the public to have a measurable indicator of teacher preparedness. Thus, the Educational Testing Service developed the Praxis.

As a consequence of these trends, districts have attempted to combat the issue of recruitment and increase the pool of applicants by initiating special programs. These programs vary by district and include ideas such as career-change programs designed to encourage professionals into midcareer switches to teaching. Programs include alternative certification plans, recruitment of teachers from other countries, financial incentives such as signing bonuses,

student loan forgiveness, housing assistance, and tuition reimbursement programs for educational advancement (Hirsch, Koppich, & Knapp, 2001).

Teacher Selection

The hiring of teachers is one of the most important responsibilities of principals (Emley & Ebmeier, 1997; Place & Drake, 1994). When errors in hiring occur, consequences are felt by staff, students, parents, community, and the overall operation and functioning of the school (Emley & Ebmeier, 1997).

Unfortunately, not much empirical research has been conducted to date to support how to hire quality teachers effectively. “The research to date has not sufficiently addressed questions such as (1) what criteria need to be assessed; (2) which of those criteria are judged to be the most important by those using them in the process; and (3) what variables influence principal priorities” (Place & Drake, p. 87).

Typically, school principals, supervisors, and education professors determine and define the attributes of good teachers. Teacher education and preparatory programs are based on this information. School district recruitment is based on this information. School principals interview prospective teachers based on this information. These traits generally include the following: professionalism, understanding of students, creativity, control of class, planning, individualization, and pupil personnel (Cruickshank & Haefele, 2001). These standards are very subjective and are difficult to assess in a recruitment or interview process.

Many different models of teacher effectiveness exist and are coupled with effective teacher qualities and traits. The situation posed to personnel tasked with hiring new teachers is one of trying to identify best practices in the hiring process. Exactly what are these quality characteristics, how can interview questions be developed to assess these characteristics

accurately, and what other sources of information are utilized to identify these essential traits?

Current Context

In my limited experience as a middle school principal, I have hired candidates who have been outstanding teachers. I have also hired candidates who have not been good teachers. I am quickly learning that there is no specific formula for hiring teachers. In fact, sometimes I wonder if acquiring good teachers is a matter of good fortune.

In my quest to learn more about the hiring process in my district, I learned that a very specific process exists. First, candidates must apply by filling out an official application. The human resources department then screens the application to determine whether or not the candidate possesses the initial qualities necessary for employment to include education, background, experiences, and licensure.

Once the application is approved, the candidate is scheduled for a screening interview with a member of the human resources team. Candidates are asked a series of structured questions by members of the human resources team who are trained administrators of the Teacher Perceiver Instrument. Both long and short forms of the interview are available. It is left to the discretion of the interviewer as to which form to use.

Successful candidates are then sent to interview with principals of schools with vacant positions. The only training that has been provided to principals in my district is related to questions that should not be asked for legal reasons. For example, we have been instructed not to ask questions that would be in violation of the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1956, or Title VII of the Civil Rights Act of 1964.

A number of studies have identified strategies principals can employ when hiring prospective teacher candidates. While there is an emerging consensus on the importance of these

methodologies, few studies link these methods with actual success rates of teachers.

Although I have learned through the review of literature process that the quality of the teaching staff is a primary predictor of school success, I am still very disabled in terms of knowing how to interview to acquire the best teachers. When I first began interviewing at the building level, I had not been taught the art of interviewing as it relates to determining and considering the core values that are important to the success of the school. I had not been taught how to develop questions to determine if the candidate possesses the characteristics of a person who would possess the core values, yet personnel decisions are potentially the most important decisions I will have to make.

It is with this personal conviction that I pursued this topic in the form of a Delphi study. Through this group consensus-building process, a panel of expert principals determined the teacher traits considered most important in the interview process. Furthermore, consensus was developed regarding the types of questions principals ask teachers during the selection process to identify these traits as well as other sources principals utilize to identify these essential traits.

Purpose of the Study

The purpose of this study was to develop consensus among expert principals regarding the traits considered most essential in the teacher selection process, the interview questions to target the specific traits as well as determine other sources that the expert principals utilize to identify the essential traits of teachers. The Delphi Methodology was utilized to develop consensus.

Research Questions

1. What do expert principals across the nation perceive as the most important teacher traits to consider in the teacher selection process?

2. What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?
3. What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

Definition of Terms

The following definitions were applicable to this study:

1. Interview: An interaction whereby the interviewer makes a judgment based on the qualifications of the candidate to determine the candidate's suitability for the position (Baker & Speir, 1990; Salgado & Moscoso, 2002; Schmidt & Hunter, 1998).
2. Teacher Selection: The act of differentiating between those who will become successful teachers by focusing on the qualities, attributes, preservice qualifications and experience used in varying degrees by employing officials to rate teacher candidates (Alberti, 1984; Baskin, Ross & Smith, 1996; Darling-Hammond, 2003).
3. Principal: The school official delegated the responsibility from the school board to make final recommendations on which applicant to hire (Berg, 1998).
4. Prospective Teacher: A person who has completed a degree in education and is pursuing a career in teaching (Cain-Caston, 1999).
5. Delphi Method: A quantitative methodology structure to support a group communication forecasting. The method consists of rounds of structured questions designed to collect and analyze knowledge from a panel of experts (Hasson, Keeney & McKenna, 2000; Kennedy, 2004; Stewart, 2001; Williams, Boone & Kingsley, 2004; Winzenried, 1997; Yang, 2003).

Theoretical Framework

The theoretical framework related to the teacher selection process is represented in Figure 1. The framework represents the conceptual thinking behind the teacher selection process. It is based on the premise that research along with knowledge and experiences of principals are two main criteria used to determine the traits of effective teachers.

Organization

Chapter one of this study will serve as an introduction to include the current context of the study (personal), background of the issue, purpose of the study, related research questions, definitions and a theoretical framework for the study. Chapter two contains a review of the literature as it relates to the research questions. The methodology is addressed in chapter three. Results are in chapter four. Chapter five includes conclusions, limitations, and recommendations for future study.

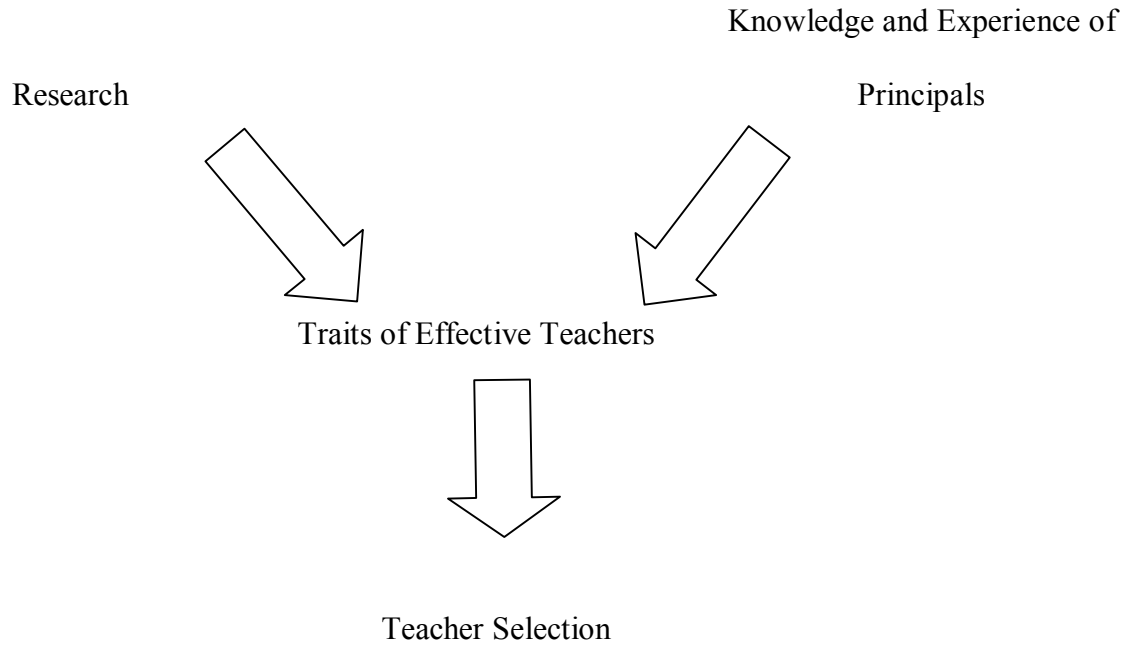


Figure 1. Theoretical Framework.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The purpose of this chapter is to provide a review of the literature relative to the research questions identified for this study. The research questions are as follows:

1. What do expert principals across the nation perceive as the most important teacher traits to consider in the teacher selection process?
2. What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?
3. What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

Examining Theoretical and Commentary Literature

The proxy web server at Virginia Polytechnic and State University was the vehicle used to obtain relevant research for this topic. Education Full Text, Educational Resource Information Center (ERIC) and Ingenta were the databases utilized most frequently through the Virginia Polytechnic and State University online library system. Articles were generally available in full-text or PDF format. When not available as full-text or PDF, the Wilson Link option provided a link to the Illiad system for article retrieval. Dissertations were also reviewed for format, content and reference review. Dissertations Abstract Online as well as the Addison holdings for Virginia Tech dissertations were sources for dissertation searches.

Key words utilized for the search included principal perception, teacher attributes, teacher selection, teacher shortage and teacher traits. All studies analyzed were published in peer-reviewed journals.

Studies included in this literature review were published in peer-reviewed journals, were based on a qualitative or quantitative experimental design, and were directly related to perceptions of the traits of effective teachers. Studies were excluded from the literature review if they used protocols to determine the effectiveness of a teacher during the interview process, were based on literature reviews as the primary indicator of the identification of the traits of effective teachers with no methodology designed to apply the information from the literature reviews, or were based on a specific type of interview as the determinant of interview success.

Analysis of Studies

The studies presented in this chapter represent a comprehensive review of the current literature with varying purposes and methodologies. The content and scope of this review is organized into three sections. The first section includes studies measuring the perceptions of administrators regarding traits of outstanding teachers (Braun, Willems, Brown & Green, 1987; Cain-Caston, 1999; Kowalski, McDaniel, Place & Reitzug, 1992; Place & Drake, 1994; Ralph, Kesten, Lang & Smith, 1998). Studies in the second section address the perceptions of teachers and students about the traits they consider to be indicative of exceptional teachers (Evans, 2002; Ilmer, Snyder, Erbaugh & Kurz, 1997; Murphy, Delli & Edwards, 2004). Sources of information utilized by principals to identify the essential traits of teachers are included in the third section (Cain-Caston, 1999; Hatilin & Abrahamson, 1995; Theel & Tallerico, 2004; Ralph, Kesten, Lang, & Smith, 1998). The fourth section includes issues related to challenges posed by the No Child Left Behind Act (NCLB, 2002).

Perceptions of Administrators

Studies in this literature review related to perceptions of administrators of the traits of effective teachers were quantitative in nature. The lists of traits to be evaluated by administrators

in all studies were based on literature reviews conducted in advance by the researchers.

Respondents were generally asked to rank the list of traits in order of importance (Cain-Caston, 1999; Place & Drake, 1994) or respondents were asked to rate a list of traits using a Likert scale (Braun, Willems, Brown & Green, 1987; Kowalski, McDaniel, Place & Reitzug, 1992; Ralph, Kesten, Lang & Smith, 1998).

The surveys in all studies were sent to administrators based on geographical regions. Included are Wyoming (Braun, Willems, Brown & Green, 1987); Indiana, Kansas, and Minnesota (Kowalski, McDaniel, Place, Reitzug, 1992); Ohio and Illinois (Place & Drake, 1994); North Carolina (Cain-Caston, 1999); and Canada (Ralph, Kesten, Lang & Smith, 1998).

Studies differed based on the job description of the respondents. Although all were considered administrators, some studies included only principals (Kowalski, McDaniel, Place & Reitzug, 1992; Place & Drake, 1994), one included principals and superintendents (Cain-Caston, 1999), another included directors of education (Ralph, Kesten, Lang & Smith, 1998), and the last study did not define the respondents beyond the term “administrators” (Braun, Willems, Brown & Green, 1987).

Elementary and secondary schools were included in all studies. One study was limited to suburban schools (Kowalski, McDaniel, Place & Reitzug, 1992).

The identification of administrators’ perceptions of the qualities most important in teachers was the focus of a survey sent to all school administrators in Wyoming (Braun, Willems, Brown & Green, 1987). The study was conducted in two parts: variables considered important by administrators when reviewing a credential file of a teacher applicant and qualities an administrator looks for when interviewing a teacher applicant. Respondents were asked to rate each item in terms of its importance on a one to six Likert scale with one being the least

important and six being the most important.

Initially, 215 out of the 319 surveys were returned. After follow-up requests were made, a total of 271 responses were received. This equates to 84% of the administrators in Wyoming. Means, standard deviations, and median scores were reported for each item.

Correct spelling, punctuation, and English usage were ranked of the highest importance in the section related to screening of the applicant's credential files. Letters of recommendation from those who have seen the candidate work with children and letters of recommendation from administrators were ranked second and third respectively. Honesty of responses, interpersonal skills, use of oral English, and personal appearance were the top four characteristics in order of importance to be considered in an interview (Braun, Willelms, Brown & Green, 1987).

Overall, the researchers determined that the administrators were consistent in their responses (Braun, Willelms, Brown & Green, 1987). The researchers did perform one-way analyses of variance (ANOVA) to determine if differences existed among levels of administrators across elementary, middle, and high schools. Generally, secondary administrators considered previous work experience and the ability to sponsor extra-curricular activities as indicators of more importance than their elementary counterparts.

A similar study was sent to principals of suburban districts in Indiana, Kansas and Minnesota (Kowalski, McDaniel, Place & Reitzug, 1992). The purpose of this study was to determine the characteristics principals felt were most important and least important when considering teacher candidates for employment.

A list of 46 "commonly cited characteristics of teachers" (Kowalski, McDaniel, Place & Reitzug, 1992, p. 35) was created based on literature reviews. Respondents were asked to rate each item on a one to five Likert scale with one representing items of least importance and five

representing items of most importance.

A return rate of 93% was achieved. A total of 81 surveys were returned out of a possible 87. Of those returned, 70% represented elementary principals, 17% were middle school principals, and 12% represented high school principals.

Of the 46 factors received, 35 had mean scores over 4.0. Respect for students, honesty, ability to work with peers, verbal communication, and quality of previous teaching experience were the top five characteristics listed in order of most importance, respectively. The five characteristics of least importance included (1) extroverted personality, (2) quantity of experience, (3) involvement with activities in high school and college, (4) commitment to doing community service, and (5) chronological age.

The researchers computed one-way analyses of variance (ANOVA) to determine if the gender, experience, academic degrees, level of assignment, or size of school district of the respondents were of significance. These analyses yielded four areas of significance: (1) chronological age was significantly less important to elementary school principals than to middle school principals, (2) chronological age was significantly less important to female principals than to male principals, (3) multicultural education was significantly more important to principals of the second-largest district than to the other principals and (4) the importance of high school and collegiate activities was significantly more important to high school principals than to elementary school principals (Kowalski, McDaniel, Place & Reitzug, 1992).

In a fashion similar to the work of Kowalski, McDaniel, Place & Reitzug (1992), Ralph, Kesten, Lang & Smith (1998) conducted a comparable study in Canada. The researchers developed a list of characteristics based on current literature. The list of characteristics was sent to directors of education in Canada for the purpose of determining their views of the importance

of candidates' teaching skills when hiring new teachers. Respondents were asked to rank each item on a one to five Likert scale with one being the indicator of least importance and five being the indicator of most importance.

A total of 69 out of 95 administrators returned the surveys, resulting in a return rate of 73%. Eighty-seven percent of the respondents had been administrators for at least six years. Only three percent of the respondents were in their first year of school administration. Ninety seven percent of the respondents had been involved in hiring decisions for at least six years.

Eight characteristics had a median score of 5.0 for importance. These characteristics are (1) establishing classroom climate, (2) building rapport with students, (3) classroom management, (4) personal qualities, (5) communication and interpersonal skills, (6) planning for instruction, (7) building rapport with parents and community members and (8) use of instructional strategies. The three areas of lowest importance (median score of 3.0) were (1) record keeping, (2) multi-cultural sensitivity and (3) using computers.

This study also collected data related to the teacher training programs offered in universities in Canada. Overall, the researchers found that a collaborative effort exists among universities and schools systems and that hiring personnel in Canada are generally satisfied with the level of preparedness of graduates.

A random sampling of elementary and high school principals in Ohio and Illinois was used as the population for another study to determine criteria principals use in the selection of teachers (Place & Drake, 1994). Respondents were asked to rank order nine criteria in order of importance for consideration when hiring teachers.

The random sample included 320 principals. One hundred sixty respondents (half) were from each state. The 160 from each state were further divided in half to represent elementary

and high school principals. Middle school principals were excluded. The purpose for this exclusion was to ensure that the differences between elementary and high school principals would be clear. Fifty-seven percent of the questionnaires were returned.

The following indicate the results of the ranking of the nine characteristics in order of most important to least important: (1) enthusiasm for teaching, (2) communication skills, (3) interviewer's evaluation, (4) former teaching performance, (5) verbal fluency, (6) specialized knowledge, (7) reference information, (8) grade point average, and (9) self-purposing.

The researchers further sought to determine if any significant similarities existed between the states and among the levels of principals in the ranking of the characteristics by importance. A correlation of .9333 was made between elementary and high school principals, indicating a high degree of similarity. A correlation of .9667 was made among all principals in the two states, also indicating a high degree of similarity.

A study of similar methodology was conducted among a sample of principals and superintendents in North Carolina (Cain-Caston, 1999). Respondents were asked to rank 12 criteria in order of importance in hiring teachers for their first teaching position. The twelve characteristics were based on "commonly occurring factors in public school systems and in higher education" (Cain-Caston, 1999, p. 70).

One hundred surveys "were mailed to a stratified random sample of elementary school principals, middle school principals, high school principals and superintendents of schools in North Carolina" (Cain-Caston, 1999, p. 70). Seventy-two of the surveys were initially returned. A second mailing of 50 surveys was sent out, resulting in 25 additional returns. The overall return rate was 67%.

The following represents the rank order preference of the characteristics listed on the

survey in order of most important to least important: (1) evaluation of student teaching performance by public school supervisor, (2) effective use of oral and written English, (3) personal appearance, (4) grade point average in major area, (5) scores on the National Teachers Examination, (6) evaluation by college instructors in major subject area, (7) evaluation by college instructors in professional education courses, (8) evaluation of student teaching by college supervisor, (9) cumulative grade point average, (10) environment in which the applicant was reared, (11) race and (12) other factors (Cain-Caston, 1999).

The previous section reviewed studies related to perceptions of principals and administrators of the traits most important to identify in teachers. The studies were quantitative in nature and required the respondents to rate characteristics by their level of importance or place the characteristics in a rank order of importance. Some studies correlated results among levels of schools or across states. Generally, most administrators valued similar characteristics regardless of the level of school (elementary, middle or high) or location.

Perceptions of Teachers and Students

Studies in this literature review related to student and teacher perceptions of traits of effective teachers utilized both quantitative and qualitative methods. Respondents were generally interviewed as the first step in the research process (Evans, 2002; Ilmer, Snyder, Erbaugh & Kurz, 1997; Murphy, Delli & Edwards, 2004). After the interviews were concluded, researchers in two of the studies coded the responses and developed categories (Evans, 2002; Ilmer, Snyder, Erbaugh & Kurz, 1997). One study included a survey and drawings by students as part of the data collection (Murphy, Delli & Edwards, 2004).

One study was exclusive to students (Evans, 2002), another was exclusive to teachers (Ilmer, Snyder, Erbaugh, & Kurz, 1997), and the third study included teachers and students

(Murphy, Delli & Edwards, 2004).

Populations in two studies included suburban participants (Evans, 2002; Murphy, Delli & Edwards, 2004). All studies included urban participants (Evans, 2002; Imer, Snyder, Erbaugh & Kurz, 1997; Murphy, Delli & Edwards, 2004)). Students in Catholic schools were included in one study (Evans, 2002). All populations were from elementary schools (Evans, 2002; Imer, Snyder, Erbaugh & Kurz, 1997; Murphy, Delli & Edwards, 2004). One study included teachers from secondary schools as part of the population (Murphy, Delli & Edwards, 2004).

To determine teacher characteristics valued by students, Evans (2002) interviewed students from urban, suburban and Catholic schools. Fourteen students were included in the study, which spanned over 14 months. Nine girls and five boys participated. All were ten to 11 years old. Interviews were recorded, transcribed, analyzed, and coded into categories of effective teachers. After the individual interviews were concluded, the group of 14 students was brought together for further discussion and clarification.

A series of questions was asked to each student. Examples of questions include

1. Over the years, who have been your really good teachers?
2. What made them good?
3. How would you define a really good/effective teacher?
4. What advice would you give future teachers about the ways they could become effective teachers? (Evans, 2002, p. 53.)

The findings were coded into characteristics of definitions of what teachers should be and do, teacher skills, teacher knowledge, and teacher dispositions. The students indicated that teachers should (1) help students learn, (2) help students understand, (3) explain information clearly, (4) be willing to answer questions (5) be able to make learning fun, (6) be smart and

know a lot about all the subjects, (7) know a lot about their students as well as the content, and (8) be fair.

Evans (2002) concluded that elementary school students are able to identify the characteristics of effective teachers. Generally, “children want teachers who care about them and treat them with respect, who help them learn and make learning fun” (Evans, 2002, p. 58).

In another study (Murphy, Delli, & Edwards, 2004), interviews were also used to identify characteristics of good teachers. Also included in this study were surveys, drawings, and the inclusion of teachers into the population.

The researchers divided the respondents into three groups: (1) sixty second grade students, (2) sixty-one pre-service teachers (3) twenty-two regular teachers. All participants attended or worked in suburban or urban schools at the elementary or secondary level.

The first phase of the study was drawing. Each participant was asked to “draw a picture of good teaching” (Murphy, Delli & Edwards, 2004, p. 77). In evaluating the drawings, the researchers analyzed each drawing and made note of any omissions and inclusions in the drawings.

Interviews about the drawings were conducted as the next phase of the study. Researchers asked the respondents questions about the drawings. Content analyses were conducted to determine consistent themes.

The third phase of the study included a “good teacher measure” (Murphy, Delli & Edwards, 2004, p. 76). Respondents rated the extent to which specific characteristics were measures of good teaching. A Likert scale of one to four was used with one being a poor measure and four being a good measure. The scale was adapted for the second graders by substituting a graded series of smiley faces for the numbers.

The data revealed that a high degree of similarity was evident across all three groups in the belief of what makes a good teacher. Specifically, the groups agreed that good teachers should be “caring, patient, not boring, polite, and organized” (Murphy, Delli, & Edwards, 2004, p. 78).

The identification of factors that urban teachers felt were fundamental for successful teaching were the focus of a study conducted with 73 teachers in Detroit (Ilmer, Snyder, Erbaugh & Kurz, 1997). Like the other studies in this section, interviews are used as the tool to gather data for this study.

The interviews were conducted individually and each lasted approximately 30 minutes. Interviews were transcribed and a thematic content analysis was conducted. The researchers identified names and definitions for thematic codes, then analyzed transcripts for frequency of responses across the themes.

Overall, 45 themes emerged. The seven most frequent themes accounted for 41% of the responses. These seven themes were (1) knowledge of community and culture, (2) teachers’ needs and attitudes (compassion, diligence and integrity), (3) childrens’ needs, (4) instructional style and teaching method, (5) community resources, (6) school climate, and (7) subject matter and content knowledge.

The researchers indicated that teacher preparation programs must infuse this knowledge into their programs. Additionally, the knowledge and insights of urban educators could also contribute to the overall successes of all schools (Ilmer, Snyder, Erbaugh & Kurz, 1997).

This section of the review of literature examined studies related to perceptions of teachers and students of the traits most important to identify in teachers. The studies were qualitative and quantitative in nature. All studies were based on interviews for all or part of the methodology.

Generally, teachers and students value similar characteristics of effective teachers.

Sources of information utilized by principals to identify the essential traits of teachers

Studies in this section of the literature review identify information principals use during the teacher selection process to identify the essential traits of teachers. Studies utilized varying methodologies to include quantitative (Cain-Caston, 1999; Hatlin & Abrahamson, 1995; Ralph, Kesten, Lang, & Smith, 1998) and qualitative (Theel & Tallerico, 2004).

The studies were all conducted on a geographical basis. Areas include North Carolina (Cain-Caston, 1999); Texas (Hatlin & Abrahamson, 1995); northeastern United States (Theel & Tallerico, 2004); and Canada (Ralph, Kesten, Lang & Smith, 1998).

In North Carolina, an instrument was constructed to survey principals and superintendents across the state to “determine the most important factors in hiring teachers for their first teaching positions” (Cain-Caston, 1999). Respondents were asked to rank 12 criteria in order of importance in hiring teachers for their first teaching position. The twelve characteristics were based on “commonly occurring factors in public school systems and in higher education” (Cain-Caston, 1999, p. 70).

One hundred surveys “were mailed to a stratified random sample of elementary school principals, middle school principals, high school principals and superintendents of schools in North Carolina” (Cain-Caston, 1999, p. 70). Seventy-two of the surveys were initially returned. A second mailing of 50 surveys was sent out, resulting in 25 additional returns. The overall return rate was 67%.

The following represents the rank order preference of the characteristics listed on the survey in order of most important to least important: (1) evaluation of student teaching performance by public school supervisor, (2) effective use of oral and written English, (3)

personal appearance, (4) grade point average in major area, (5) scores on the National Teachers Examination, (6) evaluation by college instructors in major subject area, (7) evaluation by college instructors in professional education courses, (8) evaluation of student teaching by college supervisor, (9) cumulative grade point average, (10) environment in which the applicant was reared, (11) race and (12) other factors (Cain-Caston, 1999).

Another study was developed to determine the specific “value and importance public school superintendents place on written and oral references for applicants who have just completed student teaching and are applying for their first full-time teaching position” (Hatilin & Abrahamson, 1995, p. 2).

The survey, along with a cover letter, was sent to all superintendents in the state of Texas. A total of 332 surveys were returned from the 1,063 mailed, resulting in a return rate of 31.2 percent. The average number of years experience for each respondent was 25.9 years.

The instrument listed ten different types of references (1) cooperating teacher, (2) cooperating principal, (3) university supervisor, (4) education professor, (5) other-than-education professors (6) teachers in your school district, (7) previous employer, (8) leaders of volunteer organizations, (9) pastor, and (10) character references (Hatilin & Abrahamson, 1995).

Respondents were asked to rank each type of reference on a scale of one (no importance) to seven (most important).

The top three references included cooperating teacher, cooperating principal, and university supervisor. The three types of references with least importance included leaders of volunteer organizations, pastor, and character references (Hatilin & Abrahamson, 1995).

A similar type of survey was also administered to “administrators in charge of hiring new teachers” in Canada. The survey was sent to a total of 95 potential respondents. A return of 69

surveys resulted a return rate of 73 percent. Eighty-seven percent of the respondents had been in administration for at least six years (Ralph, Kesten, Lang & Smith, 1998).

In this survey, respondents were required to rate the importance of specific elements of the hiring process. A Likert-scale was utilized with the rating of one representing a lowest level of importance and a rating of five representing the highest level of importance.

Elements earning ratings that were considered sources of information utilized to determine teacher effectiveness include internship evaluation report, interview performance, internship narrative comments, resume, and grades (Ralph, Kesten, Lang & Smith, 1998).

Portfolios were the subject of a research study conducted by Theel and Tallerico (2004). In this research, a case study approach was utilized. The main goal of this study was to determine what forms teacher portfolios take, how principals evaluate these portfolios, and if the portfolios are used to make decisions in the hiring process.

“In-depth, semi-structured interviews were conducted with 18 principals and four other key informants” (Theel & Tallerico, 2004, p. 27). All interviews were taped, transcribed, and the data were coded.

The researchers determined that principals were consistent in their knowledge of form and content of portfolios. According to the findings of the study, portfolios should contain “several lesson plans, photographs of projects, in-class activities, teacher-student interactions, examples of classroom teaching practice, documentation of student teaching experience, feedback and letters of reference, and a statement of the applicant’s teaching philosophy” (Theel & Tallerico, 2004, p. 28).

Overall, it was determined that principals were uncomfortable assessing the quality and validity of portfolios of prospective teachers. Principals consistently noted in their interviews

that the subjectivity of the portfolios was a matter of concern. In essence, principals in this study indicated that portfolios were not influential as a tool in the teacher selection process.

The Challenge of the No Child Left Behind Act

The purpose of this section is to examine the impact of Federal legislation on the teacher selection process. The implementation of the No Child Left Behind Act (NCLB, 2002) has had varying degrees of influence on the teacher selection process.

“As part of the No Child Left Behind Act, Congress issues another challenge to ensure that, by the end of the 2005-2006 school year, every classroom in America has a teacher who is ‘highly qualified.’ After all, only with a talented teacher in every classroom will our students have the opportunity to excel” (Paige, 2002).

The No Child Left Behind Act requires that all teachers be highly qualified (NCLB, 2002). By definition of the Act, teachers must have a four-year degree from a university and be fully certified to teach by their state standards. Furthermore, teachers must demonstrate competence in their core content area, which is assessed differently at elementary and secondary levels. Elementary school teachers must pass a subject knowledge test as well as an assessment of teaching skills in reading, writing and math. Secondary teachers must pass a subject knowledge test in their content area in addition to holding a degree in the content area taught (NCLB, 2002).

Characteristics of quality teachers were determined by principals, supervisors, and education professors in literature dated prior to the implementation of the No Child Left Behind Act (Cruickshank & Haefle, 2001). These qualities generally included professionalism, understanding of students, control of the class, planning, individualization, competence, content knowledge, reflective practitioner, and responsive to diversity. Although the criteria in the No

Child Left Behind Act are valued, they are much more in line with content knowledge than with being able to effectively work with students.

The criteria specified in the No Child Left Behind Act are particularly challenging for rural and urban school districts (Darling-Hammond, 2003). Factors to include salaries, working conditions, teacher preparation, and mentoring support all have an impact on the high attrition rate in urban and rural schools.

Rural school districts have unique characteristics that serve as obstacles in the hiring of highly qualified teachers (The Rural School Community and Trust, 2004). Many rural school districts are in financial distress and are not able to offer competitive salaries with suburban or urban counterparts. Teachers are often required to teach in more than one area due to the nature of the school and therefore must certify as highly qualified in more than one area. Additionally, the physical distance of rural areas from the general population presents problems with attracting new educators (Jimerson, 2004).

Urban school districts along with individual schools enrolling mostly students from families with low-income are also having difficulties meeting the tenets of the No Child Left Behind Act in terms of hiring highly qualified teachers (Murphy & DeArmond, 2003). A study analyzing the beliefs of urban superintendents revealed that it is their conviction that urban schools tend to be magnets for the least-experienced, least-prepared, and least-adequate teachers. Furthermore, the superintendents indicate that they do not have the power to move the best teachers to the lowest performing schools because it may cause the best teachers to resign (Fuller, Campbell, Celio, Harvey, Immerwahr, & Winger, 2003).

It is indeed a challenge for schools, urban and rural in particular, to recruit and hire teachers who meet the definition of highly qualified as set forth by the No Child Left Behind

Act.

Summary

Chapter II, Review of the Literature, presented studies representing a comprehensive review of the current literature with varying purposes and methodologies. Each study revealed characteristics of quality teachers. These traits can also be classified into one of eleven domains, which are presented in alphabetical order in Table 1.

The literature review was subdivided into four sections: (1) perceptions of administrators regarding traits of outstanding teachers, (2) perceptions of teachers and students pertaining to essential teacher traits, (3) Sources of information utilized by principals to identify the essential traits of teachers and (4) issues related to the implementation of the No Child Left Behind Act (NCLB, 2002).

The first section included studies measuring perceptions of administrators regarding traits of outstanding teachers. Respondents in all studies were asked to rank the list of traits in order of importance (Cain-Caston, 1999; Place & Drake, 1994) or were asked to rate a list of traits using a Likert scale (Braun, Willelms, Brown & Green, 1987; Kowalski, McDaniel, Place & Reitzug, 1992; Ralph, Kesten, Lang & Smith, 1998). Generally, most administrators valued similar characteristics regardless of the level of school (elementary, middle or high) or geographic location.

Perceptions of teachers and students regarding essential teacher traits were examined in the second section. Studies utilized both quantitative and qualitative methods. In all studies, respondents were interviewed as the first step in the research process (Evans, 2002; Ilmer, Snyder, Erbaugh & Kurz, 1997; Murphy, Delli & Edwards, 2004). After the interviews were concluded, researchers in two of the studies coded the responses and developed categories

(Evans, 2002; Ilmer, Snyder, Erbaugh & Kurz, 1997). One study included a survey and drawings by students as part of the data collection (Murphy, Delli & Edward, 2004). Generally, teachers and students value similar characteristics of effective teachers.

Studies in the third section identified information principals use during the teacher selection process to identify the essential traits of teachers. Studies utilized varying methodologies to include quantitative (Cain-Caston, 1999; Hatlin & Abrahamson, 1995; Ralph, Kesten, Lang, & Smith, 1998) and qualitative (Theel & Tallerico, 2004).

The studies were all conducted on a geographical basis. Areas include North Carolina (Cain-Caston, 1999); Texas (Hatlin & Abrahamson, 1995); northeastern United States (Theel & Tallerico, 2004); and Canada (Ralph, Kesten, Lang & Smith, 1998).

The third section of the literature review addressed issues related to the implementation of the No Child Left Behind Act (NCLB, 2002). Urban and rural school districts have faced unique challenges in hiring personnel who meet the definition of highly qualified teachers as specified by the legislation. Factors affecting urban and rural districts include high rates of teacher attrition, salary challenges, recruitment difficulties, and unique job responsibilities.

Table 1

Analysis of Studies Related to Trait Domains

Trait Domain	Studies Addressing the Trait Domains	
Ability to work with others	Cain-Caston (1999)	Kowalski, McDaniel, Place & Reitzug (1992)
	Evans (2002)	Murphy, Delli & Edwards (2004)
	Ilmer, Snyder, Erbaugh & Kurz (1997)	Ralph, Kesten, Lang & Smith (1998)
Academic achievement	Braun, Willems, Brown & Green (1987)	Place & Drake (1994)
	Cain-Caston (1999)	
Communication skills	Braun, Willems, Brown & Green (1987)	Kowalski, McDaniel, Place & Reitzug (1992)
	Cain-Caston (1999)	Murphy, Delli & Edwards (2004)
	Evans (2002)	Place & Drake (1994)
	Ilmer, Snyder, Erbaugh & Kurz (1997)	Ralph, Kesten, Lang & Smith (1998)
Content knowledge	Braun, Willems, Brown & Green (1987)	Kowalski, McDaniel, Place & Reitzug (1992)
	Evans (2002)	Place & Drake (1994)
	Ilmer, Snyder, Erbaugh & Kurz (1997)	Ralph, Kesten, Lang & Smith (1998)

Trait Domain	Studies Addressing the Trait Domains	
Enthusiasm	Cain-Caston (1999)	Kowalski, McDaniel, Place & Reitzug (1992)
	Evans (2002)	Murphy, Delli & Edwards (2004)
	Ilmer, Snyder, Erbaugh & Kurz (1997)	Place & Drake (1994)
Experience	Braun, Willems, Brown & Green (1987)	Place & Drake (1994)
	Kowalski, McDaniel, Place & Reitzug (1992)	
Motivation	Braun, Willems, Brown & Green (1987)	Ilmer, Snyder, Erbaugh & Kurz (1997)
	Evans (2002)	
Pedagogy	Braun, Willems, Brown & Green (1987)	Kowalski, McDaniel, Place & Reitzug (1992)
	Cain-Caston (1999)	Place & Drake (1994)
	Evans (2002)	Ralph, Kesten, Lang & Smith (1998)
	Ilmer, Snyder, Erbaugh & Kurz (1997)	
Physical appearance	Braun, Willems, Brown & Green (1987)	Kowalski, McDaniel, Place & Reitzug (1992)
	Cain-Caston (1999)	
Professional goals	Braun, Willems, Brown & Green (1987)	Ralph, Kesten, Lang & Smith (1998)
	Kowalski, McDaniel, Place & Reitzug (1992)	Theel & Tallarico (2004)

Trait Domain

Studies Addressing the Trait Domains

References

Braun, Willems, Brown & Green (1987) Place & Drake (1994)

Haitlin & Abrahamson (1995)

Ralph, Kesten, Lang & Smith (1998)

CHAPTER 3

METHODOLOGY

Introduction

The methodology section provides a narrative structure for how this study was conducted. The framework addresses the Delphi Method, panel selection and identification, data collection and data analysis.

The Delphi Method

The Delphi method was first used by Dalkey and Helmer (1962) in their work for the Rand Corporation. Initially, a four- or five-round Delphi procedure was utilized. In later studies, Brooks (1979) and Pfeiffer (1968) determined that the Delphi method provided valid results with only three rounds. Currently the Delphi method is used widely in studies related to health care, communications, public relations, education, and scientific disciplines (Kennedy, 2004; Yang, 2003).

The primary objective of the Delphi method is to build consensus and consistency of opinion from a group of experts regarding an area of interest or inquiry (Hasson, Keeney & McKenna, 2000; Winzenreid, 1997; Yang, 2003). The Delphi technique is based on rounds of questions. The first round involves open-ended questions sent to “a panel of informed individuals, hence the title experts” (McKenna, 1994, p. 1221). The responses are returned to the researcher who then compiles the wide range of answers. The second round of questioning for the Delphi involves sending a copy of the comprehensive list of answers from the first question to the experts. For this second round, the experts are asked to rank or evaluate the responses from the first round. The responses are returned to the researcher who then compiles the responses. In this compilation, the mean for each response is calculated for the group. This is

the beginning of the consensus-building phase. The data indicating group responses and rankings are sent back to the experts for the third round of questions. At this point, the experts are provided an opportunity to review the consensus of the group, reflect on their individual responses, and indicate any changes in response. This last round of data is returned to the researcher who then makes a final compilation, thus representing group consensus.

In general, the benefits of the Delphi are many (Dalkey, 1967). Members of the expert panel have the opportunity to provide feedback confidentially, receive group feedback to which they may compare their responses, develop a final consensus based on the input of each and every group member, and explore new thinking and motivation through an economical data analysis process.

This study utilized the Delphi method to develop consensus of the traits that a panel of principals feel are essential to identify in the teacher selection process. The method was also used to determine the questions principals ask in the teacher selection process to identify these essential traits. Additionally, the technique established the other sources of information principals utilize to identify the essential traits of teachers.

Data were collected through rounds of questions presented to the panel of principals. As the data were collected after each round of questions, the data were analyzed. Group and individual responses were presented to each panel member. With each round, individual panel members were able to adjust their individual responses based on group consensus. The objective of the Delphi process in this study was to gain judgments on complex matters from a panel of experts. "Its capacity to capture those areas of collective knowledge that are held within professions but not often verbalized, makes it enormously useful in the field of professional education" (Stewart, 2001, p. 922).

Panel Identification and Selection

By definition, the Delphi method facilitates a group consensus-building technique (Hasson, Keeney & McKenna, 2000; Winzenried, 1997; Yang, 2003). Due to the fact that the quality of the data from the Delphi will be only as good as the quality of the panel (Linstone & Turoff, 1975; Hasson, Keeney & McKenna, 2000), great care was taken to ensure that expert principals were asked to serve on the panel for this study. In working with experts, it is important to select the experts wisely and ensure that the conditions for the work of the experts are appropriate (Helmer, 1967).

The principals requested to serve on this study were those who have received national recognition related to performance in and contributions to the field of education. The National Association of Elementary School Principals named 60 principals as state principals of the year in 2003 based on specific criteria (Table 2). Ninety-three secondary principals met the criteria established by the National Association of Secondary School Principals (Table 3) and were named as state principals of the year in 2003. From this population of 153 nationally recognized principals, a systematic sample of 25 was requested to serve on the Delphi panel. Systematic sampling is often used when a list of all members of the population is accessible (Hinkle, Wiersma & Jurs, 1998).

“A systematic sample is a probability sample in which every k th member of the population is selected and in which $1/k$ is the sampling fraction. The first member of the sample is determined by randomly selecting an integer between 1 and k ” (Hinkle, Wiersma & Jurs, 1998, p. 181).

All 153 named principals of the year were listed alphabetically and assigned a numerical position. Numbers ranged from one to 153. Once this list was established, a number was

randomly selected between one and 25. This number represented the number position of the first member from the list selected. For each subsequent selection, 25 was added to the random number in order of sequence. For example, if the number 17 was the randomly selected number, the first person selected would have been the seventeenth person named on the list. Each subsequent selection would be 25 positions away from the initially randomly selected position of 17.

Table 2

Criteria established by the National Association of Elementary School Principals (1984)

Category	Criteria
Evidence of outstanding contributions to the well-being of the educational community	ways in which the principal's leadership has benefited curriculum, staff morale, community support, student interest, and the learning environment; ways in which the principal provides creative leadership to inspire teachers and others to achieve and contribute to the school environment; examples of service or achievements above and beyond what is expected in the usual school program; ways in which others have acknowledged the principal as a force for positive change.
Existing requirements in state principal recognition programs	Is an active principal of a school in which a commitment is clearly evident through programs designed to meet the academic and social needs of all students, and through firmly established community ties with parents and local business organizations. Has been an active principal for at least five years. Will be an active principal during the year in which he/she will receive the award.

Shows a strong commitment to the principalship through active membership in professional associations.

Is respected by students, colleagues, parents, and the community at large.

Assumes an active role in his/her community, distinguishing himself/herself as a leader in civic, religious, or humanitarian activities.

Shows strong educational leadership by setting high expectations for school staff and students.

Maintains an orderly, purposeful learning environment.

Table 3

Criteria established by the National Association of Secondary School Principals (1994)

Category	Criteria
Collaborative leadership	Involves teachers, staff members, parents, students, and the community in achieving the goals of the school
	Provides direction or focus to achieve the school's goals as a member of the school's leadership team

Models continuous professional growth

Teaches, coaches, and assists others in professional development that focuses on student learning

Balances management tasks with instructional leadership tasks

Utilizes effective problem-solving techniques

Establishes and maintains a positive school climate that reflects high student and staff morale

Interacts professionally and tactfully with others

Creates structures that enable teachers to develop an appreciation for each student's abilities

Acknowledges achievement or accomplishments of students and teachers

Communicates effectively orally and in writing

Models values, beliefs, and attitudes that inspire others to higher levels of performance

Develops and maintains dialogue with representatives of diverse community groups

Personalization

Curriculum,
instruction and
assessment

Improves teaching and learning by implementing programs and improvement efforts

Observes, supervises, and evaluates teachers and instructional programs to maximize the learning opportunities for every student

Analyzes multiple sources of data to improve instructional practices and outcomes

Demonstrates knowledge of learning, teaching, research and programs that maximize student performance

Facilitates in developing and maintaining co-curricular programs that complement the curriculum while fostering students' academic success

Data Collection and Analysis

The intent of this study was to develop a framework to help principals refine the current teacher selection process. From their knowledge and experience, a panel of experts developed consensus regarding the essential traits of teachers necessary to identify in the interview process, the interview questions designed to determine if these essential traits are present during the teacher selection process, and other sources of information utilized to identify the essential traits.

The Delphi method was selected as the data collection tool for this study because it provides the framework to develop group consensus. By definition, the Delphi technique is “a group process involving an interaction between the researcher and a group of identified experts on a specified topic, usually through a series of questionnaires” (Skutsch & Hall, 1973). For the purposes of this study, the complex topic was teacher selection. The knowledge and experiences of the panel of principals from a national perspective provided the underlying premise from which group consensus was be built. This consensus was developed through three rounds of inquiry.

The second area involved the specific interview questions principals ask during the teacher selection process designed to identify whether or not the teacher candidate possesses these essential traits. The third distinguished other sources of information principals examine to identify the traits of effective teachers. The knowledge and experiences of the panel of principals was the basis for these judgments.

The first round of the Delphi study included the three open-ended questions that were designed to solicit a broad range of responses. The questions were posed to a panel of principal experts. The questions were as follows:

1. What do expert principals across the nation perceive as the most important teacher traits to consider in the teacher selection process?
2. What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?
3. What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

Responses from the first round of the Delphi were consolidated. Separate lists were developed to reflect input for each question. Like responses from question one (characteristics) were consolidated. Like responses from question two (interview questions) were consolidated. Like responses from question three (other sources) were consolidated. Non-related or incomplete responses were eliminated. The Delphi II was then generated.

The second round of the Delphi study included instructions for the participants to rate each of the responses provided from the open-ended Delphi I. Specifically, participants were asked to rate their agreement that each of the items listed is a characteristic that is essential to identify in the interview process. Participants were asked to rate their agreement that each of the interview questions is an effective question to ask candidates in the selection process to identify the traits that are considered essential. Participants then indicated their level of agreement that each of the other sources of information related to the teacher selection process is essential. The method of rating was a Likert scale. Ratings ranged from a low of one (strongly disagree) to a high of five (strongly agree).

Responses from the second round of the Delphi were coded and entered into SPSS 11.0 for analysis. Means (average of responses) and standard deviations (distribution of responses on

the continuum) were computed for each response. Data were compiled and placed into the Delphi III instrument.

Delphi III included the group data from Delphi II as well as the individual responses generated from Delphi II. For this third round, participants were asked to review the group consensus and compare it with their individual responses. Participants were provided the opportunity to change their individual responses if they so chose. At the conclusion of the Delphi III, group consensus was formed. Results were shared with the panel.

To assess the validity of the questions selected for the first round of the Delphi prior to actual implementation, the Delphi pilot study was conducted. The experts who participated in the pilot study were doctoral candidates in the Educational Leadership and Policy Studies program at Virginia Polytechnic and State University and their advisors. The doctoral candidates are current public school administrators in the Commonwealth of Virginia. Participants in the pilot study represented assistant principals, principals, senior coordinators, program coordinators, assistant superintendents, and superintendents. Two participants were university professors. During the pilot phase, the researcher was able to determine changes that needed to be made to the questions, refine instructions, clarify terms, and develop the data tables for analysis in SPSS 11.0. Participants in the pilot study provided valuable feedback that contributed to the overall refinement of the study (see Appendices A, B, C & D).

Appendix A contains the instrument to collect data related to the professional background of each participant. The open-ended questions from Delphi I are included in Appendix B. The Delphi II instruments reflecting results from Delphi I, questions one and two, are in Appendices C and D respectively.

Summary

This chapter provided an overview for the methodology that was utilized in this study. A review of the scope of the panel selection and identification was presented. Selection procedures for the sample (panel of experts) was reviewed. Justification to indicate that the Delphi method was an effective methodology to use to build group consensus regarding the complex topic of teacher selection was demonstrated. A review of data collection, data analysis, and impact of data on subsequent rounds of the Delphi were discussed. The value of conducting a pilot study was shared.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to analyze three main areas within the teacher selection process. The first was the identification of teacher traits expert principals consider to be essential. The second area identified the specific interview questions expert principals ask during the teacher selection process designed to identify whether or not the teacher candidate possesses these essential traits. The third distinguished other sources of information expert principals examine to identify the traits of effective teachers. The knowledge and experiences of the panel of expert principals were the basis for these judgments.

The Delphi method was selected as the data collection instrument for this study because it provided the framework to develop group consensus. By definition, the Delphi technique is “a group process involving an interaction between the researcher and a group of identified experts on a specified topic, usually through a series of questionnaires” (Skutsch & Hall, 1973). For the purposes of this study, the complex topic was teacher selection. The knowledge and experiences of the panel of expert principals from a national perspective provided the underlying premise from which group consensus was built. This consensus was developed through three rounds of inquiry.

Development of Panel of Experts

The principals requested to serve on this study were those who have received national recognition related to performance in and contributions to the field of education. The National Association of Elementary School Principals named 60 principals as state principals of the year in 2003 based on specific criteria (Table 2). Ninety-three secondary principals met the criteria

established by the National Association of Secondary School Principals (Table 3) and were named as state principals of the year in 2003. From this population of 153 nationally recognized principals, a systematic sample of 25 was requested to serve on the Delphi panel. Systematic sampling is often used when a list of all members of the population is accessible (Hinkle, Wiersma & Jurs, 1998).

“A systematic sample is a probability sample in which every k th member of the population is selected and in which $1/k$ is the sampling fraction. The first member of the sample is determined by randomly selecting an integer between 1 and k ” (Hinkle, Wiersma & Jurs, 1998, p. 181).

All 153 named principals of the year were listed alphabetically (Appendix E) and were assigned two numbers. The first number represented the numerical position of each candidate in alphabetical order. The second number represented the systemic sampling position of each candidate. This second number determined the order of contact for each candidate.

An introductory letter along with the Delphi I instrument (Appendix F) was sent to candidates in the order of the contact number assignment. Initial contact to develop a panel of 25 expert principals began on September 30, 2004. The twenty-fifth principal agreed to participate in the study on October 24, 2004. A total of 132 principals was requested to serve on the panel before the desired sample size was obtained. Once the twenty-fifth response was received, no further candidates were contacted.

Delphi I

The first round of the Delphi study included the three open-ended questions that were designed to solicit a broad range of responses (Appendix G). The questions were posed to a panel of principal experts. The questions were

1. What do expert principals across the nation perceive as the most important teacher traits to consider in the teacher selection process?
2. What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?
3. What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

Responses from the first round of the Delphi were consolidated. Separate lists were developed to reflect responses to each question. Like responses from question one (essential traits) were consolidated. Like responses from question two (interview questions) were consolidated. Like responses from question three (other sources) were consolidated. Non-related or incomplete responses were eliminated.

The following table (Table 4) indicates the frequency of responses in each of the areas of inquiry for Delphi I. The first column lists the respondent number. The second column includes the frequency of responses related to traits considered essential to identify in the interview process. Column three contains the frequency of interview questions submitted designed to target the traits. The frequency of other sources used by expert principals to identify the essential traits is listed by respondent in column four.

Table 4

Frequency of Items in Delphi I by Participant

Respondent	Essential Traits	Interview Questions	Other Sources
1	9	5	6
2	5	4	4

Respondent	Essential Traits	Interview Questions	Other Sources
3	6	8	4
4	11	7	5
5	11	6	3
6	5	6	5
7	6	5	4
8	6	4	4
9	6	8	3
10	7	6	2
11	6	6	3
12	5	6	2
13	7	5	4
14	4	7	3
15	7	10	4
16	8	7	3
17	4	6	3
18	6	8	2
19	5	9	2
20	5	9	5
21	5	7	2
22	9	10	3
23	14	8	6

Respondent	Essential Traits	Interview Questions	Other Sources
24	3	3	2
25	6	4	3
Total Responses	166	164	87

Table 4 summarized the frequency of responses from each participant in the Delphi I. The number of responses indicating the traits considered essential in the teacher selection process was 166. The number of interview questions submitted to target the most essential teacher traits was 164. A total of 87 responses was submitted indicating other sources utilized to identify the essential traits of teachers.

Table 5 indicates measures of central tendency for Delphi I. Specific measures are included in column one. The second column indicates the mean and range of responses for traits considered essential to identify in the interview process. Column three includes the mean and range of responses for the interview questions developed to target the essential traits. The fourth column contains the mean and range of responses for other sources utilized by expert principals to identify the essential traits of teachers.

Measures of central tendency were summarized in Table 5. The range of responses for traits considered essential to identify in the interview process was three to 14. The mean response per participant was 6.64. The number of interview questions submitted ranged from three to 10. The mean number of interview questions submitted per participant was 6.56. The range for submissions for other sources utilized to identify the essential traits of teachers was the lowest. The range was two to six. The mean for these submissions was also the lowest. The mean per participant was 3.74.

Table 5

Delphi I: Measures of Central Tendency

Measure of Central Tendency	Essential Traits	Interview Questions	Other Sources
Mean Responses	6.64	6.56	3.74
Range of Responses	3 to 14	3 to 10	2 to 6

Table 6 shows the responses of expert principals regarding the traits considered essential to identify in the teacher selection process. The traits are ranked first in descending order by frequency. The traits are then listed alphabetically within each frequency range. The first and third columns list the essential traits submitted. Columns two and four indicate the frequency number.

Table 6

Delphi I Results: Essential Traits by Frequency

Essential Trait	Frequency	Essential Trait	Frequency
Content knowledge	10	Community involvement	1
Communication skills	7	Compassion	1
Flexibility	6	Confident	1
Creative	5	Courageous	1
Energetic	5	Critical thinking skills	1
Concerned for students	3	Curiosity	1
Dependable	3	Dedication	1

Essential Trait	Frequency	Essential Trait	Frequency
Desire to work with children	3	Desire to impact the future	1
Enthusiastic	3	Desire to teach and make a difference	1
Lifelong learner	3	Diverse thinking skills	1
Organized	3	Eager to learn	1
Sense of humor	3	Eager to please	1
Team player	3	Empathetic	1
Adaptable	2	Enjoys teaching	1
Cares for children	2	Ethical	1
Dynamic	2	Excited to teach	1
Experience	2	Happy	1
Honest	2	High expectations	1
Integrity	2	How the candidate “fits” within the program	1
Knowledge of best instructional practices	2	Intellectual ability	1
Knowledge of pedagogy	2	Intellectual capacity	1
Love of children	2	Interpersonal skills	1
Positive	2	Involvement in profession	1
Respects diversity	2	Kindness	1
Work ethic	2	Knowledge of curriculum	1

Essential Trait	Frequency	Essential Trait	Frequency
Ability to address individual needs of students	1	Knowledge of early adolescence	1
Ability to deliver content	1	Knowledge of planning process	1
Ability to get along with others	1	Knowledge of technology	1
Ability to relate to parents	1	Likes to work with children	1
Ability to relate to young people	1	Motivational	1
Ability to teach	1	Open minded	1
Ability to work well with a learning community	1	Openness	1
Ability to work well with parents	1	Optimistic	1
Ability to work well with students	1	Passion for teaching and learning	1
Ability to get along with others	1	Personal relations skills	1
Able to deliver content to different kinds of learners with success	1	Positive thinker	1

Essential Trait	Frequency	Essential Trait	Frequency
Able to manage multiple tasks	1	Professionalism	1
Advocate for children	1	Puts students first	1
Approachable	1	Reflective	1
Authentic	1	Reliable	1
Belief that all students can (and will) learn	1	Respects colleagues	1
Belief in students	1	Respects different learning styles	1
Brain research knowledge	1	Respects students	1
Character	1	Sincere	1
Child development expertise	1	Smart	1
Child development knowledge	1	Stands up for what is right	1
Classroom management	1	Teaching ability	1
Commitment	1	Understanding of assessments	1
Commitment to children	1	Understands data	1
Commitment to educating kids	1	Warm	1
Commitment to education	1	Well-spoken	1

Essential Trait	Frequency	Essential Trait	Frequency
Commitment to self	1	Willing to go the extra mile	1
Commitment to students	1	Willingness to help others	1
Common sense	1	Willingness to take on challenges	1
Community connections	1	Worldly	1

Table 6 shows the frequency of responses in numerical and alphabetical order beginning with the most frequently mentioned trait. A summary of the essential traits submitted by the panel of expert principals showed that 25 of the 166 essential traits were repeated among participants. This accounted for 81 of the 166 total submissions in Delphi I with the remaining 85 of the 166 total essential traits being single submissions.

Table 7 lists all interview questions submitted by the panel of expert principals designed to target the traits considered essential to identify in the teacher selection process. The frequency for all questions is one because no interview questions were duplicated. The interview questions are listed in alphabetical order in column one. The second column shows the frequency of response.

Table 7

Delphi I Results: Interview Questions by Frequency

Interview Question	Delphi I Frequency
Are you a leader or follower?	1
Ask for a response to a scenario about a challenging child.	1

Interview Question	Delphi I Frequency
Ask for a response to a scenario about a difficult parent.	1
Can all students learn?	1
Choose a section of your curriculum. How would you develop a unit around this section?	1
Describe a difficult situation you experienced with student behavior. Include the actions of the student, your actions, and the outcome.	1
Describe a lesson where you teach your content for a period of 90 minutes.	1
Describe an ideal classroom.	1
Describe an ideal literacy program.	1
Describe for me what an ideal student is.	1
Describe the best lesson you ever observed.	1
Describe the best lesson you ever taught.	1
Describe the characteristics of a good parent.	1
Describe the characteristics of a good student.	1
Describe the characteristics of a great communicator.	1
Describe the instructional strategies you use to increase the chances that student will be efficient and effective.	1
Describe your experiences in teaching.	1
Describe your experiences in working with other teachers.	1
Describe your student teaching experience.	1
Do you consider yourself to be an expert in your content area?	1

Interview Question	Delphi I Frequency
Do you feel comfortable presenting information to adults?	1
Do you hold conferences with students?	1
Do you plan to pursue your education further?	1
Give an example of a time when you differentiated your lesson.	1
Give an example of how you made a difference in the life of another person.	1
How are students able to communicate and share their learning with others?	1
How can a teacher make a positive impact on the life of a student?	1
How detailed are your lesson plans?	1
How do you accommodate students who learn quickly?	1
How do you accommodate students who learn slowly?	1
How do you address cultural diversity in your classroom?	1
How do you address the individual needs of your students?	1
How do you answer a parent who wants to know why you are not going through the textbook chapter by chapter?	1
How do you close lessons?	1
How do you define at-risk students?	1
How do you define success in teaching?	1
How do you ensure your students are learning?	1
How do you feel about being accountable for your test scores?	1

Interview Question	Delphi I Frequency
How do you feel about providing students with chances to make up failed tests?	1
How do you feel about your students and parents knowing your test scores?	1
How do you handle a student who is always late with assignments?	1
How do you handle different abilities in the classroom?	1
How do you handle it when a parent blames you for the child's poor performance?	1
How do you integrate essential questions into your lessons?	1
How do you involve parents in the education of their child?	1
How do you keep students actively engaged in high level activities?	1
How do you know when your students fully understand the lesson?	1
How do you open lessons?	1
How do you plan daily lessons?	1
How do you plan to record parental contacts?	1
How do you plan units of study?	1
How do you teach reading in your content area?	1
How do you teach writing in your content area?	1
How important is reading and writing in the content areas?	1
How is a teacher also a leader?	1
How often will you call parents?	1

Interview Question	Delphi I Frequency
How should objectives be constructed?	1
How well did your college prepare you for student teaching?	1
How well do you think your student teaching prepared you for this potential job?	1
How will you accommodate a non-reader in your class?	1
How will you assess yourself as a teacher?	1
How will you be a steward of good deeds to your colleagues?	1
How will you grade students on homework?	1
How will you group your students to maximize learning?	1
How will you meet the needs of all students?	1
How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	1
How will you pursue ongoing professional development?	1
How will you reflect on your own teaching?	1
How will you work to address closing the achievement gap?	1
How would you develop a lesson plan with a team of teachers?	1
How would you differentiate assessment methods?	1
How would you differentiate for an ESL student?	1
How would you handle a situation where you thought a parent completed a project for his/her child?	1
How would you handle a student who refused to complete an assigned	1

Interview Question	Delphi I Frequency
task?	
How would you handle cheating in your classroom?	1
How would you handle conflict with another teacher?	1
How would you handle, (provide a sample scenario of a typical class and throw in “monkey wrenches”, an emergency drill, sudden illness, announcement of an early dismissal) to get a picture of their flexibility in dealing with change.	1
How would you integrate technology in your classroom?	1
How would you promote acceptance, tolerance, and diversity in the classroom?	1
How would you provide for different learning styles?	1
How would you structure a parent-teacher conference?	1
How would you use the administrators to help you?	1
How would you work with students who are below grade level?	1
How would your previous students describe you?	1
If all students failed a quiz, what would you do?	1
If I asked your cooperating teacher about you, what would they say?	1
If students complete their work early, what would they be doing in your classroom?	1
If you could change anything about yourself, what would it be?	1
If you could change one thing about yourself, what would it be?	1

Interview Question	Delphi I Frequency
If you heard another teacher speaking inappropriately of a student, how would you handle it?	1
If you were given \$1,000.00 to use in your classroom, what would you buy?	1
In what ways do you apply the information on “brain research” in your teaching strategies?	1
In what ways do you remain “current” on educational issues and instructional practices?	1
Is it important for the students be your friend?	1
Is it important for the students to like you?	1
List three adjectives to describe yourself.	1
Provide an example of an open-ended question.	1
Provide an example where you resolved conflict with another person.	1
Provide me with an example of a high level question. Why is it high level?	1
Provide me with an example of a quality objective.	1
Should special education children be included in the regular classroom?	1
Should students be promoted to the next grade if they can’t read?	1
Should teachers be required to submit lesson plans to the administration? Why or why not?	1
Should the objectives be in the curriculum or should teachers develop their	1

Interview Question	Delphi I Frequency
own?	
Tell me how the different learning styles of children impact your lesson planning.	1
Think of your favorite topic. Describe how you would teach that topic.	1
Walk me through how you would plan tomorrow's lesson.	1
Walk me through one of your teaching days.	1
What are some personality characteristics you find undesirable in people?	1
What are the most important parts of a lesson?	1
What are the qualities of a good team player?	1
What are the three most important rules you would have in your classroom?	1
What are the unique needs of the middle level student (physical, emotional, intellectual)?	1
What are your goals five years from now? Ten?	1
What are your professional aspirations?	1
What direct impact will No Child Left Behind have in your classroom?	1
What do you enjoy most about teaching?	1
What do you remember most about your own education?	1
What do you think is special about our school?	1
What evidence would I see in your classroom and from your practices to indicate that you believe all students will learn?	1

Interview Question	Delphi I Frequency
What evidence would I see in your classroom that promotes the value and dignity of all students?	1
What have you done in previous districts to improve teaching with students?	1
What have you learned about the way the human brain learns?	1
What is a rubric and how would you use it to support instruction?	1
What is an achievement gap?	1
What is an example of a high level activity?	1
What is an example of a project your students completed?	1
What is cooperative learning and how would you use it in the classroom?	1
What is direct instruction?	1
What is the best deterrent to student misbehavior?	1
What is the best way to determine if students understand the lesson?	1
What is the greatest strength you bring to the classroom?	1
What is the most effective way to communicate with parents?	1
What is your greatest life accomplishment?	1
What is your idea of an ideal administration?	1
What is your opinion of No Child Left Behind?	1
What is your philosophy of education?	1
What kind of students do you like to work with?	1
What new ideas do you bring to this experience?	1

Interview Question	Delphi I Frequency
What qualities do you have that make you an effective teacher?	1
What questions do you have for me?	1
What sets you apart from the other candidates?	1
What sources can be used for content knowledge, other than textbooks?	1
What sources of assistance do you think would be important to you as a new teacher in this school?	1
What specifically interests you in this position?	1
What techniques will you use to manage the classroom?	1
What type of students do you think you work best with?	1
What was the greatest challenge in student teaching?	1
What was your biggest success in student teaching?	1
What was your impression of our school when you walked in today?	1
What will you bring to our district that will benefit our students and staff?	1
What would I see if I walked into your classroom unannounced?	1
What would you do if a student told you he/she was homeless?	1
What would you do if 50% of your students failed a test?	1
When is it appropriate to use drill and practice strategies?	1
When is it okay to give up on a child?	1
When should the principal become involved in assisting with your classroom discipline?	1
Where do you see yourself in the next five years?	1

Interview Question	Delphi I Frequency
Why are you interested in our district?	1
Why do you want to be a teacher?	1
Why do you want to teach in our district?	1
Why have you chosen teaching as a career direction?	1
Why is parental contact important?	1

Table 7 provides a summary of the interview questions submitted by the panel of expert principals. All 164 interview questions were single submissions.

Table 8 shows the responses of expert principals regarding the other sources utilized to identify the essential traits of teachers in the teacher selection process. The traits are ranked first in descending order by frequency. The traits are then listed alphabetically within each frequency range. The first column lists the other sources submitted. Column two indicates the frequency number.

Table 8

Delphi I Results: Other Sources by Frequency

Other Sources	Delphi I Frequency
References	9
Certification	6
Grades	6
Credentials	3
Evaluations	3

Other Sources	Delphi I Frequency
Experience	3
Appearance	2
Collegiate preparation	2
Employment history	2
Interview score	2
Observations	2
Portfolios	2
Recommendations	2
Student teaching feedback	2
Transcript	2
Work experience	2
Ability to discuss current literature	1
Academic history	1
Ancillary materials	1
Application	1
Attendance history with previous employer	1
Awards	1
Background check	1
Balance of references to include work, personal and community	1
Books read	1
Committee review	1

Other Sources	Delphi I Frequency
Communication skills	1
Community experience	1
Degree earned	1
Direct contact with those providing recommendations	1
Educational background	1
Effective use of communication skills	1
Endorsements	1
First impression – gut feeling	1
How often the candidate mentions “kids” or “students” in their answers	1
Job history	1
Letters of recommendation	1
Model lessons	1
Opinion of previous administrator	1
Personal references	1
Previous observations	1
Previous teaching experience	1
Ratings from previous school district	1
Ratings from student teaching	1
Real-world work experiences	1
Research knowledge	1

Other Sources	Delphi I Frequency
Score on human resources instrument	1
Student work	1
Talk with the school secretary who answers the phone when I call. (They frequently are able to provide insights on the candidate's character, interpersonal relationships, etc.)	1
University attended	1
University preparation	1
Volunteer service	1
Willingness to sponsor extra-curricular activities	1

Table 8 summarized the other sources of information utilized to identify the essential traits of teachers submitted by the panel of experts. This summary showed that 16 of the 87 other sources were repeated among participants. This accounted for 50 of the 87 total submissions in Delphi I. The remaining 37 of the 87 total other sources submitted by the panel were single submissions. Table 8 shows these other sources in alphabetical order.

Delphi II

The second round of the Delphi study included instructions (Appendix H) for the participants to rate each of the responses provided from the open-ended Delphi I. The instructions, along with the Delphi II instrument (Appendices I, J & K) were sent to candidates on November 4, 2004. A return date of November 11 was requested. Twenty-two responses were received by November 29. Throughout the response phase, follow-up contacts were made via telephone and electronic mail.

In Delphi II, participants were asked to rate their agreement that each of the items listed is a characteristic that is essential to identify in the interview process. Participants were asked to rate their agreement that each of the interview questions is an effective question to ask candidates in the selection process to identify the traits that are considered essential. Participants then indicated their level of agreement that each of the other sources of information related to the teacher selection process is essential. The method of rating was a Likert scale. Ratings ranged from a low of one (strongly disagree) to a high of five (strongly agree).

Responses from the second round of the Delphi were coded and entered into SPSS 11.0. Means (average of responses) and standard deviations (distribution of responses on the continuum) were computed for each response. Data were compiled. Results with a mean of 4.0 and above were considered most essential and were placed into the Delphi III instrument. Responses with a mean of below 4.0 were not considered most essential and were not included for further consideration in Delphi III. Tables 9, 10, and 11 illustrate where the mean of 4.0 fell in the continuum of responses by placement of a line in the table. Items above the line have a mean of 4.0 or higher. Items below the line have a mean of below 4.0.

A summary of the ratings of the essential traits submitted by the panel of expert principals showed that 69 of the 110 traits considered most essential had a ranking of 4.0 or higher. The mean of the remaining essential traits had a mean of below 4.0.

A total of 25 essential traits were repeated by more than one respondent in Delphi I. Of these 25 essential traits with multiple submissions, a total of 21 had means above 4.0 in Delphi II. The remaining four essential traits with multiple submissions in Delphi I were not considered most essential in Delphi II. The essential trait adaptable was repeated two times in Delphi I, but only had a mean of 3.55 in Delphi II. The essential trait dynamic was submitted twice in Delphi

I, but only had a mean of 3.14 in Delphi II. Experience was repeated twice in Delphi I, with a mean of 3.23 in Delphi II. Lifelong learner was repeated three times in Delphi I, with a mean of only 3.19 in Delphi II. All other repeated submissions from Delphi I demonstrated a mean of above 4.0 in Delphi II, meaning that they were considered among the most essential traits submitted through both rounds of inquiry.

Essential traits identified by single submissions in Delphi I comprised the remaining most essential traits in Delphi II. The trait with the most submissions in Delphi I (content knowledge with ten submissions) maintained the highest mean in Delphi II (4.73).

The following table (Table 9) shows the results related to essential traits in Delphi II. Column one lists the essential traits ranked in descending order by Delphi II mean. The Delphi II mean is listed in the second column. The standard deviation from Delphi II is reported for each essential trait in column three. A horizontal line has been included in the table to differentiate those essential traits with a mean of below 4.0 and those essential traits with means of 4.0 and above.

Table 9

Delphi II Results: Essential Traits and Standard Deviations Ranked by Mean

Essential Trait	Delphi II Mean	Standard Deviation
Content knowledge	4.7273	.45584
Commitment	4.5909	.50324
Ability to get along with others	4.5000	.51177
Ability to address individual needs of students	4.4545	.50965
Belief in students	4.4545	.50965

Essential Trait	Delphi II Mean	Standard Deviation
High expectations	4.4091	.50324
Honest	4.4091	.50324
Energetic	4.3636	.49237
Sense of humor	4.3636	.49237
Common sense	4.3182	.47673
Communication skills	4.3182	.47673
Dependable	4.3182	.47673
Respects students	4.3182	.47673
Willingness to help others	4.3182	.47673
Ability to work well with parents	4.2727	.45584
Creative	4.2727	.45584
Flexibility	4.2727	.45584
Integrity	4.2727	.45584
Knowledge of curriculum	4.2727	.45584
Positive	4.2727	.45584
Respects colleagues	4.2727	.45584
Work ethic	4.2727	.45584
Happy	4.2273	.42893
Interpersonal skills	4.2273	.42893
Likes to work with children	4.2273	.42893
Respects diversity	4.2273	.42893

Essential Trait	Delphi II Mean	Standard Deviation
Sincere	4.2273	.42893
Teaching ability	4.2273	.42893
Team player	4.2273	.42893
Compassion	4.1818	.39477
Courageous	4.1818	.39477
Enthusiastic	4.1818	.58849
Ethical	4.1818	.39477
Excited to teach	4.1818	.39477
Kindness	4.1818	.50108
Knowledge of best instructional practices	4.1818	.39477
Knowledge of pedagogy	4.1818	.39477
Optimistic	4.1818	.39477
Organized	4.1818	.39477
Passion for teaching and learning	4.1818	.39477
Reliable	4.1818	.39477
Respects different learning styles	4.1818	.39477
Understands data	4.1818	.39477
Willing to go the extra mile	4.1818	.39477
Willingness to take on challenges	4.1818	.39477
Commitment to educating kids	4.1364	.35125
Commitment to students	4.1364	.35125

Essential Trait	Delphi II Mean	Standard Deviation
Concerned for students	4.1364	.35125
Critical thinking skills	4.1364	.35125
Dedication	4.1364	.35125
Desire to teach and make a difference	4.1364	.35125
Enjoys teaching	4.1364	.35125
Intellectual capacity	4.1364	.35125
Love of children	4.1364	.35125
Motivational	4.1364	.35125
Personal relations skills	4.1364	.46756
Professionalism	4.1364	.35125
Ability to teach	4.0909	.42640
Commitment to education	4.0909	.29424
Positive thinker	4.0909	.29424
Desire to work with children	4.0455	.21320
Empathetic	4.0455	.37509
Able to deliver content to different kinds of learners with success	4.0000	.43644
Able to manage multiple tasks	4.0000	.00000
Belief that all students can (and will) learn	4.0000	.30861
Cares for children	4.0000	.30861
Commitment to children	4.0000	.30861

Essential Trait	Delphi II Mean	Standard Deviation
Puts students first	4.0000	.30861
Stands up for what is right	4.0000	.43644
Character	3.9545	.37509
Classroom management	3.9545	.37509
Understanding of assessments	3.9545	.21320
Ability to work well in a learning community	3.9091	.42640
Approachable	3.9091	.29424
Commitment to self	3.9091	.42640
Confident	3.9091	.29424
Open minded	3.9091	.42640
Openness	3.9091	.29424
Ability to work well with students	3.8636	.46756
How the candidate “fits” within the program	3.8636	.46756
Knowledge of early adolescence	3.8636	.35125
Well-spoken	3.8636	.35125
Knowledge of technology	3.8182	.39477
Eager to please	3.7273	.45584
Ability to relate to young people	3.6364	.58109
Ability to get along with others	3.5909	.50324
Advocate for children	3.5909	.59033
Adaptable	3.5455	.50965

Essential Trait	Delphi II Mean	Standard Deviation
Ability to relate to parents	3.3636	.49237
Authentic	3.3182	.56790
Lifelong learner	3.3182	.56790
Desire to impact the future	3.2727	.45584
Ability to deliver content	3.2273	.42893
Child development knowledge	3.2273	.42893
Experience	3.2273	.42893
Knowledge of planning process	3.2273	.42893
Worldly	3.2273	.52841
Curiosity	3.1818	.39477
Reflective	3.1818	.39477
Child development expertise	3.1364	.35125
Community involvement	3.1364	.35125
Dynamic	3.1364	.35125
Warm	3.1364	.35125
Eager to learn	3.0909	.42640
Intellectual ability	3.0909	.52636
Diverse thinking skills	3.0455	.37509
Brain research knowledge	3.0000	.43644
Community connections	3.0000	.43644
Involvement in profession	3.0000	.53452

Essential Trait	Delphi II Mean	Standard Deviation
Smart	2.9091	.42640

Table 9 provided a summary of the ratings of the essential traits submitted by the panel of expert principals. A total of 69 of the 110 traits considered most essential had a ranking of 4.0 or higher. The mean of the remaining essential traits had a mean of below 4.0.

The standard deviation ranged from .0000 for the trait of able to manage multiple tasks to .5903 for the trait of advocate for children. All members of the panel responded with the same rating for the trait able to manage multiple tasks. The variance among responses was the greatest for the trait of advocate for children.

A summary of the ratings of the interview questions submitted by the panel of expert principals showed that 63 of the 164 interview questions had a mean of 4.0 or above . The mean of the remaining interview questions fell below 4.0. None of the interview questions were repeated by more than one respondent in Delphi I.

Table ten shows the results related to interview questions developed to target essential traits in Delphi II. Column one lists the interview questions ranked in descending order by Delphi II mean. The Delphi II mean is listed in the second column. The standard deviation from Delphi II is reported for each essential trait in column three. A horizontal line has been included in the table to differentiate those interview questions with a mean of below 4.0 and those interview questions with means of 4.0 and above.

Table 10

Delphi II Results: Interview Questions and Standard Deviations Ranked by Mean

Interview Question	Delphi II Mean	Standard Deviation
How will you meet the needs of all learners?	4.8182	.39477
What questions do you have for me?	4.7273	.45584
How do you feel about being accountable for your test scores?	4.6818	.42640
How important is reading and writing in the content areas?	4.6818	.47673
How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	4.6818	.56790
What was your impression of our school when you walked in today?	4.6818	.47673
How can a teacher make a positive impact on the life of a student?	4.6364	.43644
Provide me with an example of a high level question. Why is it high level?	4.6364	.58109
Choose a section of your curriculum. How would you develop a unit around this section?	4.5909	.50324
Describe a difficult situation you experienced with student behavior. Include the actions of the student,	4.5909	.59033

Interview Question	Delphi II Mean	Standard Deviation
your actions, and the outcome.		
Give an example of how you made a difference in the life of another person.	4.5909	.59033
How do you handle it when a parent blames you for the child's poor performance?	4.5909	.37509
How do you address cultural diversity in your classroom?	4.5455	.47673
How do you address the individual needs of your students?	4.5455	.50965
Describe the characteristics of a great communicator.	4.5000	.51177
How do you define success in teaching?	4.5000	.29424
What direct impact will No Child Left Behind have in your classroom?	4.3636	.49237
How do you teach reading in your content area?	4.3182	.47673
What will you bring to our district that will benefit our students and staff?	4.3182	.47673
How will you accommodate a non-reader in your class?	4.2727	.55048
How would you handle a student who refused to complete an assigned task?	4.2727	.45584
What is the greatest strength you bring to the	4.2727	.45584

Interview Question	Delphi II Mean	Standard Deviation
classroom?		
How would you promote acceptance, tolerance, and diversity in the classroom?	4.2273	.42893
What evidence would I see in your classroom that promotes the value and integrity of all students?	4.2273	.52841
What sources of assistance do you think would be important to you as a new teacher in this school?	4.2273	.42893
Why have you chosen teaching as a career direction?	4.2273	.42893
How do you keep students actively engaged in high level activities?	4.1818	.42640
How would you work with students who are below grade level?	4.1818	.50108
What is an example of a high level activity?	4.1818	.50108
What is the best way to determine if students understand the lesson?	4.1818	.39477
What qualities do you have that make you an effective teacher?	4.1818	.39477
Why are you interested in our district?	4.1818	.39477
How do you teach writing in your content area?	4.1364	.35125
How will you be a steward of good deeds to your colleagues?	4.1364	.46756

Interview Question	Delphi II Mean	Standard Deviation
How will you pursue ongoing professional development?	4.1364	.35125
How would you handle a situation where you thought a parent completed a project for his/her child?	4.1364	.46756
How would you integrate technology in your classroom?	4.1364	.35125
What evidence would I see in your classroom and from your practices to indicate that you believe all students will learn?	4.1364	.46756
What sets you apart from the other candidates?	4.1364	.35125
Why do you want to teach in our district?	4.1364	.46756
Why is parental contact important?	4.1364	.35125
Describe the instructional strategies you use to increase the chances that students will be efficient and effective.	4.0909	.29424
How do you ensure your students are learning?	4.0909	.51177
How will you group your students to maximize learning?	4.0909	.42640
How will your work to address closing the achievement gap?	4.0909	.42640

Interview Question	Delphi II Mean	Standard Deviation
How would you provide for different learning styles?	4.0909	.42640
What is a rubric and how would you use it to support instruction?	4.0909	.42640
What is an achievement gap?	4.0909	.42640
Describe an ideal classroom.	4.0455	.37509
Describe the best lesson you ever observed.	4.0455	.37509
How do you handle a student who is always late with assignments?	4.0455	.47673
How do you handle different abilities in the classroom?	4.0455	.37509
Tell me how the different learning styles of children impact your lesson planning.	4.0455	.48573
What do you do if 50% of your students failed a test?	4.0455	.57547
What kind of students do you like to work with?	4.0455	.48573
What would you do if a student told you he/she was homeless?	4.0455	.65300
Describe a lesson where you teach your content for a period of 90 minutes.	4.0000	.43644
How are students able to communicate and share their learning with others?	4.0000	.45584
If all students failed a quiz, what would you do?	4.0000	.43644

Interview Question	Delphi II Mean	Standard Deviation
If students complete their work early, what would they be doing in your classroom?	4.0000	.43644
If you were given \$1,000.00 to use in your classroom, what would you buy?	4.0000	.43644
What do you enjoy most about teaching?	4.0000	.53452
What techniques will you use to manage the classroom?	4.0000	.43644
Describe an ideal literacy program.	3.9545	.37509
What are the qualities of a good team player?	3.9545	.37509
Do you plan to pursue your education further?	3.9091	.29424
How do you involve parents in the education of their child?	3.9091	.59033
What is your philosophy of education?	3.9091	.42640
What would I see if I walked into your classroom unannounced?	3.9091	.61016
When is it okay to give up on a child?	3.9091	.86790
How do you know when your students fully understand the lesson?	3.8636	.39477
Give an example of a time when you differentiated your lesson.	3.8182	.39477
How would you differentiate assessment methods?	3.8182	.39477

Interview Question	Delphi II Mean	Standard Deviation
In what ways do you remain "current" on educational issues and instructional practices?	3.8182	.39477
What are your goals five years from now? Ten?	3.8182	.39477
What are your professional aspirations?	3.8182	.39477
What new ideas do you bring to this experience?	3.8182	.50108
Why do you want to be a teacher?	3.8182	.50108
How will you reflect in your own teaching?	3.7727	.42893
How would you handle cheating in your classroom?	3.7727	.42893
What are the three most important rules you would have in your classroom?	3.7727	.42893
What is the most effective way to communicate with parents?	3.7727	.42893
Where do you see yourself in the next five years?	3.7727	.42893
Describe the best lesson you ever taught.	3.7273	.45584
How do you plan units of study?	3.7273	.42640
What do you remember most about your own education?	3.7273	.45584
What is the best deterrent to student misbehavior?	3.7273	.45584
What is your opinion of No Child Left Behind?	3.7273	.45584
Describe the characteristics of a good parent.	3.6818	.47673
How do you open lessons?	3.6818	.35125

Interview Question	Delphi II Mean	Standard Deviation
How will you assess yourself as a teacher?	3.6818	.47673
How would you develop a lesson plan with a team of teachers?	3.6818	.47673
Provide an example where you resolved conflict with another person.	3.6818	.47673
What are the unique needs of the middle level student (physical, emotional, intellectual)?	3.6818	.56790
When should the principal become involved in assisting with your classroom discipline?	3.6818	.47673
Describe your experiences in teaching.	3.6364	.49237
What are some personality characteristics you find undesirable in people?	3.6364	.49237
How do you integrate essential questions into your lessons?	3.5909	.59033
List three adjectives to describe yourself.	3.5909	.50324
What do you think is special about our school?	3.5000	.51177
What type of students do you think you work best with?	3.5000	.51177
What specifically interests you in this position?	3.4545	.50965
How would you structure a parent-teacher conference?	3.4091	.50324

Interview Question	Delphi II Mean	Standard Deviation
How would you use the administrators to help you?	3.4091	.50324
If I asked your cooperating teacher about you, what would they say?	3.4091	.50324
What is an example of a project your students completed?	3.4091	.50324
Do you hold conferences with students?	3.3636	.49237
If you could change one thing about yourself, what would it be?	3.3636	.49237
What is direct instruction?	3.3636	.49237
What was the greatest challenge in student teaching?	3.3636	.49237
Can all students learn?	3.3182	.56790
Describe your student teaching experience.	3.3182	.47673
How do you accommodate students who learn slowly?	3.3182	.39477
How do you feel about your students and parents knowing your test scores?	3.3182	.55048
How often will you call parents?	3.3182	.47673
If you could change anything about yourself, what would it be?	3.3182	.47673
Provide an example of an open-ended question.	3.3182	.47673
What are the most important parts of a lesson?	3.3182	.47673

Interview Question	Delphi II Mean	Standard Deviation
What sources can be used for content knowledge, other than textbooks?	3.3182	.47673
Describe your student teaching experience.	3.2727	.45584
How do you feel about providing students with chances to make up failed tests?	3.2727	.47673
How would you handle conflict with another teacher?	3.2727	.45584
If you heard another teacher speaking inappropriately of a student, how would you handle it?	3.2727	.45584
Provide me with an example of a quality objective.	3.2727	.45584
Think of your favorite topic. Describe how you would teach that topic.	3.2727	.45584
What have you learned about the way the human brain learns?	3.2727	.45584
What is cooperative learning and how would you use it in the classroom?	3.2727	.45584
What was your biggest success in student teaching?	3.2727	.45584
Describe the characteristics of a good student.	3.2273	.42893
How do you plan daily lessons?	3.2273	.47673
How would you differentiate for an ESL student?	3.2273	.42893
Is it important for students to like you?	3.2273	.42893

Interview Question	Delphi II Mean	Standard Deviation
Walk me through one of your teaching days.	3.2273	.42893
Describe for me what an ideal student is.	3.1818	.39477
How do you accommodate students who learn quickly?	3.1818	.29424
How do you close lessons?	3.1818	.21320
How should objectives be constructed?	3.1818	.50108
How well do you think your student teaching prepared you for this potential job?	3.1818	.39477
How would your previous students describe you?	3.1818	.39477
Is it important for students to be your friend?	3.1818	.39477
Should the objectives be in the curriculum or should teachers develop their own?	3.1818	.39477
Walk me through how you would plan tomorrow's lesson.	3.1818	.39477
What have you done in previous districts to improve teaching with students?	3.1818	.39477
What is your greatest life accomplishment?	3.1818	.39477
Are you a leader or a follower?	3.1364	.35125
How will you grade students on homework?	3.1364	.35125
Do you consider yourself to be an expert in your content area?	3.0909	.42640

Interview Question	Delphi II Mean	Standard Deviation
How is a teacher also a leader?	3.0909	.29424
In what ways do you apply the information on "brain research" in your teaching strategies?	3.0909	.52636
Should students be promoted to the next grade if they can't read?	3.0909	.42640
When is it appropriate to use drill and practice strategies?	3.0909	.42640
Describe your experiences in working with other teachers.	3.0455	.37509
How well did your college prepare you for student teaching?	3.0455	.21320
What is your idea of an ideal administration?	3.0455	.48573
Do you feel comfortable presenting information to adults?	2.9545	.37509
How do you answer a parent who wants to know why you are not going through the textbook chapter by chapter?	2.9545	.50965
How would you handle (provide a sample scenario of a typical class and throw in "monkey wrenches" ...) to get a picture of their flexibility in dealing with change.	2.9545	.37509

Interview Question	Delphi II Mean	Standard Deviation
Ask for a response to a scenario about a challenging child.	2.9091	.42640
How detailed are your lesson plans?	2.9091	.49237
How do you define at-risk students?	2.9091	.39477
How do you plan to record parental contacts?	2.9091	.52841
Should teachers be required to submit lesson plans to the administration? Why or why not?	2.8182	.50108
Should special education children be included in the regular classroom?	2.7727	.52841
Ask for a response to a scenario about a difficult parent.	2.7273	.45584

Table 10 showed that 63 of the 164 interview questions submitted by the panel of expert principals had a mean of 4.0 or above . The mean of the remaining interview questions fell below 4.0. None of the interview questions were repeated by more than one respondent in Delphi I.

The standard deviation ranged from .21320 to .86790. The variance of responses was the least for the interview question, “How do you close lessons?” The variance among responses was the greatest for the interview question, “When is it okay to give up on a child?”

Table 11 shows the results related to other sources utilized to identify the essential traits of teachers in Delphi II. Column one lists the other sources ranked in descending order by Delphi II mean. The Delphi II mean is listed in the second column. The standard deviation from

Delphi II is reported for each other source in column three. A horizontal line has been included in the table to differentiate those other sources with a mean of below 4.0 and those other sources with means of 4.0 and above.

Table 11

Delphi II Results: Other Sources and Standard Deviations Ranked by Mean

Other Sources	Delphi II Mean	Standard Deviation
Communication skills	4.5455	.50965
Effective use of communication skills	4.4545	.59580
Balance of referrals to include work, personal and community	4.3636	.65795
Personal references	4.3182	.47673
Recommendations	4.2727	.45584
References	4.1818	.39477
Letters of recommendation	4.1364	.35125
Certification	4.0909	.61016
Willingness to sponsor extra-curricular activities	4.0909	.52636
Score on human resources instrument	4.0455	.65300
Student teaching feedback	4.0000	.30861
University preparation	4.0000	.30861
Evaluations	3.9545	.37509
Application	3.9091	.61016
Experience	3.9091	.29424

Other Sources	Delphi II Mean	Standard Deviation
Previous teaching experience	3.9091	.42640
Observations	3.8636	.35125
Opinion of previous administrator	3.8636	.35125
Portfolios	3.8636	.35125
Ratings from student teaching	3.8636	.46756
Collegiate preparation	3.8182	.58849
Educational background	3.8182	.66450
Job history	3.8182	.50108
Previous observations	3.8182	.39477
Ratings from previous school district	3.8182	.39477
Credentials	3.7727	.75162
Employment history	3.7727	.42893
Real-world work experiences	3.7727	.42893
Work experience	3.7273	.45584
Background check	3.5909	.50324
Endorsements	3.5455	.50965
Awards	3.5000	.59761
Appearance	3.4545	.50965
Attendance history with previous employer	3.4091	.59033
First impression - gut feeling	3.4091	.59033
Transcript	3.3182	.47673

Other Sources	Delphi II Mean	Standard Deviation
Committee review	3.2727	.55048
Degree earned	3.2727	.55048
Interview score	3.2727	.45584
Academic history	3.1818	.39477
Books read	3.1818	.66450
Direct contact with those providing Recommendations	3.1818	.39477
Model lessons	3.1818	.39477
University attended	3.1818	.39477
Grades	3.1364	.35125
Research knowledge	3.0909	.29424
Talk with the school secretary who answers the phone when I call...	3.0909	.29424
Volunteer service	3.0909	.29424
How often the candidate mentions "kids" or "students" in their responses	3.0455	.37509
Student work	3.0455	.37509
Community experience	2.9545	.65300
Ability to discuss current literature	2.9091	.52636
Ancillary materials	2.9091	.42640

A summary of the ratings considering other sources of information utilized by expert principals to identify the essential traits of teachers showed that 12 of the 53 other sources had a mean of 4.0 or above. The mean of the remaining other sources fell below 4.0.

A total of 16 other sources were repeated by more than one respondent in Delphi I. Of these 16 other sources with multiple submissions, only three had mean ratings of 4.0 or higher in Delphi II. These include certification with a mean of 4.0909, recommendations with a mean of 4.2727, and references with a mean of 4.1818.

Other sources identified by single submissions in Delphi I comprised the nine other sources considered most essential in Delphi II. The other source with the most submissions in Delphi I (references) was not the other source with the highest mean in Delphi II. The other source with the highest mean in Delphi II (communication skills) resulted from a single submission in Delphi I.

The table also showed that the standard deviation ranged from .29424 for the other source of experience to .75162 for the other source of credentials. Panel members responded most consistently when rating the other source of experience. The variance among responses was the greatest for the other source of credentials.

The purpose of the Delphi Method is to build consensus among a panel of experts. In the second round of the Delphi for this study, the participants rated each of the responses provided from the open-ended Delphi I. Specifically, participants were asked to rate their agreement that each of the items listed is a characteristic that is essential to identify in the interview process. Participants were asked to rate their agreement that each of the interview questions is an effective question to ask candidates in the selection process to identify the traits that are considered essential. Participants then indicated their level of agreement that each of the other

sources of information related to the teacher selection process is essential. The method of rating was a Likert scale. Ratings ranged from a low of one (strongly disagree) to a high of five (strongly agree).

Responses from the second round of the Delphi were coded and entered into SPSS 11.0. Means (average of responses) and standard deviations (distribution of responses on the continuum) were computed for each response. Data were compiled. Results with a mean of 4.0 and above were considered most essential and were placed into the Delphi III instrument. All other responses with a mean below 4.0 were eliminated from the Delphi III.

Delphi III

Each Delphi III instrument included the group mean for each item from Delphi II as well as the individual responses for each panel member generated from Delphi II. For this third round, participants were asked to review the group consensus and compare it with their own individual responses. Participants were provided the opportunity to change their individual responses if they so chose. At the conclusion of the Delphi III, it was determined that group consensus had been formed.

The Delphi III instruments were sent to each of the 22 panel members who returned Delphi II responses. Delphi III instructions (Appendix L) and Delphi III instrument (Appendix M) was sent to each panel member on December 7, 2004. A return date of December 17, 2004, was requested. Follow-up contact was made with participants via telephone and electronic mail. Of the 22 recipients, 21 panel members responded to the Delphi III instrument by January 3, 2005. A total of seven panel members made changes to their Delphi II individual ratings after reviewing the Delphi II group means. Fourteen panel members indicated that no changes were

necessary to their individual ratings of items after reviewing the group data. One panel member did not respond.

The following table (Table 12) shows the changes made in Delphi III by each participant in each area of inquiry. Column one lists participants by number. The second column indicates the number of changes made to individual ratings of each essential trait by each participant. Column three shows the number of changes made to individual ratings of each interview question by participant. The final column indicates the number of changes made to individual ratings of each other source considered essential to identify in the teacher selection process.

Table 12

Summary of Delphi III Changes by Participant

Participant Number	Number of changes to: Essential Traits	Number of changes to: Interview Questions	Number of changes to: Other Sources
1	0	8	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	3	4	0
8	0	0	0
9	0	0	0

Participant Number	Number of changes to: Essential Traits	Number of changes to: Interview Questions	Number of changes to: Other Sources
10	0	2	1
11	0	5	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	6	0
18	0	0	0
19	0	0	0
20	No response to Delphi III Instrument		
21	0	0	0
22	0	0	0

Table 12 shows that of the participants who submitted changes, the range of changes was three to eight. The mean number of changes made was 5.8. Three panelists made changes in one category only. Two panelists made changes to two categories. No panelists made changes to all three categories.

All changes made by panelists indicated an increase in numerical value. No panel members made changes to decrease their individual mean. Additionally, all changes were within one numerical rating of the previous rating.

Table 13 contains a summary of the Delphi III changes made in the area of essential traits. The traits that were changed are listed in column one by numerical assignment. Column two lists the specific essential trait. The numerical change made is listed in column three.

Table 13

Summary of Changes to Essential Traits in Delphi III

Essential Trait Number	Item	Change
trait 60	Happy	4 to 5
trait 62	Honest	4 to 5
trait 78	Love of children	4 to 5

Delphi III changes to essential traits are included in Table 13. The table shows that three changes were made in the area of essential traits. These traits include happy, honest, and love of children. In each instance, the ratings increased from four to five.

The following table (Table 14) includes a summary of the Delphi III changes made in the area of interview questions. The interview questions that were changed are listed in column one by numerical assignment. Column two lists the specific interview questions. The numerical change made is listed in column three.

Table 14

Summary of Changes to Interview Questions in Delphi III

Interview Question Number	Item	Change
Interview question 27	How are students able to communicate and share their learning with others?	3 to 4
Interview question 28	How can a teacher make a positive impact on the life of a student?	4 to 5
Interview question 37	How do you define success in teaching?	4 to 5
Interview question 38	How do you ensure your students are learning?	4 to 5
Interview question 44	How do you handle it when a parent blames you for the child's poor performance?	3 to 4
Interview question 44	How do you handle it when a parent blames you for the child's poor performance?	4 to 5
Interview question 53	How do you teach reading in your content area?	4 to 5
Interview question 54	How do you teach writing in your content area?	4 to 5
Interview question 61	How will you accommodate a non-reader in your class?	3 to 4
Interview question 61	How will you accommodate a non-reader in your class?	4 to 5
Interview question 67	How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	3 to 4

Interview Question Number	Item	Change
Interview question 75	How would you handle a student who refused to complete an assigned task?	4 to 5
Interview question 80	How would you promote acceptance, tolerance, and diversity in the classroom?	4 to 5
Interview question 81	How would you provide for different learning styles?	4 to 5
Interview question 86	If all students failed a quiz, what would you do?	3 to 4
Interview question 92	If you were given \$1,000.00 to use in your classroom, what would you buy?	4 to 5
Interview question 117	What direct impact will No Child Left Behind have in your classroom?	4 to 5
Interview question 117	What direct impact will No Child Left Behind have in your classroom?	4 to 5
Interview question 155	What do you do if 50% of your students failed a test?	3 to 4
Interview question 155	What do you do if 50% of your students failed a test?	4 to 5
Interview question 122	What evidence would I see in your classroom that promotes the value and dignity of all students?	3 to 4
Interview question 122	What evidence would I see in your classroom that promotes the value and dignity of all students?	4 to 5

Interview Question Number	Item	Change
Interview question 127	What is an example of a high level activity?	4 to 5
Interview question 143	What sets you apart from the other candidates?	4 to 5

Delphi III changes to interview questions are included in Table 14. Panelists made changes to 24 interview questions. Ratings for five interview questions were made by multiple panelists. The remaining 14 interview questions were changed by only one participant. Seven interview questions were adjusted in rank from three to four. Seventeen adjustments were made in rank from four to five.

Table 15 consists of a summary of the Delphi III changes made in the area of other sources. The other sources that were changed are listed in column one by numerical assignment. Column two lists the specific other source. The numerical change made is listed in column three.

Delphi III changes to other sources are indicated in Table 15. The other source references was the only other source to receive a change in Delphi III. The change was made by one participant. The rating was adjusted to four to five.

Table 15

Summary of Changes to Other Sources in Delphi III

Other Source Number	Item	Change
other source 42	References	4 to 5

Table 16 includes the Delphi II and Delphi III changes in means and rank related to essential traits. Column one lists the essential traits in descending order by Delphi III mean. The second column includes the Delphi III mean. Delphi II mean is indicated in column three. The

rank of the each essential trait in Delphi III is listed in column four. Column five shows the rank of each essential trait in Delphi II.

Table 16

Delphi III Results: Change of Mean and Rank of Essential Traits from Delphi II to Delphi III

Essential Trait	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
Content knowledge	4.7273	4.7273	1	1
commitment	4.5909	4.5909	2	2
ability to get along with others	4.5000	4.5000	3	3
ability to address individual needs of students	4.4545	4.4545	4	4
belief in students	4.4545	4.4545	5	5
Honest	4.4545	4.4091	6	7
high expectations	4.4091	4.4091	7	6
Energetic	4.3636	4.3636	8	8
sense of humor	4.3636	4.3636	9	9
Common sense	4.3182	4.3182	10	10
communication skills	4.3182	4.3182	11	11
dependable	4.3182	4.3182	12	12
Respects students	4.3182	4.3182	13	13
willingness to help others	4.3182	4.3182	14	14
ability to work well with parents	4.2727	4.2727	15	15
Creative	4.2727	4.2727	16	16

Essential Trait	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
flexibility	4.2727	4.2727	17	17
Integrity	4.2727	4.2727	18	18
knowledge of curriculum	4.2727	4.2727	19	19
Positive	4.2727	4.2727	20	20
Respects colleagues	4.2727	4.2727	21	21
work ethic	4.2727	4.2727	22	22
Happy	4.2727	4.2273	23	23
interpersonal skills	4.2273	4.2273	24	24
likes to work with children	4.2273	4.2273	25	25
Respects diversity	4.2273	4.2273	26	26
Sincere	4.2273	4.2273	27	27
Teaching ability	4.2273	4.2273	28	28
team player	4.2273	4.2273	29	29
compassion	4.1818	4.1818	30	30
courageous	4.1818	4.1818	31	31
enthusiastic	4.1818	4.1818	32	32
Ethical	4.1818	4.1818	33	33
Excited to teach	4.1818	4.1818	34	34
kindness	4.1818	4.1818	35	35
knowledge of best instructional practices	4.1818	4.1818	36	36

Essential Trait	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
knowledge of pedagogy	4.1818	4.1818	37	37
optimistic	4.1818	4.1818	38	38
organized	4.1818	4.1818	39	39
Passion for teaching and learning	4.1818	4.1818	40	40
Reliable	4.1818	4.1818	41	41
Respects different learning styles	4.1818	4.1818	42	42
understands data	4.1818	4.1818	43	43
Willing to go the extra mile	4.1818	4.1818	44	44
willingness to take on challenges	4.1818	4.1818	45	45
love of children	4.1818	4.1364	46	54
commitment to educating kids	4.1364	4.1364	47	46
commitment to students	4.1364	4.1364	48	47
concerned for students	4.1364	4.1364	49	48
Critical thinking skills	4.1364	4.1364	50	49
dedication	4.1364	4.1364	51	50
desire to teach and make a difference	4.1364	4.1364	52	51
Enjoys teaching	4.1364	4.1364	53	52
intellectual capacity	4.1364	4.1364	54	53
motivational	4.1364	4.1364	55	55
personal relations skills	4.1364	4.1364	56	56

Essential Trait	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
professionalism	4.1364	4.1364	57	57
Ability to teach	4.0909	4.0909	58	58
commitment to education	4.0909	4.0909	59	59
Positive thinker	4.0909	4.0909	60	60
desire to work with children	4.0455	4.0455	61	61
empathetic	4.0455	4.0455	62	62
able to deliver content to different kinds of learners with success	4.0000	4.0000	63	63
able to manage multiple tasks	4.0000	4.0000	64	64
belief that all students can (and will) learn	4.0000	4.0000	65	65
cares for children	4.0000	4.0000	66	66
commitment to children	4.0000	4.0000	67	67
puts students first	4.0000	4.0000	68	68
Stands up for what is right	4.0000	4.0000	69	69

Means and rank of each of the most essential traits are presented in Table 16. Three traits were changed by participants in the final round of the Delphi. Of these three traits with changes, only two increased in a position of rank from Delphi II to Delphi III.

The trait honest increased from a ranking of seven in Delphi II to six in Delphi III. Although one participant raised an individual rating of the trait happy, the trait remained in the same ranked position in Delphi II and Delphi III. The mean did increase by .0454 however, the

traits are ranked in alphabetical order secondary to numerical order. The trait love of children moved eight positions forward from Delphi II to Delphi III. One participant increased a rating and the trait moved into a numerical category where it was placed in a higher alphabetical position.

Table 17 includes the Delphi II and Delphi III changes in means and rank related to interview questions. Column one lists the interview questions in descending order by Delphi III mean. The second column includes the Delphi III mean. Delphi II mean is indicated in column three. The rank of the each interview question in Delphi III is listed in column four. Column five shows the rank of each interview question in Delphi II

Table 17

Delphi III Results: Change of Mean and Rank of Interview Questions from Delphi II to Delphi III

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
How will you meet the needs of all learners?	4.8182	4.8182	1	1
What questions do you have for me?	4.7273	4.7273	2	2
How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	4.7273	4.6818	3	5
How do you feel about being accountable for your test scores?	4.6818	4.6818	4	3
How important is reading and writing in the	4.6818	4.6818	5	4

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
content areas?				
What was your impression of our school when you walked in today?	4.6818	4.6818	6	6
How can a teacher make a positive impact on the life of a student?	4.6818	4.6364	7	7
How do you handle it when a parent blames you for the child's poor performance?	4.6818	4.5909	8	12
Provide me with an example of a high level question. Why is it high level?	4.6364	4.6364	9	8
Give an example of how you made a difference in the life of another person.	4.6364	4.5909	10	11
Choose a section of your curriculum. How would you develop a unit around this section?	4.5909	4.5909	11	9
Describe a difficult situation you experienced with student behavior. Include the actions of the student, your actions, and the outcome.	4.5909	4.5909	12	10
How do you address cultural diversity in your classroom?	4.5455	4.5455	13	13
How do you address the individual needs of your students?	4.5455	4.5455	14	14

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
How do you define success in teaching?	4.5455	4.5000	15	16
Describe the characteristics of a great communicator.	4.5000	4.5000	16	15
What direct impact will No Child Left Behind have in your classroom?	4.4545	4.3636	17	17
How do you teach reading in your content area?	4.3636	4.3182	18	18
How will you accommodate a non-reader in your class?	4.3636	4.2727	19	20
What will you bring to our district that will benefit our students and staff?	4.3182	4.3182	20	19
How would you handle a student who refused to complete an assigned task?	4.3182	4.2727	21	21
What evidence would I see in your classroom that promotes the value and integrity of all students?	4.3182	4.2273	22	24
What is the greatest strength you bring to the classroom?	4.2727	4.2727	23	22
How would you promote acceptance, tolerance, and diversity in the classroom?	4.2727	4.2273	24	23
What sources of assistance do you think would be important to you as a new teacher in this school?	4.2273	4.2273	25	25

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
Why have you chosen teaching as a career direction?	4.2273	4.2273	26	26
What is an example of a high level activity?	4.2273	4.1818	27	29
How do you keep students actively engaged in high level activities?	4.1818	4.1818	28	27
How would you work with students who are below grade level?	4.1818	4.1818	29	28
What is the best way to determine if students understand the lesson?	4.1818	4.1818	30	30
What qualities do you have that make you an effective teacher?	4.1818	4.1818	31	31
Why are you interested in our district?	4.1818	4.1818	32	32
How do you teach writing in your content area?	4.1818	4.1364	33	33
What sets you apart from the other candidates?	4.1818	4.1364	34	39
How will you be a steward of good deeds to your colleagues?	4.1364	4.1364	35	34
How will you pursue ongoing professional development?	4.1364	4.1364	36	35
How would you handle a situation where you thought a parent completed a project for his/her	4.1364	4.1364	37	36

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
child?				
How would you integrate technology in your classroom?	4.1364	4.1364	38	37
What evidence would I see in your classroom and from your practices to indicate that you believe all students will learn?	4.1364	4.1364	39	38
Why do you want to teach in our district?	4.1364	4.1364	40	40
Why is parental contact important?	4.1364	4.1364	41	41
How do you ensure your students are learning?	4.1364	4.0909	42	43
How would you provide for different learning styles?	4.1364	4.0909	43	46
What do you do if 50% of your students failed a test?	4.1364	4.0455	44	54
Describe the instructional strategies you use to increase the chances that students will be efficient and effective.	4.0909	4.0909	45	42
How will you group your students to maximize learning?	4.0909	4.0909	46	44
How will your work to address closing the achievement gap?	4.0909	4.0909	47	45

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
What is a rubric and how would you use it to support instruction?	4.0909	4.0909	48	47
What is an achievement gap?	4.0909	4.0909	49	48
If all students failed a quiz, what would you do?	4.0909	4.0000	50	59
Describe an ideal classroom.	4.0455	4.0455	51	49
Describe the best lesson you ever observed.	4.0455	4.0455	52	50
How do you handle a student who is always late with assignments?	4.0455	4.0455	53	51
How do you handle different abilities in the classroom?	4.0455	4.0455	54	52
Tell me how the different learning styles of children impact your lesson planning.	4.0455	4.0455	55	53
What kind of students do you like to work with?	4.0455	4.0455	56	55
What would you do if a student told you he/she was homeless?	4.0455	4.0455	57	56
How are students able to communicate and share their learning with others?	4.0455	4.0000	58	58
If you were given \$1,000.00 to use in your classroom, what would you buy?	4.0455	4.0000	59	61
Describe a lesson where you teach your content	4.0000	4.0000	60	57

Interview Questions	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
for a period of 90 minutes.				
If students complete their work early, what would they be doing in your classroom?	4.0000	4.0000	61	60
What do you enjoy most about teaching?	4.0000	4.0000	62	62
What techniques will you use to manage the classroom?	4.0000	4.0000	63	63

Table 17 provides mean and rank data related to the interview questions. Of the interview questions that were changed, 14 interview questions moved to a rank of higher position from Delphi II to Delphi III. The remaining questions did not change in position of rank from Delphi II to Delphi III.

Table 18 includes the Delphi II and Delphi III changes in means and rank related to other sources. Column one lists the other sources in descending order by Delphi III mean. The second column includes the Delphi III mean. Delphi II mean is indicated in column three. The rank of the each other source in Delphi III is listed in column four. Column five shows the rank of each other source in Delphi II.

Table 18

Delphi III Results: Change of Mean and Rank of Other Sources from Delphi II to Delphi III

Other Sources of Information	Delphi III Mean	Delphi II Mean	Delphi III Rank	Delphi II Rank
Communication skills	4.5455	4.5455	1	1
Effective use of communication skills	4.4545	4.4545	2	2
Balance of referrals to include work, personal and community	4.3636	4.3636	3	3
Personal references	4.3182	4.3182	4	4
Recommendations	4.2727	4.2727	5	5
References	4.2273	4.1818	6	6
Letters of recommendation	4.1364	4.1364	7	7
Certification	4.0909	4.0909	8	8
Willingness to sponsor extra-curricular activities	4.0909	4.0909	9	9
Score on human resources instrument	4.0455	4.0455	10	10
Student teaching feedback	4.0000	4.0000	11	11
University preparation	4.0000	4.0000	12	12

The item references was the only other source that was changed by a participant in Delphi III (Table 18). The increase in rating did not result in a change of rank from Delphi II to Delphi III for the other source of references.

Summary

This study utilized the Delphi method to develop consensus of the traits that a panel of

principals feel are essential to identify in the teacher selection process. The method was also used to determine the questions principals ask in the teacher selection process to identify those essential traits. Additionally, the technique established the other sources of information principals utilize to identify the essential traits of teachers.

The principals requested to serve on this study were those who have received national recognition related to performance in and contributions to the field of education. The National Association of Elementary School Principals named 60 principals as state principals of the year in 2003 based on specific criteria (Table 2). Ninety-three secondary principals met the criteria established by the National Association of Secondary School Principals (Table 3) and were named as state principals of the year in 2003. From this population of 153 nationally recognized principals, a systematic sample of 25 was requested to serve on the Delphi panel.

Data were collected through three rounds of questions presented to the panel of principals. As the data were collected after each round of questions, the data were analyzed. Group and individual responses were presented to each panel member. With each round, individual panel members were able to adjust their individual responses based on group consensus. The objective of the Delphi process in this study was to gain consensus on complex matters from a panel of experts.

As the panel members developed consensus for the three areas of inquiry, very few changes were made to initial submissions regarding the three research questions posed in Delphi I, with the exception of the submissions related to interview questions. Developing consensus related to interview questions designed to target the most essential traits of teachers was the most engaging area for the panel. Participants challenged the group mean data in the area of interview questions by submitting the most changes in this area in Delphi III. Fewer changes were

submitted in Delphi III to the most essential teacher traits as well as other sources considered to identify the essential traits. It was observed that the panel members advocated for questions they felt were most essential by increasing their score in Delphi III. There were no decreases in ratings submitted by panel members at any point in the data collection.

As the study progressed through the three rounds of inquiry, it became clear that consensus was being developed among the panel of experts. Of particular interest are the potential connections that can be made between the traits considered essential to identify in the interview process and the questions asked in interviews to target these traits. Several themes began to emerge as the data were analyzed.

CHAPTER 5

SUMMARY BY RESEARCH QUESTION, FINDINGS, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS FOR FUTURE STUDY

Overview

This study utilized the Delphi method to develop consensus of the traits that a panel of expert principals feel are essential to identify in the teacher selection process. The method was also used to determine the questions principals ask in the teacher selection process to identify these essential traits. Additionally, the technique established the other sources of information expert principals utilize to identify the essential traits of teachers.

The principals who served on this study were those who have received national recognition related to performance in and contributions to the field of education. The National Association of Elementary School Principals named 60 principals as state principals of the year in 2003 based on specific criteria (Table 2). Ninety-three secondary principals met the criteria established by the National Association of Secondary School Principals (Table 3) and were named as state principals of the year in 2003. From this population of 153 nationally recognized principals, a systematic sample of 25 was requested to serve on the Delphi panel.

Summary by Research Question

Unfortunately, very little empirical research has been conducted to date to support how to effectively screen and hire quality teachers. “The research to date has not sufficiently addressed questions such as (1) what criteria need to be addressed; (2) which of those criteria are judged to be the most important by those using them in the process; and (3) what variables influence the principal priorities” (Place & Drake, 1987). The lack of empirical research puts currently practicing principals at a disadvantage when attempting to hire prospective teachers, as it is clear

that the hiring of teachers is one of the most important responsibilities of principals (Emley & Ebmier, 1997; Place & Drake, 1994).

The results of this study do however, support and expand upon the limited previously conducted empirical research related to teacher traits considered essential to identify in the interview process. Additionally, other sources of information principals utilize to identify the essential traits of teachers identified in this study were congruent with the limited previously conducted empirical research. Since the investigation of research for this study did not find studies relating interview questions to essential traits, no direct research connection can be made. It should be noted that the professional significance of the consensus-building component of the study related to this research question is invaluable.

What do expert principals across the nation perceive as the most important teacher traits to consider in the interview process?

The traits considered essential to identify in the interview process in Delphi I contained 25 items that were repeated by more than one panel member. The trait that appeared to be most essential in Delphi I had ten submissions. This trait was content knowledge. Content knowledge remained the trait with the highest mean rating at the conclusion of Delphi III. The mean for the trait content knowledge after Delphi III analysis was 4.72. The trait content knowledge remained highly valued throughout the consensus building process.

The trait content knowledge has surfaced in the limited amount of empirical research as being strongly considered. Content knowledge was referred to in studies conducted by Braun, Williams, Brown & Green (1987); Evans (2002); Ilmer, Snyder, Erbaugh & Kurz (1997); Kowalski, McDaniel, Place & Reitzug (1992); Place & Drake (1994); and Ralph, Kesten, Lang & Smith (1998).

Further analysis of the data related to this research question revealed a strong trend in the underlying issues of hiring practices faced by the expert principals. Of the essential traits submitted by the panel that were considered most essential (means in Delphi III of 4.0 or above), the majority of the traits involved relationships with people. The remaining traits considered most essential were related to credentials.

Traits that were not considered most essential were also considered for this analysis. Consistent findings were present. The traits considered not most essential (means in Delphi III of below 4.0) could be categorized in a similar fashion. The majority of the traits in this group were indicative of relationships with others whereas the remaining traits were associated with credentials.

These data show that the expert principals place a tremendous emphasis on essential traits that are related to relationships with others. The expert principals in this study demonstrated that they considered relationships with others as the most important to identify in the interview process.

What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?

When given the opportunity to adjust individual ratings to influence the group mean in Delphi III, the category of interview questions had the most input and change from the panel of experts. Overall, 25 changes were made to interview question ratings in Delphi III. The number of changes was greater than those submitted for traits considered essential (three changes) or other sources of information utilized to identify the essential traits of teachers (one change).

As the data related to this research question were considered on a deeper level, a similar theme emerged that was consistent with the findings related to the essential traits data. Of the

interview questions submitted by the panel of expert principals designed to best target the most essential traits (means in Delphi III of 4.0 or above), the majority were associated with relationships with others. The remaining interview questions designed to best target the most essential traits were related to credentials.

Interview questions that were not considered as the best targets of the essential traits were also considered for this analysis. Similar findings were present. The interview questions considered not most essential (means in Delphi III of below 4.0) could be categorized in a similar fashion. Only a small margin of the traits in this group could be considered as questions designed to target relationships with others whereas the remaining majority were focused on credentials.

These data are consistent with the essential traits data in that they show that the expert principals place a tremendous emphasis on interview questions with a focus on relationships with others.

What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

The other sources of information utilized to identify the essential traits of teachers in the interview process in Delphi I contained 16 items that were repeated by more than one panel member. The other source that appeared to be most significant in Delphi I had nine submissions. This other source was references. The other source references did not retain its high position as consensus was built among the panel of expert principals. At the conclusion of Delphi III, the other source references fell to the position of six when ranked by mean from high to low. The other source with the highest mean after Delphi III analysis was communication skills. It is interesting to note that the other source of communication skills was only submitted by one panel

member during Delphi I.

The source communication skills has surfaced in the limited amount of empirical research as being strongly considered. Communication skills was referred to in studies conducted by Braun, Williams, Brown & Green (1987); Cain-Caston (1999); Evans (2002); Ilmer, Snyder, Erbaugh & Kurz (1997); Kowalski, McDaniel, Place & Reitzug (1992); Murphy, Delli & Edwards (2004); Place & Drake (1994); and Ralph, Kesten, Lang & Smith (1998).

Data from this study related to other sources utilized to identify the essential traits of teachers were also consistent with the findings of the other areas of inquiry. A deeper analysis into the data revealed that the other sources considered most essential had a focus on relationships with others. Of the other sources submitted by the panel that were considered most essential (means in Delphi III of 4.0 or above), the majority of the other sources were associated with relationships. The remaining other sources considered most essential were related to credentials.

Other sources that were not considered most essential were also considered for this analysis. Similar findings were established. The other sources considered not most essential (means in Delphi III of below 4.0) could be categorized in a similar fashion. The minority of the traits in this group were indicative of relationships whereas the majority were related to credentials

Findings

The purpose of this study was to develop consensus among a group of expert principals from across the nation regarding the teacher selection process. The Delphi method was selected as the tool to answer the following research questions:

1. What do expert principals across the nation perceive as the most important teacher

traits to consider in the teacher selection process?

2. What interview questions do expert principals across the nation ask during the teacher selection process to target the most important teacher traits?
3. What other sources of information do expert principals across the nation utilize to identify the essential traits of teachers?

Through a consensus-building process, the expert principals in this study developed a core of traits considered essential in the interview process. The expert principals also built consensus on the interview questions that are best suited to target the essential traits.

Furthermore, the expert principals in this study determined the most essential other sources utilized to identify the most essential traits of teacher candidates in the teacher selection process.

Although these three areas are directly related to the research questions, further findings within each area were realized as follows:

Finding 1:

Expert principals ask interview questions that are directly connected with the essential traits they are looking for in teacher candidates. This is evidenced in this study by the connections that emerged between the traits considered essential to identify in the interview process and the interview questions asked to target the essential traits of teachers. Many of the interview questions submitted by the panel of expert principals were directly related to the essential traits. Further analysis revealed that the connections between essential traits and interview questions could be correlated with the domains that emerged in the research analysis in Chapter two (Table 1).

Finding 2:

Expert principals value the ability of the teacher candidate to possess relationship-

building skills. This is evidenced in this study by the volume of interview questions associated with relationships with others. Many of the interview questions submitted by the expert principals were based on real-life situations involving other people. These questions were developed to determine how the teacher candidate would react in certain situations with others including parents, students, and colleagues.

Finding 3:

Expert principals rely on initial screening interviews at the district level for validation of teacher license credentials and assume that candidates who advanced to principal level interviews have met the standards for licensure. This is evidenced in this study by the lack of interview questions related to licensure submitted by the expert principals combined with the indication made by the expert principals that traits related to licensure were considered most essential.

Finding 4:

Expert principals assume that the most highly ranked essential trait of content knowledge is validated during the initial screening interview. This is evidenced in this study by what initially could appear to be a contradiction. Only one interview question related to content knowledge emerged as most essential by the expert principals, yet the essential trait of content knowledge consistently ranked as the most essential trait throughout all stages of the Delphi study. This shows that content knowledge is clearly important to the expert principals, but that expert principals do not assess teacher candidates about content knowledge at the principal level interview.

Finding 5:

Expert principals value the knowledge and understanding of the teacher candidates

related to current issues. At the present time, one of the current issues appears to be the accountability movement. This is evidenced in this study by the focus of the interview questions submitted by the expert principals. Many interview questions were directly related to teacher accountability for test scores, meeting the needs of all learners, and specific strategies for closing the achievement gap.

Finding 6:

Expert principals developed consensus on the traits considered most essential to identify in the teacher selection process as the Delphi study progressed. This is evidenced in this study by an analysis of the number of submissions from Delphi I. The number of submissions considered essential by the panel of experts in Delphi I was 166. By the conclusion of Delphi III, the number of traits considered essential by the panel of expert principals narrowed to 69.

Finding 7:

Expert principals utilize various other sources of information to identify the most essential traits of teachers. Other sources that were impacted by relationships with others tended to be the most important other sources considered essential by expert principals. This is evidenced in this study by the other sources that emerged as most essential in Delphi III. These most essential other sources included references, recommendations, and evaluations. They all include the input of others. Other sources that were not influenced by the input of others included certification and university preparation. These other sources were not considered as essential in Delphi III.

Finding 8:

Expert principals place a very heavy emphasis on relationships between teachers and parents. This is evidenced in this study by the volume of interview questions that assessed the

response of teacher candidates to questions about specific situations with parents. Many of these interview questions included circumstances that occur on a regular basis as well as some that could be more challenging. Additionally, relationships with others was a recurring theme related to the essential traits of teachers in Delphi III.

Finding 9:

Expert principals place a very heavy emphasis on the influence and impact teachers have on the lives of students. This is evidenced in this study by the interview questions posed to teacher candidates as well as the emergence of student-centered traits being considered as most essential in Delphi III. Many of the questions posed to teacher candidates by the expert principals attempt to assess the level of commitment the teacher candidate has to the overall well-being of children. Other questions were developed to assess how teacher candidates feel about children and if the teacher candidates really care about children.

Finding 10:

Expert principals identified essential traits of teachers that were consistent with the review of literature. It should be noted that although this connection exists, a greater emphasis was placed on relationships with others by the expert principals in this study.

Finding 11:

Expert principals in this study identified interview questions designed to target the most essential traits of teachers that cannot be validated against other empirical research. This is evidenced by the fact that the investigation of empirical research for this study did not find studies relating interview questions to specific traits.

Finding 12:

Expert principals in this study indicated that a focus on literacy in all content areas is very

important. This is evidenced in this study by the fact that interview questions were submitted which required the teacher candidate to respond to concerns such as how to handle the issue of a student who is reading below grade level, how to teach reading in the content area, and how to teach writing in the content area.

Finding 13:

Expert principals in this study value teachers who provide students with multiple opportunities for academic and behavioral success. This is evidenced in this study by the fact that some of the most essential interview questions from Delphi III sought to determine how the teacher candidate would react to individual student failure as well as whole class failure. The expert principals also asked interview questions to determine how the teacher candidate would handle students who were consistently late with assignments and students who refused to complete assignments. Additionally, flexibility was also noted as a trait considered most essential to identify in the teacher selection process.

Finding 14:

Expert principals in this study believe that if students are highly engaged in their lessons, classroom management issues will not be a problem. This is evidenced in this study by the focus of interview questions considered most essential. Interview questions related to student engagement in the classroom were submitted with a greater emphasis than interview questions related to classroom management.

The identified purpose of this study was to develop consensus among a group of expert principals from across the nation regarding the teacher selection process. By using the Delphi method, consensus was developed related to the research questions. Findings related to the consensus of the expert principals have been identified. Each finding can be connected to a

recommendation for professional practice.

Implications

This study gathered data from expert principals related to the most essential traits of teachers, interview questions asked by expert principals to target the most essential traits, and other sources of information utilized by the expert principals to identify the essential traits. Findings were identified from an analysis of the data. Each finding described previously has implications for future practice in the teacher selection process. Each paragraph in this section of the study describes a recommendation consistent with each finding identified in the previous section.

Implication 1:

Interview questions asked by expert principals are connected with the essential traits identified by expert principals. As a result of this finding, it is recommended that connections between the traits considered essential to identify in the interview process and the interview questions designed to target these traits be validated. The synthesis chart (Appendix N) relating these connections to the research analysis presented in chapter two is the beginning of the continuation of this study.

Implication 2:

The ability of the teacher candidate to have relationship-building skills is valued by expert principals. As a result of this finding, it is recommended that a uniform interview instrument be developed to assess the relationship-building skills of teacher candidates. It is also recommended that teacher preparatory programs include coursework related to human interaction skills to better prepare teacher candidates for the real world of teaching.

Implication 3:

Data in this study imply that initial screening interviews at the district level validate the credentials of the teacher candidate. Principals tend to ask interview questions that are not related to credentials due to this implication. As a result of this finding, it is recommended that principals and school division offices responsible for initial screening interviews at the district level work together to develop a uniform process for the interview process. A consistent process will ensure that candidates sent for school level interviews have met the requirements and possess the credentials for licensure.

Implication 4:

Content knowledge is the single most important essential trait of teachers. Expert principals do not inquire about content knowledge because they assume that this is a credential that should be addressed during initial screening interviews at the district level. It is recommended that the essential trait of content knowledge be incorporated at the screening level of the teacher selection process. The Praxis could be used as a screening tool to address the issue of content knowledge. It is further recommended that this be communicated with principals tasked with interviewing teachers.

Implication 5:

The knowledge and understanding of teacher candidates related to the accountability movement is important to expert principals. Because this is an issue important for principals at the school level, it should also be important for teachers. It is recommended that teacher preparatory programs provide focus on how the accountability movement will manifest at the classroom level and how teachers can structure their work to support the overall success of each child and the school as a whole. Newly hired teachers should also be provided with the most

current information related to individual accountability as well as the resources they need to meet success.

Implication 6:

The expert principals developed consensus on the traits considered most essential to identify in the teacher selection process. It is recommended that a uniform interview instrument based on all identified most essential traits be developed based on the results of this study. This will ensure that principals have access to questions developed to target the most essential traits of teachers.

Implication 7:

Expert principals rely on other sources of information, particularly sources impacted by relationships, to identify the essential traits of teachers. It is recommended that a list of potential other sources of information needed to accompany the employment application be standardized. This standardization will ensure that applicants are fully aware of the importance of input such as recommendations, references, and evaluations. This standardization will also ensure principals that candidates have successfully met the standardized requirements at a minimum level prior to successfully completing the initial screening process.

Implication 8:

The relationship between teachers and parents is very important to expert principals. It can be inferred that this is a high priority issue for principals because of the amount of time it takes to mediate and solve relationship problems between teachers and parents. It is also recognized that many new teachers have not had enough experiences with parents to have knowledge of how to handle difficult situations. As a result of this finding, it is recommended that school divisions provide district-wide training for newly hired teachers regarding

relationships with parents.

Implication 9:

A heavy emphasis is placed by expert principals on the impact of teacher behavior on the lives of children. As a result of this finding, three recommendations can be made. The first recommendation is the development of an interview instrument that places a greater emphasis on the feelings teacher candidates have about children. The second recommendation is the development of a rubric to help principals determine the level of commitment and care a teacher candidate has regarding children. The third recommendation would include the implementation at the district level of an induction program for newly hired teachers to address the impact of teacher behavior on the lives of children.

Implication 10:

Although a connection between the data in this study and previous research exists, a void is present with reference to the importance of relationships. It is recommended that college preparatory programs place an emphasis on relationships to include colleagues, parents, students, and administrators.

Implication 11:

The investigation for this study did not reveal studies relating interview questions to specific teacher traits. It is suggested that a rubric be developed to measure responses to interview questions related to specific traits. This will provide principals with a tool by which to consistently measure responses.

Implication 12:

The data show that an emphasis on the literacy of children is very important to the expert principals. Considering that student achievement in reading is a major focus of the

accountability movement and that reading assessment data is a critical measure of student success, it is recommended that universities require literacy training for all students entering the field of teaching. It is further recommended that school districts develop uniform in-service programming for implementation across all content areas to support reading and writing across the curriculum.

Implication 13:

Expert principals in this study value teachers who provide students with multiple opportunities for success in behavior and academics. This value reflects the belief that all students can learn, but not at the same pace and in the same way. Considering this value, implications can be extended to teacher expectations of students, grading practices, and a consistent focus on utilizing student evaluation as an instructional tool. It is recommended that school districts develop uniform policies regarding the teaching, assessment, re-teaching, and re-assessment of students. Additionally, it is recommended that school districts develop uniform grading practices that are indicative of providing students with multiple opportunities for success.

Implication 14:

It was found in this study that expert principals believe that students who are highly engaged in their learning will not present management or discipline issues in the classroom. As a result of this finding, it is recommended that teacher preparatory programs at the university level and teacher induction programs at the school district level provide a strong focus on how to actively engage students in their learning. A strong foundation for teachers in how to consistently maintain high levels of engagement will have tremendous implications related to discipline and classroom management issues.

Limitations

During the course of this Delphi study, six main limitations surfaced. These include the initiation of Delphi I and panel formation, issues of data collection versus reader convenience in Delphi II, using a published list with limited contact data, promotions and moves of panel members from the position on which selection was based, the non-tracking of demographic information related to respondents, and the fact that the panel of experts is not a representative sample of principals in the field as it is indicative of a group of nationally recognized elite principals.

When contacting prospective panel members, the researcher electronically mailed a letter of introduction and attached the Delphi I instrument to the file. Panel members indicated their intent to participate by reply and submission of the completed Delphi I instrument. Although this action was intended to streamline the panel construction and subsequent initial data collection, it actually presented minor problems with the initial data collection. The amount of time spent to create the original panel was longer than anticipated by the researcher. Therefore, initial respondents who had submitted Delphi I responses early in the process were required to wait until the panel was fully constructed and Delphi I data received and analyzed before receiving the Delphi II. It is suggested by the researcher that the panel be fully constructed prior to sending out the Delphi I to ensure more timely receipt of data. This will also ensure that all panel members experience the same amount of time between rounds of inquiry.

The issue of data collection versus reader convenience surfaced in Delphi II. Because the researcher focused on data collection rather than reader convenience, the Delphi II was extremely lengthy. It was at this phase of the study that the respondents required the most follow-up contact for participation. It is the belief of the researcher that the length of the

document was intimidating to the respondents and that they may have felt it too lengthy to continue with participation. The researcher did not eliminate responses that were not repeated in Delphi I in order to shorten the Delphi II document for reader convenience. The underlying process of consensus building was the main reason the researcher chose to include the responses as such in Delphi II. The researcher feels that this is substantiated by the high ranking in Delphi III of communication skills as a source considered to identify the essential traits of teachers. The other source of communication skills was only submitted by one panel member of Delphi I. Had the researcher elected to focus on reader convenience, communication skills may have been eliminated for consideration in Delphi II because it was only a single-submission in Delphi I.

The researcher relied upon lists published by the NASSP and NAESP for principals of the year in 2003. The NASSP list included electronic mail addresses, which was the preferred method of communication for this study. The NAESP list did not include electronic mail addresses, only school contact information. The researcher learned that electronic addresses are not easily obtained and many times school web sites do not include the electronic addresses of the principal. Additionally, many schools are reluctant to release the electronic addresses of the principals.

Considering that the researcher utilized the 2003 principals of the year listings from the NASSP and NAESP, it is understandable that many of the principals of the year were promoted or moved to positions in other districts. The researcher attempted to facilitate contact and locate those who had new positions, however contact was not always possible.

An analysis of responses by demographics to possibly include region of the country, age of principal, experience level of principal, and other sources of demographical information was not conducted because respondents were not tracked by demographics. Conducting a

demographic analysis could have potentially enriched the data analysis.

The final limitation is related to the fact that the participants in this study are not representative of the general population of principals. For the purposes of this study, the success of the Delphi methodology is contingent on the construction of an expert panel. The principals who participated in this study are considered experts and are highly regarded in their field.

The six main limitations of this study included the initiation of Delphi I and panel formation, issues of data collection versus reader convenience in Delphi II, using a published list with limited contact data, promotions and moves of panel members from the position on which selection was based, and the non-tracking of demographic information related to respondents. Although the limitations above surfaced during this Delphi study, considerations for correction and effective resolution of the limitations were carefully considered and executed with the input of chair of the doctoral committee.

Recommendations for Future Study

After careful consideration of this study, five recommendations for future study are made. These include development of a rubric for interview questions, validating connections between interview questions and traits considered essential to identify in the interview process, conducting correlations between principal characteristics and traits considered essential to identify in the interview process, conducting studies to determine the importance of relationships in the profession of education, and conducting studies related to the development of quality interview questions.

It is recommended that a future study be conducted that would link essential traits and interview questions. The first research question in this study focused on the traits considered essential to identify in the interview process. The second research question focused on the

interview questions developed by expert principals to target these traits. This study did not connect the specific traits to interview questions.

Considering that the 63 interview questions generated in this study remained with means of above 4.0 were created by expert principals with subsequent consensus building, it is recommended that a rubric be developed based on these questions. The rubric should be based on research firmly grounded in effective teaching practices and student achievement. This tool could be used not only by principals during the interview process, but also by prospective teachers so that they can learn and know what is important to practicing principals in schools.

Panel members who participated in this study were assured confidentiality. The only official connection made with individual principals of the year and this study is that the names of the principals appear on the NASSP and NAESP lists that are included in the Appendix of this study. It is recommended that a future study be conducted with different groups of principals representative of different characteristics so that correlations can be made between principal characteristics and traits of teachers considered essential to identify in the interview process.

In an effort to focus on the importance of relationships in the profession of education, it is recommended that future studies be conducted to determine the impact of relationships. This may include how relationships among teachers, students, parents, and administrators manifest in the school setting. It may also include how to best determine the relationship building capacity of teacher candidates during the interview process.

A final recommendation for future study is related to the lack of empirical research studies related specifically to the development and use of interview questions or techniques in the teacher selection process. It is suggested that studies be conducted to determine how to best develop interview questions, how to create questions that will target a specific trait, and how to

measure responses consistently against a rubric.

Good to Great, written by Jim Collins, addresses why some companies achieve greatness and others do not. Collins addresses the importance of people and hiring in the following quote: “If we get the right people on the bus, the right people in the right seats, and the wrong people off the bus, then we’ll figure out how to take it someplace great.” This study echoes the sentiment of Jim Collins. If principals are able to get the right teachers in their schools, teaching the right classes, teaching with the right attitude, then the schools will achieve greatness. Teachers are clearly the key to school success, and it is an awesome responsibility for principals to hire the right teachers for the right schools.

References

- Alberti, C. E. (1984). A basic guide to staff selection. *Clearing House*, 78, 285-288.
- Baker, H. G., & Speir, M. S. (1990). The employment interview: Guaranteed improvement in reliability. *Public Personnel Management*, 19(1), 1-4.
- Baskin, M. K., Ross, S. M., & Smith, D. L. (1996). Selecting successful teachers: The predictive validity of the urban teacher selection interview. *The Teacher Educator*, 32, 1-21.
- Berg, K. A., & Brimms, R. P. (1998). Screening teacher applicants. *NASSP Bulletin*, 102, 32-35.
- Braun, J. A., Willems, A., Brown, M., & Green, K. (1987). A survey of hiring practices in selected school districts. *Journal of Teacher Education*, 38, 45-49.
- Brooks, K. W. (1979). Delphi technique: Expanding applications. *North Central Association Quarterly*, 53, 377-385.
- Cain-Caston, M. (1999). A survey of opinions of North Carolina school administrators regarding factors considered most important in hiring teachers for their first teaching position. *Journal of Instructional Psychology*, 26(2), 69-73.
- Collins, J. (2001). *Good to great*. New York, NY: Harper Collins.
- Cruickshank, D.R. & Haefle, D. (2001). Good teachers, plural: What makes a teacher good: Looking at ways we have answered the question in the past century may place the current evaluation craze in perspective. *Educational Leadership*, 58(5), 26-30.
- Dalkey, N. C. (1967). *Delphi*. Santa Monica, CA: The RAND Corporation.
- Dalkey, N. C., & Helmer, O. (1962). *An experimental application of the Delphi method to the use of experts* (Abridged, Report No. RM-727-PR). Santa Monica, CA: The RAND Corporation.

- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Educational Policy Analysis Archives*, 8(1), 1-49. Abstract retrieved July 25, 2004, from <http://www.asu.edu>.
- Darling-Hammond, L., & Youngs, P. (2002). Defining "highly qualified teachers": What does "scientifically-based research" actually tell us? *Educational Researcher*, 31(9), 13-25.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters. *Educational Leadership*, 60(8), 6-13.
- Emley, K., & Ebmeier, H. (1997). The effect of employment interview format on principals' evaluations of teachers. *Journal of Personnel Evaluation in Education*, 11, 39-56.
- Evans, J. F. (2002). Effective teachers: An investigation from the perspectives of elementary school students. *Action in Teacher Education*, 24(3), 51-62.
- Fuller, H. L., Campbell, C., Celio, M., Harvey, J., Immerwahr, J., & Winger, A. (2003, July). *An impossible job? The view from the urban superintendent's chair*. Retrieved July 19, 2004, from http://www.crpe.org/pubs/pdf/ImpossibleJob_reportweb.pdf
- Haberman, M. (1995). *Star teachers of children in poverty*. West Lafayette, IN: Kappa Delta Pi.
- Haitlin, T. J., & Abrahamson, R. L. (1995). Written or oral job references for new teachers? Perceptions of superintendents. *The Clearing House*, 68(6), 372-374.
- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, 32(4), 1008-1015.
- Helmer, O. (1967). *Systematic use of expert opinions* (Report No. P-3721). Santa Monica, CA: The RAND Corporation.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (1998). *Applied statistics for the behavioral sciences*. Boston, MA: Houghtlin Mifflin Company.

- Hirsch, E., Koppich, J., & Knapp, M. (2001). *Revisiting what states are doing to improve the quality of teaching: An update on patterns and trends*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington. Available: www.ctpweb.org.
- Ilmer, S., Snyder, J.-A., Erbaugh, S., & Kurz, K. (1997). Urban educators' perceptions of successful teaching. *Journal of Teacher Education*, 48(5), 379-385.
- Ingersol, R. & Smith, T. (2003). The wrong teacher solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
- Jimerson, L. (2004). *Special challenges of the "No Child Left Behind" act for rural schools and districts*. Washington, DC: The Rural School and Community Trust.
- Jurs, S., Zoski, K., & Mueller, R. (1993, April 13). *Using linear regression to determine the number of factors to retain in factor analysis and the number of issues to retain in Delphi studies and other surveys*. Paper presented at the annual meeting of the American Education Research Association.
- Kennedy, H. P. (2004). Enhancing Delphi research: Methods and results. *Journal of Advanced Nursing*, 45(5), 504-511.
- Kowalski, T. J., McDaniel, P., Place, A. W., & Reitzug, U. C. (1992). Factors that principals consider most important in selecting new teachers. *ERS Spectrum*, 10(3), 34-38.
- Linstone, H. A., & Turoff, M. (1975). *The Delphi method: Techniques and applications*. Reading, MA: Addison-Wesley.
- Murphy, P. J., & DeArmond, M. M. (2003, July). *From the headlines to the frontlines: The teacher shortage and implications for recruitment policy*. Washington, DC: Center on Reinventing Public Education.

- Murphy, P. K., Delli, L. A., & Edwards, M. N. (2004). The good teacher and good teaching: Comparing beliefs of second-grade students, preservice teachers, and inservice teachers. *The Journal of Exceptional Education, 72*(2), 69-92.
- National Association of Elementary School Principals. (1984). *National Distinguished Principals Program*. Abstract retrieved July 27, 2004, from <http://www.naesp.org>.
- National Association of Secondary School Principals. (1994). *National Association of Secondary Principals Principal of the Year Program*. Abstract retrieved July 27, 2004, from <http://www.nassp.org>.
- National Board for Professional Teaching Standards. (2002, August). *What Teachers Should Know and Be Able To Do*. Retrieved July 15, 2004, from <http://www.nbpts.org>
- National Center for Education Statistics. (1994-1995). *Follow-Up Survey*.
- National Commission on Excellence in Education. (1983). *A nation at risk*. Washington, DC: U.S. Department of Education.
- National Commission on Teaching and America's Future. (1997). *Doing what matters most: Investing in quality teaching*. New York: Author.
- No Child Left Behind Act of 2001, 20 U.S.C § 6801 (2002).
- Pfeiffer, J. (1968). *New look at education*. Poughkeepsie, NY: Odyssey Press.
- Place, A. W., & Drake, T. L. (1994). The priorities of elementary and secondary principals for The criteria used in the teacher selection process. *Journal of School Leadership, 4*(1), 87-93.
- Ralph, E. G., Kesten, C., Lang, H., & Smith, D. (1998). Hiring new teachers: What do school districts look for? *Journal of Teacher Education, 49*(1), 47-57.
- Rural School Community Trust. (2004). The highly qualified teacher requirements of no child

- left behind: Impacts on America's rural schools. Retrieved July 19, 2005, from http://www.ruraledu.org/issues/nclb/Highly_Qualified_Teacher_Fact_Sheet.pdf
- Salgado, J. F., & Moscoso, S. (2002). Comprehensive meta-analysis of the construct validity of the employment interview. *European Journal of Work and Organizational Psychology, 11*(3), 299-324.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124*(2), 262-274.
- Skutsch, M., & Hall, D. (1973). Delphi: Potential uses in education planning. In *Project Simu-School: Chicago Component*. Chicago, IL: Chicago Board of Education: Illinois Department of Facility Planning.
- Snyder, T., Hoffman, C. & Geddes, C. (1997). *The digest of education statistics*. Washington, DC: National Center for Education Statistics.
- Stewart, J. (2001). Is the Delphi technique a qualitative method? *Medical Education, 35*, 922-923.
- Theel, R. K., & Tallerico, M. (2004). Using portfolios for teacher hiring: Insights from school principals. *Action in Teacher Education, 26*(1), 26-33.
- United States Department of Education. (2002). *Meeting the highly qualified teachers challenge: The Secretary's annual report on teacher quality*. Washington, DC: U.S. Department of Education, Office of Postsecondary Education, Office of Policy, Planning and Innovation.
- United States Department of Education. (2003). *Meeting the highly qualified teachers challenge: The secretary's annual report on teacher quality*. Washington, D.C.: U.S. Department of

Education, Office of Postsecondary Education, Office of Policy, Planning and Innovation.

United States Department of Education, & Office of the Deputy Secretary. (2004, May). *No child left behind: A toolkit for teachers*. Washington, D.C.: United States Department of Education, Education Publications Center.

Williams, D. L., Boone, R., & Kingsley, K. V. (2004). *Journal of Research on Technology Education*, 36(3), 213-229.

Winzenreid, A. (1997, July 6). *Delphi studies: The value of expert opinion bridging the gap -- Data to knowledge*. Paper presented at the annual conference of the International Association of School Librarianship held in conjunction with the International Association of Teacher-Librarianship.

Yang, Y. N. (2003, April 21). *Testing the stability of experts' opinions between successive rounds of Delphi studies*. Paper presented at the annual meeting of the American Educational Research Association.

APPENDIX A

Delphi I

Participant Background Information (Pilot)

Participant Background Information (Pilot)

Please review the following questions as they relate to you and your employment as a principal.

Please mark the most appropriate response.

1. Total number of Years Employed as a Principal _____ less than one year
(Including this year) _____ 1-5
_____ 6-10
_____ 11-15
_____ 16-20
_____ 21 or more
2. Classification of School System _____ rural
_____ suburban
_____ urban
3. Level of School _____ elementary
_____ middle
_____ high
_____ career/technical
_____ alternative

_____ collegiate

_____ other, please specify:

4. Highest Degree Held

_____ bachelors

_____ masters

_____ advanced certificate or
educational specialist

_____ doctoral

5. Gender

_____ female

_____ male

APPENDIX B

Delphi I (Pilot)

Delphi I (Pilot)

This study seeks to determine the traits of teachers that school leaders consider essential to identify in the teacher selection process. The study is also designed to determine the questions school leaders ask during the interview process in order to identify these essential traits.

You will be asked to respond to two questions. In order to provide clarity of focus, the framework for the National Board for Professional Teaching Standards has been provided for you.

The National Board for Professional Teaching Standards (NBPTS) is a private, non-profit organization that is governed by a board, most of whom are teachers. The NBPTS has established standards for what teachers should know and be able to do. The NBPTS standards were developed from an extensive review of best practices as well as practitioner input. The standards are presented in five core areas, as follows (National Board for Professional Teaching Standards, 2002):

1. Teachers are committed to students and their learning.
 - a. Teachers recognize individual differences and adjust their practices accordingly.
 - b. Teachers have an understanding of how students develop and learn.
 - c. Teachers treat students equitably.
 - d. Teachers' mission extends beyond developing the cognitive capacity of their students.

2. Teachers know the students they teach and how to teach those subjects to students.

- a. Teachers appreciate how knowledge in their subjects is created, organized, and linked to other disciplines.
 - b. Teachers command specialized knowledge of how to convey a subject to students.
 - c. Teachers generate multiple paths to knowledge.
3. Teachers are responsible for managing and monitoring student learning.
- a. Teachers call on multiple methods to meet their goals.
 - b. Teachers orchestrate learning in group settings.
 - c. Teachers place a premium on student engagement.
 - d. Teachers regularly assess student progress.
 - e. Teachers are mindful of their principal objectives.
4. Teachers think systemically about their practice and learn from experience.
- a. Teachers are continually making difficult choices that test their judgment.
 - b. Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
5. Teachers are members of learning communities.
- a. Teachers contribute to school effectiveness by collaborating with other professionals.
 - b. Teachers work collaboratively with parents.
 - c. Teachers take advantage of community resources.

Delphi I (Pilot)

Question One:

What traits of teachers do you find from your knowledge and experience are essential to identify in the teacher selection process?

Question Two:

What questions do you ask during the teacher selection process to identify the traits you consider essential?

APPENDIX C

Delphi II / Question I (Pilot)

Delphi II / Question I (Pilot)

Listed below are traits of teachers considered to be essential to identify in the teacher selection process. Based on your knowledge and experience, please use the following Likert scale to rate your level of agreement that the trait is essential.

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

1.	Actively engages students in their learning	5	4	3	2	1
2.	Ability to work with peers	5	4	3	2	1
3.	Ability to work with children	5	4	3	2	1
4.	Ability to work with parents	5	4	3	2	1
5.	Ability to address the individual needs of students	5	4	3	2	1
6.	Communication skills	5	4	3	2	1
7.	Content knowledge	5	4	3	2	1
8.	Commitment to high standards	5	4	3	2	1
9.	Classroom management	5	4	3	2	1
10.	Common sense	5	4	3	2	1
11.	Commitment to student learning	5	4	3	2	1
12.	Creative	5	4	3	2	1
13.	Content delivery	5	4	3	2	1
14.	Dependability	5	4	3	2	1
15.	Differentiated instructional techniques	5	4	3	2	1
16.	Enthusiasm	5	4	3	2	1
17.	Empathy	5	4	3	2	1
18.	Flexibility	5	4	3	2	1
19.	Interpersonal skills	5	4	3	2	1
20.	Innovated	5	4	3	2	1
21.	Intellectual ability	5	4	3	2	1
22.	Knowledge of school policies	5	4	3	2	1
23.	Knowledge of school procedures	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

24.	Leadership skills	5	4	3	2	1
25.	Love of children	5	4	3	2	1
26.	Love of teaching	5	4	3	2	1
27.	Lifelong learner	5	4	3	2	1
28.	Lesson planning	5	4	3	2	1
29.	Organization	5	4	3	2	1
30.	Optimistic	5	4	3	2	1
31.	Passion for student learning	5	4	3	2	1
32.	Personality	5	4	3	2	1
33.	Professionalism	5	4	3	2	1
34.	Reflective	5	4	3	2	1
35.	Responsible	5	4	3	2	1
36.	Seeks help from others	5	4	3	2	1
37.	Sense of ethics	5	4	3	2	1
38.	Sense of morality	5	4	3	2	1
39.	Understanding of how children learn	5	4	3	2	1
40.	Uses assessment to drive future planning and instruction	5	4	3	2	1
41.	Uses research to improve practices	5	4	3	2	1
42.	Willingness to connect with students outside the classroom	5	4	3	2	1
43.	Work ethic	5	4	3	2	1

APPENDIX D

Delphi II / Question II (Pilot)

Delphi II / Question II (Pilot)

Listed below are interview questions asked during the teacher selection process to identify traits of teachers that are considered essential. Based on your knowledge and experience, please use the following Likert scale to rate your level of agreement that the question targets an essential teacher trait.

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

1.	Describe a problem or misunderstanding you have experienced with yourself, a student, a colleague or an administrator. Tell me how you resolved the problem.	5	4	3	2	1
2.	What have you been reading?	5	4	3	2	1
3.	Discuss how you would collaborative with your teaching partners.	5	4	3	2	1
4.	What strengths would you bring to a team?	5	4	3	2	1
5.	Describe your previous experiences that would help you be able to determine the developmental stages of a child.	5	4	3	2	1
6.	How do you know when learning occurs?	5	4	3	2	1
7.	How would you get to know the students in your class?	5	4	3	2	1
8.	How would you design your lessons to meet the individual learning needs of each student?	5	4	3	2	1
9.	What is the most important thing in your life today?	5	4	3	2	1
10.	Why do you want to be a teacher?	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

11.	How can you and the school compensate for deficiencies in home background?	5	4	3	2	1
12.	How would you address a very academically diverse class of students?	5	4	3	2	1
13.	How can you help children who are having difficulty learning?	5	4	3	2	1
14.	Describe a recent lesson you found to be most effective. How do you know it was effective?	5	4	3	2	1
15.	How would you motivate reluctant learners?	5	4	3	2	1
16.	How do you know when you met your objective?	5	4	3	2	1
17.	If I were to enter your classroom, what might I observe?	5	4	3	2	1
18.	In the content area of math, what recent literature have you read on best practices?	5	4	3	2	1
19.	What motivated you to desire to be a teacher and how will this motivation lend itself to our school?	5	4	3	2	1
20.	What knowledge, understanding, or experiences have you had with the Virginia Standards of Learning?	5	4	3	2	1
21.	Describe the commitment necessary to be an exceptional teacher.	5	4	3	2	1
22.	Describe a situation where relationship building was important.	5	4	3	2	1
23.	Do you plan to continue your education?	5	4	3	2	1
24.	How would you handle a first time (potential) college student?	5	4	3	2	1
25.	Please describe one of your best instructional lessons.	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

26.	What are three of your best qualities that you feel will make you a successful educator?	5	4	3	2	1
27.	Describe an effective student management technique.	5	4	3	2	1
28.	What efforts do you make to raise the bottom 20% of your students?	5	4	3	2	1
29.	What were your middle school experiences? How does this experience reflect in your teaching?	5	4	3	2	1
30.	Take me through the planning of a lesson in your content area.	5	4	3	2	1
31.	Our students come from impoverished homes. What strategies would you use to buffer the effects of poverty in your class?	5	4	3	2	1
32.	Take me through interventions you might use for behavior problems.	5	4	3	2	1
33.	How do you feel about collaboration among teachers?	5	4	3	2	1
34.	Name three ways you involve parents in their child's education.	5	4	3	2	1
35.	What is your educational philosophy?	5	4	3	2	1
36.	What is your philosophy of discipline?	5	4	3	2	1
37.	Describe your classroom management style.	5	4	3	2	1
38.	What innovative techniques would you use to teach the Standards of Learning?	5	4	3	2	1
39.	How do you plan to communicate with parents?	5	4	3	2	1
40.	What are your professional goals?	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

41.	Explain to the team your procedures you employ to maintain an environment that addresses the needs of children.	5	4	3	2	1
42.	What do you consider to be the most important aspect of teaching?	5	4	3	2	1
43.	What previous knowledge and/or experience do you bring to the classroom?	5	4	3	2	1
44.	How do you measure student progress?	5	4	3	2	1
45.	Describe a lesson you have done that you would consider outstanding. What made it outstanding?	5	4	3	2	1
46.	Give me an example of a lesson or a piece of a lesson where you felt that you were meeting the individual needs of all of your students.	5	4	3	2	1
47.	How do you integrate reading and writing into your content area?	5	4	3	2	1
48.	Describe for us a time when you were able to involve parents, community partners, and/or business partners into a unit of study	5	4	3	2	1
49.	What do you consider to be the most important aspects of your content?	5	4	3	2	1
50.	Tell me about your working relationship with your previous supervisor and peers.	5	4	3	2	1
51.	How do you manage a classroom with four gifted students, three students with learning disabilities, five students functioning one grade level below and eight average students?	5	4	3	2	1
52.	If you felt learning was not taking place, what steps would you take?	5	4	3	2	1
53.	How would you use research in the classroom?	5	4	3	2	1
54.	Tell me about your experiences with children.	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

55.	How do you feel about this statement, “All children can learn”?	5	4	3	2	1
56.	How do you feel about the administration of collaboratively developed assessments?	5	4	3	2	1
57.	As a content planning team member, how would you ensure that there is an equal division of responsibilities among your colleagues?	5	4	3	2	1

APPENDIX E

Alphabetical List of 2003 NAESP and NASSP Principals of the Year

Principal Name	Elementary / Secondary	School Name	State
Acuncius, Rick	Secondary	Highland Middle School	Illinois
Addy, Randy	Secondary	Newcomerstown High School	Ohio
Allen, David	Secondary	Platteville Middle School	Wisconsin
Ashby, Beverly	Secondary	Butler Middle School	Utah
Austin, Howard G.	Elementary	Prescott Elementary School	Arkansas
Baker, Diane	Secondary	Tularosa Middle School	New Mexico
Bassett, William W.	Elementary	Centerville Elementary School	Georgia
Billetz, John	Secondary	Post Falls High School	Idaho
Bingham, Julia	Secondary	Robert Frost Middle School	New York
Blackwell, R. Wayne	Elementary	Chatom Elementary School	Alabama

Principal Name	Elementary / Secondary	School Name	State
Boehms, Larry	Secondary	Troy High School	Michigan
Boggs, Linda M.	Elementary	Blue Ridge Elementary School	Washington
Boule, Denise	Secondary	Exeter-West Greenwich Senior High School	Rhode Island
Brady, Tim	Secondary	Wheatbridge Middle School	Kansas
Branch, Harry L.	Secondary	Central Elementary School	Arkansas – middle school
Brandriff, Arthur	Secondary	Western Branch High School	Virginia
Brissette, Lisa S.	Elementary	Globe Park School	Rhode Island
Brist, Kenneth	Secondary	Valparaiso High School	Indiana
Brittingham, Sharon L.	Elementary	Frankford Elementary School	Delaware
Brooks, Deborah	Secondary	Newmarket Junior- Senior High School	New Hampshire
Brown, Linda	Secondary	Parkview	Arkansas

Principal Name	Elementary / Secondary	School Name	State
		Arts/Science Magnet H.S.I.	
Brown, Ronald R.	Elementary	Heller Elementary School	Kansas
Burke, Sterlind, Sr.	Secondary	Patuxent Valley Middle School	Maryland
Bussey, Robert	Secondary	Ware County High School	Georgia
Cannella, Frank	Elementary	White Mountain Elementary School	New Mexico
Ciesluk, John H., Dr.	Elementary	Wolf Swamp Road School	Massachusetts
Claus, Russell S.	Elementary	Darmstadt American Elementary	Department of Defense
Cleaver, Becke	Secondary	William Conkwright Middle School	Kentucky
Clendening, Raye	Secondary	Martin Luther King Jr. Middle School	California
Colbaugh, Nancy L., Dr.	Elementary	Eugene Field Elementary School	Missouri

Principal Name	Elementary / Secondary	School Name	State
Cosgrove, Mary Ann	Elementary	Lewis and Clark Elementary School	Montana
Crocker, Jeanne	Secondary	South Portland High School	Maine
Cronin, Pamela	Secondary	Larimore High School	North Dakota
Curtis, Karen	Elementary	Rancho Sante Fe Elementary School	Arizona
Darlington, Roystene	Secondary	Graham Park Middle School	Virginia
Deck, Kathy	Secondary	Raymond Park Middle School	Indiana
DeNiro, Kathleen	Secondary	Corwin Middle School	Colorado
Deragisch, Douglas	Secondary	Marshall Junior High School	Minnesota
Dignan, Thomas F., Dr.	Elementary	Freddie Stowers Elementary School	Department of Defense
Donnelly, James Jr.	Secondary	James A. Green High School	New York
Dorsey, Henry	Secondary	Hazlehurst High	Mississippi

Principal Name	Elementary / Secondary	School Name	State
		School	
Drotar, Judith	Elementary	American International School / Dhaka Bangladesh	Department of State
Dubbs, Scott	Secondary	Fergus High School	Montana
Dunn, William	Secondary	Arlington Senior High School	Minnesota
Dutot, Nancy	Secondary	South Middle School	North Dakota
Ferreira, Anthony	Secondary	Dorothy L. Beckwith Middle School	Massachusetts
Finch, Wilton	Secondary	Southern Nash High School	North Carolina
Forrester, Marcia	Secondary	Britton-Hecia High School	South Dakota
Fraser, Elizabeth	Secondary	Durango High School	Nevada
Frick, Duane	Secondary	Jefferson Junior High School	Iowa
Frude, Christine E.	Elementary	Paradise Valley Elementary	Wyoming
Gilcrest, Ralph III	Secondary	Lake Gibson High	Florida

Principal Name	Elementary / Secondary	School Name	State
		School	
Gilchrist, Barbara	Secondary	Central Kitsap Junior High	Washington
Gipson, Cindy R.	Elementary	Raymond Elementary School	Mississippi
Goodness, Gregory	Secondary	Shapleigh Middle School	Maine
Hardin, Dorothy	Secondary	Pikesville High School	Maryland
Harless, Freda A.	Elementary	Berlin McKinney Elementary	West Virginia
Harrison, Ursula	Secondary	Whiting High School	Wyoming
Heady, Andrew L.	Elementary	Abraham Lincoln Elementary	Nebraska
Hemre, Robert L.	Elementary	John Harris Elementary School	South Dakota
Hoff, Stephen	Secondary	Laramie Junior High School	Wyoming
Hoffman, Margaret A.	Elementary	Ft. Wright Elementary	Kentucky
Holliday, Janet	Secondary	Youree Drive Middle	Louisiana

Principal Name	Elementary / Secondary	School Name	State
		School	
Hollinger, Jay S., Dr.	Elementary	McAuliffe Elementary School	Texas
Hoogheem, James R.	Elementary	Fernbrook Elementary School	Minnesota
Huelsmann, Richard	Secondary	East Hampton Middle School	Connecticut
Hutchinson, David	Secondary	Ferndale High School	Washington
Hutchinson, Patricia	Secondary	Lumberton Middle School	New Jersey
Isenberg, Gene S.	Secondary	Emil A. Cavallini Middle School	New Jersey – middle school
Jacobson, Warren	Secondary	Greenway High School	Arizona
Jennelle, Joseph A.	Secondary	Central Bucks High School East	Pennsylvania
Johnson, Kevin L., Dr.	Elementary	Kearsarge Regional Elementary School at New London	New Hampshire
Jones, Ann	Secondary	Vestavia Hills High	Alabama

Principal Name	Elementary / Secondary	School Name	State
Jones, Darlene	Secondary	Francis Howell North High School	Missouri
Kemhus, Carol L.	Secondary	Ogden Middle School	Oregon
Kito, John R.	Elementary	William Tyson Elementary	Alaska
Klinke, Jannett	Secondary	Lakenheath Middle School	Department of Defense Education Authority
Klosek, Susan M., Dr.	Elementary	Osborn School	New York
Kondon, Jane	Secondary	Davisville Middle School	Rhode Island
Kurtz, Joy	Secondary	New Hope-Solebury Middle School	Pennsylvania
Kuskie, Mary J.	Elementary	Franklin Elementary	Idaho
Lambert, Regina	Secondary	Canton Middle School	North Carolina
Lamberty, Ronald	Secondary	Seward High School	Nebraska
Larby, Frank	Secondary	Rim County Middle School	Arizona
Lark, Carol J.	Elementary	C.P. Squires	Nevada

Principal Name	Elementary / Secondary	School Name	State
		Elementary School	
Lewis, Lillie	Secondary	Parker Academy	South Carolina
Lewis, Lillie G.	Secondary	Parker Academy of Fine Arts and Humanities	South Carolina – Middle School
Little, Lennie M., Dr.	Secondary	Hazlehurst Elementary School	Mississippi – Middle School
Lowery, Douglas	Secondary	Hilliard Memorial Middle School	Ohio
Madden, Paul	Secondary	Needham High School	Massachusetts
McCarthy, Jana	Secondary	Lewis and Clark Middle School	Idaho
McCloud, Melody T.	Elementary	Robert R. Moton Elementary School	Virginia
McGee, Barry	Secondary	Raleigh Egypt Middle School	Tennessee
Meissen, Michael	Secondary	Madison LaFollette High School	Wisconsin
Mershon, Clark	Secondary	New Mark Middle	Missouri

Principal Name	Elementary / Secondary	School Name	State
Mikulcik, Paul J., Dr.	Elementary	Mechanics Grove Elementary School	Illinois
Millet, Courtney P.	Elementary	LaPlace Elementary School	Louisiana
Minehira, Norman	Secondary	Leilehua High School	Hawaii
Montgomery, Curtis G.	Secondary	Reid Primary and Middle School	Ohio – Middle School
Morrison, Bob	Secondary	Edmond Memorial High School	Oklahoma
Mullally, Georgeann	Elementary	Lawton Chiles Elementary	Florida
O'Connor, John E., Dr.	Secondary	Dover Middle School	New Hampshire
Olson, Dawn	Secondary	Flandreau Middle School	South Dakota
Ortman, Don L.	Elementary	Starkweather Elementary School	Iowa
Osgood, John	Secondary	C.L. Jones Middle School	Nebraska

Principal Name	Elementary / Secondary	School Name	State
Owen, Keith E.	Elementary	Beulah Heights Elementary School	Colorado
Park, Judy	Secondary	Independence High School	Utah
Park, Pamela S.	Elementary	Orchard Elementary School	Utah
Park, Patricia	Secondary	Aliamanu Middle School	Hawaii
Parks, Jacqueline A.	Secondary	Manchester Elementary	Vermont – Middle School
Patterson, Gregory W., Dr.	Elementary	Dodson Elementary School	Tennessee
Paulsgrove, Christy	Secondary	Goliad Middle School	Texas
Pear, Louis G.	Elementary	West Hill Elementary School	Connecticut
Pecina, Michele M.	Elementary	James Monroe Year- Round Elementary	California
Pfannl, Beth, Dr.	Elementary	The American School of Asuncion	Department of State
Pickett, Shaun	Secondary	South Royalton	Vermont

Principal Name	Elementary / Secondary	School Name	State
		School	
Poe, Terry	Secondary	Independence Junior High School	West Virginia
Poore, Norman	Secondary	Madison Middle School	Mississippi
Porter, Adda V.	Elementary	Munson Elementary School	Ohio
Priesz, Paul	Secondary	Valencia High School	California
Risinger, David	Secondary	Leo C. Mayfield Middle School	Oklahoma
Roberto, Robert	Secondary	John F. Kennedy High School	New Jersey
Roth, Bettye	Secondary	Woodlands Middle Community School	Florida
Rudiak, Barbara A., Dr.	Elementary	Phillips Elementary School	Pennsylvania
Schmid, David	Secondary	Steamboat Springs High School	Colorado
Schug, Rodney	Secondary	Yakutat High School	Alaska
Schuler, Julie C.	Elementary	Prarie View	North Dakota

Principal Name	Elementary / Secondary	School Name	State
Schum, Debra	Secondary	East St. John High School	Louisiana
Sinkel, Gerald A.	Elementary	Mackinaw Trail Middle School	Michigan
Slagley, Charles	Secondary	Galena High School	Illinois
Smith, Dawn L.	Elementary	Warm Springs Elementary	Oregon
Smith, Steven	Secondary	Towns County Middle School	Georgia
Sorensen, Donna K.	Elementary	Wileman Elementary School	Wisconsin
Springston, Gregory	Secondary	Junction City High School	Kansas
Stephens, Jerry	Secondary	Marshalltown High School	Iowa
Stinson, Gayle	Secondary	Texas High School	Texas
Stringer, Paul	Secondary	Thomas Weaver High School	Connecticut
Svaluto, Marilyn	Secondary	Davidson Middle	Michigan

Principal Name	Elementary / Secondary	School Name	State
Taber, Katherine L., Dr.	Elementary	Jefferson Elementary School	Oklahoma
Talbert, Dale A.	Elementary	Maury Elementary School	District of Columbia
Taton, Georgia	Secondary	Jane Mears Middle School	Alaska
Tsukamoto, Susan	Secondary	Sig Rogich Middle School	Nevada
Turner, Gail H.	Elementary	Glenwood Elementary School	North Carolina
Walls-Culotta, Sandra	Secondary	Sussex Technical High School	Delaware
Warren, Timothy	Secondary	Milan High School	Tennessee
Watson, Allyn A.	Elementary	Edgewood Elementary School	Maryland
Wear, Donna	Secondary	Lone Oak High School	Kentucky
Westphal, William	Secondary	Canby High School	Oregon
Whitaker, Erline	Secondary	Spingarn Stay High	District of Columbia

Principal Name	Elementary / Secondary	School Name	State
Wilson, Steve	Secondary	W.J. Keenan High School	South Carolina
Wood, Donald G.	Elementary	Wellford Elementary School	South Carolina
Young, Annie M.	Elementary	Clark Elementary School	Indiana
Young, Curtis J.	Elementary	Honowai Elementary School	Hawaii

APPENDIX F

Delphi I Introductory Letter

Dear

My name is Andrea P. Tottossy and I am currently the principal at Northside Middle School in Norfolk, Virginia. I am currently completing my doctoral studies in leadership and policy studies at Virginia Tech.

As a fellow principal, I am sure you realize that one of the most important decisions you make is related to hiring teachers. You may not be aware that there have been very few empirical studies conducted to identify the best practices in hiring strategies from the perspective of principals. Through my research, I hope to identify these best practices in hiring from a very specific group of expert principals, those who received national recognition as state principals of the year in 2003.

I recognize that your time is very important. I also identify with the need to have input from other principals to share what really works in hiring teachers. Participation in this study will not take excessive time from your schedule. I will provide you with clear, concise, and easy to follow documents at each phase of the study. Please also know that I will protect the anonymity of your answers and will gladly share the results of the study with you.

The methodology used for this study will build consensus from a group of experts. The Delphi method is a very powerful way to develop group consensus while protecting the anonymity of individual responses. For this study, a three-round Delphi will be conducted by first introducing three questions related to hiring practices to a group of 25 nationally recognized principals. All responses from the questions will be collected and submitted back to you. For the second round of the Delphi study, you would review the collective data from everyone and rate the responses by level of importance using a Likert scale. These ratings will be collected, analyzed, and submitted back to you. For the third round of the Delphi Study, you would review the overall data of everyone's responses and make any changes to your individual ratings based on the collective feedback from the group. Once this is completed, we will have reached consensus on what nationally recognized principals of the year perceive as best practices in the hiring of teachers. I believe that this will yield a very useful and interesting document.

It is my hope that you will agree to participate by sharing your thoughts on the questions on the attached Word document. Please return to me via e-mail at atottossy@nps.k12.va.us.

Thank you!

Sincerely,

Andrea P. Tottossy, Doctoral Candidate
Dr. Travis W. Twiford, Committee Chairperson

APPENDIX G

Delphi I Instrument

Delphi I

This study seeks to determine the traits of teachers that nationally recognized principals consider essential to identify in the teacher selection process, the questions nationally recognized principals ask during the interview process in order to identify these essential traits and other sources of information used to identify these essential traits.

Please respond to the following three questions. In order to provide clarity of focus, the framework for the National Board for Professional Teaching Standards has been provided for you at the conclusion of this document. Please indicate your responses below and return via e-mail to atottossy@nps.k12.va.us.

Question One:

What traits of teachers do you find from your knowledge and experience are essential to identify in the teacher selection process?

Question Two:

What questions do you ask during the teacher selection process to identify the traits you consider essential?

Question Three:

What other sources of information do you utilize to identify the essential traits of teachers?

The National Board for Professional Teaching Standards (NBPTS) is a private, non-profit organization that is governed by a board, most of whom are teachers. The NBPTS has established standards for what teachers should know and be able to do. The NBPTS standards were developed from an extensive review of best practices as well as practitioner input. The standards are presented in five core areas, as follows (National Board for Professional Teaching Standards, 2002):

6. Teachers are committed to students and their learning.
 - a. Teachers recognize individual differences and adjust their practices accordingly.
 - b. Teachers have an understanding of how students develop and learn.
 - c. Teachers treat students equitably.
 - d. Teachers' mission extends beyond developing the cognitive capacity of their students.

7. Teachers know the students they teach and how to teach those subjects to students.
 - a. Teachers appreciate how knowledge in their subjects is created, organized, and linked to other disciplines.
 - b. Teachers command specialized knowledge of how to convey a subject to students.
 - c. Teachers generate multiple paths to knowledge.

8. Teachers are responsible for managing and monitoring student learning.
 - a. Teachers call on multiple methods to meet their goals.
 - b. Teachers orchestrate learning in group settings.
 - c. Teachers place a premium on student engagement.
 - d. Teachers regularly assess student progress.
 - e. Teachers are mindful of their principal objectives.

9. Teachers think systemically about their practice and learn from experience.
 - a. Teachers are continually making difficult choices that test their judgment.
 - b. Teachers seek the advice of others and draw on education research and scholarship to improve their practice.

10. Teachers are members of learning communities.
 - a. Teachers contribute to school effectiveness by collaborating with other professionals.
 - b. Teachers work collaboratively with parents.
Teachers take advantage of community resources.

APPENDIX H

Delphi II Instructions

November 4, 2004

Dear

Thank you for responding to the first round of the Delphi Study related to identifying the best practices in hiring strategies from the perspective of principals. We are well on our way to developing consensus from a panel of expert principals to determine these best practices.

You will now be asked to rate each of the responses provided using the following scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Three documents are attached. Please use the scale noted above to rate each item in each document. The first document contains responses related to the traits of teachers essential to be identified in the teacher selection process. Interview questions used to identify these essential traits are in the second attachment. The third document includes other sources of information that can be used to identify the traits of teachers that are considered essential.

Each document attached includes specific instructions. You may bold or highlight your answer choices, or mark them on a printed copy and send them directly to me by mail or fax.

Thank you again for your participation in this study. I would be very appreciative if you would return your responses by November 11, 2004.

Sincerely,

Andrea P. Tottossy, Doctoral Candidate
2633 Springhaven Drive
Virginia Beach, VA 23456
757-531-3150 (work telephone)
757-531-3144 (work fax)
757-427-1140 (home phone)
atottossy@nps.k12.va.us (e-mail)

APPENDIX I
Delphi II Instrument, Question 1

Delphi II / Question I

Listed below are traits of teachers considered to be essential to identify in the teacher selection process. Based on your knowledge and experience, please use the following Likert scale to rate your level of agreement that the trait is essential.

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

1	Ability to address individual needs of students	5	4	3	2	1
2	Ability to deliver content	5	4	3	2	1
3	Ability to get along with others	5	4	3	2	1
4	Ability to relate to parents	5	4	3	2	1
5	Ability to relate to young people	5	4	3	2	1
6	Ability to teach	5	4	3	2	1
7	Ability to work well with a learning community	5	4	3	2	1
8	Ability to work well with parents	5	4	3	2	1
9	Ability to work well with students	5	4	3	2	1
10	Ability to get along with others	5	4	3	2	1
11	Able to deliver content to different kinds of learners with success	5	4	3	2	1
12	Able to manage multiple tasks	5	4	3	2	1
13	Adaptable	5	4	3	2	1
14	Advocate for children	5	4	3	2	1
15	Approachable	5	4	3	2	1
16	Authentic	5	4	3	2	1
17	Belief that all students can (and will) learn	5	4	3	2	1
18	Belief in students	5	4	3	2	1
19	Brain research knowledge	5	4	3	2	1
20	Cares for children	5	4	3	2	1
21	Character	5	4	3	2	1
22	Child development expertise	5	4	3	2	1
23	Child development knowledge	5	4	3	2	1
24	Classroom management	5	4	3	2	1
25	Commitment	5	4	3	2	1
26	Commitment to children	5	4	3	2	1
27	Commitment to educating kids	5	4	3	2	1
28	Commitment to education	5	4	3	2	1
29	Commitment to self	5	4	3	2	1
30	Commitment to students	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

31	Common sense	5	4	3	2	1
32	Communication skills	5	4	3	2	1
33	Community connections	5	4	3	2	1
34	Community involvement	5	4	3	2	1
35	Compassion	5	4	3	2	1
36	Concerned for students	5	4	3	2	1
37	Confident	5	4	3	2	1
38	Content knowledge	5	4	3	2	1
39	Courageous	5	4	3	2	1
40	Creative	5	4	3	2	1
41	Critical thinking skills	5	4	3	2	1
42	Curiosity	5	4	3	2	1
43	Dedication	5	4	3	2	1
44	Dependable	5	4	3	2	1
45	Desire to impact the future	5	4	3	2	1
46	Desire to teach and make a difference	5	4	3	2	1
47	Desire to work with children	5	4	3	2	1
48	Diverse thinking skills	5	4	3	2	1
49	Dynamic	5	4	3	2	1
50	Eager to learn	5	4	3	2	1
51	Eager to please	5	4	3	2	1
52	Empathetic	5	4	3	2	1
53	Energetic	5	4	3	2	1
54	Enjoys teaching	5	4	3	2	1
55	Enthusiastic	5	4	3	2	1
56	Ethical	5	4	3	2	1
57	Excited to teach	5	4	3	2	1
58	Experience	5	4	3	2	1
59	Flexibility	5	4	3	2	1
60	Happy	5	4	3	2	1
61	High expectations	5	4	3	2	1
62	Honest	5	4	3	2	1
63	How the candidate “fits” within the program	5	4	3	2	1
64	Integrity	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

65	Intellectual ability	5	4	3	2	1
66	Intellectual capacity	5	4	3	2	1
67	Interpersonal skills	5	4	3	2	1
68	Involvement in profession	5	4	3	2	1
69	Kindness	5	4	3	2	1
70	Knowledge of best instructional practices	5	4	3	2	1
71	Knowledge of curriculum	5	4	3	2	1
72	Knowledge of early adolescence	5	4	3	2	1
73	Knowledge of pedagogy	5	4	3	2	1
74	Knowledge of planning process	5	4	3	2	1
75	Knowledge of technology	5	4	3	2	1
76	Lifelong learner	5	4	3	2	1
77	Likes to work with children	5	4	3	2	1
78	Love of children	5	4	3	2	1
79	Motivational	5	4	3	2	1
80	Open minded	5	4	3	2	1
81	Openness	5	4	3	2	1
82	Optimistic	5	4	3	2	1
83	Organized	5	4	3	2	1
84	Passion for teaching and learning	5	4	3	2	1
85	Personal relations skills	5	4	3	2	1
86	Positive	5	4	3	2	1
87	Positive thinker	5	4	3	2	1
88	Professionalism	5	4	3	2	1
89	Puts students first	5	4	3	2	1
90	Reflective	5	4	3	2	1
91	Reliable	5	4	3	2	1
92	Respects colleagues	5	4	3	2	1
93	Respects different learning styles	5	4	3	2	1
94	Respects diversity	5	4	3	2	1
95	Respects students	5	4	3	2	1
96	Sense of humor	5	4	3	2	1
97	Sincere	5	4	3	2	1
98	Smart	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

99	Stands up for what is right	5	4	3	2	1
100	Teaching ability	5	4	3	2	1
101	Team player	5	4	3	2	1
102	Understanding of assessments	5	4	3	2	1
103	Understands data	5	4	3	2	1
104	Warm	5	4	3	2	1
105	Well-spoken	5	4	3	2	1
106	Willing to go the extra mile	5	4	3	2	1
107	Willingness to help others	5	4	3	2	1
108	Willingness to take on challenges	5	4	3	2	1
109	Work ethic	5	4	3	2	1
110	Worldly	5	4	3	2	1

APPENDIX J

Delphi II Instrument, Question 2

Delphi II / Question II

Listed below are interview questions asked during the teacher selection process to identify traits of teachers that are considered essential. Based on your knowledge and experience, please use the following Likert scale to rate your level of agreement that the question targets an essential teacher trait.

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

1	Are you a leader or follower?	5	4	3	2	1
2	Ask for a response to a scenario about a challenging child.	5	4	3	2	1
3	Ask for a response to a scenario about a difficult parent.	5	4	3	2	1
4	Can all students learn?	5	4	3	2	1
5	Choose a section of your curriculum. How would you develop a unit around this section?	5	4	3	2	1
6	Describe a difficult situation you experienced with student behavior. Include the actions of the student, your actions, and the outcome.	5	4	3	2	1
7	Describe a lesson where you teach your content for a period of 90 minutes.	5	4	3	2	1
8	Describe an ideal classroom.	5	4	3	2	1
9	Describe an ideal literacy program.	5	4	3	2	1
10	Describe for me what an ideal student is.	5	4	3	2	1
11	Describe the best lesson you ever observed.	5	4	3	2	1
12	Describe the best lesson you ever taught.	5	4	3	2	1
13	Describe the characteristics of a good parent.	5	4	3	2	1
14	Describe the characteristics of a good student.	5	4	3	2	1
15	Describe the characteristics of a great communicator.	5	4	3	2	1
16	Describe the instructional strategies you use to increase the chances that student will be efficient and effective.	5	4	3	2	1
17	Describe your experiences in teaching.	5	4	3	2	1
18	Describe your experiences in working with other teachers.	5	4	3	2	1
19	Describe your student teaching experience.	5	4	3	2	1
20	Describe your student teaching experience.	5	4	3	2	1
21	Do you consider yourself to be an expert in your content area?	5	4	3	2	1

22	Do you feel comfortable presenting information to adults?	5	4	3	2	1
23	Do you hold conferences with students?	5	4	3	2	1
24	Do you plan to pursue your education further?	5	4	3	2	1
25	Give an example of a time when you differentiated your lesson.	5	4	3	2	1
26	Give an example of how you made a difference in the life of another person.	5	4	3	2	1
27	How are students able to communicate and share their learning with others?	5	4	3	2	1
28	How can a teacher make a positive impact on the life of a student?	5	4	3	2	1
29	How detailed are your lesson plans?	5	4	3	2	1
30	How do you accommodate students who learn quickly?	5	4	3	2	1
31	How do you accommodate students who learn slowly?	5	4	3	2	1
32	How do you address cultural diversity in your classroom?	5	4	3	2	1
33	How do you address the individual needs of your students?	5	4	3	2	1
34	How do you answer a parent who wants to know why you are not going through the textbook chapter by chapter?	5	4	3	2	1
35	How do you close lessons?	5	4	3	2	1
36	How do you define at-risk students?	5	4	3	2	1
37	How do you define success in teaching?	5	4	3	2	1
38	How do you ensure your students are learning?	5	4	3	2	1
39	How do you feel about being accountable for your test scores?	5	4	3	2	1
40	How do you feel about providing students with chances to make up failed tests?	5	4	3	2	1
41	How do you feel about your students and parents knowing your test scores?	5	4	3	2	1
42	How do you handle a student who is always late with assignments?	5	4	3	2	1
43	How do you handle different abilities in the classroom?	5	4	3	2	1
44	How do you handle it when a parent blames you for the child's poor performance?	5	4	3	2	1

45	How do you integrate essential questions into your lessons?	5	4	3	2	1
46	How do you involve parents in the education of their child?	5	4	3	2	1
47	How do you keep students actively engaged in high level activities?	5	4	3	2	1
48	How do you know when your students fully understand the lesson?	5	4	3	2	1
49	How do you open lessons?	5	4	3	2	1
50	How do you plan daily lessons?	5	4	3	2	1
51	How do you plan to record parental contacts?	5	4	3	2	1
52	How do you plan units of study?	5	4	3	2	1
53	How do you teach reading in your content area?	5	4	3	2	1
54	How do you teach writing in your content area?	5	4	3	2	1
55	How important is reading and writing in the content areas?	5	4	3	2	1
56	How is a teacher also a leader?	5	4	3	2	1
57	How often will you call parents?	5	4	3	2	1
58	How should objectives be constructed?	5	4	3	2	1
59	How well did your college prepare you for student teaching?	5	4	3	2	1
60	How well do you think your student teaching prepared you for this potential job?	5	4	3	2	1
61	How will you accommodate a non-reader in your class?	5	4	3	2	1
62	How will you assess yourself as a teacher?	5	4	3	2	1
63	How will you be a steward of good deeds to your colleagues?	5	4	3	2	1
64	How will you grade students on homework?	5	4	3	2	1
65	How will you group your students to maximize learning?	5	4	3	2	1
66	How will you meet the needs of all students?	5	4	3	2	1
67	How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	5	4	3	2	1
68	How will you pursue ongoing professional development?	5	4	3	2	1
69	How will you reflect in your own teaching?	5	4	3	2	1
70	How will you work to address closing the	5	4	3	2	1

	achievement gap?					
71	How would you develop a lesson plan with a team of teachers?	5	4	3	2	1
72	How would you differentiate assessment methods?	5	4	3	2	1
73	How would you differentiate for an ESL student?	5	4	3	2	1
74	How would you handle a situation where you thought a parent completed a project for his/her child?	5	4	3	2	1
75	How would you handle a student who refused to complete an assigned task?	5	4	3	2	1
76	How would you handle cheating in your classroom?	5	4	3	2	1
77	How would you handle conflict with another teacher?	5	4	3	2	1
78	How would you handle, (provide a sample scenario of a typical class and throw in “monkey wrenches”, an emergency drill, sudden illness, announcement of an early dismissal) to get a picture of their flexibility in dealing with change.	5	4	3	2	1
79	How would you integrate technology in your classroom?	5	4	3	2	1
80	How would you promote acceptance, tolerance, and diversity in the classroom?	5	4	3	2	1
81	How would you provide for different learning styles?	5	4	3	2	1
82	How would you structure a parent-teacher conference?	5	4	3	2	1
83	How would you use the administrators to help you?	5	4	3	2	1
84	How would you work with students who are below grade level?	5	4	3	2	1
85	How would your previous students describe you?	5	4	3	2	1
86	If all students failed a quiz, what would you do?	5	4	3	2	1
87	If I asked your cooperating teacher about you, what would they say?	5	4	3	2	1
88	If students complete their work early, what would they be doing in your classroom?	5	4	3	2	1

89	If you could change anything about yourself, what would it be?	5	4	3	2	1
90	If you could change one thing about yourself, what would it be?	5	4	3	2	1
91	If you heard another teacher speaking inappropriately of a student, how would you handle it?	5	4	3	2	1
92	If you were given \$1,000.00 to use in your classroom, what would you buy?	5	4	3	2	1
93	In what ways do you apply the information on “brain research” in your teaching strategies?	5	4	3	2	1
94	In what ways do you remain “current” on educational issues and instructional practices?	5	4	3	2	1
95	Is it important for the students be your friend?	5	4	3	2	1
96	Is it important for the students to like you?	5	4	3	2	1
97	List three adjectives to describe yourself.	5	4	3	2	1
98	Provide an example of an open-ended question.	5	4	3	2	1
99	Provide an example where you resolved conflict with another person.	5	4	3	2	1
100	Provide me with an n example of a high level question. Why is it high level?	5	4	3	2	1
101	Provide me with an example of a quality objective.	5	4	3	2	1
102	Should special education children be included in the regular classroom?	5	4	3	2	1
103	Should students be promoted to the next grade if they can’t read?	5	4	3	2	1
104	Should teachers be required to submit lesson plans to the administration? Why or why not?	5	4	3	2	1
105	Should the objectives be in the curriculum or should teachers develop their own?	5	4	3	2	1
106	Tell me how the different learning styles of children impact your lesson planning.	5	4	3	2	1
107	Think of your favorite topic. Describe how you would teach that topic.	5	4	3	2	1
108	Walk me through how you would plan tomorrow’s lesson.	5	4	3	2	1
109	Walk me through one of your teaching days.	5	4	3	2	1
110	What are some personality characteristics you find undesirable in people?	5	4	3	2	1

111	What are the most important parts of a lesson?	5	4	3	2	1
112	What are the qualities of a good team player?	5	4	3	2	1
113	What are the three most important rules you would have in your classroom?	5	4	3	2	1
114	What are the unique needs of the middle level student (physical, emotional, intellectual)?	5	4	3	2	1
115	What are your goals five years from now? Ten?	5	4	3	2	1
116	What are your professional aspirations?	5	4	3	2	1
117	What direct impact will No Child Left Behind have in your classroom?	5	4	3	2	1
118	What do you enjoy most about teaching?	5	4	3	2	1
119	What do you remember most about your own education?	5	4	3	2	1
120	What do you think is special about our school?	5	4	3	2	1
121	What evidence would I see in your classroom and from your practices to indicate that you believe all students will learn?	5	4	3	2	1
122	What evidence would I see in your classroom that promotes the value and dignity of all students?	5	4	3	2	1
123	What have you done in previous districts to improve teaching with students?	5	4	3	2	1
124	What have you learned about the way the human brain learns?	5	4	3	2	1
125	What is a rubric and how would you use it to support instruction?	5	4	3	2	1
126	What is an achievement gap?	5	4	3	2	1
127	What is an example of a high level activity?	5	4	3	2	1
128	What is an example of a project your students completed?	5	4	3	2	1
129	What is cooperative learning and how would you use it in the classroom?	5	4	3	2	1
130	What is direct instruction?	5	4	3	2	1
131	What is the best deterrent to student misbehavior?	5	4	3	2	1
132	What is the best way to determine if students understand the lesson?	5	4	3	2	1
133	What is the greatest strength you bring to the classroom?	5	4	3	2	1

134	What is the most effective way to communicate with parents?	5	4	3	2	1
135	What is your greatest life accomplishment?	5	4	3	2	1
136	What is your idea of an ideal administration?	5	4	3	2	1
137	What is your opinion of No Child Left Behind?	5	4	3	2	1
138	What is your philosophy of education?	5	4	3	2	1
139	What kind of students do you like to work with?	5	4	3	2	1
140	What new ideas do you bring to this experience?	5	4	3	2	1
141	What qualities do you have that make you an effective teacher?	5	4	3	2	1
142	What questions do you have for me?	5	4	3	2	1
143	What sets you apart from the other candidates?	5	4	3	2	1
144	What sources can be sued for content knowledge, other than textbooks?	5	4	3	2	1
145	What sources of assistance do you think would be important to you as a new teacher in this school?	5	4	3	2	1
146	What specifically interests you in this position?	5	4	3	2	1
147	What techniques will you use to manage the classroom?	5	4	3	2	1
148	What type of students do you think you work best with?	5	4	3	2	1
149	What was the greatest challenge in student teaching?	5	4	3	2	1
150	What was your biggest success in student teaching?	5	4	3	2	1
151	What was your impression of our school when you walked in today?	5	4	3	2	1
152	What will you bring to our district that will benefit our students and staff?	5	4	3	2	1
153	What would I see if I walked into your classroom unannounced?	5	4	3	2	1
154	What would you do if a student told you he/she was homeless?	5	4	3	2	1
155	What you do if 50% of your students failed a test?	5	4	3	2	1
156	When is it appropriate to use drill and practice strategies?	5	4	3	2	1

157	When is it okay to give up on a child?	5	4	3	2	1
158	When should the principal become involved in assisting with your classroom discipline?	5	4	3	2	1
159	Where do you see yourself in the next five years?	5	4	3	2	1
160	Why are you interested in our district?	5	4	3	2	1
161	Why do you want to be a teacher?	5	4	3	2	1
162	Why do you want to teach in our district?	5	4	3	2	1
163	Why have you chosen teaching as a career direction?	5	4	3	2	1
164	Why is parental contact important?	5	4	3	2	1

APPENDIX K

Delphi II Instrument, Question 3

Delphi II / Question III

Listed below are other sources of information used to identify the traits of teachers that are considered essential. Based on your knowledge and experience, please use the following Likert scale to rate your level of agreement that each source will target an essential teacher trait.

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

1	Ability to discuss current literature	5	4	3	2	1
2	Academic history	5	4	3	2	1
3	Ancillary materials	5	4	3	2	1
4	Appearance	5	4	3	2	1
5	Application	5	4	3	2	1
6	Attendance history with previous employer	5	4	3	2	1
7	Awards	5	4	3	2	1
8	Background check	5	4	3	2	1
9	Balance of references to include work, personal and community	5	4	3	2	1
10	Books read	5	4	3	2	1
11	Certification	5	4	3	2	1
12	Collegiate preparation	5	4	3	2	1
13	Committee review	5	4	3	2	1
14	Communication skills	5	4	3	2	1
15	Community experience	5	4	3	2	1
16	Credentials	5	4	3	2	1
17	Degree earned	5	4	3	2	1
18	Direct contact with those providing recommendations	5	4	3	2	1
19	Educational background	5	4	3	2	1
20	Effective use of communication skills	5	4	3	2	1
21	Employment history	5	4	3	2	1
22	Endorsements	5	4	3	2	1
23	Evaluations	5	4	3	2	1
24	Experience	5	4	3	2	1
25	First impression – gut feeling	5	4	3	2	1
26	Grades	5	4	3	2	1
27	How often the candidate mentions “kids” or “students” in their answers	5	4	3	2	1
28	Interview score	5	4	3	2	1

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

29	Job history	5	4	3	2	1
30	Letters of recommendation	5	4	3	2	1
31	Model lessons	5	4	3	2	1
32	Observations	5	4	3	2	1
33	Opinion of previous administrator	5	4	3	2	1
34	Personal references	5	4	3	2	1
35	Portfolios	5	4	3	2	1
36	Previous observations	5	4	3	2	1
37	Previous teaching experience	5	4	3	2	1
38	Ratings from previous school district	5	4	3	2	1
39	Ratings from student teaching	5	4	3	2	1
40	Real-world work experiences	5	4	3	2	1
41	Recommendations	5	4	3	2	1
42	References	5	4	3	2	1
43	Research knowledge	5	4	3	2	1
44	Score on human resources instrument	5	4	3	2	1
45	Student teaching feedback	5	4	3	2	1
46	Student work	5	4	3	2	1
47	Talk with the school secretary who answers the phone when I call. (They frequently are able to provide insights on the candidate's character, interpersonal relationships, etc.)	5	4	3	2	1
48	Transcript	5	4	3	2	1
49	University attended	5	4	3	2	1
50	University preparation	5	4	3	2	1
51	Volunteer service	5	4	3	2	1
52	Willingness to sponsor extra-curricular activities	5	4	3	2	1
53	Work experience	5	4	3	2	1

APPENDIX L

Delphi III - Instructions

December 3, 2004

Dear _____,

Thank you for your continued participation in the Delphi Study related to teacher selection. Delphi III, the final phase of the Delphi Study, is attached. It is with this round of the Delphi that group consensus will be finalized.

The attached chart shows an analysis of data from the rating of responses to the three areas of inquiry. The Group Mean column contains the mean of responses from members of the Delphi panel. The Individual Rating column contains the response provided by you, an individual respondent. In order to fully develop consensus, please review the group mean for each trait. Should you desire to change your individual response based on the collective feedback from the group, you may do so by indicating a response in the New Rating column. All responses will be recalculated based on this final round of the study. Please note that in an attempt to develop consensus on the “most essential” traits, interview questions, and other sources of information considered when hiring teachers, all responses with a group mean of less than 4.0 were eliminated at the conclusion of Delphi II.

If you are satisfied with your responses and the overall group mean for each response, please place an X in the box at the top of the attachment. Even if you do not intend to change any of your responses, please place an X in the box so that your intention can be documented.

Kindly review your responses, indicate changes or a desire for no change, and forward back to me via e-mail (atotossy@nps.k12.va.us) or fax (757-531-3144). I would very much appreciate receiving your responses by December 17, 2004.

Again, thank you for your participation.

Sincerely,

Andrea P. Tottossy,
Doctoral Candidate
Virginia Polytechnic Institute and State University

APPENDIX M

Delphi III Instrument

**If no changes to individual ratings from Delphi II are desired,
please place an "X" here:**

Essential Traits	Group Mean	Individual Rating	New Rating
content knowledge	4.7273		
commitment	4.5909		
ability to get along with others	4.5000		
belief in students	4.4545		
ability to address individual needs of students	4.4545		
high expectations	4.4091		
honest	4.4091		
sense of humor	4.3636		
energetic	4.3636		
willingness to help others	4.3182		
respects students	4.3182		
dependable	4.3182		
communication skills	4.3182		
common sense	4.3182		
positive	4.2727		
flexibility	4.2727		
integrity	4.2727		
ability to work well with parents	4.2727		
work ethic	4.2727		
respects colleagues	4.2727		
knowledge of curriculum	4.2727		
creative	4.2727		
team player	4.2273		
teaching ability	4.2273		
sincere	4.2273		
likes to work with children	4.2273		
respects diversity	4.2273		
interpersonal skills	4.2273		
happy	4.2273		
willingness to take on challenges	4.1818		
reliable	4.1818		
organized	4.1818		
knowledge of pedagogy	4.1818		
willing to go the extra mile	4.1818		
understands data	4.1818		
optimistic	4.1818		
knowledge of best instructional practices	4.1818		
excited to teach	4.1818		

enthusiastic	4.1818
courageous	4.1818
compassion	4.1818
respects different learning styles	4.1818
passion for teaching and learning	4.1818
kindness	4.1818
ethical	4.1818
motivational	4.1364
love of children	4.1364
desire to teach and make a difference	4.1364
professionalism	4.1364
personal relations skills	4.1364
intellectual capacity	4.1364
enjoys teaching	4.1364
dedication	4.1364
critical thinking skills	4.1364
concerned for students	4.1364
commitment to students	4.1364
commitment to educating kids	4.1364
positive thinker	4.0909
commitment to education	4.0909
ability to teach	4.0909
empathetic	4.0455
desire to work with children	4.0455
puts students first	4.0000
cares for children	4.0000
belief that all students can (and will) learn	4.0000
able to manage multiple tasks	4.0000
able to deliver content to different kinds of learners with success	4.0000
stands up for what is right	4.0000
commitment to children	4.0000

Interview Questions	Group Mean	Individual New Rating	Rating
How will you meet the needs of all learners?	4.8182		
What questions do you have for me?	4.7273		
How will you organize your classroom to ensure that it is managed so well that it prevents disciplinary interruptions?	4.6818		
How important is reading and writing in the content areas?	4.6818		
How do you feel about being accountable for your test scores?	4.6818		
What was your impression of our school when you walked in today?	4.6818		
Provide me with an example of a high level question. Why is it high level?	4.6364		
How can a teacher make a positive impact on the life of a student?	4.6364		

How do you handle it when a parent blames you for the child's poor performance?	4.5909
Choose a section of your curriculum. How would you develop a unit around this section?	4.5909
Give an example of how you made a difference in the life of another person.	4.5909
Describe a difficult situation you experienced with student behavior. Include the actions of the student, your actions, and the outcome.	4.5909
How do you address cultural diversity in your classroom?	4.5455
How do you address the individual needs of your students?	4.5455
How do you define success in teaching?	4.5000
Describe the characteristics of a great communicator.	4.5000
What direct impact will No Child Left Behind have in your classroom?	4.3636
What will you bring to our district that will benefit our students and staff?	4.3182
How do you teach reading in your content area?	4.3182
What is the greatest strength you bring to the classroom?	4.2727
How will you accommodate a non-reader in your class?	4.2727
How would you handle a student who refused to complete an assigned task?	4.2727
Why have you chosen teaching as a career direction?	4.2273
What sources of assistance do you think would be important to you as a new teacher in this school?	4.2273
What evidence would I see in your classroom that promotes the value and integrity of all students?	4.2273
How would you promote acceptance, tolerance, and diversity in the classroom?	4.2273
What is an example of a high level activity?	4.1818
How do you keep students actively engaged in high level activities?	4.1818
What qualities do you have that make you an effective teacher?	4.1818
What is the best way to determine if students understand the lesson?	4.1818
Why are you interested in our district?	4.1818
How would you work with students who are below grade level?	4.1818
Why do you want to teach in our district?	4.1364
How would you handle a situation where you thought a parent completed a project for his/her child?	4.1364
How will you pursue ongoing professional development?	4.1364
Why is parental contact important?	4.1364
What sets you apart from the other candidates?	4.1364
What evidence would I see in your classroom and from your practices to indicate that you believe all students will learn?	4.1364

How would you integrate technology in your classroom?	4.1364
How will you be a steward of good deeds to your colleagues?	4.1364
How do you teach writing in your content area?	4.1364
What is an achievement gap?	4.0909
What is a rubric and how would you use it to support instruction?	4.0909
How would you provide for different learning styles?	4.0909
How will your work to address closing the achievement gap?	4.0909
How will you group your students to maximize learning?	4.0909
How do you ensure your students are learning?	4.0909
Describe the instructional strategies you use to increase the chances that students will be efficient and effective.	4.0909
What do you do if 50% of your students failed a test?	4.0455
What would you do if a student told you he/she was homeless?	4.0455
What kind of students do you like to work with?	4.0455
Tell me how the different learning styles of children impact your lesson planning.	4.0455
How do you handle different abilities in the classroom?	4.0455
How do you handle a student who is always late with assignments?	4.0455
Describe the best lesson you ever observed.	4.0455
Describe an ideal classroom.	4.0455
If you were given \$1,000.00 to use in your classroom, what would you buy?	4.0000
If students complete their work early, what would they be doing in your classroom?	4.0000
If all students failed a quiz, what would you do?	4.0000
How are students able to communicate and share their learning with others?	4.0000
Describe a lesson where you teach your content for a period of 90 minutes.	4.0000
What techniques will you use to manage the classroom?	4.0000
What do you enjoy most about teaching?	4.0000

Other Sources of Information	Group Mean	Individual Rating	New Rating
Communication skills	4.5455		
Effective use of communication skills	4.4545		
Balance of referrals to include work, personal and community	4.3636		
Personal references	4.3182		
Recommendations	4.2727		
References	4.1818		
Letters of recommendation	4.1364		
Certification	4.0909		
Willingness to sponsor extra-curricular activities	4.0909		
Score on human resources instrument	4.0455		
University preparation	4.0000		

Student teaching feedback

4.0000

APPENDIX N

Delphi III Data Synthesis

Delphi III Data Synthesis

Trait Domain Identified in Empirical Research	Delphi III Traits Considered Essential to Identify in the Interview Process (sample)	Delphi III Interview Questions to Target the Essential Traits (sample)
<p>Ability to work with others</p>	<p>Ability to get along with others (parents, students, and colleagues)</p> <p>Common sense</p> <p>Compassionate</p> <p>Courageous</p> <p>Dependable</p> <p>Desire to work with children</p> <p>Ethical</p> <p>Flexible</p> <p>Honest</p>	<p>How can a teacher make a positive impact on the life of a student?</p> <p>How do you handle it when a parent blames you for the child's poor performance?</p> <p>Give an example of how you made a difference in the life of another person.</p> <p>How would you address cultural diversity in your classroom?</p> <p>What evidence would I see in your</p>

Trait Domain Identified in Empirical Research	Delphi III Traits Considered Essential to Identify in the Interview Process (sample)	Delphi III Interview Questions to Target the Essential Traits (sample)
	Demonstrates Integrity Kind Likes to work with children Organized Reliable Respects diversity Respects others Sense of humor Sincerity Team player Willingness to help others	classroom that promotes the value and integrity of all students? How will you be a steward of good deeds to your colleagues?
Academic achievement	Critical thinking skills Intellectual capacity	
Communication skills	Communication skills	Provide me with an example of a high level

Trait Domain Identified in Empirical Research	Delphi III Traits Considered Essential to Identify in the Interview Process (sample)	Delphi III Interview Questions to Target the Essential Traits (sample)
Content knowledge	Content knowledge Understands data	<p>question. Why is it high level?</p> <p>Describe the characteristics of a great communicator.</p> <p>Why is parental contact important?</p> <p>How are students able to communicate and share their learning with others?</p>
Enthusiasm	Energetic	<p>Choose a section of your curriculum. How would you develop a unit around this section?</p> <p>How would you integrate technology into the classroom?</p> <p>Describe a lesson where you teach your content for a period of 90 minutes.</p>
		What is the greatest strength you bring to

<p>Trait Domain Identified in Empirical Research</p>	<p>Delphi III Traits Considered Essential to Identify in the Interview Process (sample)</p>	<p>Delphi III Interview Questions to Target the Essential Traits (sample)</p>
	<p>Enthusiastic High expectations Optimistic Positive Willing to go the extra mile Willingness to take on challenges</p>	<p>the classroom? How do you keep students actively engaged in high-level activities? What qualities do you have that make you an effective teacher?</p>
<p>Motivation</p>	<p>Belief that all students can (and will) learn Cares for children Commitment to students and their education Concerned for students Dedicated Desire to teach to make a difference Enjoys teaching</p>	<p>How do you feel about being accountable for your test scores? How do you define success in teaching? What do you enjoy most about teaching? What will you bring to our district that will benefit our students and staff? Why are you interested in our district? What sets you apart from the other</p>

Trait Domain Identified in Empirical Research	Delphi III Traits Considered Essential to Identify in the Interview Process (sample)	Delphi III Interview Questions to Target the Essential Traits (sample)
	<p>Excited to teach</p> <p>Happy</p> <p>Motivational</p> <p>Passion for teaching and learning</p> <p>Work ethic</p>	<p>candidates?</p>
Pedagogy	<p>Able to deliver content to different kinds of learners with success</p> <p>Ability to address the individual needs of students</p> <p>Creative</p> <p>Knowledge of curriculum</p> <p>Knowledge of pedagogy</p> <p>Respects different learning styles</p>	<p>How will you meet the needs of all learners?</p> <p>How important is reading and writing in the content areas?</p> <p>How do you address the individual needs of your students?</p>
Professional goals		Why have you chosen teaching as a career

<p>Trait Domain Identified in Empirical Research</p>	<p>Delphi III Traits Considered Essential to Identify in the Interview Process (sample)</p>	<p>Delphi III Interview Questions to Target the Essential Traits (sample)</p>
		<p>direction?</p>

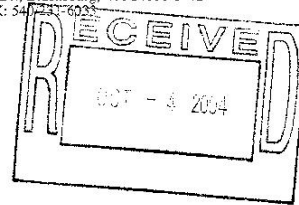
APPENDIX O

IRB Approval



Institutional Review Board


Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice President for Research Compliance
CVM Phase II- Duckpond Dr., Blacksburg, VA 24061-0442
Office: 540/231-4991; FAX: 540/231-6033
email: moored@vt.edu



DATE: September 24, 2004

MEMORANDUM

TO: Travis W. Twiford Educational Leadership & Policy St. oc 0302
Andrea Tottossy

FROM: David Moore 

SUBJECT: **IRB Exempt Approval:** "Teacher Selection: A Delphi Study" IRB # 04-454

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that the research falls within the exempt status. Approval is granted effective as of September 24, 2004.

cc: File