Chapter 1: The Problem

The best opportunity a principal has to improve teaching and learning in a school is when a new teacher is hired.

Gordon Donaldson, Jr., 1990, p. 1

Introduction

Policy, practice, and research all suggest that teachers have a strong impact on the education of their students. The No Child Left Behind Act (NCLB) mandates that there will be highly qualified teachers in every school by 2005-2006 (PL 107 110, Title I, Part A, §1119a.2). Highly-qualified teachers are defined as professionals who have been licensed in their state to teach (United States Department of Education [USDE], 2002). The Virginia Department of Education (2002) has further interpreted this guidance to be teachers who are both certified and teaching in their area(s) of endorsement.

However, being certified to teach does not guarantee that a teacher will be successful with students. Students need effective teachers, but the criteria for teacher effectiveness are not as easily defined as for "highly qualified" teachers. Within teacher effectiveness, a teacher's certification is only one of many components. Teacher effectiveness is a multi-faceted concept incorporating all aspects of teachers from personality to knowledge to technical skills. The difficulty of the identifying effective teachers during the hiring process is compounded by the fact that interviews often are not conducted in a valid or reliable manner.

Teacher selection is complex; it is influenced by factors identified in applied psychology regarding the topic of interviewing such as interview structure and the phrasing of questions, and it draws on effective teacher research. Although, the influence

of effective teacher research is often confined to administrators' tacit knowledge as opposed to a systematic application. Influencing the selection process are administrators' personal perceptions of what constitutes a good teacher. For some administrators a good teacher does not refer students to the office, for others the good teacher achieves a grade level or more in academic growth a year. Questions, format, note-taking, training, and impression management have all been investigated in employee selection studies (e.g., Ellis, West, Ryan, & DeShon, 2002; Middendorf & Macan, 2002; Pulakos & Schmitt, 1995). However, studies on interviewing are commonly done in business settings or assessment centers; few studies have specifically addressed teacher selection. Studies that use a teacher sample typically consider principals' perceptions of desired teacher characteristics (Place & Drake, 1994), interview format (Emley & Ebmeier, 1997), interview questions (Perkins, 1998), and psychological influences (Delli & Vera, 2002). These studies are isolated examples often with sample sizes of less than 25 participants. Effective teacher research generated over the last 30 years can be used to create job-related questions and anchored rating scales through the use of characteristics and practices found in the extant research on selection. Yet, this integration of effectiveness and interview research had not occurred prior to this study.

Some effective teacher characteristics, such as certification and experience, can be screened on an application. For example, research has demonstrated that certified teachers are more effective than noncertified teachers (Darling-Hammond, 2000b; Darling-Hammond, Berry, & Thoreson, 2001; Hawk, Coble, & Swanson, 1985). Other elements of a teacher's effectiveness can be ascertained through behavioral- or situational-based questions during the employment interview, such as asking a teacher

about planning for instruction (Emley & Ebmeier, 1997; Pawlas, 1995). Gathering information about teacher effectiveness depends on the expertise of the interviewer to ask the questions to solicit the information and then evaluate the response.

Students taught by highly effective teachers make larger achievement gains than their peers taught by less effective teachers (Mendro, Jordon, Gomez, Anderson, & Bembry, 1998; Sanders & Horn, 1998; Stronge & Ward, 2002). While NCLB makes an initial positive step, it does not go far enough to ensure a highly effective teacher for every student in that it stops with the certification requirement without considering other effective teacher attributes. Teacher effectiveness goes beyond certification and encompasses issues such as personal attributes, classroom management and organization, planning, instructional delivery, and assessment.

Teacher Effectiveness

Teacher effectiveness is a loosely defined concept (Stronge, 2002) that is influenced by individuals' perspectives on what characteristics are highlighted (Yin & Kwok, 1999). An effective teacher cares about students as individuals and communicates that ethic by creating thoughtfully planned, executed, and assessed instructional opportunities in a productive classroom environment in an effort to the increase the achievement of each student. This description incorporates the factors of caring (Peart & Campbell, 1999), communication (Hanushek, 1971), preparation and delivery of instruction (Johnson, 1997), as well as assessment of student learning (Gronlund, 2002; Shellard & Protheroe, 2000). Effective building-level administrators and educators know that better teachers have higher student achievement results, fewer discipline issues, and better relationships with their students (e.g., Ralph, Kesten, Lang, & Smith, 1998).

Researchers have found that the teacher impact on student learning lasts for years after students have left the teacher's classroom (Sanders & Horn, 1998). Given the benefits of effective teachers, school administrators need knowledge and skills to distinguish these applicants from others in the candidate pool.

Teacher Selection Interviews

Researchers have investigated a variety of psychological and social factors that impact interviews along with other aspects such as format, questions, and ratings. An interview is an exchange of information between an interviewer and interviewee to assess whether the applicant and the organization would be a good match (Eder & Harris, 1999). The employment interview conducted at the building level between the administrator and the candidate, along with any other panel members, constitutes a selection interview. Other interviews may be conducted by central office personnel, such as screening interviews, or final interviews with curriculum supervisors, personnel directors, or the superintendent based on the recommendation from the building-level interview team.

Research on teacher selection interviews is limited, and administrators often have received little or no preparation on how to conduct interviews and select effective teachers (Castetter, 1996; Perkins, 1998). Texts on selecting effective teachers contain suggested questions and approaches (e.g., Clement, D'Amico, & Protheroe, 2000; McEwan, 2002; Peterson, 2002). Additionally, available commercial products, such as Teacher Perceiver © and Teacher Insight ©, focus on psychological constructs (Gallup Organization, n.d.,b.; Gallup Organization, 2001). Yet, none of these resources includes studies directly relating teacher selection processes to the qualities of effective teachers. Highly qualified teachers as defined in NCLB can be determined by the personnel

department verifying that applicants are licensed, but the issue of effectiveness requires that administrators are adept at asking questions and evaluating applicants' responses about prior experiences.

In constructing a valid and reliable interview, the interviewer first has to identify the job responsibilities in order to write appropriate questions and design a means of evaluating the responses given (Castetter, 1996). During the interview, the interviewer should assess the applicants' knowledge, skills, and dispositions in relation to the job. Interviews range in the level of structure from low to high. Unstructured interviews help the interviewer get to know the candidate as a person and are commonly used in personnel selection (van der Zee, Bakkar, & Bakkar, 2002). A structured interview can be highly or loosely controlled, but it is characterized by a preset format and set of questions designed to enhance the psychometric properties of the interview (Campion, Palmer, & Campion, 1997). Typically, it contains items involving constructs of applied mental skills, direct job knowledge, applied social skills, and organizational fit (Huffcutt, Roth, Conway, & Stone, 2001). The format of the questions varies, as some questions seek to solicit basic information whereas others are designed to delve deeper into the applicant's professional background. Experience-based questions, also referred to as behavior-based questions, ask applicants about their past performance (Clement, et al., 2000). For example, the question might begin with the stem "Tell me about a time when" in order to get the applicant to describe a situation and how he or she addressed it. The key idea is that past performance is informative of behavior that will occur on the job (Dipboye, 1997). By using the findings from teacher effectiveness research as the basis for the knowledge, skills, and dispositions that teachers need to be successful with students and

building an interview protocol based on the selection literature around those components, administrators have a tool to help them select the best from the teacher applicant pool.

Future areas of development for teacher interview protocols are many. They include establishing a link between the selection process and subsequent employee performance, assessing the impact of administrator training, investigating how interviews are conducted, and customizing protocols for teachers interviewing for different teaching assignments. Whether the protocol is created by the administrator, school district, or a commercial vendor, interviewers must be cognizant of the weaknesses that may exist in the protocol. A major weakness in available commercial teacher selection instruments is the lack of published studies on their reliability and validity (Metzger & Wu, 2003). Further in a dissertation study on school administrators, Perkins (1998) found that none of the administrators had formal training in how to conduct interviews. One avenue of research being explored by Mary Clement (personal communication, February 24, 2003) is on the interview practices and questions of 200 administrators. As increasing numbers of teachers are hired due to teacher turnover (i.e., retirements and leaving the profession), increasing enrollments, or decreasing class sizes, there are increased opportunities for using well-developed teacher interview protocols.

Conceptual Framework

Teacher selection is influenced by a multitude of factors. Interviews are impacted by many input sources, which if left unchecked may adversely influence the decision reached during the interview process as one factor dominates the others (see Figure 1). Unlike Figure 1, which represents the reality in many teacher selection interviews, Figure 2 depicts an improved concept that emphasizes decision-making

through the lens of research while still recognizing, but bracketing additional influences. This study concentrated on the relationship between the response to a question based on effective teacher research and how practicing administrators perceived the strength of that response. Building-level administrators make judgments of the quality of interview responses. Conceptually, this is a fairly linear process as shown in Figure 2. However, despite the responses being provided, administrators' determination of the quality of the response is affected by outside factors as shown in the ellipse (Figure 2). While these components may not be consciously considered by the interviewer, nonetheless they may impact his or her judgment, as indicated by the broken arrow. This conceptual framework represents what is occurring in an interview protocol that was designed to integrate the research bases from qualities of effective teachers to derive the questions and rubric and the interview literature for the format.

Figure 1 *Conceptual Framework of Many Selection Interviews*

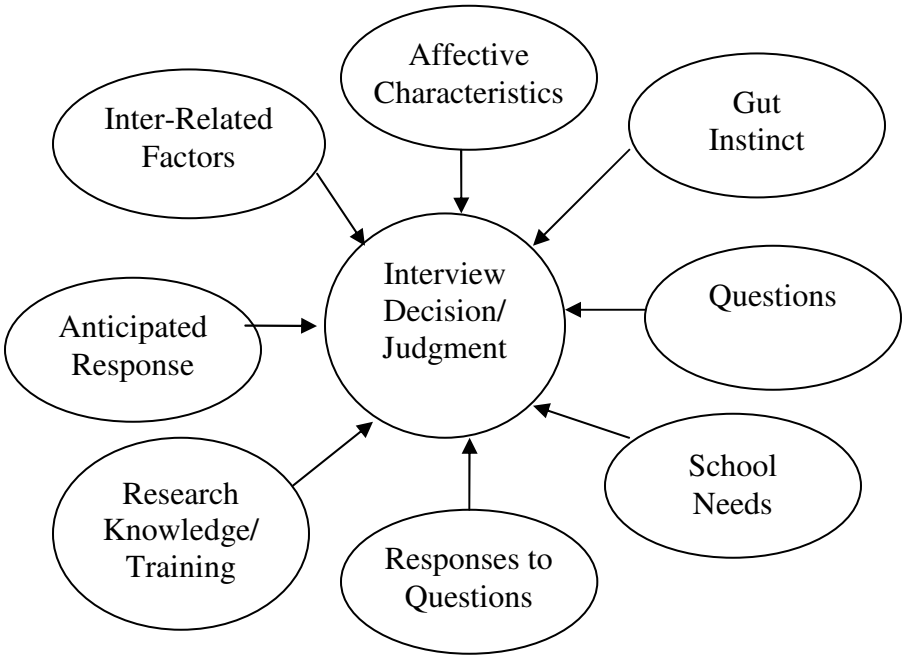
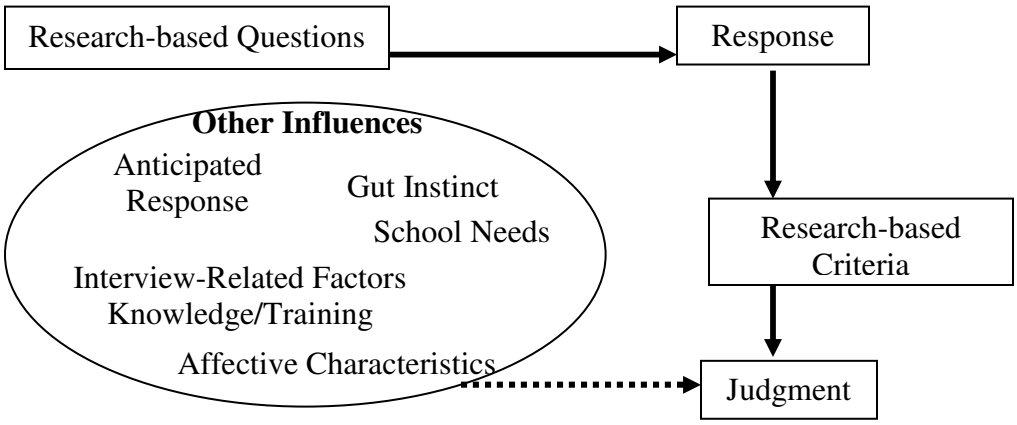


Figure 2 *Conceptual Framework of the Relationship Between the Interview Question and Judgment*



Statement of the Problem

Purpose of the Study

This study: (a) collected data on building-level administrators' interviewing practices and (b) focused on how they associate interview statements with varying levels of teacher effectiveness. The protocol incorporated the psychometric properties recommended in the interview research literature. The study was narrowed to the statements from a rubric for rating responses developed as part of an interview protocol.

The intent of the study was to synthesize the extant research literature on effective teachers and selection interviews in an effort to develop an interview protocol that can be used to better discriminate between effective teachers and ineffective teachers. An interview protocol was developed incorporating the findings from a review of the extant literature. From that protocol, a series of statements related to a teacher performance rubric was extracted in order to ask building-level administrators to rate the strength of the statement from exemplary to unsatisfactory. The assessment of the statements by the principals established the content validity of the rating rubric. Additionally, school

personnel shared information about their interviewing practices to determine what selection techniques recommended by the research literature are used in actual practice.

Research Questions

This study addressed the following questions using data collected from a survey sent to 300 public school principals.

Phase I research questions: Interviewing practices. These questions focus on the practices identified in the extant literature and the techniques used by practicing school administrators.

I.1 What teacher interviewing practices are recommended by the extant literature?

I.2 To what degree do practicing building-level administrators' teacher interviewing techniques reflect research-based best practice?

I.3 To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?

Phase II research questions: Perception of key quality indicators. This phase of the study considers that agreement between administrators, administrators and the research literature, and the relationship between demographic characteristics and ratings.

II.1 To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?

II.2 To what extent is there agreement between a research-based rubric and participants' responses?

II.3 To what degree do participants' demographic characteristics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted per year) relate to their association of statements with levels of teacher competence?

Significance of the Study

The teacher recruitment, selection, and induction processes are time consuming and costly, especially considering their frequency necessitated by increasing enrollments, decreasing class sizes, teacher retirement, teachers changing schools/districts, and teachers leaving the profession. For example, one study found that the cost of teacher turnover was valued at 25-33% of the teacher's salary by the time recruitment, administrative, and training costs were calculated (Texas Center for Educational Research, 2002). While many building-level administrators spend many hours each year interviewing to fill vacancies, few have received training on how to interview or the legal considerations associated with interviewing, thus potentially exposing school districts to disparate hiring suits (Castetter, 1996; Perkins, 1998). Further, the lack of attention paid to such an important administrator job duty related directly to the quality of the teachers who impact student learning could a contributor to some of the factors affecting teacher turnover.

Quality teacher selection is about identifying individuals who can make a profound positive impact in students' lives. Teachers facilitate student learning through adeptly blending pedagogy, content knowledge, and interpersonal and communication skills (Stronge, 2002). Additionally, professionals who are most effective at meeting students' needs and facilitating student success are a necessity as ineffective teachers

stunt student growth (e.g., Mendro, et al., 1998; Stronge, Tucker, & Ward, 2003; Wright, Horn, & Sanders, 1997).

As a part of this study, a protocol was developed using employment interview questions linked to job-related qualities of effective teachers. The creation of structured interview questions and anchored rubrics associated with each question based on qualities of effective teachers is one step in improving a process to assist administrators in making more informed teacher selection decisions.

Definition of Terms

Building Level Administrator

A principal or assistant principal who supervises licensed personnel (Indiana Professional Standards Board, 2003). As used in this study, a building level administrator may also include superintendents who, as one of their job responsibilities, serve as a principal. All individuals surveyed were identified as currently serving as principals in the United States.

Interview

The exchange of information between a candidate and an organization's representative(s) in which the representative gathers information about the candidate's work-related knowledge, skills, and abilities, person-organizational fit, values, and motivations (Eder & Harris, 1999). This definition is sufficiently broad to incorporate a variety of interview formats and levels of structure.

Teacher Effectiveness

A multifaceted concept incorporating the diversity of roles and responsibilities teachers assume in the classroom and related settings (Yin & Kwok, 1999). The

framework adopted in this study considered six main categories, or qualities, of teacher effectiveness identified by Stronge (2002) and includes: (a) prerequisites to teaching, (b) teacher as a person, (c) classroom management and organization, (d) organizing for instruction, (e) implementing instruction, and (f) monitoring student progress and potential.

Limitations of the Study

The following limitations apply to the interpretation of the results of this study.

1. The research literature on the qualities of effective teachers does not concur on the definition of an effective teacher.
2. The sampling procedure limits the generalizability of the findings to individuals who are similar to the respondents in this study.
3. Respondents must have participated in an interview within the last 12 months to be eligible to complete the survey. Therefore, some of the randomly selected participants may not be able to participate if they have not had to conduct a teacher selection interview.
4. The data collection period included winter break, which may have reduced the number respondents.

Major Assumptions

The following major assumptions underlie the design of this study.

1. Building-level administrators can associate statements with how likely they would be to hire an applicant making similar statements.
2. Teacher effectiveness can be rated adequately.

3. Interview questions selected were aligned with the responses provided for building-level administrators' judgments.

Chapter 2: Review of the Literature

This chapter reviews the literature on qualities of effective teachers and selection interviews. A discussion of the need for highly-qualified teachers, as identified in legislation and in terms of supply, precedes consideration of what constitutes an effective teacher. Additionally, the history, development, and study of the teacher selection interview are provided to make a connection between both bodies of literature. Finally, a proposed plan for research examining teacher effectiveness through interviewing is introduced.

Need for Effective Teachers

Nearly 50 years ago, a doctoral student wrote that effective teacher selection and retention were major problems (Delaney, 1954). Today, teacher quality continues to be newsworthy (Darling-Hammond, 2000a; Hussar, 1999; Ingersoll, 2001). Over the years, research studies have measured teacher effectiveness both quantitatively and qualitatively (e.g., Peart & Campbell, 1999; Sanders & Horn, 1998). Standardized test scores of learning gains, determined either by actual baseline data or by predicted achievement levels, were a frequent data source in many quantitative studies (Mendro, et al., 1998; Sanders, 2001; Stronge, et al., 2003; Walls, Nardi, von Minden, & Hoffman, 2002). Qualitative investigations asking students about their most effective teachers reported humor, caring, and respect as common characteristics (Black & Howard-Jones, 2000; Peart & Campbell). Regardless of how the study was constructed, the teacher repeatedly has been demonstrated to have a strong influence on student learning.

Effective teachers do more than deliver instruction and manage behavior. They are the masters of a science and art that combines pedagogy (Marzano, Pickering, &

McTighe, 1993), subject-matter knowledge (Goldhaber & Brewer, 2000), and interpersonal skills in order to construct meaningful experiences for each child in their classroom (Collinson, Killeavy, & Stephenson, 1999; Peart & Campbell). An effective teacher connects with the learner and helps build bridges among content, skills, and processes in a meaningful manner for the student (Covino & Iwanicki, 1996; Shellard & Protheroe, 2000). High-performing teachers teach the content and related skills so that students can connect the new material to their experiences (Bloom, 1984; Marzano et al., 1993). In making schooling as authentic as possible, effective teachers provide their students opportunities to learn how to use knowledge.

Legislation Mandating Accountability

Effective teachers influence what students know and can do; therefore, in order for future leaders and workers to be competitive in a global marketplace, they need a solid educational foundation upon which to build their futures (U.S. Department of Education [USDE], 2001). Business leaders want workers who are ready to work as opposed to needing remediation on skills they should have learned in high school (Cascio, 1998). In an effort to ensure a quality education for the future workers of America, legislation concerning accountability and teacher quality has been passed on the federal level. School districts must identify, select, and retain high quality teachers (Dozier & Bertotti, 2000). The No Child Left Behind Act of 2001 (NCLB) calls for highly-qualified teachers in all schools by the end of the 2005-2006 school year (PL 107 110, Title I, Part A, §1119a.2). In 2002-2003, all teachers in schools receiving targeted assistance (i.e., Title I schools) had to meet the definition of highly qualified. Additionally, federal legislation requires local educational agencies to report annual

increases in the percentages of highly qualified instructional personnel in school systems to the state (PL 107 110, Title I, Part A, §1119b.1.A). Some states require additional testing or a college major in the subject area to meet their interpretation of highly qualified. In Virginia, for example, highly qualified teachers are fully licensed either through traditional teacher education programs or are working on full licensure through an alternative route program and teach in their endorsed area (Virginia Department of Education [VDOE], 2002, July). In essence, "quality teaching …. means bringing distinctive life experiences and perspectives to the classroom; providing valuable role models for minority and non-minority students alike; enriching the curriculum, assessment, and school climate; and strengthening connections to parents and communities" (USDE, 1998, p. 3).

Impact of Student Enrollment and Teacher Supply

While legislation can mandate specific standards to be met, it cannot compel highly qualified individuals to apply for teaching positions. This, in essence, creates a supply-and-demand problem. Teachers are increasingly in demand as student enrollment rises, reductions in class size are mandated, and the current teacher workforce nears retirement. Thus, 2005, K-12 enrollment in public and private schools is expected to reach 53.5 million students, up an estimated one million students from 1998 (Gerald & Hussar, 2000). While enrollment increases, teachers are leaving the profession and retiring faster than certified new hires can be secured (Ingersoll, 2001). Ingersoll also found that teacher turnover rates (13.2%) are higher than the overall national average for worker turnover (11%). These teachers may be changing teaching positions or as the 1991-1992 Teacher Follow-up Survey to the Schools and Staffing Survey found that of

those who left the profession, 63.9% were employed by private businesses, 18.8% worked for the government, and 11.9% were self-employed (Pigge & Marso, 1996). Contributing to the problem is that the average age of an American teacher is 44 years compared to 39 years for other workers (Hussar, 1999) resulting in teachers being eligible for retirement and needing to be replaced sooner than workers in other areas.

The demand issue challenges teacher education professionals, human resources personnel, and others who recognize that preparation programs graduate adequate numbers of teachers and there are sufficient numbers of certified individuals to meet the needs in most areas, but teachers may not reside or want to work in the locality that needs them. Compounding the supply issue is that 39% of newly prepared teachers elect not to teach or are unable to secure teaching positions (Darling-Hammond, 2000a; Edwards, 2000). Henke, Chen, and Geis (2000) reported some of the reasons given by graduates who earned their teaching certification for not entering the teaching workforce, including prestige of other professions (2%), low pay (7%), more lucrative offers (10%), and no longer interested in teaching (46%). Some were offered positions and declined them due to being asked to teach out of their certified areas or in unsafe school environments.

History of Effective Teacher Literature

Identifying highly qualified individuals to provide leadership and facilitate learning in a productive and academically enriching classroom environment is integral to meeting the need for teachers and fulfilling the requirements of the NCLB. An examination of the historical context of teacher effectiveness reveals that these concerns are not new. Teacher effectiveness is broadly used to identify attributes of what constitutes a good teacher, but is dependent on who is looking at the concept. For

example, for a third grader, a teacher who creates memorable learning experiences with butterflies is effective (Dill & Dill, 1993). Adults may recall a well-organized, knowledgeable teacher who understood them (Check, 1999). Many researchers using test data consider teachers effective if students experience learning gains of at least one year's growth.

Studies on the qualities of effective teachers began in the 1920s with personality traits and have continued, focusing on related topics such as teaching methods, behavior towards student learning, mastery of competencies, professional decision making, and interaction of pedagogical and subject area knowledge (Lederman & Niess, 2001). Influencing the view of teacher effectiveness is the conceptual lens through which one is viewing. The accountability lens, which frequently is used, focuses on teacher competence and the importance of providing evidence of effectiveness (Yin & Kwok, 1999). Other conceptual lenses identified by Yin and Kwok include goal-task, resource utilization, process, school constituencies, absence of problems, and continuous learning.

Quality Indicators of Effective Teachers

Six effective teacher qualities were identified by Stronge (2002): prerequisites, personality, management, planning, instruction, and assessment. When asked to reflect upon their most effective or ineffective teachers, respondents often named characteristics in the instruction and personality components (Black & Howard-Jones, 2000; Delaney, 1954; Peart & Cambell, 1999). Examples of prerequisites investigated in studies include preparation programs and licensing (e.g., Darling-Hammond, 2000b; Fetler, 1999). However, while studies seek to isolate and identify specific characteristics, it is the sum of all the factors that makes a teacher effective. Thus, high-quality teachers combine

strategy with clearly focused goals and high expectations for both behavior and learning in order to promote student achievement (Cotton, 2000; Johnson, 1997; Marzano et al., 1993; Mason, Schroeter, Combs, & Washington, 1992; McBer, 2000; Peart & Campbell; Shellard & Protheroe, 2000).

Quality indicators are a list of experiences, traits, and behaviors that are typically found in effective teachers. While possessing one or even several of these indicators is not sufficient evidence that an applicant will be an effective teacher, it is a researched-based way to consider applicants. Again, indicators are influenced by the conceptual lens through which an applicant is viewed. Castetter (1996) wrote that the interview is an opportunity to integrate all the different sources of information about a candidate. If interviewers are aware of these quality indicators, they will have a toolkit of items that are likely to be indicative of teacher effectiveness to consider, along with other information collected in the selection process such as writing samples, portfolios, or observations of demonstration lessons. One way to package the quality indicators is in a rubric format where the essential evidence being sought for each question is presented in a format that offers the interviewer a consistent means of assessing the response.

Prerequisites of Effective Teachers

Prerequisites are attributes teachers acquire, such as higher education degrees and licenses. Research on teacher effectiveness with regard to credentials has focused on examining coursework, increasing standards and accountability, and revamping certification requirements (Evans, Stewart, Mangin, & Bagley, 2001; Melnick & Pullin, 2000; Soler, 1999). Each of these factors contributes to teachers' knowledge of the

subject matter and pedagogy and may be gained by teachers before ever instructing their own classes.

The courses teachers take before entering the classroom have an impact on their ability to convey the subject material to students. While the value of both educational coursework and content area study is often debated, a recent meta-analysis found that the results of studies are inconsistent, in part, due to the varied sources of data (Choi & Ahn, 2003). In a study of 266 student teachers, educational coursework was a stronger predictor of student teaching performance than grade point average or National Teacher Exam specialty scores (Ferguson & Womack, 1993). Based on these findings, Ferguson and Womack wrote that increasing subject matter coursework and decreasing pedagogical work would be counterproductive as there is a link between student achievement and teacher education coursework. Yet, a California study found that mathematics teachers who had majors or minors in mathematics had students with higher test scores on the Stanford 9 Achievement test (Fetler, 1999). The better job that teachers do in conveying content knowledge to students, the more likely students will be able to apply the classroom to real life or even high stakes tests (Popham, 1999).

The benefit of content-area preparation may be due to an intrinsic interest. Wenglinsky (2000) found that teachers with a major or minor in a subject are more likely to attend professional development offerings in that area and subsequently incorporate what they learned into instruction. Thus, attending professional development sessions in the content area enhances effectiveness as teachers learn additional strategies and content applications to teach students (Campshire, 2001; Cross & Regden, 2002).

Educational coursework does not have to occur in a traditional teacher preparation program. A study comparing traditionally prepared teachers to alternatively prepared teachers (*N*=82) showed that there was no statistical difference in student achievement (Miller, McKenna, & McKenna, 1998). The cohort members all had degrees in their subject matter and took condensed educational coursework before assuming teaching positions with mentoring support. Similarly, the California Commission on Teacher Credentialing (1996) conducted a longitudinal study of district intern programs of alternative teacher certification and found that 75% of interns were still in their original placement and many had assumed leadership positions within the school. A Georgia study found that alternatively prepared teachers had higher evaluations than traditionally prepared teachers; however, the finding was not statistically significant (Guyton, Fox, & Sisk, 1991). Examining an applicant's coursework is one indicator of the content and pedagogical knowledge they bring to the classroom, whereas teacher certification is the formal state approval of applicants' preparation.

Teacher certification is determined by individual states, and, as mentioned, typically is the operational definition of a highly qualified teacher as defined in NCLB. Certified teachers have been found to have more influence on student learning than uncertified teachers (Darling-Hammond, 2000b; Darling-Hammond et al., 2001; Goldhaber & Brewer, 200l; Hawk et al., 1985; Laczko-Kerr & Berliner, 2002). Clearly, teachers must be assigned to teach in their field in order for certification to be a valid indicator of teacher effectiveness. In a study of 359 secondary-level teachers whose schools were being reorganized to reduce the emphasis on departments, researchers found through a survey that teachers had a decreased sense of efficacy when assigned out of

field (Ross, Cousins, Gadalla, & Hannay, 1999). A separate matched-pairs study compared certified teachers who were licensed to teach mathematics or licensed in another area; students taught by teachers instructing in their field had higher levels of achievement (Hawk et al.). Furthermore, the study found that teachers assigned to teach in their field scored higher on measures of instructional presentation and content knowledge. Laczko-Kerr and Berliner reported that teachers who were certified increased their students' achievement by two grade equivalent months (20%) over their under certified counterparts. Darling-Hammond also found that teachers who are licensed in the area in which they are teaching have higher student achievement in reading and mathematics than out-of-field teachers. In summary, teacher certification is an indicator of effectiveness so long as teachers are assigned to teach in their field (Wayne & Youngs, 2003).

Personality of the Teacher

Teachers make connections with their students through words and actions. A teacher's verbal ability has a positive affect on student achievement as the ability to communicate content knowledge and belief in students is vital in teaching (Darling-Hammond, 2000b; Hanushek, 1971; Haberman, 1995b). Effective teachers have been described as caring, enthusiastic, motivated, fair, respectful, reflective, and dedicated individuals with a sense of humor who interact well with students and colleagues (Black & Howard-Jones, 2000; Delaney, 1954; National Association of Secondary School Principals [NASSP], 1997; Peart & Campbell, 1999). "We cannot teach students well if we do not know them well" (Sizer, 1999, p. 6).

Emmer, Evertson, and Anderson (1980) found that both ineffective and effective teachers treat students equally in terms of respect; however, the effective teachers are better at listening and expressing their feelings. Students need to feel comfortable in the instructional environment in order to learn. In that respect, the personal connection that an educator makes with students assists in creating a trusting and respectful relationship (Marzano et al., 1993; McBer, 2000). The ability to relate to students and convey a sense that they are valued and that the teacher wants them to be there is vital (Haberman, 1995a). Haberman also found that students work for teachers who they perceive are honest with them and believe in them. In brief, the impact of teachers on student learning is increased when students are taught by well-prepared professionals who integrate their knowledge of instruction with a deep sense of caring about the individual students whom they teach.

Learning Environment and Management

The learning environment is influenced by the physical setting and people's perceptions of classroom space. While teachers often have little control over physical plant issues (e.g., heating and leaky ceilings), they can create a welcoming environment with room arrangements that are appropriate for the activities taking place, bulletin board displays related to the material being studied, and the posting of classroom rules and safety procedures (Stronge, 2002). The larger piece of the classroom environment is how members of the class perceive the classroom climate. Climate here refers to the identity, feel, and tone of the room, which influences how people behave and perceive the quality of their experience (Hoy & Hoy, 2003). Teachers cultivate a positive classroom environment for their students by working with students to ensure that routines,

procedures, and expectations are clear; additionally, these teachers take more time at the start of the school year to work with students on creating a positive class climate where individuals are treated with respect and fairness (Covino & Iwanicki, 1996; Emmer et al., 1980; Hoy & Hoy). In establishing a productive learning environment, effective teachers are recapturing instructional time that is often lost in administrative activities, discipline, and transitions (Hoy & Hoy). Effective teachers combine technical skills and resources, knowledge of students, and content with their own personalities to offer meaningful instructional experiences to their pupils.

Instruction and Assessment

Instruction and its related components is perhaps the most visible aspect of a teacher's job. Teachers need to relate the curriculum to the larger context of real life and help students construct their own meaning (Educational Review Office, 1998). Teaching is a complex task in which educators must determine how to instruct students on the essential knowledge and skills to promote the acquisition of new material and abilities (Langer, 2001). Effective teachers plan, deliver, and assess instruction in a productive learning environment.

Lesson planning. Good classroom teaching is the product of thoughtful and deliberate behind-the-scenes lesson planning. Effective teachers know their content area, common student misconceptions, and available resources to use in the classroom (Buttram & Waters, 1997). These teachers use long-range planning to map where instruction will go in combination with alignment of the curriculum (McEwan, 2002; Walker, 1998). They identify appropriate intended learning outcomes for their students and develop means to assess students on these outcomes during the planning process

(Gronlund, 2002; Marzano et al., 1993). An effective teacher organizes for instruction by considering the overarching themes that can be addressed through "big questions" in particular units of study to provide clear and focused instruction in the classroom (Cotton, 2000; Johnson, 1997; McBer, 2000). The teacher incorporates a variety of instructional strategies and resources to facilitate learning and differentiate for student needs (Cunningham & Allington, 1999; Emmer et al., 1980; Mason et al., 1992; McBer, 2000). In planning and considering a multitude of factors, effective teachers survey the educational terrain and plan for how they will guide students on their journey during the delivery of instruction.

Delivery of Instruction. The way teachers present material influences learning. Effective teachers expect more from students and, in turn, students' own expectations for success are raised (Entwisle & Webster, 1973; Mason et al., 1992). Effective teachers provide instruction in which students are actively engaged in minds-on and hands-on activities as they seek to construct meaning from the content while being supported by the teacher (Cunningham & Allington; 1999; Good & Brophy, 1997; Shellard & Protheroe, 2000; Wang, Haertrl, & Walberg, 1994). The teacher is actively involved throughout the lesson, providing additional detail, and monitoring and adjusting based on student feedback (Education USA Special Report, n.d.; Panasuk, Stone, & Todd, 2002).

Effective teachers know how to use instructional techniques with students such as mastery learning and cooperative learning. When used appropriately with students, these strategies can result in student achievement that is one standard deviation or higher than that of students taught without the use of the strategies (Bloom, 1984). They use technology during instruction to offer more individualized student attention, to provide

hands-on experiences, and to shift the focus from the teacher to the student (Dickson & Irving, 2002; Holahan, Jurkat, & Friedman, 2000). These educators also use the students' prior knowledge as a base with hands-on, inquiry approaches to facilitate increased levels of learning (Covino & Iwanicki, 1996). Further, effective teachers use questioning, not only ask questions, but teaching students how to ask quality questions with appropriate follow-ups for prompting, redirection, and clarification (Covino & Iwanicki). Delivery of instruction is a complex process full of decisions, deviations from the original lesson plan, and responses to student inquiry.

Assessment of learning. Assessment is an ongoing process that occurs before, during, and after instruction is delivered. Effective teachers monitor student learning through a variety of informal and formal assessments and offer timely feedback to students (Cotton, 2000; Good & Brophy, 1997; Peart & Campbell, 1999). They check for student understanding throughout a lesson and adjust instruction based on the feedback (Guskey, 1996). Assignments given to students, such as homework and in-class activities, are aligned with the intended learning outcomes so they are meaningful to students in developing or reinforcing a concept and to teachers analyzing the process and/or products (Cruickshank & Haefel, 2001; Stronge, 2002).

The analysis of the data from student assessments informs effective teachers about the degree to which students have acquired specific understandings and skills, and guides teachers in setting instructional goals (Cruickshank & Haefele; Gronlund, 2002). As teachers analyze student progress, they keep students informed through timely and regular targeted feedback that can help students improve and be more successful in future work (Cotton; Hoy & Hoy, 2003; Marzano, Norford, Payneter, Pickering, & Gaddy,

2001; Walberg, 1984). Thus, assessment is an interactive process between teachers and their students, ideally occurring in a positive classroom environment.

Impact of Effective Teachers

Highly effective teachers facilitate learning for all students. They are successful with all groups of learners in the classroom, compared to less effective educators who often teach to the middle and, therefore, leave some students out. Effective teachers get high results regardless of the range of learners (Wright et al., 1997). They are adept at assessing students' abilities, setting reasonable goals, and supporting students in attaining high levels of achievement (Collinson et al., 1999). In examining the influence of race, socioeconomic status, class size, classroom composition, and the teacher, Sanders and Horn (1998) found that it was the educator who was the best predictor of students' growth. Similarly, the Tennessee Value Added Assessment System (TVAAS) study, through a statistical model using archival data, showed that teachers had an impact lasting three to five years after the student leaves their classroom (Wright et al.). Conversely, ineffective teachers have an adverse effect on learning, causing students who began at the same level with the only difference being the teacher to do more poorly over the course of their school year. Sanders (2001) acknowledged that there are mitigating factors in students' lives (e.g., parental divorce) that impact achievement, but, in general, the teacher is the most influential factor in student achievement.

Critics of the Tennessee system suggest that it holds teachers accountable for student factors outside of their control (Kupermintz, 2002) and is difficult for end-users to understand (Ballou, 2002; Bock, Wolfe, & Fisher, 1996). The Tennessee Office of Education Accountability requested a technical review of TVAAS in 1996 that addressed

several issues, including concerns that the system was too difficult to understand and that there was no way to ensure the accuracy of system at the level of the individual educator (Bock et al.). Ballou (2002) wrote that, "there are too many uncertainties and inequalities," (p. 13) with value-added testing as race, gender, and free and reduced-cost lunch program participation are minor contributors to teacher effectiveness. Kupermintz (2002) echoed concerns regarding unidentified variables and called for more research to better focus on the program's strengths and weaknesses to bring about improvements. The requirement for adequate yearly progress (AYP) contained in NCLB and the criteria for value-added assessment have the potential to be in conflict, as schools may fail to make AYP, yet perform adequately on the value-added system (Bianchi, 2003). Also, critics are concerned about the narrow focus of TVAAS on standardized student achievement data and what implications may be for teacher evaluation and AYP.

While some researchers criticize the Tennessee study, other researchers have concurred with Sanders' findings that the teacher has a larger impact on student achievement than curriculum, professional development, or school resources (Mendro et al., 1998). A study of third grade teachers in Virginia found that students of effective teachers achieved at greater levels in core content areas than their peers in ineffective teachers' classrooms (Stronge et. al, 2003). In Tennessee (Sanders, 2001), Texas (Mendro et al.), and Virginia (Stronge et al.) the teachers considered in the effectiveness studies were not first-year teachers because of the need for archival data. None of these studies manipulated students' placement in classrooms rather, they relied upon several years of data gathered from school records. Nonetheless, Sanders' TVAAS statistical model has spurred various value-added programs throughout the United States.

Selection Interviews

The word "interview" comes from the Latin word "videre," to see. The purpose of the employment interview is to exchange information to see if a candidate and a given position are a good fit. Interviews are used most of the time by organizations in making hiring decisions (Delaney, 1954; Dessler, 1997). Thus, the employment literature finds that the interview is second only to the employment application as a means of evaluating an employee pool (Schmidt & Rader, 1999). Specifically, one education study reported that administrators use interviews 85% of the time (Emley & Ebmeier, 1997).

Despite its widespread use, the validity and reliability of a selection interview may be highly variable as it is impacted by interviewer personality, gender and other demographic characteristics (Delli & Vera, 2002; Huffcutt & Roth, 1998); interviewer training (Howard & Ferris, 1996; Huffcutt & Woehr, 1999; Maurer & Fay, 1988; Williamshon, Campion, Roehling, Malox, & Campion, 1997); interview questions (Barclay, 2001; Conway, Jako, & Goodman, 1995; Conway & Peneno, 1999; Ellis et al., 2002; Huffcutt, Roth, & McDaniel, 1996; Pulakos & Schmitt, 1995; Taylor & Small, 2002); interviewer ratings (Campion et al., 1997; Maurer & Lee, 2000; Pulakos, Schmitt, Whitney, & Smith, 1996); halo effect (Castetter, 1996; Kiker & Motowidlo,1998); note-taking (Burnett, Fan, Motowidlo, & DeGroot, 1998; Macan & Dipboye, 1994; Middendorf & Macan, 2002); and interview format (Barclay, 1999; Chapman & Rowe, 2001; Huffcutt et al., 2001). Table 1 provides a summary of each of the studies cited above. Researchers in applied psychology and other fields have a history of dissecting the interview process in an effort to enhance its effectiveness as a tool in evaluating interviewees.

Table 1 *Studies in Brief*

Author and Date Title	Design	Sample	Variable(s)	Findings
Barclay, 1999 "Employee selection: A question of structure"	Survey	Sent to 889 organizations both public and private Response rate (31%)	Asked about: Structured interviewing and questioning techniques	• 77% of respondents used behavior-based interviewing • 77% used structured interviewing by both personnel specialists and managers • structured interviews are used throughout the hiring process • behavior-based interviewing is favored over situational interviewing
Barclay, 2001 "Improving selection interviews with structure: Organizations' use of 'behavioral' interviews	Survey	*n*=163 organizations (30% response rate)	Question type	• Increasing numbers of organizations use behavior-based interviewing • 83% use behavior-based interviewing for multiple positions • 67% of respondents use the technique to improve selection • Common problems with the technique: need for training and practice and preparation required • A third of the respondents tell interviewees about the type of interview approach being used
Brtek & Motowidlo, 2002 "Effects of procedure and outcome accountability on interview validity"	2 x 2 factorial analysis	338 undergraduates	IV: Type of accountability (2 levels each DV: Interview ratings and supervisors' ratings	• Some relationship between note-taking and procedural accountability, but not statistically significant • Procedural accountability increased interview validity, whereas, outcome accountability lowered it • Interviewers were more attentive during the interview in the procedural accountability condition

Author and Date Title	Design	Sample	Variable(s)	Findings
Burnett & Motowidlo, 1998 "Relations between different sources of information in the structured selection interview"	Interview	Multi-part study Part I: *n*=167 Part II: *n*=82 Part III: *n*=30	IV: Type of question, visual cues, nonverbal cues, and job performance DV: Interview ratings	• Nonverbal behaviors (i.e., gaze, hand movement) related to ratings • Suggest that interviewers be trained to decode nonverbal behaviors to utilize it as another source of information
Burnett, Fan, Motowidlo, & DeGroot, 1998 "Interview notes and validity"	Interview	Multi part study Part I: *n*=166 Part II: *n*=111 Part III: *n*=93	IV: Note-taking condition DV: Interview ratings	• Voluntary note-taking increased validity over non-note-takers • When note-taking was manipulative, non-note-takers' judgments were just as valid as those taking general or behavioral-based note • The majority of voluntary notes were behavioral (70%); 23% contextual, 13% procedural, 6% judgmental, 5% dispositional
Chapman & Rowe, 2001 "The impact of videoconference technology, interview structure, and interviewer gender on interviewer evaluations in the employment interview: A field experiment"	2 x 2 x 3 factorial analysis also a qualitative component	*N*=92 job applicants	IV: Format, structure, gender DV: Score on a pre- and post - interview questionnaire, ratings	• Interview format was significantly related to ratings, with interviewers rating applicants in the video-conferencing higher than in face-to-face interviews • Disadvantage to videoconferencing was that nonverbal behavior was more difficult to assess • Highly structured interviews had lower interview ratings than semi-structured or unstructured interviews • Evaluations are impacted by the gender of the interviewer in this study

Author and Date Title	Design	Sample	Variable(s)	Findings
Conway, Jako, & Goodman, 1995 "A Meta-analysis of interrater and internal consistency reliability of selection interviews"	Meta-analysis	111 interrater reliability coefficients and 49 coefficient alphas	Study design, interviewer training, interview structure, response evaluation, combining multiple ratings	• Highly structured interviews had reliability at .67 while unstructured interviews had reliability at .34
Conway & Peneno, 1999 "Comparing structured interview question types: Construct validity and applicant reactions"	Interview & survey	*N*=179 (reduced to 137 for the second round interviews)	IV: Question type DV: Interview ratings	• Situational and behavior-based questions were correlated • All three types of questions (conventional, situational, and behavior based) had high means • Question type did not correlate with cognitive ability • Confirmed that situational questions related more to job knowledge and behavior-based questions to past performance • Applicants thought general questions had higher face validity than situational or behavior-based
Ellis, West, Ryan, & DeShon, 2002 "The use of impression management tactics in structured interviews: A function of question type?"	Interview using experience-based and situational questions	119 structured interviews	IV: Question type DV: Impression management techniques and interviewer evaluation	• Assertive impression management techniques were statistically more significant than defensive ones • Situational questions were answered with ingratiation techniques • Experience-based questions received responses that used self-promotion techniques • Interviewer evaluations were higher if ingratiation techniques were used

Author and Date Title	Design	Sample	Variable(s)	Findings
Emley & Ebmeier, 1997 "The effect of employment interview format on principals' evaluation of teachers"	2 x 2 factorial analysis	*N*=16 administrators	IV: Interview format DV: Ratings	• Found no significant difference between structured or branched formatted interviews
Howard & Ferris, 1996 "The employment interview context: Social and situational influences on interviewer decisions"	2 x 2 x 2 factorial analysis	*N*= 116 full-time employees	IV: Self- promotion behavior, job requirement ambiguity, Nonverbal behavior DV: Ratings on a questionnaire	• Nonverbal behaviors influence perceived competence • Self-promotion behaviors lowered evaluations • Interviewer training and self-promotion behaviors were statistically significant, suggesting that a trained interviewer was aware of the behavior and its intent • Perceived competence and perceived job suitability were significantly related
Huffcutt & Roth, 1998 "Racial group differences in employment interview evaluations"	Meta- analysis	31 studies	Level of structure and group differences	• Structure and group differences are inversely proportional • Group differences and job complexity are inversely proportional • Group differences and proportion of minority applicants are proportional
Huffcutt, Roth, Conway, & Stone, 2001 "Identification and Meta-analytic assessment of psychological constructs measured in employment interviews"	Meta-analysis	*N*=47 interview studies	Interview structure and interview constructs	• Highly structured interviews were better at predicting job success • Low-structured interviews focused on mental ability, background credentials, personality, and physical attributes (e.g., stamina) • Highly structured interviews emphasized applied mental skills, direct job knowledge, applied social skills (e.g., communication), and organizational fit

Author and Date Title	Design	Sample	Variable(s)	Findings
Huffcutt, Roth, & McDaniel, 1996 "A meta-analytic investigation of cognitive ability in employment interview evaluations: Moderating characteristics and implications for incremental validity"	Meta- analysis	49 studies	Interviewees' ability test scores and interviewer ratings	• Cognitive ability and interview structure are inversely proportional • Question type influences the ability correlation (situational correlated more highly than experience- based questions) • Low-complexity jobs correlate higher with ability test scores • Having interviewees' ability test scores available increased how likely it was that ability was addressed in the evaluations
Huffcutt, Weekley, Wiesner, DeGroot, & Jones, 2001 "Comparison of situational and behavior description interview questions for higher-level positions"	2 x 2 factorial analysis	Multiple Studies Part I: n =59 Part II: n = 93	IV: Question type DV: Training program performance	• Compared situational (.22 validity) and experience-based questions, experience-based questions related to job performance (.49 validity) in study 1 • In study 2 the ratings from the experience-based questioning correlated (r=.31, p < .01) with the supervisors' evaluation ratings, but the situational ratings did not
Huffcutt & Woehr, 1999 "Further analysis of employment interview validity: A quantitative evaluation of interviewer-related structuring methods"	Meta- analysis	120 studies (sample size of 18,158)	Interviewer training Same interviewer Panel interview Note-taking	• Training had the strongest relationship • Validity improves with the use of the same interviewer • Panel interviews are mixed on validity impact • Note-taking findings are inconclusive
Kiker & Motowidlo, 1998 "Effects of rating strategy on interdimensional variance, reliability, and validity or interview ratings"	Videotaped interviews	N = 180	IV: rating strategies DV: ratings	• Rating systems may assist in increasing intrarater reliability, but does not help with overall variance

Author and Date Title	Design	Sample	Variable(s)	Findings
Macan & Dipboye, 1994 "The effects of the application on processing of information from the employment interview"	2 x 3 factorial analysis	*N*=139 undergraduates	IV: Note-taking condition; application qualifications DV: Recognition of statements from the different applicants; interview ratings	• Note-taking improved recognition of interview information, but did not reduce bias effects • Interview ratings related to preinterview impressions based on the application review
Maurer & Lee, 2000 "Accuracy of the situational interview in rating multiple job candidates"	Repeated-measures design	*N*=48 police sergeants and lieutenants	IV: Level of the job applicant (i.e., above, average, below) DV: Rating	• When interviewers were asked to rank order candidates, the mean of the recommended ranks matched the target established a priori • The use of the situational interview decreased the carryover effect that may occur when interviewing multiple candidates in a short time period
McDaniel, Whetzel, Schmidt, & Maurer, 1994 "The validity of employment interviews: A comprehensive review and Meta-analysis"	Meta-analysis	245 coefficients from 86,311 individuals	Type of questions Interview structure Basis for judging responses	• Higher validity for structured (.44) versus unstructured (.33) interviews • The criteria rating system used in the structured interview made a difference • Validity depends on the type of questions used, interview format and structure, and the basis for judgment
McFarland, Ryan, & Kriska, 2002 "Field study investigation of applicant use of influence tactics in a selection interview"	Interview	*N*=148 firefighters being considered for a promotion	IV: Technique frequency DV: Interview ratings	• Soft tactics (i.e., ingratiation, persuasion) were used more often than hard tactics (i.e., pressure) by applicants • Soft tactics correlated with interviewer ratings

Author and Date Title	Design	Sample	Variable(s)	Findings
Middendorf & Macan, 2002 "Note-taking in the employment interview: Effects on recall and judgments"	2 x 2 x 3 factorial analysis	*N*= 169 assessment center participants	IV: Type of notes DV: Ratings for recall, judgment accuracy, and notes content	• Note-taking increases recall, but not necessarily accuracy in decision making • Contextual notes were more accurate than judgmental notes
Pulakos & Schmitt, 1995 "Experienced-based and situational interview questions: Studies of validity"	Interview	*N*=216	IV: Question type DV: Ratings	• The ratings of interviewers using experience-based questions were predictive of the supervisors' ratings of the interviewee.
Pulakos, Schmitt, Whitney, & Smith, 1996 "Individual differences in interviewer ratings: The impact of standardization, consensus discussion, and sampling error on the validity of a structured interview"	Interview using experience-based questions	62 interviewers rated 515 federal agency professionals	Ratings	• Consensus discussion was statistically significant, but the small gains create the question of whether it is value-added, most likely increased peer accountability and accuracy • Systematic errors may have been reduced by the high- structure-questions, ratings, and training
Schmitt & Radar, 1999 "Exploring the boundary conditions for interview validity: Meta-analytic validity findings for a new interview type"	Correlation study	*N*=209 telephone interviews	Interview score and subsequent job performance	• Telephone interviews can be as predictive of subsequent job performance as face-to-face interviews
Stevens, 1998 "Antecedents of interview interactions, interviewers' ratings and applicants' reactions"	2 x 2 factorial analysis Survey and qualitative component	*N*= 76 interviewers and 109 job applicants	IV: Interviewers orientation (i.e., screening or recruitment); interviewer training DV: Ratings	• Trained interviewers were more likely to use a structured interview approach, collect more job-related information, and had more consistent ratings

Author and Date Title	Design	Sample	Variable(s)	Findings
Taylor & Small, 2002 "Asking applicants what they would do versus what they did do: A meta-analytic comparison of situational and past behavior employment interview questions"	Meta-analysis	*N*= 28 studies	Validity and reliability coefficients	• Behavior-based studies when paired with behavior-based anchored rubrics were more valid than their situational counterparts • Question-specific descriptively anchored ratings scales for behavior-based questions and interrater reliability are related • Interrater reliability between the two groups was comparable
van der Zee, Bakkar, & Bakkar, 2002 "Why are structured interviews so rarely used in personnel selection?"	Survey and interview	*N*=79	Examined: behavioral intentions, belief-based attitudes, norms, perceived control, and behavior	• Resource managers tend to use unstructured as opposed to structured interview protocols • 89% of the participants did not use rating scales • 34% of the interviewers used the same questions for all applicants for the same position • 80% conducted interviews in pairs or trios • 66% of lead interviewers had some training; yet, 67.3% of the other interviewers involved had no training
Williamshon, Campion, Roehling, Malox, & Campion, 1997 "Employment interview on trial: Linking interview structure with litigation outcomes"	Meta-analysis	*N*=99 cases	Interview structure linked to verdicts	• Structured interviews are more defensible in EEOC cases

History of Interviewing

The *Pall Mall Gazette* in 1884 reported, "Interviewing is an instance of the division of labour… The interviewee supplies the matter, the interviewer the form" (cited in Edenborough, 1999, p. 16). Eder and Harris (1999) reported early research conducted in 1915 that offered lists of what interviewers should do and what to avoid. Around World War II, the selection interview got a boost with the war effort to match soldiers and jobs. The 1950s and 1960s emphasized the role of the interviewer, while the 1970s sought to investigate interviewer bias. By 1980, varieties of structured interviewing came on the scene, and in the early 1990s meta-analytic studies emerged. The studies dissected the various factors that influence an interview such as legal issues, predictor variables, protocol, and questioning.

Legal Considerations

While the interview is widely used, it often suffers from misuse. Before 1964, employment interviewing was unrestricted in the United States. However, with the passage of the Civil Rights Act, the need for additional legislation became apparent. By the end of the 1960s, legislation was forming the framework for what constituted a legal interview. Thus, bona fide occupational qualifications (BFOQs) became part of the selection vernacular. For example, if a question is not job related, it is likely in violation of federal law (Dipboye, 1997). Numerous federal laws protect the rights of United States citizens both during the job search process as well as after hiring.

Litigation statistics show that most discrimination cases both by the U.S. Equal Employment Opportunity Commission's (EEOC) and those suits in which this agency is involved are due to violations of Title VII of the Civil Rights Act of 1964 (42 U.S.C.

§2000e, Pub. L. 88-352) and 1991 (Pub. L. 102-166) [EEOC, 2002]. Title VII prohibits discrimination on the basis of race, color, religion, sex, or national origin and a statement to this effect often appears on the bottom of employment postings and applications. Other statutes enforced by EEOC include the Americans with Disabilities Act of 1990 (ADA) [Pub. L. 101-336], the Age Discrimination in Employment Act of 1967 (ADEA) [29 U.S.C. §621 Pub. L. 90-202], and the Equal Pay Act of 1963 *(EPA)* [29 U.S.C. § 206(d) Pub. L. 88-38].

ADA prohibits discrimination in the private and public sectors of qualified individuals who have disabilities. Given that some employment positions have physical requirements, employers may specify the types of tasks required to perform the job and ask applicants if they can do them. Individuals who are over 40 and seeking employment may not be discriminated against on the basis of age according to ADEA. Regardless of gender, individuals performing essentially the same work are entitled to the same pay as stated in the Equal Pay Act. Of these acts, Title VII, ADA, and ADEA directly impact interviewing.

In education, Young, Rinehart, and Baits (1997) investigated the impact of age in screening for teacher applicants. Information packets were mailed to practicing principals asking them which candidate they would hire for the position of a physical education teacher (n=360) or a physics teacher (n=495). The response rate was over 60% in both cases. Principals were only asked about one position and were given information about two applicants whose qualifications were the same, but the adjectives used to describe them indicated that one was 29 and the other was 49 years old. In the case of the physical education teacher, the younger candidate was preferred, which may be an indicator of age

discrimination. No significant difference was found in the selection of the physics teacher.

Diligence exercised by employers during the selection process can ward off lawsuits. For example, Williamshon et al. (1997) found that employers who developed standard interview questions, trained their interviewers, and designed and validated the interview process have thought through what occurs in the selection interview and taken steps to ensure that the candidate is treated in a legal and ethical manner. In that study of 99 lawsuits, judges' rulings focused on the job-relatedness of the interview, such as specific job-related questions and criteria as opposed to how the interview was conducted. Other studies on legal considerations examine the issue of disparate impact caused by the use of predictor variables.

Predictor Variables

In an effort to increase the likelihood of good hiring decisions, some institutions use predictor variables, which are factors such as test scores that indicate that applicants have the required skills and knowledge to do the job. These variables should not have adverse effects on any particular demographic group. For example, if applicants for a grocery store cashier's position are given a skills test on recognizing produce, individuals over 40 years of age should be selected at approximately the same rate as their younger counterparts. A predictor variable should not be removed, however, if it ensures a quality workforce even if it is favorable to the majority (DeCorte, 1999).

An example of the use of a predictor variable in education is the National Teacher Exam. The United States Supreme Court ruled that the use of the exam did not violate Title VII even though it disqualified many minority teacher applicants in South Carolina,

because the test measured individual achievement on specific subject matter necessary for employment (*United States et al. v. State of South Carolina,* 1977*).* Other commonly used predictor variables in education include college grade point average and student teacher performance reports for new graduates (Shechtman & Sansbury, 1989). School districts must use all the best predictor variables at their disposal to select the most qualified candidates to teach students.

Interview Protocol

There are two main types of selection interviews: unstructured and structured. A meta-analysis of 47 employment interviews found that unstructured interviews emphasized background credentials, personality, physical characteristics, and general mental ability while structured interviews contain questions asked of all candidates ranging on constructs of applied mental skills, direct job knowledge, applied social skills, and organizational fit (Huffcutt, Roth, et al., 2001). An unstructured interview is appropriate for finding out about an interviewee's decision-making ability or the candidate's impression of an organization, as it allows the interviewer more flexibility in the interview (Eder & Harris, 1999). In contrast, the structured interview is standardized with mechanisms controlling for the content and the evaluation of the interview, resulting in validity scores that are up to twice as high as those of the unstructured interview (Campion et al., 1997; McDaniel, Whetzel, Schmidt, & Mauer, 1994). Both interview protocols are in use, but the structured interview is more likely to result in the selection of an effective candidate (van der Zee et al., 2002). In designing a teacher selection interview protocol, specific consideration should be given to the properties of the

interview that research has shown to have greater value. Therefore, structured interviews are discussed in more detail below.

Structured interviews

Highly structured interviews tend to be better predictors of success on the job because the constructs they contain are more job-related (Huffcutt, Roth et al., 2001). Common areas considered for structured interviews in education include the teacher's relationship with students, colleagues, and parents; instructional technique knowledge and application; and general background information (Pawlas, 1995). To increase the validity of the structured interview, all questions should be based on job-related criteria, have anchored rating scales, and use multiple trained interviewers (Campion et al., 1997; Castetter, 1996). This format helps ensure that each candidate responds to the same set of questions and is rated in a common fashion.

Question format. Logically, questions asked in interviews elicit different responses. Conventional interview questions ask the applicant to elaborate on information on an application or a resume. Experience-based questions are designed to get a candidate to discuss past performance in a specific case. An alternate format is to use situational questions in which interviewees are queried on how they would handle a hypothetical situation. One disadvantage of the situational interview is that questions may be answered superficially or in excruciating detail with numerous "what if" possibilities. In a study comparing ratings after the use of conventional and situational questions, Maurer and Fay (1998) found that ratings were more consistent when situational questions were used. However, when experience-based and situational questions were used in interviews and

the ratings were compared to employee performance, the experience-based format was a better predictor (Huffcutt, Weekley, Wiesner, Degroot, & Jones, 2001).

Pulakos and Schmitt (1995) considered the predictive validity of experience-based and situational structured interviews with a sample of 216 government employees who had at least three years of work experience and a college degree. The authors trained interviewers to conduct both kinds of interviews in a panel set-up and randomly assigned candidates. When the panel's composite rating was compared to the candidate's supervisor's performance rating, only the experience-based interview correlated with the job performance. Thus, experience-based interviewing was the better predictor of the job performance.

In a study of higher-level leadership positions, a structured interview using experience-based and situational questions was conducted over the phone in order to evaluate Pulakos and Schmitt's hypothesis (Huffcutt, Weekley, et al., 2001). A difference in the second study was that the individuals interviewed were rated based on their training, not on actual job performance. Yet again, experienced-based questions correlated significantly with performance whereas situational questions did not. To explain these findings, the researchers speculated that situational questions do not capture a person's recent or past performance in the same way. In both studies, the researchers discussed the need for additional study (Huffcutt, Weekley et al.; Pulakos & Schmitt, 1995). Given the findings in these studies, one would surmise that by knowing what skills, abilities, and dispositions are desirable in teachers, one would be able to create a more reliable and valid interview by using experience-based interview questions.

Rating scale. A key element discussed by Campion et al. (1997) in their review of interview structure is the use of anchored rating scales, which "use behavioral examples to illustrate points in order to reduce ambiguity" (p. 675). The use of rubrics for assessment purposes refers to a scoring guide that outlines what is important for a given task (Goodrich, 1996). A well-developed scoring guide specifies points for good, average, and poor answers (Eder & Harris, 1999). There is an assumption that the use of the scale enhances test-retest, interrater, and intrarater reliability through its reduction of subjectivity (Campion et al.). Suggestions for how to develop anchored scales are varied in the literature, including the use of experts as well as responses given in previous interviews (Campion et. al.).

Connection Between Effective Teacher Literature and Interview Research: Context of the Interview

Given that (a) criticisms of the lack of validity of interviews have historically been made, (b) interviews are the second most commonly used selection technique, and (c) students benefit from effective teachers, it is observed that those involved with selecting teachers must improve their practices in order to maximize the benefits of the employment interview. Interviews are vital in establishing an organizational match of the candidates' knowledge, skills, and abilities with the culture and needs of the school system (Eder & Harris, 1999). The structured interview format facilitates questioning on constructs related to teaching and, ideally, sample job-related indicators have been established to assist interviewers in their ratings of the candidates (Huffcutt, Weekley, et al., 2001; Pawlas, 1995; Schmidt & Rader, 1999). Interviewers (e.g., administrators,

teachers, parents, personnel directors) must be trained to conduct effective interviews and make the best selections (Stevens, 1998).

Protocols for Selecting Teachers

The interview format selected may influence the ability of an interviewer to discriminate between effective and ineffective teachers. In one study, 16 principals watched videotapes of teacher interviews conducted in a structured or branched structured format and were asked to rate the teacher's effectiveness (Emley & Ebmeier, 1997). The branched structured format is a series of interview questions in which the candidate's response to a question dictates the next question that will be asked. No statistical difference was found in the principals' ability to discern effective and ineffective teachers based on the interview format. The sample was limited to experienced administrators and teachers who were secure in their teaching position. The researchers concluded that teachers' responses would have been different if the teachers were in a real selection interview as opposed to a contrived setting. Additionally, the researchers noted that if the principals were novice interviewers, ineffective teachers may have appeared more competent than they actually were.

Shechtman & Sansbury (1989), two faculty members, interviewed 97 teacher education candidates in a group interview format and rated them. Then the researchers compared the ratings to the candidates' student teaching performance. Significant correlations were found in the areas of thinking, motivation, flexibility, leadership, interpersonal skills, and overall score. The traditional means of predicting performance (e.g., considering test results, GPA, and IQ) were not found to be as effective at predicting success in student teaching. It is interesting to note that the raters had difficulty

discerning ineffective applicants using traditional means, but could identify both effective and ineffective candidates using the interview format.

Products Commercially Available

While many administrators and researchers create their own interview guidelines, some use protocols that are commercially available. The Urban Teacher Selection Interview and the Star Teacher Interview are both scenario-based interviews developed by Martin Haberman 35 years ago based on 7 of his 14 features of highly effective urban teachers. The qualities of effective urban teachers were derived from over 1,000 interviews conducted since 1959 with Star teachers of children in poverty (Haberman, 1995b). The seven features assessed in the Star Teacher structured interview include persistence, professional orientation, approach to working with at risk populations, fallibility, resilience, preservation of learning time, and an ability to put ideas into practice (Haberman, 1995a). A study of 33 candidates for an alternative certification program supported the internal validity of the Urban Teacher Selection Interview (Baskin & Ross, 1993). In a trial of the Urban Teacher Selection Interview, Haberman (1993) found that 100% of the teachers selected with his 35-minute interview were still teaching two and half years later. Further, according to the developer, 90% of urban teachers selected with the instrument are still in the classroom five years later compared to the national average of 50% (Haberman, 1995a). The protocols are designed to assist administrators in identifying candidates with high potential to be successful with children living in poverty.

The Teacher Perceiver ©, another commercially available instrument, asks candidates about thoughts, feelings, and behaviors while TeacherInsight © uses an on-

line Likert-scale about applicant's talents. Both products are offered by the Gallup Organization to predict job performance success (Gallup Organization, n.d.,b.; Gallup Organization, 2001). They are marketed as screening products and use standard questions and a form of an evaluation rubric. In the case of the Teacher Perceiver©, users must be trained and have an 85% agreement rating with Gallup scorers to be certified (Gallup Organization, n.d.,a.). The questions and scoring methods are distinguishing features of both the Gallup and Haberman protocols.

In conducting a meta-analysis of commercially available interviews, Metzger and Wu (2003) determined that there were not enough published studies of Haberman's protocol to include it in the study. Thus, the researchers focused on the Gallup Teacher Perceiver Interview© for which they could not find a single refereed journal article. As a result, their analysis was based on 13 dissertation studies containing correlation coefficients between the protocol and qualities of effective teachers. They concluded that there was a slight relationship between the protocol and teacher effectiveness at a 95% confidence level. Metzger and Wu were concerned about the psychometric reliability and validity of the commercial interviews in general, the disparity between theory and beliefs, the lack of subject-matter knowledge in the interviews, and a reliance on affective characteristics of teacher applicants. The researchers reasoned that the Gallup instrument was most likely to do no worse than unstructured interviews used by school administrators. Further, they recommended that school districts save their funds until the reliability and validity of the instrument had been studied more thoroughly.

Questions

College career placement office websites (e.g., Buffalo State University, n.d.), books on instructional leadership (e.g., McEwan, 2002; Peterson, 2002), and journal articles (e.g., Pawlas, 1995) are sources for locating questions to ask in teacher interviews. Table 2 shows the content of questions aligned with the qualities of effective teachers (e.g., caring, engaging, knowledgeable). The questions offered by Pawlas appeared on multiple college career placement Internet sites. For this reason, only published questions were considered for constructing a comparison table. All reviewed sources recommended asking applicants about their motivation for becoming a teacher, instructional planning and strategies, student discipline, classroom management, and communication with students and families. When considering the ratio of qualities to questions, more questions were suggested for the management category than for any other, followed by assessment, personal characteristics, instruction, and organization. The prerequisites category was assigned the fewest questions.

While Table 2 shows recommended questions from published sources, a personnel director in Virginia studied the actual questions asked by middle school principals (N=7) in her school district to determine the content and type of questions being asked of teacher applicants (Perkins, 1998). None of the principals in the study had received formal training on conducting interviews. This school system gives principals the autonomy to make up their own questions and make hiring recommendations to the personnel office (M. Y. Perkins Barefield, personal communication, October 23, 2002). Perkins asked the principals to tape record their teacher employment interviews with the

permission of the interviewees. She later transcribed and grouped questions according to factual knowledge, cognitive ability, and professional opinion.

Table 2 *Comparison of Interview Content from Suggested Interview Questions*

Categories	Qualities of Effective Teachers*	Clement, D'Amico, Protheroe, 2000	Emley & Ebmeier, 1997	Hoy & Hoy, 2003	McEwan, 2002	Pawlas, 1995	Peterson, 2002
Prerequisites	Verbal ability	♦	♦	♦	♦	♦	♦
	Knowledge of teaching and learning			♦	♦		♦
	Certification status						
	Content knowledge						
	Teaching experience						
Personal Characteristics	Caring				♦		
	Fairness and respect	♦	♦		♦		
	Interaction with students	♦	♦	♦		♦	♦
	Enthusiasm	♦	♦				
	Motivation	♦	♦	♦	♦	♦	
	Dedication to teaching	♦	♦	♦	♦	♦	
	Reflective practice	♦	♦	♦	♦	♦	♦
Manage-ment	Classroom management	♦	♦	♦	♦	♦	♦
	Organization	♦			♦		♦
	Disciplining students	♦	♦	♦	♦	♦	♦
Organiza-tion	Importance of instruction	♦		♦	♦		
	Time allocation						
	Teacher expectations		♦	♦	♦	♦	
	Instructional planning	♦		♦	♦	♦	♦
Instruction	Instructional strategies	♦	♦	♦	♦	♦	♦
	Content and expectations	♦			♦	♦	♦
	Complexity				♦		♦
	Questioning						
	Student engagement	♦	♦		♦		♦
Assess-ment	Homework	♦			♦		♦
	Monitoring student progress	♦	♦			♦	♦
	Responding to student needs and abilities	♦	♦	♦		♦	♦

*The list of qualities was compiled from *Qualities of Effective Teachers,* James Stronge (2002).

The majority of questions (43%) elicited responses about factual knowledge. Thus, all the principals asked about credentials, instruction, and classroom management. By contrast, none of the principals asked applicants questions involving hypothetical situations. Depending on the principal, a variety of other questions were asked dealing with topics such as school climate, technology, and educational philosophy. In a follow up email questionnaire sent to the principals, Perkins found that principals' questions and what the principals said they were looking for did not always align.

Accountability for Interview Decisions

In a study on accountability, participants were told that they would be accountable for their hiring decision outcomes, the procedure followed in making judgments of the interview, the outcome and procedural process, or would not be held accountable for their judgments (Brtek & Motowidlo, 2002). Videotaped interviews of 60 managers were reviewed by participants assigned to one of the four conditions. Researchers found that procedural accountability was positively correlated to participants' judgment and the supervisors' rating of the interviewees. The way in which interviewers assess responses and candidates makes a difference in the selections made. Therefore, infusing a procedure for assessing applicants' responses to interview questions possesses the potential for improving the hiring decisions that are made.

Proposed Research

Well-designed employment interviews consider the skills, knowledge, and attributes necessary to adequately perform in a job function. Some studies have shown a relationship between the interview and employee performance (Pulakos & Schmitt, 1995). However, no published studies were found that relate interviewing and teacher

quality. When schools and classrooms are scrutinized for what makes powerful learning experiences, effect sizes are found on a variety of items ranging from curriculum to the building, but what makes the greatest impact is the teacher. Some effective teacher characteristics can be easily screened on an application (Stronge & Hindman, 2003). For example, research has shown that certified teachers are more effective than noncertified teachers (Darling-Hammond, 2000b; Darling-Hammond et al., 2001; Hawk et al, 1985). Other elements of an educator's effectiveness can be ascertained through experience-based or situational-based questions during the employment interview, such as asking a teacher about planning for instruction (Emly & Ebmeier, 1997; Pawlas, 1995). While the interview is not as reliable as watching someone teach for a day, it is significantly less costly in terms of direct and indirect costs. Therefore, the creation and initial validation of an interview format that maximizes the probability of selecting an effective teacher would contribute significantly to the profession.

Criteria for Effective Teachers

Much has been written about the qualities of effective teachers, ranging from general observations that apply to all educators to subject area-specific or population-specific characteristics. The knowledge, skills, and dispositions of effective educators that reoccur in the literature are starting points for developing a general teacher effectiveness instrument. To illustrate, effective teachers are knowledgeable about their content area, student growth and development, instructional strategies and resources, and assessment (Ferguson & Womack, 1993; Fetler, 1999; Mason et al., 1992; McBer, 2000). These educators possess skills for planning lessons, establishing routines and procedures for a smooth running classroom, managing student behavior, and communicating with

colleagues, parents, and students (Cotton, 2000; Emmer et al., 1980; Good & Brophy, 1997; Stronge, 2002). Finally, the teacher's disposition leaves a lasting impression on students as it makes the teacher accessible to students through the use of humor, fairness, respect, and compassion (Black & Howard-Jones, 2000; Check, 1999; Peart & Campbell, 1999).

In practice, teacher job descriptions often focus on the knowledge and skills components of the profession, which are easier to evaluate. A face-to-face interview provides a forum for school personnel to assess the interviewee's disposition, which is more difficult to discern from a resume and application (Delaney, 1954; Eder & Harris, 1999). However, the interview is susceptible to errors, as effective communicators may appear stronger in an interview where questions isolate specific items, whereas in a classroom the knowledge, skills, and dispositions work in combination. Therefore, an interview protocol must be sensitive to these concerns and help interviewers obtain the information they need to make informed judgments.

Summary

The literature on teacher effectiveness and interviewing provides the basis for the purpose of constructing an instrument for this study to support interviewers in discerning effective and ineffective teachers. School districts' human resource departments are under continual pressure to provide school administrators with a pool of qualified teacher candidates. Based on NCLB, identifying highly qualified teachers can be simplified to looking at certification. Therefore, the challenge for personnel departments is not searching for highly qualified teachers, but rather enhancing the likelihood that they are prescreening and selecting highly effective teachers.

There are several ways to improve the interview process both as an experience for the candidate and as a means of securing effective teachers. The key to an interview's value is the interviewer's ability to solicit responses that enable them to make a prediction about interviewees' future performance (Dessler, 1997). Using a structured interview format facilitates questioning on job-related constructs of effective teachers, and a rating rubric enhances the reliability of the response scoring (Huffcutt, Roth, et al., 2001; Pawlas, 1995; Schmidt & Rader, 1999). The next chapter presents a design and methodology that unite research in the areas of interviewing and effective teachers in an effort to increase the likelihood of selecting the best from an applicant pool to teach America's most precious resource – her children.

Chapter 3: Methodology

The primary purpose of this study was to establish content and construct validity for a series of teacher interview questions and related statements derived from the effective teacher literature and applied to various levels of teacher effectiveness. A secondary objective was to determine what interviewing practices supported by the extant literature school personnel use. The following sections address the research questions, research plan, and ethical considerations of the study.

As mentioned, the study was designed to establish a link between interview questions and qualities of effective teachers. The questions were constructed using an experience-based interviewing format linking characteristics of effective teaching to specific questions that would allow an interviewer to gather information about an applicant's past performance in order to predict future performance (Deems, 1994). Previous studies (e.g., Place & Drake, 1994; Roden & Cardina, 1996; Winter, Newton, & Kirkpatrick, 1998) have examined desired teacher attributes. Taking a different approach, Emley and Ebmeier (1997) studied interview questions, and asked participants to classify teachers as effective or ineffective, but no guidance was given to participants on how to make that distinction. These previous studies did not establish a means to identify the desired qualities or how to evaluate them. The methodology in the present study sought to make the important connection between teacher effectiveness and teacher selection.

Research Questions

The overarching question proposed in the study and supported by the research literature was: What responses do building-level administrators associate with varying levels of teacher competence? To address this question, a series of teacher interview

questions were designed so as to incorporate the psychometric properties of an effective interview along with the qualities of effective teachers. The study was intended to address explore administrators' interviewing practices and their perceptions of statements related to key quality indicators.

Phase I Research Questions: Interviewing Practices

I.1 What teacher interviewing practices are recommended by the extant literature?

I.2 To what degree do building-level administrators' teacher interviewing techniques reflect research-based best practice?

I.3 To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?

Phase II Research Questions: Perception of Key Quality Indicators

II.1 To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?

II.2 To what extent is there agreement between a research-based rubric and participants' responses?

II.3 To what degree do participants' demographic characteristics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted a year) relate to their association of statements with levels of teacher competence?

Sample

A national stratified random sample of principals was used. The contact information for 300 school personnel was obtained from a commercial vendor, Quality

Educational Data (QED). This company was selected based on a recommendation from the Association for Supervision of Curriculum Development that the listings maintained by QED were high quality. Furthermore, the company had recently undergone its annual verification and update of information maintained in its databases. Additionally, the company provided demographic information about the population's demographics (see Table 3) as well as the sample's demographics (see Table 4). The sample is randomly stratified by school level (i.e., elementary, middle, and high) first, and then urbanicity (i.e., rural, suburban, urban). A sample size of 300 was selected to obtain a 95% confidence level with a confidence interval of 10.

Table 3 *Demographics of the Population*

	Actual schools per category	Percentage of the group's make up
Public Schools (98,643)		
Elementary	67,800	68.7%
Middle	14,300	14.5%
High	16,543	16.8%
Principals with Urbanicity Listed (86,273)		
Urban	21,215	24.6%
Suburban	39,768	46.1%
Rural	25,290	29.3%

Table 4 *Demographics of the Sample*

	Urbanicity			
School Level	Urban	Suburban	Rural	Subtotals
Elementary (K-5)	51 (17.0%)	95 (31.7%)	60 (20.0%)	206 (68.7%)
Middle (6-8)	11 (3.7%)	20 (6.7%)	13 (4.3)	44 (14.5%)
High (9-12)	12 (4.0%)	23 (7.7%)	15 (5.0%)	50 (16.8%)
Subtotals	74 (24.6%)	138 (46.0%)	88 (29.3%)	

Generalizability

The results of this study may be generalized to all public schools in the United States that match the grade-level descriptions: elementary (K-5), middle (6-8), and high (9-12) in urban, suburban, and rural settings where the survey participants work. To a lesser extent, the results may be generalized to public schools that span multiple grades such as K-8 and junior high schools. To a limited degree, the results may also be generalized to private schools operating within the United States.

Instrument Development

A review of the literature and available instruments did not reveal an appropriate instrument that was appropriate for this study's purpose. Therefore, a survey instrument was developed, which gathered participants' responses to questions on their demographics, interviewing practices, and perceptions of the strength of summary

statements describing teacher applicants' responses to interview questions. The instrument was validated for use in this study. The survey questions were developed by the researcher to target the qualities of effective teachers. The five qualities of effective teachers considered were: personal characteristics, classroom management, instructional planning, delivery, and assessment.

Table of Specifications

A table of specifications was developed for the instrument to ensure that each of the qualities was represented among the questions (see Table 5). The qualities of effective teachers as noted by Stronge (2002) are listed in the first column, and in the last column are the subcategories Stronge identified with each quality, followed in parentheses by the question number on the survey instrument that relates to the subcategory. For each question there were six associated response items for participants to rate as being associated with varying levels of teacher effectiveness.

Table 5 *Table of Specifications*

Quality of effective teachers	Subcategory on the teacher effectiveness behavior scale (question number on the survey)
Personal characteristics	Enthusiasm (23) Caring; fairness and respect; positive Relationships (31) Reflection* (36)
Classroom management	Classroom organization (24) Classroom management (27)
Organization for instruction	Planning – short and long * (25) Instructional complexity (29) Time use (33)
Instructional delivery	Instructional differentiation (26) Expectations for student learning (32) Technology integration (34) Instructional clarity (35)
Assessment	Quality of feedback (28) Assessment for understanding (30)

*Note. * denotes items included in Stronge's (2002) framework, but not explicitly identified as separate qualities. Stronge (personal communication, March 15, 2004) gave permission for the alteration.*

Instrument Design

The 106–item survey consisted of a combination of forced-choice responses and rating items. The survey also contained a strategic elimination question designed to remove individuals who had not conducted teacher interviews in the last year.

Specifically, Part I collected demographic and background information. Part II asked building-level administrators about their interviewing practices. Part III solicited participants' association of summary statements of responses with the strength of that response based on the type of teacher applicant who would be likely to make such a statement. Specific verbal labels were selected to describe the type of teacher applicant in order to "clarify the meaning of the scale for participants" (Weisberg, Krosnick, &

Bowman, 1996, p. 82). High-quality statements were considered exemplary, whereas low-quality statements were unsatisfactory. There were two middle levels: developing and proficient.

Part I: Demographic and background information. Participants were asked to provide information about their worksite, professional position, years of experience as an administrator, gender, and number of interviews conducted in the last year.

Part II: Interviewing practices. Data were solicited on the amount of training provided by the school district, personal interviewing practices, source of interview questions, and sources of information on how to interview.

Part III: Perceptions of responses. The final part of the survey asked administrators to consider summary statements that describe teacher applicants' responses to a given question. Administrators then determined what level of teacher competence was associated with the response.

Instrument Validation: Pilot Studies

Two pilot studies were conducted to refine the instrument. The first established content validity between the proposed interview questions and the intended associated qualities of effective teachers. The second study collected feedback from practicing administrators on their perceptions of the intended rating of the level (i.e., unsatisfactory, developing, proficient, or exemplary) of teacher who would give the sample response to the question.

Piloting the questions: Determination of content validity. Employment interviews that are structured and include questions on job-related constructs are deemed more reliable and valid than unstructured interviews both in selecting personnel and withstanding legal

challenges. This pilot focused on the questions to establish a match between the question and the focus associated with the query.

Content validity in the present study measured the degree to which the questions relate to the specific quality of effective teaching (Weisberg et al., 1996). After the queries were created for each of the effective teacher themes (personal characteristics, classroom management, planning for instruction, delivering instruction, and assessing/monitoring student performance), they were reviewed by a professor who conducts research on teacher effectiveness. Adapting a protocol used by Bauer et al. (2001), a sample of workshop session participants familiar with the qualities of effective teachers (N=29) then sorted the questions back into subsections, and the proportion of correct matches was calculated. The workshop participants were practicing school personnel (e.g., teachers and administrators) who had attended the day-long workshop. This was done to determine agreement between what the question was probing and how it was interpreted. The pilot respondents were asked about the alignment of the questions with the qualities of effective teacher descriptions in order to establish content validity (Appendix A).

Item analysis was conducted to determine the variability of the responses. Items in which the majority of respondents agreed with the intended associated quality of an effective teacher were considered to have content validity.

Twenty-nine participants (100% participation and return) completed a two-page questionnaire exploring how qualities of effective teachers and interview questions were related (see Table 6). In some cases, a respondent indicated two associations, so the response was not included. The boldfaced percentages in Table 6 indicate the targeted

quality. In 9 out of 14 questions, a majority of respondents associated the intended quality with the question. In three of the situations where the respondents did not agree with the intended construct, they associated the question with a closely associated construct (Questions 10, 11, 12).

The results of the pilot study indicated that respondents perceived a tight connection between "Organizing for Instruction" and "Instructional Delivery." Further compounding the difficulty for respondents to differentiate between the two aforementioned categories in questions #10 and #11, question-leading language was unintentionally used in the descriptor of the "Organizing for Instruction" category. This may have impacted the results therefore the wording was not changed between the pilot and the final survey. Question #12 was reclassified to reflect the respondents' perception that it fit better in the category of Instruction. Originally, Question #12 was intended to solicit thoughts on how technology could be planned for and organized for in instruction but the wording "used in instruction" led respondents to categorize it as an instructional delivery component. The final question of disagreement was Question #14, in which respondents were split on how to categorize the construct of reflection, while reflection is done by the individuals, respondents may have been confused by the multiple qualities in which the applicant could be asked to reflect upon for this reason the wording was not changed between the pilot and the final survey. Adjustments to the wording of the questions were made based on the data collected for the final survey instrument.

Table 6 *Question Alignment to the Qualities of Effective Teachers*

Question	Personal characteristics	Classroom management	Organization	Instruction	Assessment
1. What do you find most rewarding about teaching?	**59%**	0%	0%	41%	0%
2. Tell me what you do with students the first few weeks you are working with them to establish a positive classroom environment.	0%	**86%**	14%	0%	0%
3. Share with me your long and short-term planning process for instruction.	0%	0%	**66%**	28%	7%
4. Describe to me how you engage students in their learning.	14%	3%	3%	**79%**	0%
5. Share with me a time you had difficulty with a particular student's behavior and what you did to address it.	3%	**90%**	3%	3%	0%
6. Explain your grading system to me.	0%	0%	11%	0%	**89%**
7. Think about an instructional unit you like to teach. Tell me why you selected particular teaching strategies to address the curriculum.	0%	0%	11%	**89%**	0%
8. Tell me how you accommodate students' learning needs on the assessments you give.	3%	0%	3%	7%	**86%**
9. Give me an example of how you establish and maintain rapport with your students.	**75%**	14%	11%	0%	0%
10. Describe how you promote high expectations for student achievement.	24%	0%	38%	**31%**	3%
11. How does your classroom time use reflect that learning is the primary purpose for students?	0%	32%	61%	**7%**	0%
12. How do you use technology as part of your instruction?	0%	0%	**7%**	90%	0%
13. Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.	0%	0%	7%	**93%**	0%
14. Think about a lesson that despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns.	**3%**	0%	7%	55%	31%

Note. Bold indicates the intended alignment.

Piloting the instrument: Determination of reliability and content validity. In this second pilot study, respondents were asked to consider the responses associated with various levels of teacher effectiveness as opposed to the questions, which was the focus of the first pilot study. Content validity can be established by the consensus of individuals knowledgeable in the area (Gay, 1987; Litwin, 1995). The survey was reviewed with 13 practicing administrators to establish content validity. There were four elementary principals, five middle school administrators, four high school administrators representing all three urbanicity classifications with two serving in a rural setting, five in suburban settings, and six in urban areas. Internal consistency was calculated using Spearman-Brown's formula. Additionally, the administrators were asked to provide feedback on the clarity of the directions, clarity of the indicators, use of language, and ease of use of the survey instrument (Appendix B). Each participant was offered a $10.00 bookstore gift card as a token of appreciation.

Thirteen practicing administrators (87% response rate) returned copies of the pilot survey in which they indicated their level of agreement with sample responses to interview questions in order to establish content validity. Their responses were used to adjust the scoring guide for the final survey. Internal consistency was used as a measure of reliability. It was calculated at 0.7 using Spearman-Brown's formula since the survey contained more than 50 items (Gay, 1987).

Respondents agreed on the ratings provided based on the research literature 93% of the time, and within one level of the suggested rating 100% of the time (see Table 7). In cases where three or fewer ($\leq$23%) of the respondents disagreed with the intended rating, the rating originally assigned to the response remained. If four administrators

disagreed on the rating (≥31% of the respondents), the rating was changed to reflect the administrators' perceptions. The bold print on Table 7 indicates instances where four or more respondents disagreed with the intended rating. As illustrated, this occurred for seven questions, and in each case the directionality of the suggested response was the same. In each case, the administrators were within one level of the originally suggested rating. As a result, the scoring guide was adjusted down one level for six questions (30F, 32B, 32F, 33B, 35A, 35D); for example from "developing" to "ineffective" and up from "proficient" to "exemplary" for one question (31E).

Table 7 *Agreement with Intended Rating*

Question	Response Agreement with Target Score A	B	C	D	E	F
23. What do you find most rewarding about teaching?	100%	100%	100%	100%	92%	92%
24. Tell me what you do with students during the first few weeks you are working with them to establish a positive classroom environment.	100%	100%	100%	100%	100%	92%
25. Share with me your long and short-term planning process.	100%	100%	77%	92%	85%	100%
26. Describe how you engage students in their learning.	92%	100%	92%	92%	100%	100%
27. Share with me a time you had difficulty with a particular student's behavior and what you did to address it.	100%	77%	100%	100%	85%	85%
28. Explain how you share with students and families your grading system.	92%	100%	77%	92%	85%	100%
29. Think about an instructional unit you like to teach. Tell me why you selected particular teaching strategies to address the curriculum.	100%	100%	92%	92%	92%	92%
30. Tell me how you accommodate students' learning needs on the assessments you give.	92%	85%	100%	100%	100%	**69%**
31. Give an example of how you establish and maintain rapport with your students.	92%	92%	100%	100%	**69%**	92%
32. Describe how you promote high expectations for student achievement.	100%	**69%**	85%	100%	92%	**54%**
33. How does your classroom time use reflect that learning is the primary purpose for students?	100%	**69%**	100%	100%	100%	92%
34. How do you use technology as part of your instruction?	100%	100%	92%	100%	77%	100%
35. Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.	**69%**	100%	100%	**69%**	100%	85%
36. Think about a lesson that, despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns?	100%	100%	92%	100%	100%	85%

Note. Bold indicates a question where the score was adjusted one level.

Data Collection Procedures

Two sources of data were collected. The first was done through the use of a literature review on interviewing practices and the second through the administration of a survey.

Research Literature Content Analysis

The research literature on interviewing practices was reviewed. Content analysis was "used to extract desired information from a body of materials … by systematically and objectively identifying specified characteristics of the material" (Smith, 2000, p. 314). Through this process components that have a positive impact on interviewing outcomes were identified. The content used included refereed journal articles that were sampled in layers: (a) those published between August 1, 1993 and August 30, 2003 and (b) those that reflected a quantitative study. The search began with a review of electronic databases between the years specified. The databases used included: ABI/Inform Global, Business Index ASAP, ERIC, Expanded Academic, and Infotrac. These databases were searched using the terms: *interview* (with the terms *employment, job*, or *selection* preceding it) and *personnel selection.*

Twenty-nine studies met the criteria. The initial recording unit was theme followed by category. The categories were exhaustive and mutually exclusive to reflect the purpose of the study as recommended by Holsti (1969). The categories were all based on descriptive codes that required no interpretation (Miles & Huberman, 1994). Frequency counts of descriptions of the interviewing practices investigated in the studies were recorded on a matrix.

Reliability and validity were established through the processes used in the content analysis. One form of reliability is stability, which "refers to the extent to which the results of the content classification are invariant over time. Stability can be determined when the same content is coded more than once by the same coder" (Weber, 1990, p. 17). While stability is a weaker process for establishing reliability than interrater reliability, it was selected due to the nature of the study and the intended application of the data collected. Since the categories were based on descriptions, content validity according to Holsti (1969) could be sufficiently established through the informed judgment of the investigator.

Survey Procedure

Pre-alert postcards have been found to be a way of improving the response rate (Gall, Gall, & Borg, 1999). Therefore, the randomly selected 300 elementary, middle, and high school administrators were mailed a postcard (Appendix C) informing them of a study being conducted on teacher interviewing. One week later, a study packet was mailed to the same group. This initial mailing contained a cover letter and survey booklet (Appendix D), a self-addressed stamped envelope, and a Sacagawea golden dollar coin. These procedures were based on Fowler's (1993) findings that professional survey presentation and prepaying respondents increases response rates. Additionally, the inclusion of a self-addressed, stamped envelope reduces the burden on respondents and increases the response rate (Dillman, 1983). Administrators were asked to complete the 30-minute survey and return it within two weeks. Participants were assured that their responses would be kept confidential.

One week after the deadline, a second mailing was sent to nonrespondents containing another cover letter (Appendix E), a copy of the survey, and a return mailer with the request that they return the survey by a specified due date. A final mailing was sent one and half weeks later to nonresponders with a request that the survey be returned within one and half weeks. It also contained a cover letter (Appendix F), copy of the survey, and a return mailer.

In the event that a survey was returned with missing information such as failure to fill out the first page, the participant received a letter and a copy of the missing page with a request to fill it out and return it in an enclosed stamped addressed envelope. Surveys received 12 weeks after the initial postcard alert mailing were considered unusable.

Data Analysis

Information such as the total sample description, years of experience, approximate number of interviews conducted annually, gender, regional affiliation, and job placement was collected from the participants. Homogeneity-of-responses analyses with ordinal rankings and chi square tests were used to show that the initial sample was representative of the population and that the responders were representative of the population.

Table 8 summarizes the methodology, data collection instrumentation, and analysis by question. Primarily, descriptive statistics and standard deviations were used. Means and standard deviations were used to summarize the level of agreement of respondents' perceptions and the research literature with regard to the description of applicants' responses.

Table 8 *Data Analysis Matrix*

Research Question		Methodology	Data Collection Instrumentation	Analysis
I.1	What teacher interviewing practices are recommended by the extant literature?	Content analysis	Matrix	Frequency counts
I.2	To what degree do building-level administrators' teacher interviewing techniques reflect research-based best practice?	Survey and content analysis Questions: 10-19	Matrix and forced-choice response items on the survey	Descriptive statistics
I.3	To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?	Survey questions: 7, 9-21	Forced-choice response items	MANOVA
II.1	To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?	Survey questions: 23-36	Survey	Descriptive statistics, percent-ages
II.2	To what extent is there agreement between a research-based rubric and participants' responses?	Survey questions: 23-36	Survey	Item analysis means and standard deviations
II.3	To what degree do participants' demographic characteristics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted a year) relate to their association of statements with levels of teacher competence?	Survey questions: 3-8, 22-36	Survey	Chi square tests and correlations

Ethical Safeguards

The researcher made a commitment to protect the confidentiality of the participants. The study was submitted to the Human Subjects Review Committee at The College of William and Mary for approval. Upon receipt of approval, the study was conducted in keeping with acceptable, ethical research practices.

As mentioned, the study was conducted in a manner that protected the anonymity of the study participants. Each survey contained a numeric code that enabled the researcher to track respondents and do the follow up mailings. The code sheet was always in the possession of the researcher or secured in a locked space. At the conclusion of the study, the code-sheet was destroyed. Any publication or presentation of this study's findings will address participants by their broader classifications such as gender, regional affiliation, and setting.

Chapter 4: Analysis of Results

This study investigated principals' perceptions of the quality of responses to interview questions and collected information on their interviewing experience and practices. Additionally, responses were compared to recommended best practices in the research literature regarding interviewing. A content analysis was conducted to identify trends in the literature. Quantitative methods were used to analyze the data collected in a national survey of elementary, middle, and high school public school principals from rural, suburban, and urban settings.

Research Questions

The research questions for the study are divided into two phases investigating (a) interviewing practices, and (b) administrators' perceptions of key quality indicators. They are as follows:

Phase I: Administrators' Interviewing Practices

I.1 What teacher interviewing practices are recommended by the extant literature?

I.2 To what degree do building-level administrators' teacher interviewing techniques reflect research-based best practice?

I.3 To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?

Phase II: Administrators' Perceptions of Key Quality Indicators

II.1 To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?

II.2 To what extent is there agreement between a research-based rubric and participants' responses?

II.3 To what degree do participants' demographic characteristics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted a year) relate to their association of statements with levels of teacher competence?

The Study

Return Rate

On December 1, 2003, postcards announcing the study were mailed to all 300 randomly selected participants (Appendix C). One postcard was returned for an incorrect address; however, it took several weeks to be returned, so the initial survey mailing and follow up mailings were sent to the original addressee, and were not returned.

On December 9, 2003, the initial survey mailing containing a cover letter, survey, return mailer, and Sacagawea dollar were sent to the same group. The cover letters requested that the enclosed surveys be returned within two weeks. The first round yielded 112 survey responses (37.3% response rate). A second mailing was sent out on December 30, 2003, to nonresponders resulting in the receipt of an additional 42 surveys, raising the response rate to 51.3%. A third and final mailing was sent on January 28, 2004, to nonresponders; an additional 21 surveys were returned resulting in a final response rate of 58.3%. Of the 175 surveys received by February 17, 2004, 12 weeks after the initial pre-alert mailing, 141 (80.6%) of the surveys were usable. Thirty-four surveys were deemed unusable due to the respondent: declining to participate in the survey (14.3%), being eliminated since they had not conducted a teacher selection interview in the last

year (3.4%), or inappropriately completing the survey form (1.7%). Of the 300 surveys sent, the usable response rate was 47.0%.

Demographic Information

The stratified random survey sample (*N*=300) was drawn from a national population of public school principals. The sample was representative of the of the U.S. public school principalship population. In order to compare the population, sample, and respondents, chi square tests were used (see Table 9). As illustrated, the percentages of the number of individuals solicited remained stable with the exception of the final column of usable respondents in urbanicity, in which the rankings of suburban and rural respondents switched. In parentheses are the actual numbers of school principals in each group.

A chi-square test for school level found no statistical difference between the population, study sample, and useable respondents. The x^2_{obs} =3.28 is less than x^2_{crit} = 9.49; thus there is not a statistically significant interaction between the grade level and group. A chi-square test conducted on the respondents based on their urbanicity confirmed that the switch first noticed in the ordinal rankings was statistically significant since x^2_{obs} =18.66 is more than x^2_{crit} = 9.49. With alpha equal to .05, a chi-square test on urbanicity is statistically significant, x^2 (4, *N*=86,713) = 18.66, $p < .05$. As there was overrepresentation among rural respondents in the survey.

Table 9 *Comparing the Population, Study Sample, and Usable Respondents*

	Population		Study Sample		Useable Respondents	
	N	%	*N*	%	*N*	%
School Level						
Elementary	67,800	68.7	206	68.7	82	61.7
Middle	14,300	14.5	44	14.7	25	18.8
High	16,543	16.8	50	16.7	26	19.5
Urbanicity						
Urban	21,215	24.6	74	24.7	23	16.4
Suburban	39,768	46.1	138	46.0	53	37.9
Rural	25,290	29.3	88	29.3	64	45.7

Of the usable surveys, respondents were all administrators with an average of 12.3 years of experience as an administrator and a range of one to 44 years. Ninety-seven percent of respondents classified themselves as principals while 2.8% classified themselves as other, which included superintendents who functioned as principals and assistant principals. More males responded (55.3%) than females (44.0%). Respondents worked in all six regions of the country: 8.5% Northeast, 11.3% Mid-Atlantic, 24.8% Southeast, 30.5% Central, 5.0% Southwest, and 19.9% Northwest.

Administrators identified their urbanicity (i.e., urban, suburban, rural) and their worksite (i.e., grades preK-5, grades 6-8, grades 9-12). Numerical information is presented in Table 10.

Table 10 *Demographics of the Respondents*

	Urbanicity			
School Level	Urban	Suburban	Rural	Response
Elementary (K-5)	11 (7.9)	36 (25.7)	35 (25.0)	82 (58.6)
Middle (6-8)	4 (2.9)	13 (9.3)	8 (5.7)	25 (17.9)
High (9-12)	6 (4.3)	4 (2.9)	14 (10.0)	24 (17.1)
Other (e.g., K-12; 7-12)	2 (1.4)	0 (0)	7 (5.0)	9 (6.4)
Response	23 (16.4)	53 (37.9)	64 (45.7)	140 (100.0)

Note. Percentage of the sample appears in parentheses.

All the respondents had conducted interviews within the past year. Approximately half (47.5%) conducted more than 10 interviews a year. The majority of the respondents (73.0%) had not received interview training by their school systems.

Findings for the Research Questions

The study consisted of two phases: the first focused on interviewing practices, the second involved respondents' perceptions of the quality of responses to interview questions. The results are presented individually by the research question.

Phase 1: Administrators' Interviewing Practices

I.1: What teacher interviewing practices are recommended by the extant literature?

A content analysis was conducted to examine the extant literature for categories and subcategories relating to interviewing practices. The literature search located 29 studies that met the criteria. The survey questions were divided into the themes and categories presented in Table 11.

Table 11 *Categories for Survey Questions on Interviewing Practices*

Overarching category	Subcategories
A. Interviewer characteristics	
	A1. Training in conducting interviews
	A2. Multiple interviewers
B. Interview questions	
	B1. Questions prepared in advance
	B2. Same questions
	B3. Question type (e.g., ice-breaker, hypothetical, experience-based)
	B4. Means to score question responses
C. Interview format	
	C1. Structure of the interview (i.e., structured, semi-structured, unstructured)
	C2. Note-taking

Table 12 presents the number of times the research literature addressed a particular component of interviewing; however, no weight is given to the number of times an author addresses the same attribute. For example, the Burnett, Fan, Motowidlo, and DeGroot (1998) article addressed the issue of note-taking several times in three different studies, yet only one notation is made on the table. The number of times a particular interviewing attribute was addressed by an article appears in the final row.

As illustrated, the majority of studies addressed interview structure, focusing on unstructured and structured interviews. The next layer of issues included interviewer training, scoring interview responses, and question type. The latter two subcategories relate to the type of questions used in the interview protocol. Finally, the issues of note-taking, multiple interviewers, prepared questions, and using the same questions appeared less frequently. A brief summary of the studies may be found on Table 1 in Chapter 2. According to the research, components associated with interview format and questioning,

both of which are designed to enhance the validity and reliability of the interview, are important.

Table 12 *Characteristics of Interviews as Described by Research Studies*

Characteristic Author & Year	A1 Interviewer training	A2 Multiple interviewers	B1 Prepared questions	B2 Same questions	B3 Question type	B4 Scoring responses	C1 Interview structure	C2 Note-taking
Barclay, 1999					X		X	
Barclay, 2001					X			
Brtek & Motowidlo, 2002						X		X
Burnett & Motowidlo, 1998	X					X	X	
Burnett, Fan, Motowidlo, & DeGroot, 1998								X
Chapman & Rowe, 2001						X	X	
Conway, Jako, & Goodman, 1995	X			X		X		
Conway & Peneno, 1999	X			X				
Ellis, West, Ryan, DeShon, 2002	X		X	X	X			
Emley & Ebmeier, 1997							X	
Howard & Ferris, 1996	X							
Huffcutt & Roth, 1998							X	
Huffcutt, Roth, Conway, & Stone, 2001							X	
Huffcutt, Roth, & McDaniel, 1996					X		X	
Huffcutt, Weekley, Wiesner, Degroot, & Jones, 2001					X			
Huffcutt & Woehr, 1999	X							X
Kiker & Motowidlo, 1998						X		
Macan & Dipboye, 1994								X
Maurer & Lee, 2000						X	X	
McDaniel, Whetzel, Schmidt, & Maurer, 1994						X	X	
McFarland, Ryan, & Kriska, 2002	X					X		
Middendorf & Macan, 2002								X
Pulakos & Schmitt, 1995					X			
Pulakos, Schmitt, Whitney, & Smith, 1996	X				X	X	X	
Schmitt & Radar, 1999								
Stevens, 1998	X							
Taylor & Small, 2002					X	X		
van der Zee, Bakkar, & Bakkar, 2002	X	X	X	X	X	X	X	X
Williamshon, Campion, Roehling, Malox, & Campion, 1997							X	
TOTAL	**10**	**1**	**2**	**4**	**9**	**11**	**12**	**6**

I.2: To what degree do building-level administrators' teacher interviewing techniques reflect research-based best practice?

The majority of respondents self-reported that they often used interviewing techniques supported by the research literature. Table 13 provides the means and standard deviations for the administrators' responses on a scale of 1 to 3. The closer the mean is to 1, the more likely the technique is used on a regular basis. The mean of 1.91 for the use of a rubric or other scoring guide to assess an interview response is noteworthy given that the research literature indicates that its use increases the intrarater and interrater reliability as well as the validity of the interview.

Table 13 *Descriptive Statistics of the Likelihood an Interview Technique is Used*

Technique	*Mean*	*SD*
Same questions are used with all applicants.	1.09	.28
Interviewers may take notes on the responses.	1.09	.29
Interviewers use questions that are prepared in advance.	1.13	.34
Interviewers ask situational questions.	1.13	.34
Interviewers know what knowledge, skills, and attributes are needed for the position.	1.21	.41
Interviewers ask behavior-based questions.	1.21	.41
Interviews are conducted in a structured format.	1.23	.43
Interviewers ask icebreaker questions.	1.28	.45
Multiple interviewers (2 +) participate in the interview.	1.29	.46
Interviewers use a rubric to evaluate the interview.	1.91	.87

Note. The scale is: 1=often used 2=commonly used 3=occasionally/rarely used.

I.3: To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?

Principals were asked a series of questions about their interviewing background and interviewing practices. In a review of the descriptive statistics, the categories were

collapsed to yield large enough sample sizes for the independent variable of source of interview questions and the dependent variables of interviewing practices. A 2 x 2 (Training x Source of Interview Questions) MANOVA (α=.05) showed significance for training with Wilks' Lambda =.04. ANOVA (α=.05) tests indicated significant training effects for rubric use (*F*=7.96), prepared questions (*F*=4.90), and multiple interviewers (*F*=9.07). Further examination showed that rubric use had the greatest variance in responses. Among administrators who had some interview training (*n*=38) provided by their school system, rubrics were used more often than not; however, if no training had been received (*n*=103) the use of a scoring guide was less likely (see Table 14).

Table 14 displays the means and standard deviations for each interviewing practice that was found to be statistically significant for the group of respondents who had received interview training; the majority who had not. As seen in the second row, if administrators had not been trained in interviewing practices, they were less likely to use the interviewing practices as indicated by the higher mean. Regardless of whether they had received training, administrators were more likely to report frequent use of multiple interviewers and prepared questions in selection interviews than they reported use of a rubric.

Table 14 *Relationship of Training to Interviewing Practices*

Training	*N*	Multiple interviewers	Prepared questions	Rubric use
X-bar$_{Yes}$	38	1.16 (*SD*=.37)	1.08 (*SD*=.27)	1.55 (*SD*=.80)
X-bar$_{No}$	103	1.34 (*SD*=.48)	1.16 (*SD*=.36)	2.04 (*SD*=.86)

Phase II: Administrators' Perceptions of the Key Quality Indicators

II.1: To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?

Respondents were asked to rate 84 statements by the level (exemplary to unsatisfactory) of teacher applicant who they thought would respond with such a statement. The percentage of consensus agreement by statement and rating appears in Table 15 Since Table 15 is also displaying the findings for question II.2, the boldface text and the last two columns of the table do not apply to the present question. Eighty-nine percent of the time, respondents agreed with each other on a common rating. Nine questions, 27A, 27F, 30A, 30E, 32B, 32E, 33D, 35A, and 35D, did not receive a simple majority of agreement from the respondents. Four of these questions dealt with the quality of instructional delivery, the others focused upon assessment, classroom management, and organizing for instruction. When considering the directionality of the response, 75% or more of the respondents agreed with each other 100% of the time for plus or minus one of the largest percentage recorded. For example, question 23B received a simple majority for the proficient rating (52.2%), and when considering a directional response of +1, the consensus is an agreement of 92.1% of the respondents.

Table 15 *Percentages of Respondents' Perception of the Strength of the Response with Respect to Research-Based Targeted Response*

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
Quality: Personal Characteristics						
23. What do you find most rewarding about teaching?						
a. Does not communicate his/her thoughts clearly	**83.5**	14.4	2.2	0	0	+1
b. Communicates with clarity and offers examples	0.7	7.2	**52.2**	39.9	0	+1
c. Communicates an idealistic, but ungrounded view of teaching	13	**81.2**	5.1	0.7	0	-1
d. Communicates with useful concrete and abstract examples	0.7	8.1	50.7	**40.4**	-1	0
e. Communicates a broad idea that lacks specificity	9.4	**84.1**	5.8	0.7	0	-1
f. Communicates a passion for seeing students enjoying learning	0.7	16.1	34.3	**48.9**	0	-1
31. Give an example of how you establish and maintain rapport with your students.						
a. Watches TV shows that are popular with students	60.7	**35**	3.6	0.7	-1	0
b. Provides examples of caring about individual students in and out of school	0.7	12.9	51.4	**35**	-1	0
c. Says it is hard to relate to students who are so different from the teacher or other students s/he has taught	**87.9**	10.7	1.4	0	0	+1
d. Focuses on the teacher role of controlling students	**55.7**	38.6	5.7	0	0	+1
e. Offers examples of involvement with students outside of contract hours (i.e., club, coaching, attendance at extracurricular events)	0	8	50	**42**	-1	0
f. Interacts and knows students by group interests	0	13.7	**59.7**	26.6	0	+1
36. Think about a lesson that, despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns?						
a. Focused on non-teacher related issues	**70**	26.4	3.6	0	0	+1
b. Addressed the issue with limited evidence of reflection	34.5	**64**	1.4	0	0	-1
c. Reflected to improve teaching	0	22.1	**65.7**	12.1	0	-1
d. Reflected on the teaching and the students to improve learning	0	2.2	38.1	**59.7**	0	-1
e. Focused on what the students did wrong	**54.3**	39.3	5.7	0.7	0	+1
f. Retaught the concept another way so students could learn	0.7	9.9	**50.4**	39	0	+1

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target
-1 = one level below target -2 = two levels below target

Table 15 continued

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
Quality: Classroom Management						
24. Tell me what you do with students during the first few weeks you are working with them to establish a positive classroom environment.						
a. Builds a classroom community through student ownership	0.7	5.8	40.6	**52.9**	0	-1
b. Focuses on how the classroom should run the first week	50.4	**45.3**	0.7	3.6	-1	0
c. Lacks specific examples of how they build rapport with students	**73.9**	23.2	2.2	0.7	0	+1
d. Introduces rules only once and expects students to follow them	**75.9**	21.9	2.2	0	0	+1
e. Spends time at the start of the school year reinforcing routines so students can work independently	0.7	10.8	**54**	34.5	0	+1
f. Responds to students who are off-task and redirects them	1.7	22.5	**54.3**	21.7	0	-1
27. Share with me a time you had difficulty with a particular student's behavior and what you did to address it.						
a. Works with the student and others (i.e., families, guidance counselors) to help the student meet expectations	0	2.9	48.2	**48.9**	0	-1
b. Disciplines students using punitive measures	**56.5**	37	5.8	0.7	0	+1
c. Focuses on the need for strict discipline measures	38.1	**55.4**	6.5	0	0	-1
d. Reinforces the behavior expectations	2.2	24.1	**62.4**	9.5	0	-1
e. Referred the student to the office after s/he did not improve during the class period	**30.9**	58.3	10.1	0.7	+1	0
f. Provided an example where a contributing factor was the teacher's actions	12.6	**28.1**	47.4	11.9	+1	0

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target
-1 = one level below target -2 = two levels below target

Table 15 continued

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
Quality: Organization for Instruction						
25. Share with me your long and short-term planning process.						
a. Treats long and short-term planning as isolated planning functions	36.2	**59.4**	4.3	0	0	-1
b. Does not make long-range plans or is unfamiliar with the concept	**84.9**	14.4	0.7	0	0	+1
c. Prioritizes instruction by referring to plans	1.4	34.5	56.1	**7.9**	-1	-2
d. Uses both long and short-term planning, relying heavily on short-term	0.7	39.3	**50.7**	9.3	0	-1
e. Uses planning to help consolidate facts into broader concepts	0	10.9	61.3	**27.7**	-1	0
f. Indicates that long range planning is not useful as there are too many interruptions in the school year	**79.1**	17.3	2.9	0.7	0	+1
29. Think about an instructional unit you like to teach. Tell me why you selected particular teaching strategies to address the curriculum.						
a. Diagnostically uses a wide range of instructional strategies to optimize student learning	0	1.4	25.2	**73.4**	0	-1
b. Refers to a few instructional strategies s/he knows well	15.8	**74.1**	10.1	0	0	-1
c. Selects strategies that appeal to students' learning styles	0.7	8.6	**72.7**	18	0	+1
d. Considers the resources available to teach using various strategies	0.7	30.2	**56.1**	12.9	0	-1
e. Works with another teacher who suggested the strategies would work well to teach the unit to students	2.9	**51.4**	37.9	7.9	0	+1
f. Credits the textbook with the selection of strategies	**42.4**	54.7	2.9	0	-1	0

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target
-1 = one level below target -2 = two levels below target

Table 15 continued

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
33. How does your classroom time use reflect that learning is the primary purpose for students?						
a. Focused on how learning time may be interrupted by external events, so the teacher verbally reminds students to pay attention	**28.3**	60.9	10.9	0	+1	0
b. Talks about cutting short lessons because non-instructional activities use up the time	**77.7**	20.1	2.2	0	0	+1
c. Considers the time it takes the educator to teach and the student to learn when allocating time	3.6	21.6	**58.3**	16.5	0	-1
d. Offers examples of how a high percentage of the day is devoted to instruction such as taking advantage of teachable moments	0	2.9	47.5	**49.6**	0	-1
e. Gives a basic answer about how much time is spent in class	**24.5**	71.9	3.6	0	+1	0
f. Is flexible in time use to ensure students learn	0	7.9	**65.5**	26.6	0	+1
Quality: Instructional Delivery						
26. Describe how you engage students in their learning.						
a. Modifies activities to address student needs	0	5.7	**63.6**	30.7	0	+1
b. Systematically designs differentiated learning activities	0	1.4	30.5	**68.1**	0	-1
c. Has a "one-size fits all" approach to instruction	**80.4**	18.1	0.7	0.7	0	+1
d. Provides some activities designed to capitalize on student interest	0.7	**70.3**	25.4	3.6	0	+1
e. Provides examples of how s/he achieves high levels of active student engagement	0	6.5	50	**43.5**	-1	0
f. Does not think school should have to cater to student interests	**96.4**	2.2	1.4	0	0	+1
32. Describe how you promote high expectations for student achievement.						
a. Offers examples of what meeting varying levels of expectation looks like on particular assignments	0	2.9	43.2	**54**	0	-1
b. Is enthusiastic about learning	0.7	**23.2**	42	34.1	+1	+2
c. Encourages students to participate in their learning	20.9	**51.8**	27.3	0	0	+1
d. Places sole responsibility for student success on the student	**68.3**	26.6	5	0	0	+1
e. Believes that different students have different needs at different times so high expectations reflect student differences	5.8	12.2	44.6	**37.4**	-1	0
f. Suggests that student achievement is the job of the student and is influenced slightly by the teacher	**64**	32.4	3.6	0	0	+1

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target
-1 = one level below target -2 = two levels below target

Table 15 continued

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
34. How do you use technology as part of your instruction?						
a. Offers examples of how technology and other related resources are integrated into meaningful lessons	0.7	2.1	38.6	**58.6**	0	-1
b. Is uncomfortable with technology	**72.9**	21.4	3.6	2.1	0	+1
c. Creates tasks to increase students' proficiency and expertise in appropriately using the technology	0.7	6.5	59	**33.8**	-1	0
d. Uses available technology as appropriate to instructional objectives	0.7	17.1	**67.1**	15	0	-1
e. Applies technology inappropriately in the example	70.7	**23.6**	4.3	1.4	-1	0
f. Fails to provide an example of authentic student work using technology	**77**	21.6	0.7	0.7	0	+1
35. Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.						
a. Provides an inadequate answer that demonstrates some knowledge	**48.6**	47.1	4.3	0	0	+1
b. Offers plentiful instructional examples and guided practice	0	2.9	56.8	**40.3**	-1	0
c. Gives confusing examples and directions in the example selected	**74.3**	24.3	1.4	0	0	+1
d. Communicates the topic with a lack of clarity	**48.9**	46.8	3.6	0.7	0	+1
e. Provides an example in which the class was addressed as a group on the topic and then the teacher targeted specific individuals for additional explanation as necessary	1.4	22.1	52.1	**24.3**	-1	0
f. Uses clear examples and step-by-step directions	0	3.6	**61.4**	35	0	+1

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target
-1 = one level below target -2 = two levels below target

Table 15 continued

Effective Teacher Quality	Response Level				Response Selection Relative to Target	
	Unsatisfactory	Developing	Proficient	Exemplary	Primary	Secondary
Quality: Assessment						
28. Explain how you share with students and families your grading system. PROMPT: How do students know how well they are doing? PROMPT: How do you let parents know what grades are based upon?						
a. Uses a limited variety of ongoing and culminating assessments	9.4	**66.9**	14.4	9.4	0	+1
b. Grades a variety of assignments and more formal assessments	0.7	24.5	**66.9**	7.9	0	-1
c. Has a mechanism in place for explaining the grading system when new students enter the class during the year (e.g., a welcome back)	1.4	13	55.8	**29.7**	-1	0
d. Provides adequate feedback on performance	1.5	27	**63.5**	8	0	-1
e. Regularly interprets and communicates student progress through regularly timed reports that are issued in addition to the school's marking period	0	2.9	35.7	**61.4**	0	-1
f. Prefers to base grades solely on culminating assignments (e.g., tests)	**53.2**	43.9	1.4	1.4	0	+1
30. Tell me how you accommodate students' learning needs on the assessments you give.						
a. Analyzes past student performance on assessments to determine how the student best demonstrates his/her knowledge	0	10.8	44.6	**44.6**	Tied 0/-1	Tied 0/-1
b. Assesses all students the same	59.4	**37.7**	2.9	0	-1	0
c. Gives modified assessments when they are prepared by the special education teacher	13.7	**53.2**	30.2	2.9	0	+1
d. Differentiates as appropriate for students of all ability levels	0	3.5	40.4	**56**	0	-1
e. Changes some aspects of the assessment based on the instruction students received	2.1	39.3	**46.4**	12.1	0	-1
f. Accommodates only when there is an IEP or 504 plan being enforced	**62.1**	34.3	3.6	0	0	+1

Note. Bold print indicates targeted response based on the effective teacher research.

Scale: 0= target +1 = one level above target +2= two levels above target -1 = one level below target -2 = two levels below target

II.2: To what extent is there agreement between a research-based rubric and participants' responses?

Table 15 contains boldfaced numbers indicating the percentage of respondents who agreed with the research-based target. As illustrated, this was the case 73.8% of the time, as shown by the targeted rating level receiving the highest percentage of responses. Agreement by a simple majority of respondents yielded a lower agreement level of 66.7%. For 22 (26.2%) sample statements, respondents selected a rating level other than the target. For one of the questions, 30A, the research-based target and the respondents' rating tied with 44.6%.

The last two columns of the table illustrate how respondents rated the responses relative to the research-based target. A "0" indicates that the research-based targeted level, while the plus or minus score indicates how many levels away from target a response was with plus being above the target and minus being below. In 14 cases, the majority of respondents who disagreed with the targeted rating placed the most frequently selected rating one level below the research-based target (questions: 23D, 24B, 25E, 26E, 28C, 30B, 31A, 31B, 31E, 32E, 34C, 34E, 35B, and 35E). In the case of Question 30A, the percentages of respondents agreeing with the target rating and one level down was the same. In 5 cases, the majority of respondents selected one rating level above the target more frequently (Questions: 27E, 27F, 29F, 33A, and 33E). There were two cases where the target was not selected as either the primary or secondary response (Questions 25C and 32B), implications of which will be discussed in the next chapter.

II.3: To what degree do participants' demographics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted a year) relate to their association of statements with levels of teacher competence?

Due to the nature of the data collected, both chi square tests and correlations were used. For the chi square tests, the degrees of freedom varied depending on the number of possible response categories that were used. For both chi square tests there were three levels (i.e., elementary, middle, high or urban, suburban, and rural) and up to four levels of response. However, if a particular response category was not selected by respondents then there were only three levels resulting in the degrees of freedom being 4 instead of 6. There were a total of 336 correlations run on the 84 items for experience, number of interview conducted, percentage of novices interviewed, and gender. At the .05 alpha level, one would anticipate approximately 16 correlations to be found due to random chance. As will be explained later in this section, 28 correlations were found to be statistically significant, 19 of which were found to be gender related. Both the chi square and the correlations found relatively little interaction between respondents' ratings and their demographics other than gender.

Levels. Chi-square tests were used to examine statistically significant interactions between the levels that the administrators worked with and the way they perceived the strength of the response. Sixteen of the statements showed statistically significant effects, as indicated on Table 16; however, the expected frequencies for all but one were less than 5. According to SPSS, "some of the assumptions underlying the chi-square test are questionable in small samples, and statisticians commonly suggest a rule of thumb that all expected frequencies be at least 5 in order for the chi-square test to be considered

reliable" (Kirkpatrick & Feeney, 2001, p. 105). This means that although the item was found to be statistically significant, due to the small number of responses in particular grade levels or rating levels, it may not show repeatable statistical significance if a larger sample were used resulting in larger cell sizes.

Table 16 *Level and Question Response*

Question	*N*	x^2_{obs}	*Df*[1]	Asymp. sig. (2-sided)
23A	131	15.132	4	.004**
23B	129	1.865	6	.932
23C	130	4.797	6	.570
23D	128	5.995	6	.424
23E	130	3.613	6	.729
23F	130	5.637	6	.465
24A	129	2.258	6	.895
24B	131	4.208	6	.649
24C	130	12.958	6	.044*
24D	129	16.261	4	.003**
24E	131	6.429	6	.377
24F	130	2.604	6	.857
25A	130	3.503	4	.477
25B	131	8.885	4	.064
25C	131	4.352	6	.629
25D	131	3.972	6	.680
25E	129	2.429	4	.657
25F	131	13.744	6	.033*
26A	132	2.288	4	.683
26B	132	3.899	4	.420
26C	131	14.834	6	.022*
26D	130	5.537	6	.477
26E	130	2.683	4	.612
26F	131	10.825	4	.029*
27A	130	.810	4	.937
27B	130	16.188	6	.013*
27C	131	.631	4	.960
27D	129	5.988	6	.425
27E	130	8.779	4	.067
27F	128	7.451	6	.281
28A	131	4.497	6	.610
28B	131	7.576	6	.271
28C	130	4.920	6	.554
28D	129	6.951	6	.325
28E	131	4.312	4	.365
28F	131	3.452	6	.750
29A	130	4.507	4	.342
29B	131	1.097	4	.895
29C	131	5.888	6	.436
29D	131	13.768	6	.032*
29E	131	6.350	6	.385
29F	131	4.159	4	.385

* α= .05 *df*=4, x^2_{crit} = 9.49 *df*=6, x^2_{crit} = 12.6

** α= .01 *df*=4, x^2_{crit} = 13.3 *df*=6, x^2_{crit} = 16.8

[1] *Note. Degrees of freedom differ due to some items in which a possible response was not selected by any of the survey respondents.*

Table 16 Continued

Question	*N*	x^2_{obs}	*df*[1]	Asymp. sig. (2-sided)
30A	131	5.465	4	.243
30B	130	1.359	4	.851
30C	131	7.836	6	.250
30D	132	7.125	4	.129
30E	132	2.622	6	.855
30F	132	14.074	4	.007**
31A	132	9.111	6	.167
31B	132	6.300	6	.390
31C	132	3.783	4	.436
31D	132	9.450	4	.051
31E	130	2.217	4	.696
31F	130	3.985	4	.408
32A	131	4.126	4	.389
32B	130	3.167	6	.788
32C	131	11.108	4	.025*
32D	131	5.059	4	.281
32E	130	9.426	6	.151
32F	131	2.373	4	.668
33A	130	15.672	4	.003**
33B	131	9.478	4	.05
33C	131	6.147	6	.407
33D	131	15.201	4	.004**
33E	131	6.680	4	.154
33F	130	2.289	4	.683
34A	131	11.874	6	.065
34B	132	5.667	6	.461
34C	132	1.830	6	.935
34D	132	5.718	6	.456
34E	132	10.285	6	.113
34F	131	7.282	6	.296
35A	132	11.701	4	.020*
35B	131	.516	4	.972
35C	132	10.104	4	.039*
35D	131	7.237	6	.299
35E	131	5.734	6	.454
35F	132	4.430	4	.351
36A	132	11.347	4	.023*
36B	131	10.419	4	.034*
36C	132	6.511	4	.164
36D	131	2.365	4	.669
36E	132	8.071	6	.233
36F	132	3.380	6	.760

* α= .05 *df*=4, x^2_{crit} = 9.49 *df*=6, x^2_{crit} = 12.6

** α= .01 *df*=4, x^2_{crit} = 13.3 *df*=6, x^2_{crit} = 16.8

[1] *Note. Degrees of freedom differ due to some items in which a possible response was not selected by any of the survey respondents.*

Only Question 32C had expected frequencies above 5, and is being highlighted. The x^2_{obs} =11.108 is greater than x^2_{crit} = 9.49; thus there is a statistically significant interaction between administrators' perceptions and the grade level where administrators work. Table 17 presents the observed frequencies for the number of responses associated with agreeing with the targeted rating and within plus/minus one of the target by grade level. With alpha equal to .05, a chi-square test on these frequencies is statistically significant, x^2 (4, N=131) = 11.108, $p < .05$. As revealed by the frequencies, administrators in preK–5 settings were more likely than administrators in other settings to rate teacher applicants at or above the research-based target. This is interesting because administrators in middle school and high school settings identified the targeted rating proportionally more often than their colleagues in elementary school.

Table 17 *Grades and Responses to Question 32C*

			GRADES		
			PreK-5	6-8	9-12
ID32C	-1	Count	18	5	5
	Target	Count	34	17	15
	+1	Count	31	2	4

Urbanicity. Chi-square tests were used to examine statistically significant interactions between respondents' urbanicity and the way they perceived the strength of the response. Eight of the statements showed statistically significant effects, as indicated in Table 18; however, the expected frequencies for all eight statements were less than 5. Using the rule of thumb suggested by Kirkpatrick and Feeney (2001), caution should be exercised when interpreting any of the effects of Questions 26F, 27B, 27C, 27E, 30A, 32F, 34E, and 36B. As indicated in the demographic information earlier in the chapter,

rural respondents were overrepresented; however, based on the analysis run for this question their higher participation rates did not impact the findings.

Table 18 *Urbanicity and Question Response*

Question	*N*	x^2_{obs}	*df*[1]	Asymp. sig. (2-sided)
23A	138	4.086	4	.395
23B	137	11.495	6	.074
23C	137	1.457	6	.962
23D	135	4.021	6	.674
23E	137	2.2975	6	.812
23F	136	6.520	6	.368
24A	137	6.712	6	.348
24B	138	4.544	6	.603
24C	137	8.628	6	.196
24D	136	3.144	4	.534
24E	138	9.832	6	.132
24F	137	8.357	6	.213
25A	137	5.671	4	.225
25B	138	7.196	4	.126
25C	138	5.410	6	.492
25D	139	5.295	6	.507
25E	136	5.525	4	.238
25F	138	5.249	6	.512
26A	139	1.120	4	.891
26B	140	4.224	4	.376
26C	137	6.241	6	.367
26D	137	3.947	6	.684
26E	137	4	4	.364
26F	138	13.712	4	.008**
27A	138	1.526	4	.822
27B	137	14.567	6	.024*
27C	138	16.048	4	.003**
27D	136	5.971	6	.426
27E	138	13.170	6	.040*
27F	134	2.542	6	.864
28A	138	3.301	6	.770
28B	138	7.666	6	.264
28C	137	3.489	6	.745
28D	136	4.396	6	.623
28E	139	3.159	4	.532
28F	138	5.054	6	.537
29A	138	3.449	4	.486
29B	138	3.216	4	.522
29C	138	.618	4	.961
29D	138	3.074	6	.799

* α= .05 *df*=4, x^2_{crit} = 9.49 *df*=6, x^2_{crit} = 12.6

** α= .01 *df*=4, x^2_{crit} = 13.3 *df*=6, x^2_{crit} = 16.8

[1] *Note. Degrees of freedom differ due to some items in which a possible response was not selected by any of the survey respondents.*

Table 18 Continued

Question	*N*	x^2_{obs}	*df*[1]	Asymp. sig. (2-sided)
29E	139	6.047	6	.418
29F	138	2.887	4	.577
30A	138	9.581	4	.048*
30B	137	5.837	4	.212
30C	138	5.153	6	.524
30D	140	4.774	4	.311
30E	139	12.044	6	.061
30F	139	5.767	4	.217
31A	139	10.512	6	.015
31B	139	4.900	6	.557
31C	139	4.104	4	.392
31D	139	6.210	4	.184
31E	137	1.552	4	.817
31F	138	2.475	4	.649
32A	138	6.423	4	.490
32B	137	5.061	6	.536
32C	138	3.806	4	.433
32D	138	1.359	4	.851
32E	138	1.099	6	.982
32F	138	10.601	4	.031*
33A	137	2.494	4	.646
33B	138	7.986	4	.092
33C	138	3.360	6	.763
33D	138	4.345	4	.361
33E	138	6.189	4	.185
33F	138	3.323	4	.505
34A	139	9.958	6	.126
34B	139	10.734	6	.097
34C	138	3.444	6	.751
34D	139	2.676	6	.848
34E	139	13.269	6	.039*
34F	138	8.445	6	.207
35A	139	3.361	4	.499
35B	138	6.239	4	.182
35C	139	3.962	4	.411
35D	138	6.014	6	.422
35E	139	4.747	6	.577
35F	139	.763	4	.943
36A	139	4.017	4	.404
36B	138	13.452	4	.009**
36C	139	5.637	4	.228
36D	138	5.343	4	.254
36E	139	6.433	6	.376
36F	140	5.001	6	.544

* α= .05 *df*=4, x^2_{crit} = 9.49 *df*=6, x^2_{crit} = 12.6

** α= .01 *df*=4, x^2_{crit} = 13.3 *df*=6, x^2_{crit} = 16.8

[1] *Note. Degrees of freedom differ due to some items in which a possible response was not selected by any of the survey respondents.*

Experience. Correlations between experience and question response were run using the Pearson correlation coefficient (see Table 19). Five of the 84 responses were statistically significant at the .05 level. With an alpha level of .05, there was a significant positive correlation between the response strength and years of experience as an administrator for the following four question responses:

- 25D (M=2.69, SD=0.65) and years (M=12.29, SD=7.8), $r(137)$=+.21, p<.05
- 27E (M=1.81, SD=0.64) and years (M=12.29, SD=7.8), $r(136)$=+.18, p<.05
- 32E (M=3.14, SD=0.84) and years (M=12.29, SD=7.8), $r(136)$=+.17, p<.05
- 35C (M=1.27, SD=0.48) and years (M=12.29, SD=7.8), $r(137)$=+.26, p<.05

This indicates that the more years of experience that an administrator has the more likely he/she is to give higher ratings to the responses. With an alpha of .05, there was a significant negative correlation between Question 28B (M=2.82, SD=0.57) and years of experience as an administrator (M=12.29, SD=7.8), $r(136)$=-.19, p<.05 indicating that the fewer years of experience administrators have the more likely they are to give a low rating to this assessment-related item.

Number of interviews conducted. Correlations between experience and question response were calculated using the Pearson correlation coefficient (see Table 19). One of the 84 responses was statistically significant at the .01 level. With an alpha of .01, there was a significant negative correlation between Question 29E (M=2.51, SD=0.68) and number of interviews conducted (M=1.65, SD=.78), $r(139)$=-.29, p<.01 indicating that the fewer interviews conducted a year, the more likely administrators are to give a low rating to this organizing for instruction-related item.

Percent of novices interviewed. Correlations between experience and question response were calculated using the Pearson correlation coefficient (Table 19). Three of the 84 responses were statistically significant at the .05 level. With an alpha level of .05, there was a significant positive correlation between the response strength and percentage of interviews conducted with novice teacher applicants for the following two question responses:

- 27D (M=2.81, SD=0.63) and percent of novice teacher interviews (M=2.89, SD=1.39), $r(135)=+.18$, $p<.05$ and
- 33E (M=1.79, SD=0.49) and percent of novice teacher interviews (M=2.89, SD=1.39), $r(137)=+.18$, $p<.05$.

These positive correlations indicate that novice teacher applicants are more likely to get higher ratings from administrators who interviewed more early-career teachers. With an alpha of .05, there was a significant negative correlation between Question 26D (M=2.32, SD=0.55) and years (M=12.29, SD=7.8), $r(136)=-.17$, $p<.05$, indicating that the fewer novice teacher applicants an administrator interviews, the more likely he/she is to give a low rating to this instructional delivery-related item.

Gender. Correlations between experience and question response were calculated using the Pearson correlation coefficient (Table 19). Fifteen of the 84 responses were statistically significant at the .05 level, and four were statistically significant at the .01 level. With an alpha level of .05, there was a significant positive correlation between the response strength and respondents' genders indicating that male administrators rated responses higher for the following 14 question responses:

- 23A (M=1.19, SD=0.44) and gender (M=1.56, SD=.499), $r(136)=+.17$, $p<.05$;

- 24C (M=1.3, SD=0.55) and gender (M=1.56, SD=.499), r(135)=+.20, p<.05
- 24D (M=1.26, SD=0.49) and gender (M=1.56, SD=.499), r(134)=+.19, p<.05
- 25B (M=1.16, SD=0.39) and gender (M=1.56, SD=.499), r(136)=+.18, p<.05
- 25D (M=2.69, SD=0.65) and gender (M=1.56, SD=.499), r(137)=+.19, p<.05
- 25F (M=1.25, SD=0.54) and gender (M=1.56, SD=.499), r(137)=+.19, p<.05
- 26C (M=1.22, SD=0.48) and gender (M=1.56, SD=.499), r(135)=+.19, p<.05
- 29F (M=1.60, SD=0.55) and gender (M=1.56, SD=.499), r(136)=+.21, p<.05
- 30C (M=2.22, SD=0.71) and gender (M=1.56, SD=.499), r(136)=+.17, p<.05
- 31D (M=1.50, SD=0.61) and gender (M=1.56, SD=.499), r(137)=+.21, p<.05
- 33A (M=1.83, SD=0.60) and gender (M=1.56, SD=.499), r(135)=+.18, p<.05
- 33B (M=1.24, SD=0.48) and gender (M=1.56, SD=.499), r(136)=+.18, p<.05
- 35C (M=1.27, SD=0.48) and gender (M=1.56, SD=.499), r(137)=+.17, p<.05
- 35D (M=1.56, SD=0.60) and gender (M=1.56, SD=.499), r(136)=+.19, p<.05

With an alpha level of .01, there was a significant positive correlation between the response strength and respondents' gender, indicating that male administrators rated responses higher for the following three questions responses:

- 23C (M=1.93, SD=0.46) and gender (M=1.56, SD=.499), r(136)=+.26, p<.01
- 33E (M=1.79, SD=0.49) and gender (M=1.56, SD=.499), r(136)=+.22, p<.01
- 36A (M=1.34, SD=0.55) and gender (M=1.56, SD=.499), r(137)=+.23, p<.01

With an alpha of .05, there was a significant negative correlation, indicating that the female administrators rated response items lower for the following two question responses:

- 23B (M=3.31, SD=0.64) and gender (M=1.56, SD=.499), r(136)=-.18, p<.05

- 24A (*M*=3.46, *SD*=0.64) and gender (*M*=1.56, *SD*=.499), *r*(136)=-.21, *p*<.05

Table 19 *Correlations of Respondents' Demographics and Associations of Statements of Teacher Effectiveness*

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
PC23A	Pearson correlation	-0.114	0.047	0.017	0.168*
	sig. (2-tailed)	0.183	0.586	0.845	0.049
	N	138	139	139	138
PC23B	Pearson correlation	-0.106	-0.041	-0.109	-0.181*
	sig. (2-tailed)	0.219	0.633	0.204	0.034
	N	137	138	138	137
PC23C	Pearson correlation	0.025	0.103	-0.010	0.260**
	sig. (2-tailed)	0.769	0.231	0.910	0.002
	N	137	138	138	137
PC23D	Pearson correlation	0.056	0.032	-0.041	0.107
	sig. (2-tailed)	0.520	0.711	0.638	0.216
	N	135	136	136	135
PC23E	Pearson correlation	0.077	-0.068	-0.065	0.023
	sig. (2-tailed)	0.370	0.425	0.445	0.791
	N	137	138	138	137
PC23F	Pearson correlation	0.082	-0.024	0.030	0.058
	sig. (2-tailed)	0.345	0.777	0.727	0.506
	N	136	137	137	136
CM24A	Pearson correlation	0.085	0.050	-0.063	-0.211*
	sig. (2-tailed)	0.321	0.557	0.464	0.013
	N	137	138	138	137
CM24B	Pearson correlation	0.001	-0.066	-0.101	0.083
	sig. (2-tailed)	0.994	0.439	0.235	0.334
	N	138	139	139	138
CM24C	Pearson correlation	0.024	-0.048	0.011	0.195*
	sig. (2-tailed)	0.784	0.575	0.897	0.022
	N	137	138	138	137

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
CM24D	Pearson correlation	0.153	-0.022	0.080	0.186*
	sig. (2-tailed)	0.075	0.798	0.351	0.030
	N	136	137	137	136
CM24E	Pearson correlation	0.046	0.086	0.093	0.014
	sig. (2-tailed)	0.590	0.316	0.274	0.875
	N	138	139	139	138
CM24F	Pearson correlation	-0.091	-0.010	0.114	-0.037
	sig. (2-tailed)	0.292	0.907	0.183	0.671
	N	137	138	138	137
OI25A	Pearson correlation	-0.098	0.029	0.030	0.049
	sig. (2-tailed)	0.253	0.732	0.723	0.566
	N	137	138	138	137
OI25B	Pearson correlation	-0.021	0.019	0.001	0.179*
	sig. (2-tailed)	0.808	0.827	0.993	0.036
	N	138	139	139	138
OI25C	Pearson correlation	-0.014	0.084	0.092	0.077
	sig. (2-tailed)	0.873	0.326	0.283	0.369
	N	138	139	139	138
OI25D	Pearson correlation	0.210	-0.040	0.005	0.188*
	sig. (2-tailed)	0.013	0.641	0.955	0.027
	N	139	140	140	139
OI25E	Pearson correlation	-0.008	0.145	0.044	0.057
	sig. (2-tailed)	0.926	0.090	0.610	0.510
	N	136	137	137	136
OI25F	Pearson correlation	-0.004	-0.047	0.003	0.256**
	sig. (2-tailed)	0.962	0.583	0.976	0.002
	N	138	139	139	138
ID26A	Pearson correlation	0.062	0.108	0.042	0.009
	sig. (2-tailed)	0.471	0.206	0.622	0.912
	N	139	140	140	139
ID26B	Pearson correlation	0.085	0.100	-0.061	-0.126
	sig. (2-tailed)	0.316	0.237	0.470	0.138
	N	140	141	141	140

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
ID26C	Pearson correlation	0.037	0.113	0.109	0.189*
	sig. (2-tailed)	0.668	0.187	0.204	0.027
	N	137	138	138	137
ID26D	Pearson correlation	-0.023	-0.053	-0.168*	0.095
	sig. (2-tailed)	0.786	0.533	0.049	0.267
	N	137	138	138	137
ID26E	Pearson correlation	-0.012	0.018	-0.053	-0.089
	sig. (2-tailed)	0.893	0.838	0.535	0.300
	N	137	138	138	137
ID26F	Pearson correlation	0.005	0.085	-0.062	0.163
	sig. (2-tailed)	0.949	0.322	0.465	0.057
	N	138	139	139	138
CM27A	Pearson correlation	-0.027	-0.008	0.048	-0.085
	sig. (2-tailed)	0.751	0.930	0.576	0.319
	N	138	139	139	138
CM27B	Pearson correlation	0.004	-0.055	0.082	0.154
	sig. (2-tailed)	0.966	0.525	0.338	0.072
	N	137	138	138	137
CM27C	Pearson correlation	0.065	-0.057	0.002	0.223
	sig. (2-tailed)	0.447	0.507	0.983	0.008
	N	138	139	139	138
CM27D	Pearson correlation	0.008	-0.083	0.176*	0.055
	sig. (2-tailed)	0.927	0.337	0.040	0.522
	N	136	137	137	136
CM27E	Pearson correlation	0.183*	0.007	0.091	-0.026
	sig. (2-tailed)	0.032	0.933	0.284	0.763
	N	138	139	139	138
CM27F	Pearson correlation	-0.058	-0.058	0.086	0.014
	sig. (2-tailed)	0.508	0.506	0.323	0.875
	N	134	135	135	134
A28A	Pearson correlation	0.037	0.008	0.090	-0.067
	sig. (2-tailed)	0.669	0.925	0.295	0.438
	N	138	139	139	138

Note. *PC=Personal characteristics* *CM=Classroom management* *OI=Organizing for instruction* *ID=Instructional delivery* *A=Assessment* ** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
A28B	Pearson correlation	-0.185*	0.037	0.155	-0.068
	sig. (2-tailed)	0.030	0.668	0.069	0.431
	N	138	139	139	138
A28C	Pearson correlation	-0.047	-0.005	0.092	0.096
	sig. (2-tailed)	0.584	0.949	0.285	0.267
	N	137	138	138	137
A28D	Pearson correlation	-0.017	-0.120	0.054	-0.006
	sig. (2-tailed)	0.843	0.162	0.533	0.947
	N	136	137	137	136
A28E	Pearson correlation	0.107	-0.012	0.128	0.095
	sig. (2-tailed)	0.210	0.885	0.131	0.268
	N	139	140	140	139
A28F	Pearson correlation	0.033	-0.015	0.044	0.058
	sig. (2-tailed)	0.699	0.858	0.606	0.503
	N	138	139	139	138
OI29A	Pearson correlation	0.022	0.118	-0.047	-0.146
	sig. (2-tailed)	0.797	0.167	0.581	0.087
	N	138	139	139	138
OI29B	Pearson correlation	0.118	0.079	0.003	0.071
	sig. (2-tailed)	0.169	0.358	0.970	0.409
	N	138	139	139	138
OI29C	Pearson correlation	0.079	-0.161	-0.058	0.077
	sig. (2-tailed)	0.355	0.058	0.494	0.367
	N	138	139	139	138
OI29D	Pearson correlation	0.016	-0.046	-0.066	-0.078
	sig. (2-tailed)	0.852	0.590	0.443	0.364
	N	138	139	139	138
OI29E	Pearson correlation	-0.001	-0.286**	-0.026	0.035
	sig. (2-tailed)	0.992	0.001	0.762	0.679
	N	139	140	140	139
OI29F	Pearson correlation	0.035	-0.164	0.079	0.206*
	sig. (2-tailed)	0.687	0.054	0.357	0.016
	N	138	139	139	138

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
A30A	Pearson correlation	0.092	0.089	-0.051	0.032
	sig. (2-tailed)	0.281	0.295	0.548	0.713
	N	138	139	139	138
A30B	Pearson correlation	0.045	-0.072	-0.080	0.061
	sig. (2-tailed)	0.604	0.404	0.349	0.481
	N	137	138	138	137
A30C	Pearson correlation	0.014	0.137	0.052	0.169*
	sig. (2-tailed)	0.871	0.107	0.545	0.048
	N	138	139	139	138
A30D	Pearson correlation	0.051	0.087	-0.119	-0.006
	sig. (2-tailed)	0.552	0.305	0.161	0.946
	N	140	141	141	140
A30E	Pearson correlation	-0.029	-0.045	0.019	-0.038
	sig. (2-tailed)	0.731	0.594	0.825	0.654
	N	139	140	140	139
A30F	Pearson correlation	-0.125	-0.130	0.044	0.038
	sig. (2-tailed)	0.142	0.126	0.606	0.661
	N	139	140	140	139
PC31A	Pearson correlation	0.031	0.105	0.044	0.029
	sig. (2-tailed)	0.717	0.215	0.602	0.734
	N	139	140	140	139
PC31B	Pearson correlation	-0.008	0.016	0.007	-0.112
	sig. (2-tailed)	0.922	0.852	0.937	0.190
	N	139	140	140	139
PC31C	Pearson correlation	0.048	-0.108	0.012	0.126
	sig. (2-tailed)	0.575	0.205	0.887	0.138
	N	139	140	140	139
PC31D	Pearson correlation	0.123	-0.039	0.077	0.209*
	sig. (2-tailed)	0.148	0.646	0.368	0.013
	N	139	140	140	139
PC31E	Pearson correlation	0.049	0.098	-0.056	-0.049
	sig. (2-tailed)	0.573	0.253	0.515	0.570
	N	137	138	138	137

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
PC31F	Pearson correlation	-0.005	-0.008	-0.006	-0.118
	sig. (2-tailed)	0.954	0.924	0.948	0.168
	N	138	139	139	138
ID32A	Pearson correlation	0.076	-0.025	0.006	-0.003
	sig. (2-tailed)	0.375	0.766	0.944	0.968
	N	138	139	139	138
ID32B	Pearson correlation	-0.035	-0.105	0.050	0.032
	sig. (2-tailed)	0.686	0.219	0.558	0.708
	N	137	138	138	137
ID32C	Pearson correlation	0.008	-0.024	0.029	0.019
	sig. (2-tailed)	0.924	0.775	0.737	0.823
	N	138	139	139	138
ID32D	Pearson correlation	-0.080	-0.011	-0.074	-0.021
	sig. (2-tailed)	0.353	0.899	0.389	0.808
	N	138	139	139	138
ID32E	Pearson correlation	0.168*	0.021	0.022	0.041
	sig. (2-tailed)	0.049	0.807	0.793	0.629
	N	138	139	139	138
ID32F	Pearson correlation	-0.056	-0.038	0.057	-0.014
	sig. (2-tailed)	0.511	0.656	0.506	0.873
	N	138	139	139	138
OI33A	Pearson correlation	0.122	0.088	-0.040	0.183*
	sig. (2-tailed)	0.157	0.304	0.641	0.033
	N	137	138	138	137
OI33B	Pearson correlation	0.051	0.105	0.067	0.177*
	sig. (2-tailed)	0.554	0.218	0.434	0.038
	N	138	139	139	138
OI33C	Pearson correlation	0.011	-0.105	0.044	0.010
	sig. (2-tailed)	0.897	0.219	0.607	0.908
	N	138	139	139	138
OI33D	Pearson correlation	-0.061	0.041	0.085	-0.125
	sig. (2-tailed)	0.478	0.629	0.322	0.144
	N	138	139	139	138

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
OI33E	Pearson correlation	0.075	-0.147	0.183*	0.221**
	sig. (2-tailed)	0.385	0.085	0.031	0.009
	N	138	139	139	138
OI33F	Pearson correlation	-0.028	-0.166	0.087	-0.065
	sig. (2-tailed)	0.741	0.050	0.306	0.446
	N	138	139	139	138
ID34A	Pearson correlation	0.168	-0.083	0.061	0.009
	sig. (2-tailed)	0.048	0.331	0.477	0.919
	N	139	140	140	139
ID34B	Pearson correlation	0.077	-0.056	0.007	0.068
	sig. (2-tailed)	0.365	0.513	0.934	0.427
	N	139	140	140	139
ID34C	Pearson correlation	0.000	-0.088	-0.044	-0.050
	sig. (2-tailed)	0.999	0.304	0.609	0.558
	N	138	139	139	138
ID34D	Pearson correlation	-0.075	-0.076	-0.004	-0.127
	sig. (2-tailed)	0.378	0.372	0.959	0.136
	N	139	140	140	139
ID34E	Pearson correlation	0.004	-0.047	0.090	0.067
	sig. (2-tailed)	0.961	0.582	0.291	0.432
	N	139	140	140	139
ID34F	Pearson correlation	-0.020	-0.056	-0.086	0.043
	sig. (2-tailed)	0.818	0.513	0.316	0.615
	N	138	139	139	138
ID35A	Pearson correlation	-0.082	-0.061	0.034	0.070
	sig. (2-tailed)	0.340	0.476	0.691	0.412
	N	139	140	140	139
ID35B	Pearson correlation	0.066	0.094	-0.026	0.152
	sig. (2-tailed)	0.445	0.272	0.758	0.076
	N	138	139	139	138
ID35C	Pearson correlation	0.251*	-0.014	-0.002	0.173*
	sig. (2-tailed)	0.003	0.870	0.980	0.042
	N	139	140	140	139

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Table 19 Continued

Question		Experience	Number of interviews conducted	% of novices interviewed	Gender
ID35D	Pearson correlation	-0.047	-0.033	0.140	0.192*
	sig. (2-tailed)	0.587	0.702	0.100	0.024
	N	138	139	139	138
ID35E	Pearson correlation	-0.103	-0.162	0.092	-0.089
	sig. (2-tailed)	0.229	0.056	0.281	0.299
	N	139	140	140	139
ID35F	Pearson correlation	0.143	-0.028	0.004	0.116
	sig. (2-tailed)	0.093	0.740	0.964	0.173
	N	139	140	140	139
PC36A	Pearson correlation	0.124	-0.062	0.073	0.230**
	sig. (2-tailed)	0.146	0.468	0.392	0.006
	N	139	140	140	139
PC36B	Pearson correlation	0.110	-0.080	0.014	0.091
	sig. (2-tailed)	0.200	0.349	0.869	0.289
	N	138	139	139	138
PC36C	Pearson correlation	0.032	0.084	-0.066	0.122
	sig. (2-tailed)	0.709	0.326	0.439	0.154
	N	139	140	140	139
PC36D	Pearson correlation	-0.120	0.004	0.058	0.010
	sig. (2-tailed)	0.159	0.967	0.496	0.909
	N	138	139	139	138
PC36E	Pearson correlation	-0.040	-0.120	0.076	0.102
	sig. (2-tailed)	0.644	0.157	0.374	0.234
	N	139	140	140	139
PC36F	Pearson correlation	0.059	-0.101	0.124	0.071
	sig. (2-tailed)	0.488	0.231	0.142	0.407
	N	140	141	141	140

Note. *PC=Personal characteristics* *CM=Classroom management*
OI=Organizing for instruction *ID=Instructional delivery* *A=Assessment*
** p<.05* ***p<.01*

Chapter 5: Summary, Discussion, and Recommendations

A condensed version of the study's findings are presented in this chapter with a discussion of how the findings relate to associated issues, research, and work in the field of education. Additionally, implications and future avenues for research are recommended.

Summary of the Findings

The study investigated interviewing practices and perceptions of the quality of interview responses using a national sample of public school principals. A comparison between the research literature and administrators' practices was conducted. The relationship between administrators' interviewing background and practices was examined. Finally, the relationship between administrators' perceptions of the strength of a response and the research-based response rating was explored. With the exception of the content analysis component of the extant literature, the remaining questions were addressed using data collected on the Perceptions of School Leaders on Qualities of Effective Teachers survey. The overall response rate was 58.3%, of which 47.0% were usable.

The study consisted of two phases: Phase I addressed interviewing practices whereas Phase II focused on administrators' perceptions of the strength of statements associated with the qualities of effective teachers. Data from the six research questions were analyzed, and the summary of the findings are presented on the following pages.

Phase 1: Administrator's Interviewing Practices

I.1: What teacher interviewing practices are recommended by the extant literature?

The specially designed survey was grounded in two bodies of research: interviewing practices and effective teacher research. Few studies have been published on the subject of teacher selection interviews. Stronge's (2002) framework for the qualities of effective teacher literature was adopted and used to categorize the questions. The research question specifically focused on synthesizing the research literature on interviewing practices. After a thorough review of the literature, three overarching categories emerged with associated subcategories:

A. Interviewer Characteristics

A1. Training in Conducting Interviews

A2. Multiple Interviewers

B. Interview Questions

B1. Questions Prepared in Advance (of the interview)

B2. Same Questions (are used for each applicant for the position)

B3. Question Type (e.g., general, technical, hypothetical, behavioral)

B4. Means of Scoring Question Responses (e.g., rubric, guide)

C. Interview Format

C1. Structure of the Interview (e.g., unstructured, structured)

C2. Note-Taking

The highest number of article references was in the category of Questions, of which Question Type (B3) and Means of Scoring Question Responses (B4) received the

most mentions. Additionally, in the category of Interview Format, several articles investigated the impact of Structure of the Interview (C1) and Note-Taking (C2). Subcategory C1 had the highest number of studies investigating its impact on selection. According to the research literature, the use of unstructured, semi-structured, or structured interviews is the initial focus and major emphasis when considering the psychometric properties of reliable and valid interviews. The other subcategories typically are associated with interviews with varying levels of structure.

When examining the literature, the question of interview structure was heavily researched in the years prior to 1993 when this selection of articles began. From 1993 to 2003, researchers furthered their understanding of what elements in a structured interview make a difference is decision making. Of particular interest is what components can be used to establish predictive validity between the interview and subsequent employee performance. Studies focusing on interview question format have found that experience-based questions are more predictive of employee performance than situational questions. There is also a growing body of research investigating how interviews are scored and the use of a scoring mechanism such as a rubric on selecting the best applicants. These research studies refine the literature base of what is important to incorporate into selection interviewing.

I.2: To what degree do building-level administrators' teacher interviewing techniques reflect research-based best practice?

Statistical review of 10 research-based practices using means and standard deviations showed that often used techniques included the use of note-taking, the same questions with all applicants for a position, and situational (or hypothetical) questions.

Commonly used techniques included identifying desired characteristics (i.e., knowledge, skills, attributes) for the person who will be offered the position, using behavioral-based interview questions, conducting a structured interview, asking ice-breaker questions, and using multiple interviewers. Finally, the use of a rubric to score applicants' responses was reportedly an occasional technique.

The majority of respondents indicated that they learned to interview and got their questions from other administrators. This suggests that despite attempts to write the interview-related items in nontechnical language, administrators may not be fully aware that there is an actual term associated with what they are doing. For example, an often used technique as reported by respondents is to use the same questions with all applicants, a characteristic of a structured interview. Yet, administrators responded that structured interviews were commonly, but not often used. A series of open-ended questions may have revealed more about actual practices than asking respondents how frequently they use a selection of practices.

I.3: To what degree are building-level administrators' teacher interviewing practices influenced by their background and training in interviewing?

According to respondents, interviewing background and training have little influence on their interviewing practices. There were not sufficient cell sizes to include the number of interviews conducted a year and how administrators learned to interview to incorporate these factors in the MANOVA. The presence of interviewer training and source of interview questions were sufficiently varied to be used in a MANOVA. When the presence of training in interviewing and source of interview questions was crossed with researched-based interviewing practices, only multiple interviewers, prepared

questions, and rubric revealed significant effects for training. Follow-up analysis showed that the greatest variance occurred in the use of rubrics regardless of whether the interviewer had received training from the school district.

Seventy-four administrators conducted or participated in 10 or fewer interviews a year, 43 principals were active in 11-20 interviews annually, whereas the remaining 24 respondents conducted 21 or more interviews a year. The majority of these principals did not have any training in interviewing and got their interview questions from other administrators. When considering the principals' practices, the majority of administrators reported that they often did most of the practices listed. A key question is the accuracy of the administrators' responses as well as their interpretation of the descriptors "often," occasionally," and "rarely." It is conceivable that administrators responded with "often" because the practice sounded like something they should be doing as opposed to what they actually were doing. Thus, knowing that their responses were being used in a study (Hawthorne effect) may have influenced their recollections of their practices.

Phase II: Administrators' Perceptions of the Key Quality Indicators

II.1: To what extent is there consensus agreement among participants' rating of summary statements on the Perceptions of School Leaders on Qualities of Effective Teachers survey?

Respondents agreed on a rating for each statement by a simple majority for 75 out of 84 statements. In terms of the directionality of the ratings, there was an agreement of at least 75% of the respondents for a particular rating level plus or minus one level for all 84 statements. In an exploratory study on teacher effectiveness, Stronge, et al. (2003) found that being within one rating level was considered acceptable. In that study there were two

observers, whereas the present study had up to 141 individuals providing independent ratings of statements. The implication being that being within plus or minus on rating level among the majority of respondents in a larger study is stronger than a close rating between two individuals.

II.2: To what extent is there agreement between a research-based rubric and participants' responses?

In general, respondents identified the research-based target for the response the majority of the time. Of interest is question 32B, for which the most popular rating selected (42%) was a rating of proficient. This question was initially targeted for a proficient rating, but was adjusted on the basis of feedback from the pilot study to one level down. Participants designated a level other than the research-based target for approximately one quarter of the responses. However, in each of these cases, the preferred level was one higher or lower than the target. Administrators were twice as likely to identify responses where they perceived that the level of the teacher should be one level lower. A possible reason for the variation is that practicing administrators are influenced by the quality of applicants they encounter as opposed to empirical studies, which use statistical means to classify teachers based on effectiveness.

II.3: To what degree do participants' demographic characteristics (i.e., gender, school level, urbanicity, experience as an administrator, number of interviews conducted a year) relate to their association of statements with levels of teacher competence?

Both chi-square tests and correlations were used to determine statistically significant relationships between participants' demographics and how they rated responses. Since school levels where administrators worked and urbanicity are discrete

variables, chi-square tests were selected. For school level (i.e., pre-K, Middle, High), only one question (32C) met the criteria of being both statistically significant and all expected cell sizes to be at least five. The question dealt with instructional delivery, and administrators at the middle or high school level were more likely to identify the target response, 71.4% and 63.0%, respectively, than elementary school principals, who rated the item one level higher (37.2%) or at target rating (40.8%). In considering urbanicity, it should be noted that rural respondents were overrepresented when compared to the population. This overrepresentation did not impact the findings, however, while there were significant interactions, none of them passed the suggested rule of thumb of having expected cell sizes of at least five. In general, the area (i.e., urban, suburban, rural) where one works or the school level (i.e., elementary, middle, high) does not influence principals' perceptions of the strength of a response to a question. This is not surprising, since the questions were designed to be general and applicable to all working conditions. The potential for variability would have been increased if the questions or the associated responses were altered to favor practices or techniques more commonly found in particular settings. This finding of a lack of variability is encouraging in that it suggests that the interview questions and associated response items were not biased based on urbanicity or grade level.

Correlations were calculated on the continuous variables of experience, number of interviews conducted, percent of novice teachers interviewed, and gender. Based on the positive or negative correlation coefficients given, it is possible to determine the source of the influence. The methodology used in the present study creates the possibility of finding correlations as so many were conducted. With an alpha level of .05 selected, one

would anticipate approximately 16 significant findings based on random chance as 336 correlations were conducted.

Twenty-eight statistically significant correlations were identified across the four areas, which is more than can be attributed to just random chance. Frequently, experience gained over time doing the same task or sheer repetition, helps refine one's practice, making one more attuned to differences. Thus, it was anticipated that administrators with more years of experience or those had conducted more interviews would be more likely to agree with the targeted ratings. Likewise, if principals interviewed higher percentages of novice teachers, it was assumed that their expectations would be lower, resulting in higher than anticipated ratings as they adjusted their expectations, yet the data did not support this assumption. The correlations associated with experience (5), number of interviews (1), and percentage of novice applicants interviewed (3) can be attributed to chance suggesting that the survey's items were not influenced by these demographic factors. However, gender with its 19 statistically significant correlations indicates that more than just random chance is involved.

In 17 out of 19 correlations, male administrators rated response items higher than female administrators, but the power of the correlations is small. Differences in gender perceptions of applicant competence have been studied in the interviewing literature, but this was not a focus of this study. Therefore, it is found that demographic variables (i.e., grade level, urbanicity, experience, number of interviews, percentage of novices interviewed) with the exception of gender do not influence the ratings given on the survey.

Discussion of the Findings

In this section, the findings from this study will be compared and contrasted with other research in the areas of selection interviewing and effective teaching. As mentioned, few examples of empirical studies were found examining teacher selection interviewing; whenever possible they were used. Any observations about the teacher selection should be considered hypotheses and not conclusions or theories, as the relationship between the two bodies of literature is still being explored.

Administrators' Interviewing Practices

Before delving into administrators' interviewing practices, a brief review of the practice of interviewing is warranted. Edenborough (1999) cited a quotation from the 1800s about an interview being an oral version of an employment application. Given the lower literacy rates of the time, the interview became a means of verbally assessing applicants' suitability for a job. Through the nineteenth and twentieth centuries, the process of interviewing refined itself. Many interviews were unstructured where by interviewers and interviewees dialogued, but there was little consistency across the various interviews an interviewer may have held to fill a given position.

By the late 1980s the question of whether an interview's structure made a difference in the information obtained or the decisions made was being explored in the research literature (Maurer & Fay, 1988). Following initial studies establishing that the structured interview possessed positive attributes that the unstructured interview did not, researchers began investigating the various components (e.g., questioning, note-taking, rubrics, level of structure) that made up a structured interview. Researchers also examined how much structure was needed -- from none to some to a lot.

The next vein of research coming from the structured interview focused on the format of the questions asked in order to get the most predictive information about future performance. While research upholds the importance of the structured interview, it is not used as pervasively as one would hope. The interviewing literature has evolved from the question of structure to focusing on elements of structure. However, interviewer training is the linkage between the elements of structure and its proper implementation. Familiarity with interviewing techniques is one component, knowing how to integrate the elements of a structured interview to maximize its effectiveness comes through study or training. The present study relied on self-reported data with regards to administrators' interviewing practices, there is no way of knowing if respondents use the techniques as frequently as they indicated or even use them correctly. Therefore, caution should be taken to avoid over generalizing the findings.

Interviewer training. In this study, practicing principals reported that they used structured interviews along with many of the techniques recommended in the research literature. For example, a qualitative dissertation study reported that principals did not ask the questions that solicited the information they wanted and sometimes asked illegal hiring questions (Perkins, 1998). Additionally, approximately three quarters of respondents in the present study indicated that they did not receive any interview training from their school district. Further, most of the administrators who had not received interviewing training learned the skill from other administrators. This informal approach creates the danger that ineffective practices are perpetuated by well-intentioned administrators who are naïve to the complexities of interviewing. By contrast, when

employers train their interviewers and use standard protocols the interview process is more reliable and valid (Williamshon, et al., 1997).

The lack of interviewer training is not an issue unique to education. “Interviewing does not come naturally to most people…they feel stressed …it costs between $12,000 and $20,000 for a company to hire someone…this person has a huge burden and usually has not been trained,” said Marky Stein, the author of *Fearless Interviewing* in an interview with a local newspaper (Taylor, 2002, p.C8). The costs associated with recruiting, selecting, and hiring a new teacher are approximately the same in education, according to the Texas Center for Educational Research (2002). Placing economics aside, administrators are stressed with the knowledge that selected candidates will be teaching in their school. They need to ensure that applicants selected are capable of meeting students’ needs and support student achievement. The wrong hiring decision can result in a drain on the school’s resources when intensive support is placed around the new hire in an effort to encourage improvement and insulate students from the impact of an ineffective teacher. Ultimately, if plans for improvement do not work, the school system may be removing or nonrenewing the teacher, thereby incurring the additional cost of hiring another new teacher. This does note even take into consideration the adverse impact on student learning that would have occurred.

With so much dependent on the right hiring decisions, it makes both fiscal and common sense to train administrators in interviewing. This is not a novel idea. Lack of interviewer training was considered a problem three decades ago (Bolton, 1973). Peterson (2002) suggested that interviewers should receive at least 20 hours in interviewer training. Consider the following points:

- The Gallup Organization will not allow school systems to use their instruments until the users have been trained and normed to 85% agreement (Gallup, n.d.,a).
- Training in structured interviewing has been found to improve the reliability and validity of decisions (Dipboye & Gaugler, 1993; Maurer & Fay, 1988).
- Having administrators trained in effective interviewing practices can result in better decision making, which in turn provides better teachers to students, reduces nonrenewals for poor performance, and decreases the time and money spent on teacher selection.

Interviewer practices. There are several ways in which administrators can enhance the reliability of their interview process, such as the use of the same questions for all applicants to the same position. Mertz and McNeely (2001) found that two thirds of the principals in their qualitative study used the same questions, but a third did not have specific questions identified, and one principal preferred an unstructured interview approach. Further, 33% of the principals in the study and not necessarily the same previously mentioned third were using a process whereby it was difficult to compare teacher applicants. In the present study, administrators reported that they often used the same questions and commonly used a structured interview format which is consistent with Mertz and McNeely's findings. When the same questions are used, interviewers can evaluate the applicant as well as compare applicant responses. This practice also serves an additional purpose of being more legally defensible if applicants feel that they have been treated unfairly (Williamshon, et al., 1997).

Standardizing of the interview process can vary by the level of structure imposed. Highly structured interviews do not deviate from the questions, whereas semi-structured

interviews use the same questions, but allow for an interviewer to query further or skip questions that were answered within the response to a previous question. Teacher applicants may find a highly structured interview to be more intimidating, and it may communicate to them a more impersonal interviewer. Additionally, a highly structured interview format may limit the interviewers' ability to probe for additional information. Since the interview serves the dual purpose of getting more information about the applicant and the applicant obtaining information about the school, the applicant should be told before the interview starts that the particular format does not allow for deviation, but that there will be an opportunity to ask questions at the end. Regardless, the use of the same questions ensures that applicants are given the same opportunities to share information and that interviewers can obtain information about candidates' knowledge, skills, and attributes that will inform the decision-making process as to which applicant would be best for a given school and its students.

Another practice that shows promise, but is not commonly used, is the use of rating rubrics. Fewer than half of the respondents of this study indicated using rating scales or rubrics to evaluate applicants' responses to questions. Since the 1990s, anchored rating scales have been used to focus interviewers on what was desired in applicants' answers (Campion, et al., 1997; Goodrich, 1996). The use of anchored rating scales has been shown to improve reliability and accuracy of the interviewer's judgments over the more holistic approach used in less structured or unstructured interview formats (Dipboye & Gaugler, 1993). In education, performance appraisal rubrics are increasingly used to evaluate teacher performance, replacing old-style checklists. In evaluation, these rubrics provide a description explaining what is expected for each level of performance, which in

turn, is associated with a particular job standard. It takes time to develop valid and reliable rubrics, but if a school or school system already has an evaluation system in place that uses rubrics, school personnel could adapt and customize the evaluation rubric to an interview protocol. The next step would be to compare interview ratings of the teachers' to their subsequent teaching performance.

Administrators' Perceptions of Quality Responses to Teacher Interview Questions

Perceptions are shaped by a variety of inputs such as needs, prior experiences, actions, words, and a host of other influences. A common misperception is that everyone knows what it takes to be a teacher; after all, it is reasoned, most adults in the United States spent their childhood and adolescent years in a classroom observing teachers. When people are asked about their best teachers, they identify qualities associated with effective teachers. In studies involving adults describing their best and worst teachers, common positive traits include understanding students, knowledgeable in the subject area, clear communicators, enthusiastic, humorous, and well organized and prepared, whereas negative traits include poor deliverers of information, boring, inflexible, displayed favoritism, overly strict, and mean (Black & Howard-Jones, 2000; Check, 1999; Peart & Campbell, 1999). The adult studies demonstrate an agreement of what constitutes good and bad educational experiences as they relate to teachers' actions. The present study asked principals from around the United States to rate responses based on what level of teacher they associated with specific responses. Given that other studies show a general consensus on what people value, it is not surprising that the respondents in this study tended to agree on a teacher rating for the majority of the items.

In theory, if people can recall what works and does not work in the classroom based on their own experiences, school principals should be able to apply their own understandings and observations to teacher selection without training and study in the area of interviewing. However, the problem is that one can observe something and judge its quality, but the application and interview process is used predominantly in teacher selection, not long-term observation of the teacher actually teaching. Even if the applicant is observed, there is a difference between good teaching and effective teaching that results in increased student achievement as a teacher may have good classroom management, preparation, and delivery, but students are still not learning if the teacher does not accommodate for their needs (Berliner, as cited by Black & Howard-Jones, 2000). Without knowing student achievement data, observations are limited to collecting information about processes of teaching and classroom management performance as well as interactions with students. This lack of direct observation is a weakness in many school systems' selection processes. Yet, the interview has the potential to solicit information about classroom practices by having applicants describe what they do or to provide evidence in the form of a portfolio.

Agreement of ratings between administrators. An instrument was designed for this study to provide a means of using the psychometric properties of an interview to assist administrators in discriminating between various levels of teachers. Emley and Ebmeier (1997) used only effective and ineffective teachers to test two interview protocols. In that investigation, participants were able to discern the difference regardless of the format used. The challenge in the present study was for principals to distinguish between four levels of teacher applicants. The respondents in the present study

considered not only the extreme ends as in the Emley and Ebmeier investigation, but had two mid level ratings from which to select. In the present study, 89% of the time the respondents agreed on a rating by simple majority thus, demonstrating an agreement among practicing principals for an appropriate rating for a particular response to a question.

Respondents used the exemplary rating less frequently than the other ratings. This could be a result of high expectations for what constitutes a proficient teacher or a general reluctance to apply the exemplary rating. Regardless, this reduces the four-level rating system providing for two levels each of desired and less desired responses to a three-level system. Under that scenario a teacher applicant's rating would offer a middle ground between unsatisfactory and proficient, meaning that administrators could have less compelling evidence for choosing between acceptable or unacceptable teachers.

Alignment of administrators' perceptions with the research-based target. Commercially produced interviews such as those produced by Haberman or Gallup associate an applicants' response with a particular score. While these products lack the support of empirical evidence published in refereed publications, they have received some support for their reliability and validity in dissertation studies and their own internal reviews (Metzer & Wu, 2003). These commercial interviews, whether conducted face-to-face, via telephone, or using an Internet protocol, have established criteria for assessing responses. A key distinction between the commercially available protocols and the one developed for the present study is the focus for the rating scale. The identification of targeted rating levels in this study was conducted to determine to what degree administrators would identify the research-based target associated with qualities of

effective teacher research, whereas the Gallup instruments are based on psychological constructs and the Haberman protocols are based on years of observation.

Administrators in this study were more likely to identify statements the research associated with exemplary teachers as being reflective of teachers at the proficient level. This may be due to a reluctance to use the highest rating based on limited information, or it may be their expectation of a good employee. Interestingly, all the proficient targeted responses received the highest percentage by item, implying that administrators possess a strong sense of what constitutes a proficient response.

For responses designed to portray developing teacher responses, participants often identified the research-based target, but were not consistent when the target was not the primary response as to the whether the response should be one level higher or lower. For example, a developing teacher can be expected to be enthusiastic about learning and use it to promote high expectations for students, yet respondents indicated that this is a characteristic more likely to be exhibited by proficient or exemplary teachers. A key in teacher selection interviewing is not only having good questions, but also knowing good answers when they are given and not assuming only proficient or exemplary teachers are capable of offering good answers. A developing teacher shows potential.

One implication of these findings is that administrators are likely to select proficient and exemplary teacher applicants, although they initially may not recognize exemplary teachers. As a result, the school and its students are likely to get a good teacher regardless of the administrator's ability to discern between the top two levels. However, a related implication is that top teacher applicants may not be preferred. Thus, a study on hiring the best, found that, "applicants from better colleges do not fare better

in the job market. Indeed, remarkably, they do somewhat worse" (Ballou, 1996, p. 103). If administrators can identify strong applicants early in the process and have their offers expedited, the probability of securing the top teachers is enhanced.

In hard-to-staff areas such as special education, science, and mathematics, the problem facing administrators may be the ability to distinguish among less desirable applicants. Sometimes school districts will make early contract offers to applicants because they are certified in the area, but this practice confines principals to selecting from this restricted applicant pool. It is possible that candidates' paper application and initial screening interview made them look good to human resources personnel, but during more in depth school-level interviews, the applicant is not very strong. In this situation, the principal can hire and may be compelled to hire an applicant who meets the definition of highly qualified, but lacks qualities of an effective teacher. The ability to discern the best of the worst can be invaluable in such situations.

Furthermore, some administrators may have to consider whether it is better to select a candidate with little experience, but with potential, or an experienced teacher who is not as competent as the principal would prefer. Applicants at the developing level possess the potential to become proficient when provided with opportunity and supports, whereas, common sense suggests that applicants at the unsatisfactory level should not be offered a position in the first place. Being attuned to the difference between these two levels can help ensure that students will get a teacher who will improve versus one whose performance will remain static or even decline. By using rubrics linked to effective teacher research, administrators will be applying not only their own judgments but also a research base to evaluating applicants' strengths and weaknesses.

This combination of subjective and objective information sources provides a means of rating applicants along a continuum that can be used to compare them to each another in an effort to select the best applicant. Furthermore, administrators could use the results of the interview to target areas for professional development for incoming teachers. The interview ratings can also be used to match newly hired teachers with mentors who will help early-career teachers develop or serve as resources for more experienced teachers who are new to the school system. To make this work, it is essential that interviewers use the research base on effective teaching as a guide to inform their decisions. A rubric based on the literature and used in conjunction with the interview question is one tool for enhancing the effectiveness of selection decisions.

Overall alignment. Regardless of administrators' demographics, they generally agreed with each other and the targeted rating based on the research. However, within each group, there were responses for which the rating did not achieve a simple majority of agreement, missed the target, or statistically showed a difference based on demographic variables. Table 20 summarizes the areas of difference, most of which were associated with demographic characteristics. While demographic variables of urbanicity, grade level, experience, gender, number of interviews conducted, and percentage of novice teachers interviewed did not create much variance in the response, it was the source of more differences than the other two categories. The fewest differences occurred in the Administrators' Agreement category on what the rating should be regardless of what the research base suggests. For this category, it was the agreement among administrators as to the appropriate rating. When considering the studies conducted on adults (see for example, Peart & Campbell, 1999), this level of administrator agreement is

not surprising given that participants in studies on characteristics of best and worse teachers consistently report similar characteristics. Finally, examination by the quality shows that Assessment had the fewest incidences of difference while the instructionally related categories of Organizing for Instruction and Instructional Delivery, which may be considered interdependent had the most. The high numbers associated with these two quality areas is important given that the work a teacher does preparing for instruction influences what occurs in the classroom.

Table 20 *Significant Difference by Quality of Effective Teachers*

	Personal characteristics	Classroom management	Organizing for instruction	Instructional delivery	Assessment
Demographics	6	7	10	7	2
Administrators' agreement	0	2	1	4	2
Target	4	3	4	6	2
Total	10	12	15	17	6

Given that instructional organization and delivery are tightly linked, one being the planning and the other the execution of the planning, it is not surprising that together they accounted for more areas of difference than the other three quality areas combined (See Table 20). Thus, for the core of what teachers do publicly in the classroom - instructional delivery - the highest number of areas of differences were identified. Likewise, the less public aspect of organizing for instruction, which includes planning and gathering resources, also had a high number of differences noted. The implication of these findings for teacher selection interviewing is that administrators have more difficulty evaluating responses that require contextual information, which was not available to them on the

survey. For example, administrators have ample opportunity to observe qualities such as classroom management and instructional delivery, but they do not often directly observe a teacher making planning decisions or evaluating assessment results to guide future instructional decisions.

Conclusions

Uniting employment interview and effective teacher research offers the potential of enabling administrators and others involved in decisions related to hiring teachers to be knowledgeable about what works in selection interviewing. Administrators serve as both instructional leaders and managers, and in those dual capacities make hiring recommendations to personnel directors who deal with selection issues throughout the school year. In a qualitative dissertation study, a Virginia personnel director found that middle school principals in her school district created their own questions, some of which were in violation of federal acts (Perkins, 1998). At a minimum, school districts must ensure that school administrators who conduct interviews are trained to conduct legal and effective interviews. Additionally, school district personnel departments could standardize their interview protocol to avoid problems common in interviews such as the lack of reliability and validity. A structured interview format provides a framework whereby interviewers ask the same legal job-related questions of all candidates for a particular position. The addition of a rating system facilitates a common reporting mechanism and may reduce the halo effect from previous responses to questions. Finally, all school district interviewers must receive training on how to use the protocol adopted by the school system. Students ultimately have the greatest interaction with teachers and would benefit from merging selection and effective teacher research. For the school

district selecting the teachers, this approach would increase the likelihood of securing an effective teacher while decreasing their exposure to litigation.

The current study targeted a specific element of a new teacher quality interview protocol that built upon both the effective teacher and interviewing research literature. The instrument designed for the protocol included many characteristics that the interview research base supports as good practice. The study sought to validate the rubric portion of the interview protocol by extracting key phrases from it and embedding them in response statements to associated questions. Goals for the interview protocol include making better selection decisions, reducing turnover costs, and providing students with effective teachers. By using a rubric grounded in the effective teacher research literature, administrators have a tool to focus their evaluation of applicants' responses on qualities that have been empirically linked to higher levels of student achievement.

The reality of an interview is that it is a 30–60 minute exchange of information between the interviewer(s) and the applicant. In many school systems, the interview, along with paper documentation (i.e., application, Praxis scores, certification, and recommendation letters), is the basis for teacher selection decisions. Applicants can discuss enthusiastically their love of children, desire to make a difference, and how they work in classroom or reach out to families to promote student learning. The way applicants present themselves through their appearance, mannerisms, and articulation conveys messages of confidence and competence or lack thereof. This information should be taken into consideration, but should not overwhelm the teacher selection decision.

Some administrators maintain that they can make hiring decisions within minutes of meeting an applicant. If this is true, the rest of the interview would be spent looking

for confirmation of the initial "gut instinct." In essence, how applicants respond to initial questions influences how the administrator who made a fast decision perceives the rest of the interview. This halo effect may cause a principal to recommend hiring an otherwise unsuitable candidate because the answer to the second question relating to content knowledge was superb even though later responses provided evidence pointing to problems. The converse is true as well. A good candidate who starts off shakily due to nervousness may not be able to undo the initial first impression.

The interview is an opportunity to predict future job performance based on the interactions between the interviewer(s) and the applicant (Cascio, 1998). Given a new hire will spend seven hours a day, 190+ days a year in a school building for a total of 75,600+ minutes, interviewers must get as much information out of the interview as possible to enhance their decision-making ability. This decision will make the difference between being "stuck with" a bad hire or a teacher whose contract will be renewed at the end of the school year.

A review of the teacher selection literature revealed a plethora of interviewing questions for teacher applicants, some recommendations of interviewing practices, and one empirical study on the topic of question format. The "how-to interview" books marketed for principals also provide some guidance. However, the link between interviewing practices and selecting the best teachers is still being forged. While the study did not show how the techniques were being implemented, it does suggest an awareness among respondents of some of the elements of a good interview.

Recommendations for Further Research

Additional study is needed on the actual interviewing practices of school administrators and the effectiveness of hiring decisions; specifically, predictive validity is needed. In an era of increased accountability, every aspect of schools is being scrutinized to ensure improved and continued high levels of student achievement. The way in which teachers are selected for their classroom positions is another avenue of research needing further exploration.

The current research has identified many as yet unanswered questions and opportunities for future investigations regarding the teacher selection process. Given the No Child Left Behind mandate for highly qualified teachers, administrators are charged with selecting certified teachers and placing them within their certification areas. However, certification is only one element of teacher effectiveness. Developing high quality interview procedures and questions based on the qualities of effective teachers and using the psychometric properties of good interviewing practices may result in better hiring decisions that, in turn, will influence teacher effectiveness, school climate, and, most important, student learning. Three areas for further research and application to practice are as follows:

Linking Teacher Selection Interviews to Teacher Evaluation

- A common practice in teacher evaluation is to use rubrics to define each level of performance. Adapting the evaluation rubric for use in teacher interviews would provide a means to link the predictive validity of the selection interview to the subsequent performance of the teacher selected.

- Another application of teacher evaluation to teacher selection would be for school districts to determine the ratio of performance standards related to each teacher quality to the number of teacher selection questions posed. In informal surveys of workshop participants, the most common questions asked of candidates relate to their prerequisite skills and personal characteristics, yet the primary job of teachers involves instructionally related components such as planning, instructional delivery, and assessment.

Using Technology as an Interviewing Tool

- The use of a computer-assisted interviewing protocol may enable administrators to enter their results about an applicant into a computer database so that another administrator in the same school district could search by desired characteristics to identify applicants to interview. Administrators could also gather additional information about a specific candidate. By using a standardized rating scale, the feedback from each interviewer could be stored in an electronic database. The rating scale could designate a range of scores appropriate for making the basic decisions of "not to hire," "consider hiring," and "strong candidate." In the event that the candidate is not selected by a school, the personnel department could search the database for candidates who earned high composite scores and send them on additional interviews.
- The medium used for the interview needs further investigation. Is the protocol impacted by whether it is given by telephone, video-conferencing, or face-to-face in terms of the judgments made by the interviewers and the receptivity of the interviewees towards the school district?

- Selection needs to be standardized in order to reduce the chance of litigation; however, customizing some aspects of the interview (e.g., by subject area, grade level, and experience) may be appropriate and assist the interviewer in collecting more reliable information. A database could be used to manage not only interview questions, but also interview feedback on a candidate. A series of base questions could have different wording depending on the position. Slight wording changes on questions may include inserting the subject being taught, a concern common in a particular subject area (e.g., lab safety), and the grade level.

Future Research Studies

- *Investigating teachers' perceptions of the selection rubric.* The protocol used in this study focused on administrators' perceptions of teacher quality; however, teachers may have different views. A replicated study could gather teachers' perceptions in order to compare and contrast the perceptions of these two groups would begin a dialogue of what evidence of teacher effectiveness is available and apparent during the selection process.
- *Analyzing responses to the interview questions.* A sample of teachers who have been identified as highly effective, effective, and ineffective through statistical modeling could be asked to respond to the interview questions in a double-blind format. Then their responses could be analyzed to determine the degree to which the rubric aligns with actual responses.
- *Classifying interview question responses.* Practicing administrators could be given a series of responses to the interview questions and asked to classify the responses by

the level (i.e., exemplary, proficient, developing, unsatisfactory) teacher applicant they perceive would have given the response.

These recommendations are offered as beginning points to further the knowledge base relating interviewing and teacher effectiveness. Improving interviewing skills is one step, linking it to identifying the best candidate is another, yet the ultimate step placing an effective teacher in every classroom.

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Appendix A

Pilot 1 Instrument

Thinking About Incorporating Qualities of Effective Teachers with Interview Questions for Teachers

Directions

For each item, please indicate which category would ***best*** be addressed in a response to a question. Comments and suggestions about the question may be included in the box in the last column.

Description of the Qualities of Effective Teachers

Personal Characteristics are those attributes that are inherent in an individual.
Classroom Management refers to the physical organization of the classroom and its operation.
Organization for instruction is the way a teacher plans, allocates time, and establishes high expectations.
Instruction addresses how the teacher actually instructs the class.
Assessment is how the teacher monitors student progress and responds to their needs.

	Question	Personal Characteristics	Classroom Management	Organization	Instruction	Assessment	Comments
1.	What do you find most rewarding about teaching?						
2.	Tell me what you do with students the first few weeks you are working with them to establish a positive classroom environment.						
3.	Share with me your long and short-term planning process for instruction.						
4.	Describe to me how you engage students in their learning.						
5.	Share with me a time you had difficulty with a particular student's behavior and what you did to address it.						
6.	Explain your grading system to me.						
7.	Think about an instructional unit you like to teach. Tell me why you selected particular teaching strategies to address the curriculum.						
8.	Tell me how you accommodate students' learning needs on the assessments you give.						

Please continue on the back.

Description of the Qualities of Effective Teachers
Personal Characteristics are those attributes that are inherent in an individual.
Classroom Management refers to the physical organization of the classroom and its operation.
Organization for instruction is the way a teacher plans, allocates time, and establishes high expectations.
Instruction addresses how the teacher actually instructs the class.
Assessment is how the teacher monitors student progress and responds to their needs.

	Question	**Personal Characteristics**	**Classroom Management**	**Organization**	**Instruction**	**Assessment**	**Comment(s)**
9.	Give me an example of how you establish and maintain rapport with your students.						
10.	Describe how you promote high expectations for student achievement.						
11.	How does your classroom time use reflect that learning is the primary purpose for students?						
12.	How do you use technology as part of your instruction?						
13.	Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.						
14.	Think about a lesson that despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns.						

Additional comments

Appendix B

Pilot 2 Correspondence and Instrument

Sent on College of William and Mary Letterhead
(font size reduced)

Address

November 10, 2003

Dear (insert name).

One of the best times to make changes in a faculty's make-up is when a teacher applicant is selected, because the new teacher offers additional strengths and talents to the school's faculty. The interview process for teachers offers school leaders an opportunity to make changes to the quality of the teaching faculty without a single professional development session or new initiative. We currently are conducting a pilot study on qualities of effective teachers and interviewing practices.

We are requesting your feedback on an instrument that is being developed for a national study on school leaders' interviewing practices and selection of effective teachers. The enclosed survey should take approximately 45 minutes of your time. We realize how busy you are as a practicing school administrator, and we greatly value your input.

Your participation is completely voluntary and confidential. You will not be personally identified in the pilot study. If you decide to participate, your submission of the completed survey booklet in the self-addressed stamped return envelope will indicate your consent. A separate postcard has been provided for you to indicate if you would like to receive a summary of the survey findings and a draft of the interview protocol in Summer 2004. Additionally for your participation, we would like to send you a token of appreciation in the form of a $10.00 Barnes and Noble gift card. Please provide an address for mailing the gift card on the postcard.

If you have any questions, please contact Jennifer Hindman by phone at 757.221.1707 or by email at jlhind@wm.edu. If you have concerns with any aspect of this survey, you may report them to the Chair of the Protection of Human Subjects Committee at The College of William and Mary. The Current Chair is Dr. Stan Hoegerman who can be reached at 757.221.2240.

We appreciate your consideration and assistance with this study that promises to make an important contribution our understanding of how to identify effective teachers applicants in the interview process. Please return your feedback on the survey by **Monday, November 24, 2003.**

Sincerely,

James H. Stronge, Ph.D.
Heritage Professor of Education
The College of William and Mary

Jennifer L. Hindman
Research Assistant
The College of William and Mary

Enc.

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (PHONE: 757.221.3901) ON OCTOBER 30, 2003 AND EXPIRES ON OCTOBER 30, 2004.

Survey Response Post Card

Front

Pilot Survey Response Card

Name:_____

Mailing Address: _____

_____

Check all that apply

☐ I have mailed my feedback on the survey in the separate envelope.
☐ I am declining to participate in the Pilot Survey.
☐ Please email me a copy of the study's finding and a draft of the interview protocol. My email address is:_____

Appreciation Token

☐ Mail the Barnes & Noble Gift Card to the address above.

OR

☐ I am declining the Barnes & Noble Gift Card.

Back

Jennifer Hindman
The College of William and Mary-SOE
POB 8795
Williamsburg, VA 23187-8795

Jennifer Hindman
The College of William and Mary-SOE
POB 8795
Williamsburg, VA 23187-8795

Survey Thank-you to Pilot Participants

Sent on William and Mary Letterhead

Address

Date

Dear [name of person]

I greatly appreciate your participation in the pilot study for the national survey on *Perceptions of School Leaders on Qualities of Effective Teachers.* Please find enclosed a token of appreciation in the form of a $10.00 Barnes & Noble Gift Card. Your input is invaluable to Dr. Stronge and me as we refine the survey instrument.

Sincerely,

Jennifer L. Hindman
Research Assistant
College of William and Mary

Enc.

Perceptions of School Leaders on Qualities of Effective Teachers

The survey is designed to gather information on building-level administrators' interviewing background and association of summary responses with the relative strength of the response. Please make notations directly on the document as you review:

- Page 2 for clarity of questions and language use.

- Pages 3-6 for your agreement with how the statement is rated. There are a series of statements summarizing types of responses that may be given to the interview question posed. Based on the research literature, responses were designed to be associated with a particular level of teacher applicant. The highlighted box shows where the response is targeted. Indicate whether you agree with the assignment level. If you disagree, please circle the level that you feel is more appropriate. An explanation of the response levels is on the top of page 2.

When you have completed your review, please return the entire stapled packet to:
Jennifer Hindman, The College of William and Mary-SOE, POB 8795, Williamsburg, VA 23187-8795.

A self-addressed stamped envelope has been provided for your convenience.

Perceptions of School Leaders on Qualities of Effective Teachers

Pilot study participants, please follow the directions on page 1. These directions are provided for your comments.

This questionnaire is being used as part of a study on qualities of effective teachers and interviewing. Your responses are valuable. This survey should take approximately 30-minutes.

Please return the survey regardless of whether you choose to participate. Check below all applicable items.

____ I decline to participate in the survey.

____ I would like a summary of the survey's findings and a draft of the interview protocol. Please email them to me at _____.

For Study Use Only					
(0)	(0)	(0)	(0)	(0)	(0)
(1)	(1)	(1)	(1)	(1)	(1)
(2)	(2)	(2)	(2)	(2)	(2)
(3)	(3)	(3)	(3)	(3)	(3)
(4)	(4)	(4)	(4)	(4)	(4)
(5)	(5)	(5)	(5)	(5)	(5)
(6)	(6)	(6)	(6)	(6)	(6)
(7)	(7)	(7)	(7)	(7)	(7)
(8)	(8)	(8)	(8)	(8)	(8)
(9)	(9)	(9)	(9)	(9)	(9)

1. Have you interviewed or participated in an interview to select a teacher in the past year?

☐ Yes, please continue

☐ No, stop here and return the form

2. In what state/area do you work?

☐ CT, ME, MA, NH, RI, VT

☐ DE, MD, NJ, NY, PA, Washington, DC

☐ AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV

☐ IL, IN, IO, KS, MI, MN, MO, NE, ND, OH, SD, WI

☐ AZ, NM, OK, TX

☐ AK, CO, CA, HI, ID, MT, NV, OR, UT, WA, WY

3. What term best describes your professional position?

☐ Principal ☐ Other _____

☐ Assistant Principal

4. What is the context of your school/worksite?

☐ Rural ☐ Suburban ☐ Urban

5. Indicate the grade level of the positions you most commonly are holding interviews to fill.

☐ preK – Grade 5 ☐ Grades 6 - 8 ☐ Grades 9 – 12

6. How many years have you been an administrator?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14

☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21

☐ 22 ☐ 23 ☐ 24 ☐ 25+ *Please state* _____

7. Approximately how many teacher interviews did you conduct/participate in from the fall of 2002 to fall 2003?

☐ less than 10 ☐ 11 - 20 ☐ 21 – 30

☐ 31 - 40 ☐ 41 – 50 ☐ more than 50

8. Approximately, what percentage of teacher applicants did you interview in 2002-2003 who were novice teachers (3 years or less of experience)?

☐ 0-20% ☐ 21-40% ☐ 41-60% ☐ 61-80% ☐ 81-100%

9. Does your school district offer training on how to conduct teacher selection interviews?

☐ Yes ☐ No

Please indicate how typical each item is when you conduct/participate in an interview.

		Often	Sometimes	Rarely
10.	Use multiple interviewers	☐	☐	☐
11.	Have prepared questions	☐	☐	☐
12.	Use a structured interview	☐	☐	☐
13.	Ask the same questions to each applicant interviewing for the same position	☐	☐	☐
14.	Use a scoring guide or rubric for the responses	☐	☐	☐
15.	Determine the desired qualities an applicant should have to fulfill the job responsibilities before interviewing begins	☐	☐	☐
16.	Take notes during the interview	☐	☐	☐
17	Ask applicants how they would respond to a hypothetical situation	☐	☐	☐
18.	Ask applicants to describe how they have responded to situations in the past	☐	☐	☐
19.	Use icebreaker or warm-up questions	☐	☐	☐

20. What is your primary source for interview questions?

☐ Other administrators ☐ School district list

☐ Books ☐ Commercial product

21. What was your primary way of learning to interview?

☐ Other administrators ☐ School district in-service

☐ College course ☐ National/state workshop

☐ Commercial product-related training

22. What is your gender?

☐ Female ☐ Male

Please continue on page 3

Directions

Pilot study participants, please follow the directions on page 1. These directions are provided for your comments.

This survey is designed to help associate statements describing teacher applicants' responses with administrators' judgment of the strength of the statements.

Under each boldfaced question are six statements summarizing the responses different teacher applicants may offer to the same question. Consider what type of teacher applicant is likely to make such a statement.

There are four levels for your consideration:

1 – unsatisfactory *This applicant does not have what it takes to be an effective teacher.*

2 – developing *This applicant has the makings for a good teacher, but is not there yet.*

3 – proficient *This applicant is most likely a good, solid teacher.*

4 – exemplary *This applicant is likely a highly effective teacher.*

		Unsatisfactory	Developing	Proficient	Exemplary	Do you agree with the indication, if ***No*** circle the appropriate level.	
23.	**What do you find most rewarding about teaching?**						
	g. Does not communicate his/her thoughts clearly	(1)	(2)	(3)	(4)	Yes	No
	h. Communicates with clarity and offers examples	(1)	(2)	(3)	(4)	Yes	No
	i. Communicates an idealistic, but ungrounded view of teaching	(1)	(2)	(3)	(4)	Yes	No
	j. Communicates with useful concrete and abstract examples	(1)	(2)	(3)	(4)	Yes	No
	k. Communicates a broad idea that lacks specificity	(1)	(2)	(3)	(4)	Yes	No
	l. Communicates a passion for seeing students enjoying learning	(1)	(2)	(3)	(4)	Yes	No
24.	**Tell me what you do with students during the first few weeks you are working with them to establish a positive classroom environment.**						
	a. Builds a classroom community through student ownership	(1)	(2)	(3)	(4)	Yes	No
	b. Focuses on how the classroom should run the first week	(1)	(2)	(3)	(4)	Yes	No
	c. Lacks specific examples of how they build rapport with students	(1)	(2)	(3)	(4)	Yes	No
	d. Introduces rules only once and expects students to follow them	(1)	(2)	(3)	(4)	Yes	No
	e. Spends time at the start of the school year reinforcing routines so students can work independently	(1)	(2)	(3)	(4)	Yes	No
	f. Responds to students who are off-task and redirects them	(1)	(2)	(3)	(4)	Yes	No
25.	**Share with me your long and short-term planning process.** **PROMPT: Think about a lesson you recently taught and describe how you planned for it?** **PROMPT: At the beginning of the school year, how did you plan to address the required _____** *(insert name of state standards)* **objectives for your grade/subject level?**						
	a. Treats long and short-term planning as isolated planning functions	(1)	(2)	(3)	(4)	Yes	No
	b. Does not make long-range plans or is unfamiliar with the concept	(1)	(2)	(3)	(4)	Yes	No
	c. Prioritizes instruction by referring to plans	(1)	(2)	(3)	(4)	Yes	No
	d. Uses both long and short-term planning, relying heavily on short-term	(1)	(2)	(3)	(4)	Yes	No
	e. Uses planning to help consolidate facts into broader concepts	(1)	(2)	(3)	(4)	Yes	No
	f. Indicates that long range planning is not useful as there are too many interruptions in the school year	(1)	(2)	(3)	(4)	Yes	No

Please continue on page 4

		Unsatisfactory	Developing	Proficient	Exemplary	Do you agree with the indication, if ***No*** circle the appropriate level.	
26.	**Describe how you engage students in their learning.**						
	a. Modifies activities to address student needs	(1)	(2)	(3)	(4)	Yes	No
	b. Systematically designs differentiated learning activities	(1)	(2)	(3)	(4)	Yes	No
	c. Has a "one-size fits all" approach to instruction	(1)	(2)	(3)	(4)	Yes	No
	d. Provides some activities designed to capitalize on student interest	(1)	(2)	(3)	(4)	Yes	No
	e. Provides examples of how s/he achieves high levels of active student engagement	(1)	(2)	(3)	(4)	Yes	No
	f. Does not think school should have to cater to student interests	(1)	(2)	(3)	(4)	Yes	No
27.	**Share with me a time you had difficulty with a particular student's behavior and what you did to address it.** **PROMPT: Tell me about a student who continually acted up and what you did.**						
	a. Works with the student and others (i.e., families, guidance counselors) to help the student meet expectations	(1)	(2)	(3)	(4)	Yes	No
	b. Disciplines students using punitive measures	(1)	(2)	(3)	(4)	Yes	No
	c. Focuses on the need for strict discipline measures	(1)	(2)	(3)	(4)	Yes	No
	d. Reinforces the behavior expectations	(1)	(2)	(3)	(4)	Yes	No
	e. Referred the student to the office after s/he did not improve during the class period	(1)	(2)	(3)	(4)	Yes	No
	f. Provided an example where a contributing factor was the teacher's actions	(1)	(2)	(3)	(4)	Yes	No
28.	**Explain how you share with students and families your grading system.** **PROMPT: How do students know how well they are doing?** **PROMPT: How do you let parents know what grades are based upon?**						
	a. Uses a limited variety of ongoing and culminating assessments	(1)	(2)	(3)	(4)	Yes	No
	b. Grades a variety of assignments and more formal assessments	(1)	(2)	(3)	(4)	Yes	No
	c. Has a mechanism in place for explaining the grading system when new students enter the class during the year (e.g., a welcome back)	(1)	(2)	(3)	(4)	Yes	No
	d. Provides adequate feedback on performance	(1)	(2)	(3)	(4)	Yes	No
	e. Regularly interprets and communicates student progress through regularly timed reports that are issued in addition to the school's marking period	(1)	(2)	(3)	(4)	Yes	No
	f. Prefers to base grades solely on culminating assignments (e.g., tests)	(1)	(2)	(3)	(4)	Yes	No
29.	**Think about an instructional unit you like to teach. Tell me why you selected particular teaching strategies to address the curriculum.**						
	a. Diagnostically uses a wide range of instructional strategies to optimize student learning	(1)	(2)	(3)	(4)	Yes	No
	b. Refers to a few instructional strategies s/he knows well	(1)	(2)	(3)	(4)	Yes	No
	c. Selects strategies that appeal to students' learning styles	(1)	(2)	(3)	(4)	Yes	No
	d. Considers the resources available to teach using various strategies	(1)	(2)	(3)	(4)	Yes	No
	e. Works with another teacher who suggested the strategies would work well to teach the unit to students	(1)	(2)	(3)	(4)	Yes	No
	f. Credits the textbook with the selection of strategies	(1)	(2)	(3)	(4)	Yes	No

Please continue on page 5

		Unsatisfactory	Developing	Proficient	Exemplary	Agree with the indication, if ***No*** circle the level you think reflects the response	
30.	**Tell me how you accommodate students' learning needs on the assessments you give.**						
	a. Analyzes past student performance on assessments to determine how the student best demonstrates his/her knowledge	(1)	(2)	(3)	**(4)**	Yes	No
	b. Assesses all students the same	(1)	**(2)**	(3)	(4)	Yes	No
	c. Gives modified assessments when they are prepared by the special education teacher	(1)	**(2)**	(3)	(4)	Yes	No
	d. Differentiates as appropriate for students of all ability levels	(1)	(2)	(3)	**(4)**	Yes	No
	e. Changes some aspects of the assessment based on the instruction students received	(1)	(2)	**(3)**	(4)	Yes	No
	f. Accommodates only when there is an IEP or 504 plan being enforced	(1)	**(2)**	(3)	(4)	Yes	No
31.	**Give an example of how you establish and maintain rapport with your students.**						
	a. Watches TV shows that are popular with students	(1)	**(2)**	(3)	(4)	Yes	No
	b. Provides examples of caring about individual students in and out of school	(1)	(2)	(3)	**(4)**	Yes	No
	c. Says it is hard to relate to students who are so different from the teacher or other students s/he has taught	**(1)**	(2)	(3)	(4)	Yes	No
	d. Focuses on the teacher role of controlling students	**(1)**	(2)	(3)	(4)	Yes	No
	e. Offers examples of involvement with students outside of contract hours (i.e., club, coaching, attendance at extracurricular events)	(1)	(2)	**(3)**	(4)	Yes	No
	f. Interacts and knows students by group interests	(1)	(2)	**(3)**	(4)	Yes	No
32.	**Describe how you promote high expectations for student achievement.**						
	a. Offers examples of what meeting varying levels of expectation looks like on particular assignments	(1)	(2)	(3)	**(4)**	Yes	No
	b. Is enthusiastic about learning	(1)	(2)	**(3)**	(4)	Yes	No
	c. Encourages students to participate in their learning	(1)	(2)	**(3)**	(4)	Yes	No
	d. Places sole responsibility for student success on the student	**(1)**	(2)	(3)	(4)	Yes	No
	e. Believes that different students have different needs at different times so high expectations reflect student differences	(1)	(2)	(3)	**(4)**	Yes	No
	f. Suggests that student achievement is the job of the student and is influenced slightly by the teacher	(1)	**(2)**	(3)	(4)	Yes	No
33.	**How does your classroom time use reflect that learning is the primary purpose for students?**						
	a. Focused on how learning time may be interrupted by external events, so the teacher verbally reminds students to pay attention	**(1)**	(2)	(3)	(4)	Yes	No
	b. Talks about cutting short lessons because non-instructional activities use up the time	(1)	**(2)**	(3)	(4)	Yes	No
	c. Considers the time it takes the educator to teach and the student to learn when allocating time	(1)	(2)	**(3)**	(4)	Yes	No
	d. Offers examples of how a high percentage of the day is devoted to instruction such as taking advantage of teachable moments	(1)	(2)	(3)	**(4)**	Yes	No
	e. Gives a basic answer about how much time is spent in class	**(1)**	(2)	(3)	(4)	Yes	No
	f. Is flexible in time use to ensure students learn	(1)	(2)	**(3)**	(4)	Yes	No

Please continue on Page 6

		Unsatisfactory	Developing	Proficient	Exemplary	Agree with the indication, if ***No*** circle the level you think reflects the response	
34.	**How do you use technology as part of your instruction?**						
	a. Offers examples of how technology and other related resources are integrated into meaningful lessons	(1)	(2)	(3)	(4)	Yes	No
	b. Is uncomfortable with technology	(1)	(2)	(3)	(4)	Yes	No
	c. Creates tasks to increase students' proficiency and expertise in appropriately using the technology	(1)	(2)	(3)	(4)	Yes	No
	d. Uses available technology as appropriate to instructional objectives	(1)	(2)	(3)	(4)	Yes	No
	e. Applies technology inappropriately in the example	(1)	(2)	(3)	(4)	Yes	No
	f. Fails to provide an example of authentic student work using technology	(1)	(2)	(3)	(4)	Yes	No
35.	**Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.**						
	a. Provides an inadequate answer that demonstrates some knowledge	(1)	(2)	(3)	(4)	Yes	No
	b. Offers plentiful instructional examples and guided practice	(1)	(2)	(3)	(4)	Yes	No
	c. Gives confusing examples and directions in the example selected	(1)	(2)	(3)	(4)	Yes	No
	d. Communicates the topic with a lack of clarity	(1)	(2)	(3)	(4)	Yes	No
	e. Provides an example in which the class was addressed as a group on the topic and then the teacher targeted specific individuals for additional explanation as necessary	(1)	(2)	(3)	(4)	Yes	No
	f. Uses clear examples and step-by-step directions	(1)	(2)	(3)	(4)	Yes	No
36.	**Think about a lesson that, despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns?**						
	a. Focused on non-teacher related issues	(1)	(2)	(3)	(4)	Yes	No
	b. Addressed the issue with limited evidence of reflection	(1)	(2)	(3)	(4)	Yes	No
	c. Reflected to improve teaching	(1)	(2)	(3)	(4)	Yes	No
	d. Reflected on the teaching *and* the students to improve learning	(1)	(2)	(3)	(4)	Yes	No
	e. Focused on what the students did wrong	(1)	(2)	(3)	(4)	Yes	No
	f. Retaught the concept another way so students could learn	(1)	(2)	(3)	(4)	Yes	No

Thank you for your participation!

Follow-up letter sent on William and Mary letterhead
(font reduced)

Address

November 26, 2003

Dear [insert name]:

A couple of weeks ago, information on a survey that Dr. Stronge and I are piloting for a national study was sent to you. The survey is on school leaders' perceptions of the relationship between qualities of effective teachers and interview questions. As of the sending of this follow-up letter, your survey has not been received. In the event you already responded, please ignore this mailing.

Your knowledge of how you conduct or participate in teacher interviews and what you look for in a strong candidate is important in this study. The enclosed survey should take approximately 45 minutes of your time. We realize how busy you are as a practicing school administrator, and we greatly value your contribution. Your expertise is invaluable in refining the knowledge base on how school leaders conduct teacher interviews. The survey contains 22 demographic questions and a series of 14 interview questions for you to offer your judgment of how likely you would be to hire an applicant who responded to questions a particular way. The results of the survey will be used to validate an interview protocol that is currently under development.

Your participation is completely voluntary and confidential. You will not be personally identified in the pilot study. If you decide to participate, your submission of the completed survey booklet in the self-addressed stamped return envelope will indicate your consent. A separate postcard has been provided for you to indicate if you would like to receive a summary of the survey findings and a draft of the interview protocol in Summer 2004. Additionally for your participation, we would like to send you a token of appreciation in the form of a $10.00 Barnes and Noble gift card. Please provide an address for mailing the gift card on the postcard. Please, use the enclosed envelope to return your feedback to me by **Friday, December 5, 2003.**

If you have any questions, please contact Jennifer Hindman by phone at 757.221.1707 or by email at jlhind@wm.edu. If you have concerns with any aspect of this survey, you may report them to the Chair of the Protection of Human Subjects Committee at The College of William and Mary. The Current Chair is Dr. Stan Hoegerman who can be reached at 757.221.2240.

We appreciate your consideration and assistance with this study that promises to make an important contribution to the questions asked of applicants for teaching positions.

Sincerely,

Jennifer L. Hindman
Research Assistant
College of William and Mary

Enc.

Appendix C

Pre-alert Postcard for the Study

Pre-Alert Postcard Text

Upcoming Survey on Teacher Selection and Qualities of Effective Teachers

Dear Colleague:

In one week, a survey entitled, ***Perceptions of School Leaders on Qualities of Effective Teachers,*** will be sent to you as part of a national survey.

The study is designed to collect information about interviewing practices and how qualities of effective teachers relate to questions asked during the teacher selection process. Dr. James H. Stronge and Jennifer Hindman of The College of William and Mary in Williamsburg, Virginia are conducting the study.

We know that your time is valuable and would greatly appreciate you spending approximately 30 minutes filling out the survey when it arrives in the mail with additional instructions. We can be contacted by email at jlhind@wm.edu or by telephone at 757.221.1707 if you have any questions.

James H. Stronge, Ph.D.
Jennifer L. Hindman, M. T.

Appendix D

Initial Correspondence and Survey Instrument

Letter sent on William and Mary letterhead with the initial mailing (font size reduced)

December 9, 2003

Dear Colleague:

One of the best times to make changes in a faculty's make-up is when a teacher applicant is selected, because the new teacher offers additional strengths and talents to the school's faculty. The interview process for teachers offers school leaders an opportunity to make changes to the quality of the teaching faculty without a single professional development session or new initiative. We currently are conducting a study on qualities of effective teachers and interviewing practices.

This study regarding school leaders' interviewing practices and selection of effective teachers requests your participation. Your knowledge of how you conduct or participate in teacher interviews and what you look for in a strong candidate is important in this study. The enclosed survey should take approximately 30 minutes of your time. We realize how busy you are as a practicing school administrator, and we greatly value your contribution. The results of the survey will be used to validate an interview protocol that is currently under development.

Your participation is completely voluntary and confidential. You will not be personally identified in the study. If you decide to participate, your submission on the completed survey booklet will indicate your consent. If you are interested in receiving a summary of the study's results in late spring 2004, indicate your email address on page 2 of the booklet in the space provided. Use the enclosed self-addressed stamped envelope to return your feedback by **Monday, December 22, 2003.** Should you decide not to participate, please check the first line on page 2 of this packet indicating that you are declining to participate and return the survey booklet. Please keep the enclosed Sacagawea dollar as a token of appreciation for your participation in this study.

If you have any questions, please contact Jennifer Hindman by phone at 757.221.1707 or by email at jlhind@wm.edu. If you have concerns with any aspect of this survey, you may report them to the Chair of the Protection of Human Subjects Committee at The College of William and Mary. The Current Chair is Dr. Stan Hoegerman who can be reached at 757.221.2240.

We appreciate your consideration and assistance with this study that promises to make an important contribution to our understanding of how to identify effective teacher applicants in the interview process.

Sincerely,

James H. Stronge, Ph.D.
Heritage Professor of Education
The College of William and Mary

Jennifer L. Hindman
Research Assistant
The College of William and Mary

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (PHONE: 757.221.3901) ON OCTOBER 30, 2003 AND EXPIRES ON OCTOBER 30, 2004

Perceptions of School Leaders on Qualities of Effective Teachers

For Study Use Only					
(0)	(0)	(0)	(0)	(0)	(0)
(1)	(1)	(1)	(1)	(1)	(1)
(2)	(2)	(2)	(2)	(2)	(2)
(3)	(3)	(3)	(3)	(3)	(3)
(4)	(4)	(4)	(4)	(4)	(4)
(5)	(5)	(5)	(5)	(5)	(5)
(6)	(6)	(6)	(6)	(6)	(6)
(7)	(7)	(7)	(7)	(7)	(7)
(8)	(8)	(8)	(8)	(8)	(8)
(9)	(9)	(9)	(9)	(9)	(9)

This questionnaire is being used as part of a study on qualities of effective teachers and interviewing. Your responses are valuable. This survey should take approximately 30-minutes.

Please return the survey regardless of whether you choose to participate. Check below all applicable items.

____ I decline to participate in the survey.

____ I would like a summary of the survey's findings and a draft of the interview protocol. Please email them to me at _____.

1. Have you interviewed or participated in an interview to select a teacher in the past year?

☐ Yes, please continue

☐ No, stop here and return the form

2. In what state/area do you work?

☐ CT, ME, MA, NH, RI, VT

☐ DE, MD, NJ, NY, PA, Washington, DC

☐ AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV

☐ IA, IL, IN, IO, KS, MI, MN, MO, NE, ND, OH, SD, WI

☐ AZ, NM, OK, TX

☐ AK, CO, CA, HI, ID, MT, NV, OR, UT, WA, WY

3. What term best describes your professional position?

☐ Principal ☐ Other _____

☐ Assistant Principal

4. What is the context of your school/worksite?

☐ Rural ☐ Suburban ☐ Urban

5. Indicate the grade level of the positions you most commonly are holding interviews to fill.

☐ preK – Grade 5 ☐ Grades 6 - 8 ☐ Grades 9 – 12

6. How many years have you been an administrator?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14

☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 22

☐ 23 ☐ 24 ☐ 25 ☐ 26+ *Please state* _____

7. Approximately how many teacher interviews did you conduct/participate in from the fall of 2002 to fall 2003?

☐ less than 10 ☐ 11 - 20 ☐ 21 – 30

☐ 31 - 40 ☐ 41 – 50 ☐ more than 50

8. Approximately what percentage of teacher applicants did you interview in 2002-2003 who were novice teachers (3 years or less of experience)?

☐ 0-20% ☐ 21-40% ☐ 41-60% ☐ 61-80% ☐ 81-100%

9. Does your school district offer training on how to conduct teacher selection interviews?

☐ Yes ☐ No

Please indicate how typical each item is when you conduct/participate in an interview.

		Often	Sometimes	Rarely
10.	Use multiple interviewers	☐	☐	☐
11.	Have prepared questions	☐	☐	☐
12.	Use a structured interview	☐	☐	☐
13.	Ask the same questions to each applicant interviewing for the same position	☐	☐	☐
14.	Use a scoring guide or rubric for the responses	☐	☐	☐
15.	Determine the desired qualities an applicant would have to fulfill the job responsibilities before interviewing begins	☐	☐	☐
16.	Take notes during the interview	☐	☐	☐
17.	Ask applicants how they would respond to a hypothetical situation	☐	☐	☐
18.	Ask applicants to describe how they have responded to situations in the past	☐	☐	☐
19.	Use icebreaker or warm-up questions	☐	☐	☐

20. What is your primary source for interview questions?

☐ Other administrators ☐ School district list

☐ Books ☐ Commercial product

21. What was your primary way of learning to interview?

☐ Other administrators ☐ School district in-service

☐ College course ☐ National/state workshop

☐ Commercial product-related training

22. What is your gender?

☐ Female ☐ Male

Directions

This survey is designed to help associate statements describing teacher applicants' responses with administrators' judgment of the strength of the statements.

Under each boldfaced question are six statements summarizing the responses different teacher applicants may offer to the same question. Consider what type of teacher applicant is likely to make such a statement. Circle only *one* selection for each statement.

There are four levels for your consideration:

1 – unsatisfactory *This applicant does not have what it takes to be an effective teacher.*

2 – developing *This applicant has the makings for a good teacher, but is not there yet.*

3 – proficient *This applicant is most likely a good, solid teacher.*

4 – exemplary *This applicant is likely a highly effective teacher.*

		Unsatisfactory	Developing	Proficient	Exemplary
23.	**What do you find most rewarding about the teaching profession?**				
	a. Does not communicate his/her thoughts clearly	(1)	(2)	(3)	(4)
	b. Communicates with clarity and offers examples	(1)	(2)	(3)	(4)
	c. Communicates an idealistic, but ungrounded view of teaching	(1)	(2)	(3)	(4)
	d. Communicates with useful concrete and abstract examples	(1)	(2)	(3)	(4)
	e. Communicates a broad idea that lacks specificity	(1)	(2)	(3)	(4)
	f. Communicates a passion for seeing students enjoying learning	(1)	(2)	(3)	(4)
24.	**Tell me what you do with students during the first few weeks you are working with them to establish a positive classroom environment.**				
	a. Builds a classroom community through student ownership	(1)	(2)	(3)	(4)
	b. Offers limited opportunities for students to practice routines	(1)	(2)	(3)	(4)
	c. Lacks specific examples of how they build rapport with students	(1)	(2)	(3)	(4)
	d. Introduces rules only once and expects students to follow them	(1)	(2)	(3)	(4)
	e. Spends time at the start of the school year reinforcing routines so students can work independently	(1)	(2)	(3)	(4)
	f. Responds to students who are off-task and redirects them	(1)	(2)	(3)	(4)
25.	**Share with me your long and short-term planning process.** **PROMPT: Think about a lesson you recently taught and describe how you planned for it?** **PROMPT: At the beginning of the school year, how did you plan to address the required _____** *(insert name of state standards)* **objectives for your grade/subject level?**				
	a. Treats long and short-term planning as isolated planning functions	(1)	(2)	(3)	(4)
	b. Does not make long-range plans or is unfamiliar with the concept	(1)	(2)	(3)	(4)
	c. Prioritizes instruction by referring to plans	(1)	(2)	(3)	(4)
	d. Uses both long and short-term planning, relying heavily on short-term	(1)	(2)	(3)	(4)
	e. Uses planning to help consolidate facts into broader concepts	(1)	(2)	(3)	(4)
	f. Indicates that long range planning is not useful as there are too many interruptions in the school year	(1)	(2)	(3)	(4)

Please continue on Page 4

		Unsatisfactory	Developing	Proficient	Exemplary
26.	**Describe how you engage students in their learning.**				
	a. Modifies activities to address student needs	(1)	(2)	(3)	(4)
	b. Systematically designs differentiated learning activities	(1)	(2)	(3)	(4)
	c. Has a "one-size fits all" approach to instruction	(1)	(2)	(3)	(4)
	d. Provides some activities designed to capitalize on student interest	(1)	(2)	(3)	(4)
	e. Provides examples of how s/he achieves high levels of active student engagement	(1)	(2)	(3)	(4)
	f. Does not think school should have to cater to student interests	(1)	(2)	(3)	(4)
27.	**Share with me a time you had difficulty with a particular student's behavior and what you did to address it.** **PROMPT: Tell me about a student who continually acted up and what you did.**				
	a. Works with the student and others (i.e., families, guidance counselors) to help the student meet expectations	(1)	(2)	(3)	(4)
	b. Disciplines students using punitive measures	(1)	(2)	(3)	(4)
	c. Focuses on the need for strict discipline measures	(1)	(2)	(3)	(4)
	d. Reinforces the behavior expectations	(1)	(2)	(3)	(4)
	e. Referred the student to the office after s/he did not improve during the class period	(1)	(2)	(3)	(4)
	f. Provided an example where a contributing factor was the teacher's actions	(1)	(2)	(3)	(4)
28.	**Explain how you share with students and families your grading system.** **PROMPT: How do students know how well they are doing?** **PROMPT: How do you let parents know what grades are based upon?**				
	a. Uses a limited variety of ongoing and culminating assessments	(1)	(2)	(3)	(4)
	b. Grades a variety of assignments and more formal assessments	(1)	(2)	(3)	(4)
	c. Has a mechanism in place for explaining the grading system when new students enter the class during the year (e.g., a welcome back)	(1)	(2)	(3)	(4)
	d. Provides adequate feedback on performance	(1)	(2)	(3)	(4)
	e. Interprets and communicates student progress through regularly timed reports that are issued in addition to the school's marking period	(1)	(2)	(3)	(4)
	f. Prefers to base grades solely on culminating assignments (e.g., tests)	(1)	(2)	(3)	(4)
29.	**Think about an instructional unit you planned. Tell me why you selected particular teaching strategies to address the curriculum.**				
	a. Diagnostically uses a wide range of instructional strategies to optimize student learning	(1)	(2)	(3)	(4)
	b. Refers to a few instructional strategies s/he knows well	(1)	(2)	(3)	(4)
	c. Selects strategies that appeal to students' learning styles	(1)	(2)	(3)	(4)
	d. Considers the resources available to teach using various strategies	(1)	(2)	(3)	(4)
	e. Works with another teacher who suggested the strategies would work well to teach the unit to students	(1)	(2)	(3)	(4)
	f. Credits the textbook with the selection of strategies	(1)	(2)	(3)	(4)

Please continue on page 5

		Unsatisfactory	Developing	Proficient	Exemplary
30.	**Tell me how you accommodate students' learning needs on the assessments you give.**				
	a. Analyzes past student performance on assessments to determine how the student best demonstrates his/her knowledge	(1)	(2)	(3)	(4)
	b. Assesses all students the same	(1)	(2)	(3)	(4)
	c. Gives modified assessments when they are prepared by the special education teacher	(1)	(2)	(3)	(4)
	d. Differentiates as appropriate for students of all ability levels	(1)	(2)	(3)	(4)
	e. Changes some aspects of the assessment based on the instruction students received	(1)	(2)	(3)	(4)
	f. Accommodates only when there is an IEP or 504 plan	(1)	(2)	(3)	(4)
31.	**Give an example of how you establish and maintain rapport with your students.**				
	a. Watches TV shows that are popular with students	(1)	(2)	(3)	(4)
	b. Provides examples of caring about individual students in and out of school	(1)	(2)	(3)	(4)
	c. Says it is hard to relate to students who are so different from the teacher or other students s/he has taught	(1)	(2)	(3)	(4)
	d. Focuses on the teacher role of controlling students	(1)	(2)	(3)	(4)
	e. Offers examples of involvement with students outside of contract hours (i.e., club, coaching, attendance at extracurricular events)	(1)	(2)	(3)	(4)
	f. Interacts and knows students by group interests	(1)	(2)	(3)	(4)
32.	**Describe how you promote high expectations for student achievement during your instructional time.**				
	a. Offers examples of what meeting varying levels of expectation looks like on particular assignments	(1)	(2)	(3)	(4)
	b. Is enthusiastic about learning	(1)	(2)	(3)	(4)
	c. Encourages students to participate in their learning	(1)	(2)	(3)	(4)
	d. Places sole responsibility for student success on the student	(1)	(2)	(3)	(4)
	e. Believes that different students have different needs at different times so high expectations reflect student differences	(1)	(2)	(3)	(4)
	f. Suggests that student achievement is the job of the student and is influenced slightly by the teacher	(1)	(2)	(3)	(4)
33.	**How does your use of instructional time demonstrate that learning is the primary purpose for students?**				
	a. Focused on how learning time may be interrupted by external events, so the teacher verbally reminds students to pay attention	(1)	(2)	(3)	(4)
	b. Talks about cutting short lessons because non-instructional activities use up the time	(1)	(2)	(3)	(4)
	c. Considers the time it takes the educator to teach and the student to learn when allocating time	(1)	(2)	(3)	(4)
	d. Offers examples of how a high percentage of the day is devoted to instruction, such as taking advantage of teachable moments	(1)	(2)	(3)	(4)
	e. Gives a basic answer about how much time is spent in class	(1)	(2)	(3)	(4)
	f. Is flexible in time use to ensure students learn	(1)	(2)	(3)	(4)

		Unsatisfactory	Developing	Proficient	Exemplary
34.	**How do you use technology during your instruction?** **PROMT: Suggest types of technology such as computers, graphic calculators, overheads, laserdiscs, DVD, etc.**				
	a. Offers examples of how technology and other related resources are integrated into meaningful lessons	(1)	(2)	(3)	(4)
	b. Is uncomfortable with technology	(1)	(2)	(3)	(4)
	c. Creates tasks to increase students' proficiency and expertise in appropriately using the technology	(1)	(2)	(3)	(4)
	d. Uses available technology as appropriate to instructional objectives	(1)	(2)	(3)	(4)
	e. Applies technology inappropriately in the example	(1)	(2)	(3)	(4)
	f. Fails to provide an example of authentic student work using technology	(1)	(2)	(3)	(4)
35.	**Pick a topic in your subject area that is often difficult for students to understand. Tell me what the topic is, how you explain it to students, and share with me directions for an activity you do to help further students' understanding of that topic.**				
	a. Provides an inadequate answer that demonstrates some knowledge	(1)	(2)	(3)	(4)
	b. Offers plentiful instructional examples and guided practice	(1)	(2)	(3)	(4)
	c. Gives confusing examples and directions in the example selected	(1)	(2)	(3)	(4)
	d. Communicates the topic with a lack of clarity	(1)	(2)	(3)	(4)
	e. Provided an example in which the class was addressed as a group on the topic and then the teacher targeted specific individuals for additional explanation as necessary	(1)	(2)	(3)	(4)
	f. Uses clear examples and step-by-step directions	(1)	(2)	(3)	(4)
36.	**Think about a lesson that, despite planning and preparation, did not meet your expectations and you had to regroup to address the topic with your students. Tell me what you considered and how you addressed your concerns.** **PROMPT: How do you reflect on your professional practice?**				
	a. Focused on non-teacher related issues	(1)	(2)	(3)	(4)
	b. Addressed the issue with limited evidence of reflection	(1)	(2)	(3)	(4)
	c. Reflected to improve teaching	(1)	(2)	(3)	(4)
	d. Reflected on the teaching *and* the students to improve learning	(1)	(2)	(3)	(4)
	e. Focused on what the students did wrong	(1)	(2)	(3)	(4)
	f. Retaught the concept another way so students could learn	(1)	(2)	(3)	(4)

Please return the survey in the self-addressed stamped envelope provided. The address is: Jennifer Hindman, The College of William and Mary-SOE, POB 8795, Williamsburg, VA 23187-8795.

Thank you for your participation!

Appendix E

Survey Correspondence: First Follow up Letter

Letter sent on William and Mary letterhead for follow up mailing

December 30, 2003

Dear Colleague:

A couple of weeks ago, a survey on school leaders' perceptions of the relationship between qualities of effective teachers and interview questions was mailed to you. As of the sending of this follow-up letter, your survey has not been received. In the event you already responded, please ignore this mailing.

Your knowledge of how you conduct or participate in teacher interviews and what you look for in a strong candidate is important in this study. The enclosed survey should take approximately 30 minutes of your time. We realize how busy you are as a practicing school administrator, and we greatly value your contribution. The results of the survey will be used to validate an interview protocol that is currently under development.

Your participation is completely voluntary and confidential. You will not be personally identified in the study. If you decide to participate, your submission on the completed survey booklet will indicate your consent. If you are interested in receiving a summary of the study's results in late spring 2004, indicate your email address on page 2 of the booklet in the space provided. Use the enclosed self-addressed stamped envelope to return your feedback by **Friday, January 16, 2004.** Should you decide not to participate, please check the first line on page 2 of this packet indicating that you are declining to participate and return the survey booklet.

If you have any questions, please contact Jennifer Hindman by phone at 757.221.1707 or by email at jlhind@wm.edu. If you have concerns with any aspect of this survey, you may report them to the Chair of the Protection of Human Subjects Committee at The College of William and Mary. The Current Chair is Dr. Stan Hoegerman who can be reached at 757.221.2240.

We appreciate your consideration and assistance with this study that promises to make an important contribution to the questions asked of applicants for teaching positions.

Sincerely,

James H. Stronge, Ph.D.
Heritage Professor of Education
The College of William and Mary

Jennifer L. Hindman
Research Assistant
The College of William and Mary

Enc.

Appendix F

Survey Correspondence: Second Follow up Letter

Letter sent on William and Mary letterhead for follow up mailing

January 28, 2004

Dear Colleague:

A survey on school leaders' perceptions of the relationship between qualities of effective teachers and interview questions was mailed to you in December. As of the sending of this follow-up letter, your survey has not been received. In the event you already responded, please ignore this mailing.

Your knowledge of how you conduct or participate in teacher interviews and what you look for in a strong candidate is important in this study. The enclosed survey should take approximately 30 minutes of your time. We realize how busy you are as a practicing school administrator, and we greatly value your contribution. The results of the survey will be used to validate an interview protocol that is currently under development.

Your participation is completely voluntary and confidential. You will not be personally identified in the study. If you decide to participate, your submission on the completed survey booklet will indicate your consent. If you are interested in receiving a summary of the study's results in late spring 2004, indicate your email address on page 2 of the booklet in the space provided. Use the enclosed self-addressed stamped envelope to return your feedback by **Monday, February 9, 2004**. Should you decide not to participate, please check the first line on page 2 of this packet indicating that you are declining to participate and return the survey booklet.

If you have any questions, please contact Jennifer Hindman by phone at 757.221.1707 or by email at jlhind@wm.edu. If you have concerns with any aspect of this survey, you may report them to the Chair of the Protection of Human Subjects Committee at The College of William and Mary. The Current Chair is Dr. Stan Hoegerman who can be reached at 757.221.2240.

We appreciate your consideration and assistance with this study that promises to make an important contribution to the questions asked of applicants for teaching positions.

Sincerely,

James H. Stronge, Ph.D.
Heritage Professor of Education
The College of William and Mary

Jennifer L. Hindman
Research Assistant
The College of William and Mary

Enc

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