RANKING CRITERIA FOR HIRING

NEWLY CERTIFIED TEACHERS:

A DELPHI TECHNIQUE

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PREFACE

The study developed a consensus ranking of sixteen professional and sixteen personal criteria that are important to school hiring officers in hiring newly certified teachers. A modified Delphi technique was utilized to accomplish this purpose. Because of purported differences in criteria for hiring among rural schools and metropolitan schools, two separate rankings were develped and their differences were explored.

I have a great debt to my graduate chairman, Dr. Thomas Karman, for his suggestion of study, as well as, his constant encouragement and concern. Without him I would not have had this wonderful experience at OSU.

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CHAPTER I

INTRODUCTION

In the late 1970's and early 1980's, because of the perceived quality of our public schools, there were rumblings of discontent throughout the nation. Questions were being asked by parents, industry and educational organizations about the skills of high school graduates. The rumblings became an outspoken clamor of criticism with the publication of A Nation at Risk (1983), a report about the problems of our schools. The report mentioned that many of our teachers were underprepared and lacked the skills for teaching advanced classes. The report recommended major school reform. But the public, being caught up in the apparent deterioration of the American school system, demanded reform (Strotkin in Grossman, 1985). According to the 1985 Carnegie report on education, despite all the plans and actions since the early 1980's, the reformation of the American education system has made little headway. In the preface of the 1985 Carnegie Report, Boyer stated: "The challenge confronting teaching in this country is far greater than its achievements" (Feistritzer, 1985, p. xiii).

The public is still demanding reform and the provision of quality education for each child, something that can be

accomplished in part through the selection of top quality teachers. According to Campbell, Cunningham, McPhee, & Nystrand (1970), "The quality of education in any nation is related obviously to the quality of the men and women who serve as teachers and administrators in the school system." (p. 270). To bring about a lasting reform necessitates attracting the best possible individuals to the classrooms of our nation. Grossman (1985) wrote, "It is recognized that the delivery of quality education is inextricably related to the quality of the teaching work force. Success in improving the former is dependent on improving the latter" (p. v). The task will not be made easier by the dropping percentages of college students wanting to become teachers. In 1972, 21% of all college freshman planned to pursue a teaching career. In 1982, only 4% of the college freshman planned to go into teaching (Feistritzer, 1985).

The pressure to upgrade the quality of teachers has caused 42 states to make changes in their teacher certification/preparation requirements (The National Commission on Excellence in Education, 1985). With the renewed emphasis on quality teachers, selecting the best candidates for teaching positions must be accomplished. A question arises regarding what the nation's school administrators view as new teacher qualifications. Also what criteria are most important when a personnel director or district superintendent begins to investigate a perspective teacher?

Justification of the Study

With the national demand for excellence in education
and emphasis on improving teacher quality, the author was
surprised to find only a small quantity of studies have been
done since 1980 on preferable criteria for hiring teachers.
Part of the reason may be the problem in identifying one
best process for teacher selection. Palmer (1970) states,
"Although there has been much effort made to find criteria
that are universally applicable, more than a half-century of
research has not yielded meaningful measurable criteria of
teacher effectiveness which the majority of the nation's
educators can support" (p. 1). Messerli (1977) also
attempted to explain the problem when he stated, "In the
United States, teacher selection is decentralized and
consequently, complex. While it is bureaucratic, it is not
monolithic. It is fragmented and confused by overlapping
jurisdictions shared primarily by state governments, teacher
educators, and local school districts." (p. 8). The
complexity of selection has been made more difficult in
recent years by the federal government's attempts to
alleviate bias in selection procedures. Since 1963, the
Equal Employment Opportunity Commission (EEOC) has been the
enforcement agency for a number of acts to bring about fair
hiring practices. The Uniform Guidelines on Employee
Selection Procedures (1978) applies to all teacher selection
procedures such as tests, interviews, reviews of experience
or education on application forms and evaluations of

performance. If a district's procedures are ever challenged on whether or not its practices are discriminatory, the district must present validating evidence that their practices are not discriminatory. Selection practices based on objective criteria that are job-related would be considered non-discriminatory by the EEOC. Therefore, the development of a list of objective criteria to use in the selection process would be considered very important.

The criteria lists would add stability to local districts' hiring practices by serving as a foundation of general criteria from which a district could develop its own criteria. It is important for a district to determine hiring critieria suited to its own special conditions. Bolton (1970) emphasised the importance of local determination of hiring criteria when he stated, "Behaviors should be related to the purposes of the situation in which they are expected to be exhibited. Behaviors that are considered important must be established in each community--in light of an accepted value system" (p. 100).

A criteria list that has been developed by educational hiring officers from across the country could serve as a foundation from which a district could develop its own specific criteria. The first step in teacher selection is to establish the criteria that will be used as a basis for selecting candidates (Diekrager, 1969). Studies on teacher hiring criteria have been completed in Southern California (Rhodes and Peckham, 1960), New Jersey (Gaugham, 1967),

Louisiana (May & Doerge, 1972), Michigan (Yantis and Carey, 1972), Mississippi (Napier, 1975), and Ohio (Johnson, 1976). Only two studies covered more than just one state; Lesher and Wade (1972) polled 208 Midwestern hiring officials, and Bryant, et al. (1978) surveyed school administrators across the country. Although the Bryant et al. study was the only one that could be termed a national study, they had only 45 subjects respond to their questionnaire. Since the Bryant study showed that there was no difference in criteria for hiring experienced and non-experienced teachers, this study confined itself to those of inexperienced teachers.

Other literature has many references to teacher criteria. According to Redfern (1966), there was no single criterion that can consistantly predict that a beginning teacher will succeed. Bolton (1970) suggested that criteria should be developed as a cooperative effort involving many individuals and it would have local input.

Of the many hiring criteria that can be generated, most fit into two classifications; professional or those criteria having to do with items that can be learned or developed and personal or those criteria having to do with characteristics inherent within the candidate. These two classification are used in many job criteria studies (Garton, 1982).

The fact that there is so little agreement on criteria would indicate a need for school hiring experts to work together to develop an overall national listing which local

districts could use to develop their own criteria for any specific hiring situation (Gilbert, 1967).

It would be a difficult and expensive task to get experts throughout the country to meet and develop a criteria list that would have input from each state in the nation. There would need to be representatives from both the large and small school districts because, as Kahl (1980) indicates, the criteria for hiring newly certified teachers in a rural school district would be somewhat different than those used in a metropolitan area. Culhane (1964) also stated that large school districts put more importance on criteria which are oriented inward toward the values of professional education, while in small districts more importance is given to criteria involving the social systems outside the school system (p. 557). This would entail a large number of people. Even if such a feat were accomplished, there would be a problem with getting equal input from each member. In any group or committee, according to Cyphert and Gant (1970)

> ...the final solution, usually a compromise, is often derived under the undue influence of certain psychological factors such as specious persuasion by the group member with the greatest supposed authority or even merely the loudest voice, an unwillingness to abandon publicly expressed opinions, and the bandwagon effect of majority opinion (p. 272).

Because of such influence any decision made by a group or committee might not be a true consensus, but weighted toward a few influential individuals.

The Delphi research method was developed in part to compensate for such weightings and also to allow for group consensus when restrictions do not allow for group interaction. The Delphi was explained by Anderson (1970) as follows: "The technique...is built on the strength of informed intuitive judgment. It is intended to get expert opinion without bringing the experts together in a face to face confrontation" (p. 2). The classic definition of the Delphi Technique came from Helmer and Rescher (1959)

> ... a carefully designed program of sequential individual interrogations (best conducted by questionnaires) interspersed with information and opinion feedback... by substituting a computed consensus for an agreed on majority position" (p. 50).

Bolton (1970) concluded that there was a need for a continually updated listing of personal and professional criteria to use in the hiring of teachers in school districts because, as the teaching profession becomes more complex, there are changes in the criteria teachers are expected to possess. The Delphi Technique is the best techinque for such a task because it could bring together experts in school teacher selection, from both urban and rural schools, to reach a consensus without excessive travel or "undue influence" of a few vocal individuals.

Purpose of the Study

The major purpose of this study was to collect and analyze data, using a Delphi Technique to develop a

consensus ranking of personal and professional criteria important in hiring newly certified (inexperienced) teachers. Additional analyses were to provide information relative to preferences relating to schools in Metropolitan Statistical Areas (refered to as MSA's) and those schools outside of MSA's (refered to as Non-MSA's)

Statement of the Problem

Those who educate or hire teachers need to be aware of the criteria that are perceived most important in hiring. School personnel hiring practices that are based upon valid criteria will more often result in the hiring of exemplary teachers, which will help bring about a quality educational program. In-service can help, but it is the personnel selection program that determines the initial qualities of the professional staff (Garton, 1982). A teacher selection process based on critieria is more useful than one without because a teacher hired to certain criteria can then be evaluated according to that criteria, and this also makes the process more valid. A selection process must be valid if it is to be unbiased according to the Equal Employment Opportunity Commission (1978).

This study was an attempt to identify the most important criteria for beginning teacher selection by answering the following:

1. How do chief hiring officers in school districts across the Nation rank a list of important professional and

personal criteria for the hiring of newly certified teachers?

2. Can a Delphi research technique be used to generate consensus on ranked criteria lists for the selection of newly certified teachers?

3. Is there a difference between the way that hiring officers from schools in Metropolitan Statistical Areas rank important hiring criteria as compared to hiring officers from schools in Non-Metropolitan Statistical Areas?

Definition of Terms

1. Newly Certified Teacher- A person who has completed the certification requirements to teach in the public schools but who has not had a teaching position.

2. Consensus- Reaching general agreement, a reconciling of difference (Guralnik, 1982).

3. Chief Hiring Officer- Either a District Personnel Director or a District Superintendent. In this study, they were considered to be the panel of experts needed for a Delphi study.

4. Metropolitan Statistical Area (MSA)- An area with a large population nucleus of at least 50,000 people, consisting of one or more entire counties.

5. Non-Metropolitan Statistical Area (Non-MSA)- Area not included in Standard Metropolitan Statistical Areas. For this study they were considered to be made up of rural school districts.

6. Selection Criteria- The standards which newly certified teachers are measured against by the districts' chief hiring officers.

7. Personal Criteria- Those standards used to measure certain attributes that are innate in a person.

8. Professional Criteria- Those standards used to measure certain attributes that a person obtains through formal preparation.

Limitations

1. All returns are of equal importance regardless of the size of the district that the chief hiring officer represents.

2. The Delphi process of reaching consensus on important criteria did not involve interface among MSA and Non-MSA administrators.

3. The criteria of this study were not field tested or operationalized, because they had already been shown to be important to chief hiring officers from other studies and the scope of such an activity would be too broad for this study.

4. Previous studies have shown the criteria to be valid, therefore, the study was not designed to test the validity of the criteria.

5. The study was dependent upon the cooperation of the chief hiring officers surveyed.

In summary, there is a need to improve the quality of our nation's education as evidenced by the A Nation at Risk (1983) report and the best way to start is to improve the quality of teachers hired into our school systems. A district should use criteria that is shown to be useful as a standard to help in the hiring of effective teachers. This study was conducted to find what criteria were most important in the hiring process to districts across the nation. The purpose was to collect and analyze data using a Delphi technique, to gain a consensus regarding the most important criteria for hiring newly certified teachers, according to selected administrators from districts located in MSAs and Non-MSAs across the nation.

CHAPTER II

REVIEW OF LITERATURE

The review of literature will emphasize teacher
selection procedures and how they depend upon the
development of hiring criteria for newly certified teachers.
Also the literature discussing the Delphi technique will be
reviewed.

Selection Procedures

According to Katz and Kahn (1978) an organization is
dependent upon selection processes. These processes are
entitled "maintenance inputs" which are the "energic inputs"
that sustain the system. Jucius (1967) believed that
selection procedures cannot be effectively placed in
operation until three prior steps have been completed:

1. Requirements of the job have been specified.

2. Qualifications workers must possess have been
   specified.

3. Candidates for screening have been attracted
   (p. 125).

Harris, McIntyre, Littleton and Long (1985) outlined the
steps of the selection process:

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(1) The principal makes a request for a teacher. (2) the
superintendent makes a decision: to deny the request and
report this decision to the principal- through the
personnel officer, if there is one- or to approve the
request and direct the personnel officer to circulate
notices of the vacancy. (3) college certification
officers and others make nominations. (4) the personnel
officer receives applications. . . (5) the personnel
officer verifies certification (6) the business officer
requests a reference check (7) past employers and others
prepare references (8) the personnel officer receives
references and (9) together with the principal, collects
additional data via interviews, telephone calls, or
other means and makes a recommendation (10) the
superintendent reviews the data and makes a decision; if
favorable, (11) the board of education approves or
disapproves; and (12) the candidate is notified (p. 57).

These steps indicate the general procedures which allow for
ideal selection of prospective teachers.

Gilbert (1967) believed that:

Professional teacher selection practices are rarely
employed. In large school systems that presume to be
using selection techniques, screening is actually what
is done. In smaller affluent school districts, hunch
rejections and global perusals, sometimes in actual
observations, serve as selection techniques (p. 1).

Fifty four large school systems were polled by the New York
City Board of Examiners (1978) on their selection practices.
The results showed that the most popular procedure for
selection was the interview. The next most popular
procedure was the use of scores on the National Teacher
Examination. These were followed by the use of medical
examinations and training evaluations.

Hovater (1973) studied 117 public school systems in
Alabama and found that generally: 1) written school board
policies and procedures pertaining to teacher selection do

not exist, 2) the interview was the main item on which selection was based, 3) written examinations were not used and, 4) there was no evaluation of selection practices.

In a study of 320 school systems (Stollar,Sentelle & Wilson, 1969), the authors found that selection was based primarily on academic records, interviews, recommendations and student teaching experience. The selection processes in larger school systems were more complicated because of their screening procedures. The authors commented that in smaller districts many of the techniques were dictated by expediency rather than the best selection procedures.

The informational and procedural items regarded as most useful in a study by May and Doerge (1972) were application forms, references, certification records, interviews, evaluations (recommendations), academic records, use of job descriptions or specification, use of principals and supervisors, and a planned program of teacher recruitment and selection. Another study of the same year contained a survey of personnel directors in school systems with over 50,000 students. This survey indicated that there were four major teacher selection criteria used: college grades, practice teaching, references and recommendations, and scores on the National Teachers Examination. (Deneen, Majetic, Masonis & Spencer, 1972).

Lesher and Wade (1972) found that, according to hiring officers in several individual states, the personal interview and student teaching records were the most

important procedures. Concurrence with this study was also found in information from a large sample of superintendents and personnel directors in Michigan (Yantis and Carey, 1972).

Neu (1978) interviewed 30 principals in Los Angeles who personally selected their own teachers. She found that the principals had no training in selection or interview techniques and that intuition was the major factor in the principals' selection of teachers.

A summation of the literature on teacher selection shows that the interview is the most often used technique for selection followed by recommendations of others including student teaching supervisors.

Effectiveness of Selection Procedures

New teacher selection procedures are used by all school districts, but it is important to determine which procedures are the most effective. Walker (1980) provided a good definition of an effective procedure

> Various selection tools are considered useful only if the results of their application are related to the desired performance criteria, preferably criteria shown to be required on specific jobs or types of jobs. Such selection procedures are considered job-related or, in the psychologist's term, valid (p. 245).

Using predetermined interview formats was found to be more successful in predicting teacher success than no predetermined format. In the field of business, Walker (1980) explained that the employment interview was the most

difficult test in the selection process to specify: "Its measures are drawn from judgments and perceptions of interviewers" (p.244). Never the less, interviews are probably the selection method most widely relied upon in the employment of educational personnel (Kahl, 1980).

To Byham (1978), another author from the business field, using structured interviews would make it possible to validate interview procedures. Walker (1980) stated, "For interviews to be more job-related and defended as such, the judgments inherent in the interviewing procedure must be anchored to criteria determined to be important in the jobs themselves" (p. 244).

In conclusion, the most effective procedure for selection of new teachers is a structured personal interview, and for the interview to be effective, it should be based on predetermined criteria.

<div align="center">Selection Criteria</div>

The importance of selecting quality individuals was stressed by Ryans (1960) when he stated,

> Both the lay public and professional educators generally agree that the "goodness" of an education program is determined to a large extent by the teaching. The identification of qualified and able teaching personnel, therefore, constitutes one of the most important of all educational concerns (p. 1).

To Diekrager (1969) the first step in teacher selection is to establish the criteria that will be used as the basis for

hiring teaching personnel. Bolton (1970) felt that the task of teaching had many complex facets which are constantly changing as the result of new inputs. He described the thinking on developing criteria for teacher selection which still reamins current today.

> .... consideration must be given to the complex interaction of teacher behavior, learner behavior and environmental factors in the teaching learning process. In addition, it must be recognized that with the passage of time these individual and situational variables change (p. 97).

Castetter (1981) believed there should be a fit between the position requirements and the personal characteristics of the person needed to fill a teaching position. He listed seven important behavioral characteristics that need to be evaluated in each candidate for a teaching position. They are 1. background information, 2. personal characteristics (which he listed as conceptual skills, technical skills, interpersonal skills, work motivation, emotional stability, and physical status), 3. attitudes, interest, needs, 4. the ability to perform key duties, 5. preparation and experience as it relates to the specific position, 6. teaching performance and, 7. the candidate's value system (p.168).

Personal Criteria

In 1960 Ryans directed a study to find characteristics of successful teachers, and it is still referred to as a major study of teacher characteristics today. From the study he

isolated 24 characteristics that were common to successful teachers:

1. Frequently give as reason for teaching, liking for children and interest in their development.

2. Express admiration of such qualities as friendliness, permissiveness, definiteness, and firmness in teachers.

3. Dislike in teachers such qualities as arrogance, intolerance, sarcasm, and partiality.

4. Typically appear to be "accepting" and generous in appraisals of other persons. See good points of a person rather than bad.

5. Express satisfaction with teaching (and also with teacher salaries); intend to continue teaching indefinitely.

6. Frequently engaged in teaching activity as child (e.g., taking charge of class in absence of teacher).

7. Decision to become teacher frequently was made prior to college enrollment; had planned to be a teacher from relatively early age.

8. Enjoyed school when they were students themselves.

9. Showed superior accomplishment when in school.

10. Report large number of teachers among parents and relatives.

11. Report participation in religious activities.

12. Enjoy activities with friends, but prefer small groups.

13. Frequently are members and officers of clubs.

14. Are married (85 percent of group).

15. Interested and active in literary affairs (e.g., write poetry, have published books, etc.)

16. More emotionally stable than average adult.

17. More friendly than average adult.

18. More cooperative and agreeable than average adult.

19. More restrained than average adult.

20. More objective than average adult.

21. More tolerant than average adult.

22. More inclined to "try to give a good impression" than average adult.

23. More interested in social service than average adult.

24. Less interest than average adult in computational and clerical activities.
(Ryans, 1960 pp. 365-367)

A summation of Ryans'(1960) list shows a general tendency for successful teachers to be positive in appraisals of the behavior and motives of others and to have a strong interest in reading,literary affairs and arts such as music and painting. They were socially adept and enjoyed pupil relationships. These teachers also had superior verbal intelligence, as well as emotional adjustment.

Barr (1961), in his summation of 75 doctoral dissertations, noted a number of teacher behaviors that resulted in teacher effectiveness:

1. Interest in pupil response

2. Use of illustrative materials

3. Knowledge of subject matter

4. Well-developed assignments

5. Good notebooks and outside reading

6. Conversational manner

7. Wealth of commentary remarks

8. Frequent use of pupil's experience

9. Good technique of asking questions

10. Ability to stimulate interest

11. Socialization of class work

12. Supervised study

13. Willingness to experiment (p. 92)

Four personal teacher behaviors were categorized by Kounin (1970): with-it-ness, overlapping, smoothness, and group alerting. "With-it-ness" referred to the ability of the teacher to communicate with the students. "Overlapping" concerned the teacher's ability to handle mulitiple events in a classroom and still maintain control. The concept of "smoothness" was the way a teacher handled changes and/or interruption of classroom activities and continued to be calm and in control. Kounin defined "group alerting" as the ability of the teacher to keep the students on task and paying attention.

A major review on effective teacher characteristics was done by Medley in 1977. He tried to answer the question "How does the behavior of effective teachers differ from that of ineffective teachers?" He discovered that it was not easy to find because most research dealt with observable behaviors but did not deal with "internal" variables such as cognitive ability. Medley observed that some teachers who might be effective in one classroom were ineffective in others. He concluded that, to be effective at different levels and situations, the teacher must possess many

effective teaching behaviors and be able to switch from one behavior to another.

Professional Criteria

Other than the behavioral or personal criteria as used by Castetter, Ryans, and Barr, academic or professional criteria are also used to predict effectiveness of a teacher candidate.

College Courses and Grades. The relationship between college courses and grades have been studied by several researchers. Burnett (1966) studied whether or not the use of achievement in college education courses was a reliable predictor in the selection of teachers. The results were so mixed and unclear that he could make no recommendation concerning the reliability of using achievement in college education courses in predicting teaching success. An early study by Young (1939) found that teachers with twenty-four or more semester hours in education were rated higher by their principals than those with less.

An important cause of teacher failure was weakness in subject matter background according to Smarty (1954). Also to Blackeslee (1967), a prospective teaching candidate's most important criterion was his/her subject matter background. While a strong subject matter background did not insure a successful teaching career, a common characteristic of weak teachers was shown to be a weakness in subject matter.

Major subject grade point average (GPA) was found to be a significant difference between successful teachers and average teachers, according to a study by Wilson (1964). Successful teachers had a GPA of 3.11, while average teacher's GPA was 2.88. Also Ryans (1960) in his work on teacher characteristics found a positive relationship between successful teaching and academic success.

In McKinna's study (1965) on teacher quality, he found that teachers with graduate training were more effective in the classroom. He showed there was a positive correlation in the percent of teachers with graduate training and the quality of the schools. Fass (1960) found that four times as many successful teachers held masters degrees as less successful teachers. Scherer (1960) additionally showed that teachers with graduate degrees were statistically significantly more successful than those without the degree. It cannot be concluded that graduate training specifically causes a teacher to be successful; the nature of the successful teachers might lead them to take graduate courses.

Communication Skills. Caffey (1957) developed a ranked ordered listing of desirable criteria for selection of teachers. The listing suggested that "a good command of language (manner of speech and vocabulary)"(p. 62) was placed third from the top. In a study of 1,880 elementary teachers, it was concluded that a good indicator of teacher success was literary and communicative skills (Boyer,

1954). In addition Knoell (1955) hypothesized that word fluency was a useful criterion for predicting teacher success. He also found that the ability to express ideas orally was closely related to good teaching.

Intelligence Scores. An early study by Tiegs (1927) indicated that high intelligence is not necessarily an indicator of a successful teacher. Blakeslee (1967) felt that intelligence scores should be used mainly as a screening device rather than as a selection criterion because of his findings that intelligence was of questionable value in the prediction of teacher effectiveness. It was thought by Mascho (1966) that, although a certain amount of intelligence was necessary for teaching, its determination should be accomplished before entrance into educational program rather than a pre-service procedure.

In a review of fifty-four research studies on the relationship between intelligence scores and teaching effectiveness, an uncertain conclusion was given by Getzels and Jackson (1963). Their review showed that, although there were positive correlations between intelligence and teaching success from some studies, there were also studies that showed negative or no correlation. Therefore, they concluded that the results were too mixed to indicate that intelligence scores led to teaching success.

In summary, to develop a good educational system, good teachers must be hired. The first step in the selection

process is the development of the criteria by which the perspective teacher should be measured. Today many criteria are developed to match the prospective teacher with the situational variables of the position. Many of these criteria have to do with behavioral or personal factors. Other criteria are academic or professional in nature. There is no conclusive research that education courses, grades, or intelligence are valid predictors of teaching success. There does seem to be a relationship between communication skills and graduate courses or degrees with successful teaching. There is no research substantiation for using the number of courses and grades in those courses as a criteria for teaching success, but the number of subject matter courses and grades in those courses can be used. Good communication skills appear to be a criterion for succesful teaching. According to the research, the relationship between intelligence test scores and successful teaching is inconclusive.

Studies in Selection Criteria

In the 60's and 70's a number of studies were conducted to show what criteria were important to administrators in hiring teachers. In 1978, Bryant, Santis, Nicholson and Maker (1978) surveyed 45 school administrators to determine the factors they considered important in hiring beginning teachers. The key factors from the research were maturity, initiative, interest, enthusiasm, poise, and the ability to

work with people. Other important factors were previous employment and the ability to teach in a second area. The recommendations of the study were; that institutions of higher education should alert their teacher candidates to the importance placed on personal qualifications; that teacher candidates should be aware of the importance of doing a good job in their present position; and that obtaining a teaching minor while preparing for a teaching career will enhance their career opportunities.

In another study by the New York Board of Examiners (1978), which considered 54 school systems in cities of over 250,000, the hiring criteria were primarily level of basic skills in teaching , certification, affirmative action goals, and a combined evaluation of experience, references and college transcripts.

May and Doerge (1972) found that Louisiana school personnel directors ranked categories of information in the following order of importance:

1. Academic criteria
2. Personal criteria
3. Experience related to teaching
4. Professional opinions
5. Job requirements
6. Results of examinations
7. Experience unrelated to teaching .
8. Family background

In a southern California study by Rhodes and Peckham (1960) personal qualities most important were emotional poise, health, vitality, courtesy, and tact. The professional competencies of most importance were the ability to plan lessons, to motivate students, to have knowledge of basic skills, and to add to the development of pupil morale.

A Michigan study (Yanis & Carey, 1972) of over 500 superintendents and personnel directors revealed that the criteria deemed most critical were the attitudes of the candidates toward children, teaching and education. It was also noted that the administrators recognized the importance of both objective and subjective components in evaluation.

In a regional study Lesher & Wade (1972), administrators in 208 Midwestern school districts concluded that appearance, self confidence, and verbal communication skills were most important. School principals and superintendents in Mississippi ranked critieria of most importance as 1) effective use of the English language, 2) student teaching performance, and 3) personal appearance (Napier, 1975).

Reference letters by cooperating teachers were the most important credential in a placement file according to a group of Wisconsin school administrators (Mortaloni, 1974). The personal characteristics that should be referred to in those letters were: enthusiasm, ability to benefit from advice, dependability, cooperative attitude and desire to

work hard. The top five professional characteristics were:
understanding children, classroom control, provision for
individual differences, personal and interpersonal
relationships with children, and the ability to plan lessons
in advance.

The candidate's attitude toward teaching and how the
administrators perceived the candidate's ability to get
along with children were the factors that New Jersey school
administrators chose as being the most important criteria
when employing beginning teachers (Gaugham, 1967).

A survey of 104 Ohio central office administrators and
principals concluded that the most important personal
characteristics were: neat physical appearance, good verbal
skills and emotional balance (Johnson, 1976). The most
important professional goals were: favorable letters of
recommendation from cooperating teachers, clarity of goals,
provision for individual differences, and enthusiasm.

In summarizing this selection of literature, it appears
that most school districts have no written procedures on
teacher selection. The interview is the procedure most
commonly used in the selection process, and interviews are
reported to be the best predictors of global ratings of
teacher effectiveness. In the studies on teacher selection
criteria, they fall into two main categories, professional
and personal. However, there seems to be little agreement
as to what are the most important criteria the prospective
teaching candidate should be measured against. Appendix A

is a chart summarizing these studies and the criteria each
author found to be most important. The summary reveals
little agreement between authors for any one criterion. Two
studies list no professional criteria as important. This
lack of agreement exemplifies the need for an effort to
reach a consensus on which criteria are most important to
hiring officers in the public schools.

The Delphi Technique

According to Isaac and Michael (1984), the traditional
approach to group consensus is a roundtable discussion.
This has several disadvantages: 1) the bandwagon effect of
majority opinion; 2) the power of a persuasive or
prestigious individual to influence the group decision; 3)
the tendancy for some individuals to be manipulated by group
dynamics; and 4) the unwillingness of individuals to abandon
their already stated positions. To alleviate these problems
and yet still preserve the advantage of having the groups'
pooled judgments, the Rand Corporation with the primary
direction of Olaf Helmer and Norman C. Dalkey developed the
Delphi in the early 1960's. Since that time there have been
numerous studies in many disciplines using this technique.
There are three major studies that have been done in the
field of education. *A study by Helmer (1965) sought to
elicit responses as to when a computer could comprehend
standard IQ test and score above 150. According to Helmer
the initial rounds had divergent responses, but the

educational experts reached some degree of convergence in the later rounds. The measurements used were the median and interquartile range. He did not achieve true convergence but believed that methodology of the study was very promising and should be applied in a more comprehensive manner in the near future.

Another Dephi study was conducted in 1970 by Cypert and Gant (1970). A sample of 421 experts was asked to respond to a question regarding which areas the College of Education at the University of Virginia should concentrate its efforts. This group generated a collection of 61 statements. The study was unique because of the large sample involved and also, rather than seeking agreement concerning future directions, this study sought to establish a consensus concerning what "should" be the college's future direction.

Another major Delphi technique study was conducted by Anderson (1970). He used similar methods as Cypert and Gant, however he limited his sample to a county school district in Ohio. His respondents developed opinion statements concerning two topics: client services and organizational adaptation. In both the Cypert and Gant and the Anderson studies most of the changes toward consensus came after the first round when the first median listing was reported to the respondents.

A major study concerning the use of the Delphi technique to develop selection criteria in education was

performed by Emmons (1971). The objective was to develop a set of criteria to aid in the selection of secondary principals in a model-cities program in Columbus, Ohio. This study involved canvasing four separate groups: central district office personnel, principals, neighborhood leaders, and university professors. The study had two main objectives, to develop criteria for hiring secondary principals and to test the ability of a Delphi Technique to reach a consensus among four distinct groups. The study was successful in achieving both of its objectives.

These various Delphi studies have shown that this technique is a viable research method for generating criteria and a useful tool for obtaining group consensus. The Delphi technique has been successful in the education arena without having the drawbacks of a round-table discussion. The Delphi was designed to increase the advantages of brainstorming while minimizing the interpersonal conflicts often found in group interaction (Weaver,1971).

In summary the most often used selection procedure is the interview. It is also one of the most effective procedures when it is based on predetermined criteria. These hiring criteria are used to match the prospective teacher with the situational variables of the teaching position. They can be divided into two categories, professional criteria and personal criteria. There is little agreement as to which criteria are of most

importance. A Delphi technique is designed to bring about
group consensus of opinion and can be used to bring about
consensus on criteria used for hiring new teachers.

CHAPTER III

METHODS AND PROCEDURE

Purpose

The major purpose of this study was to collect and analyze data, using a Delphi technique to develop a consensus ranking of professional and personal criteria important in hiring newly certified (inexperienced) teachers. Additional analyses were to provide information relative to preferences relating to the selection of teachers in MSA and Non-MSA schools. In this chapter the research process is described, while attempting to answer the following questions:

1. How do chief hiring officers in school districts across the Nation rank a list of important personal and professional criteria for the hiring of newly certified teachers?

2. Can a Delphi research technique be used to generate consensus on ranked criteria lists for the selection of newly certified teachers?

3. Is there a difference between the way that hiring officers from schools in Metropolitan Statistical Areas rank important hiring criteria as compared to hiring officers from schools in Non-Metropolitan Statistical Areas?

Process

Two questionnaires were developed constituting successive rounds of the Delphi study. Questionnaire I (Q I) was the initial list of professional and personal criteria sent to the chief hiring officers for ranking. Questionnaire II (Q II) provided the mean ranking of the criteria from Q I with an opportunity for the participants to rerank the criteria in an attempt to reach a consensus. The development of Q I deviated from the classical Delphi study because generally the "experts" generate the criteria. However, as can be seen from Appendix A, earlier studies have already generated important selection criteria. According to Isaac and Michael (1981), if an acceptable listing already exists, then the step in the Delphi technique which requires the experts to generate a list can be bypassed.

The present Delphi study used two rounds of question-naires, although Delphi studies usually contain three rounds. The justification for the elimination of one of the questionnaire rounds came from Cypert and Gant (1971), Weaver (1971) and Borg (1983), since they found there was little need to have further rounds, because most of the changes occur between the first and second consensus rounds.

The initial criteria were therefore generated by the studies found in Appendix A. To verify these criteria and to see if there were other criteria that needed to be added, a pilot study (see Appendix B) was conducted among eight

chief hiring officers in Utah. Four were from districts included in MSAs, and four were from Non-MSA districts. They were asked to generate criteria that were most important in the selection of newly certified teachers. Five returned the questionnaire, three from MSA districts and two from Non-MSA districts. The 15 professional criteria and 16 personal criteria this pilot study generated were then compared with the important criteria identified in the literature (Appendix A). The two lists merged remarkably well, and a list of criteria for the hiring of newly certified teachers was developed from the two sources (see Appendix C).

Another pilot study was completed to test the accuracy and effectiveness of the ranking questionnaire develped from the first pilot study (see Appendix B) and the literature (see Chapter 2). Of six hiring officers, representing three MSA and three Mon-MSA districts in Oklahoma that were asked to complete the pilot II form, five returned it, two from MSA and three from Non-MSA districts (See Appendix B). They were asked to rank the 16 professional and 16 personal criteria from 1 to 16, with 1 being the most important criteria in the selection of newly certified teachers and 16 the least important. In this second pilot study, they were also asked to add any other criteria that they thought important. No substantially new criteria were suggested by the respondents of pilot study II. The development of a list of criteria used for selection of newly certifed

teachers from literature evaluation, and pilot study I and pilot study II, would constitute round I in a classical Delphi study.

Selection of Participants

The participants in this study were the chief hiring officers selected in districts from each state in the nation. The districts were selected according to whether they were located in a MSA or a Non-MSA. Wherever possible three MSA and three Non-MSA districts from each state were invited to participate, however, some states did not have enough MSA or Non-MSA districts to reach the total desired. The determination of whether the school districts were located in an MSA or a Non-MSA was according to a publication by the US Department of Commerce (1984), which indicated where the MSAs for the United States were located. The school districts were then chosen from Patterson's American Education (1985). Chief hiring officers were invited to participate from the 280 districts of various sizes and locations selected. According to Delbercq, Van de Ven, and Gustafson (1975), a homogeneous group would need only 30 respondents to produce an accurate Delphi; however, since this was a national study, the larger number was deemed appropriate. The states and the number of MSA and Non-MSA respondents are included in Table I.

TABLE I

QUESTIONNAIRE I AND II RESPONSES BY STATE

States	Sample MSA	Non-MSA	Q I MSA	Non-MSA	Q II MSA	Non-MSA
Alabama	3	3	1	1	1	1
Alaska	1	3		1		1
Arizona	3	3	3	1	3	1
Arkansas	3	3	2	2	2	2
California	3	2	1		1	
Colorado	3	3	1	2	1	2
Conneticut	3	3	1		1	
Delaware	3	2	2	1	1	1
Florida	3	3	2	2	1	2
Georgia	3	3	2	1	1	1
Hawaii	2	2	2	1	1	1
Idaho	2	3	2	1	2	1
Illinois	3	3	1	3	1	3
Indiana	3	3	3	2	3	2
Iowa	3	3	3	1	2	1
Kansas	3	3		1		1
Kentucky	2	3	1	3	1	3
Louisiana	3	3	1			
Maine	3	3	1		1	
Maryland	3	3	1	1	1	1
Massachusetts	3	3	2		2	
Michigan	3	3	3	3	3	3
Minnesota	3	3		2		2
Mississippi	2	3	1	2	1	2
Missouri	3	3	2	1	2	
Montana	2	3		2		2
Nebraska	3	2	1	3	1	3
Nevada	2	2	2	1	2	1
New Hampshire	3	3	2	1	1	1
New Jersey	3	3	1	2	1	2
New Mexico	2	3		2		2
New York	3	3		1		1
North Carolina	3	3	2	2	2	2
North Dakota	3	3	2	1	1	1
Ohio	3	3	1	2	1	2
Oklahoma	3	3	1	2		2
Oregon	3	3	2	1	2	1
Pennsylvania	3	3	2	1	2	1
Rhode Island	0	3	1		1	
South Carolina	3	3	2	2	2	2
South Dakota	3	3	3	1	3	1
Tennessee	3	2	1	1	1	1
Texas	3	3	2	2	2	1

TABLE I Continued

States	Sample MSA	Non-MSA	Q I MSA	Non-MSA	Q II MSA	Non-MSA
Utah	3	3	1	1	1	1
Vermont	3	2				
Virginia	3	3	1	2	1	2
Washington	3	3		2		1
West Virginia	3	2	2	2	2	1
Wisconsin	3	3	1	3	1	3
Wyoming	1	3	1	3	1	3
Totals	138	142	69	72	60	68

Procedure For the Collection of Data

Questionnaire I

The 280 participants were given a cover letter that explained the procedure for filling out Q I and also outlined what steps the Delphi study would entail (See Appendix D). From the first questionnaire mailing, 69 administrators from MSA districts and 72 from Non-MSA districts responded, giving a 50% return rate, with all the states except Vermont represented. The returns were separated into a MSA group and a Non-MSA group, and mean and median scores were computed for each criterion item on the questionnaire. The criteria were then ranked according to the mean scores. The lowest mean was thus considered to be the most important criterion, etc.

Questionnaire I also asked the respondents to add any additional criteria that they felt were important in the hiring process (See Appendix D). There were 30 additional

criteria suggested, and of these, 25 could be incorporated
into the existing criteria list (see Table II). The others

TABLE II

QUESTIONNAIRE I ADDITIONS TO CRITERIA LISTS

<u>Professional Criteria</u>

 Writing ability
 Rapport drive
 Student success drive
 Acceptance
 Relationships
 Favorable oral recommendations
*Structured interview
 Other work experience with children
 Substitute teaching performance
*Completeness of resume
 Creativity
 Ability to make students feel successful
 Knowledge of phonics for primary grades
 Communication skills
*Extra curricular skills
 Ability to diagnose learning difficulties
 Knowledge of content
 Ability to assess and evaluate

<u>Personal Criteria</u>

*Intelligence
*Good judgment
 Energetic
 Self starter
 Peak performer
 Common sense
 Sense of humor
 Personality in general
 Speaking voice
 Cooperation
 Empathy
 Flexibility

* Criteria whose meanings could not be combined with
original criteria

are noted here, but because they were not mentioned by more than one respondent, they were not included into the second questionnaire. The Delphi study is not only devised to develop consensus, but also to generate information (Strauss and Zeigler, 1975), so the additional criteria suggested by the 141 experts are reported in Table II.

Using the mean response for each criterion in Q I, both the professional and the personal criteria were ranked from lowest to highest (most important to least important). Means were used because of their ease of comparison and because they were not highly influenced by extreme scores. From this ranking, Questionnaire II was developed (see Appendix E). The cover letter for Q II explained the Delphi process for the second round, or the process of trying to come to consensus. The experts were asked to look carefully at the group mean responses, at their own first responses, and then they were to rerank the criteria lists, trying, if they would, to reach a consensus with the group. If they were not able to reach consensus, they were asked to write their reasons in the provided spaces. The questionnaire contained spaces for these responses as well as the individual's previous responses.

Questionnaire II

Questionnaire II was mailed to the 141 participants who returned the first questionnaire, during February of 1987

(see Appendix E). Because of the time commitment needed to complete the study, a companion letter
(see Appendix E) was sent to encourage the panel members to complete the questionnaire. One hundred and twenty-eight, or 60 MSA districts and 68 Non-MSA distrists returned Q II, which was a 90% return rate. This is a high percentage of return for a Delphi which indicates the interest the participants had in the study.

The new responses were again divided according to MSA and Non-MSA groups, and the mean and median for each criterion was computed. To show movement toward consensus, a comparison between Questionnaire I and Questionnaire II was made where the criteria lists were divided into four quarters according to rankings 1-16. The percent of responses which place a criterion within its respective quarter was computed for both Q I and Q II responses.

The individual criteria were then compared by the final median scores and ranking placement according to MSA and Non-MSA responses to see if the criteria desired for hiring teachers in more populated areas (MSA) differed from less populated areas (Non-MSA).

Summary

This study was a Delphi technique using chief hiring officers in school districts from MSAs and Non-MSAs across the country. Each group, i.e., MSA and Non-NonMSA, were presented with a predetermined list of important criteria and asked to rank them as to those of most importance to

least importance. Ranking by means were then determined,
and a second questionnaire was sent to the hiring officers
for MSA and Non-MSA districts. They were asked to try to
reach consensus with the group mean and, if they could not,
to give comments to the reason why. A final mean ranking
was computed as well as median scores for each criterion to
show how the participants moved toward consensus on the
second round of the Delphi study. According to their final
ranking, the criteria were grouped into four quartiles and a
percentage of response within each criterion's respective
quartile was computed. The percentage point increase from
Questionnaire I to Questionnaire II was computed to reveal
that most criterion had less variance in Q II, and therefore
it showed how the participants moved toward consensus on the
second round. To add scope to the study, the comments given
by the chief hiring officers in the second questionnaire
were recorded.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this chapter is to analyze the data to answer the questions presented in chapter one. Three questions were asked:

1. How do chief hiring officers in school districts across the nation rank a list of important personal and professional criteria for the hiring of newly accredited teachers?

2. Can a Delphi research technique be used to generate consensus on ranked criteria lists for the selection of newly certified teachers?

3. Is there a difference between the way that hiring officers from schools in Metropolitan Statistical Areas rank important hiring criteria as compared to hiring officers from schools in Non-Metropolitan Statistical Areas?

Ranking of Criteria

The initial list of criteria (Questionnaire I) taken from the literature and pilot studies I and II was sent to the chief hiring officers in selected districts throughout the United States. The returned questionnaires were then

divided according to MSA and Non-MSA districts, and a ranking was prepared for each division, according to the mean of each criterion. Table III shows these rankings. The MSA and Non-MSA rankings of important hiring criteria are quite similar. "Understanding of children," "Knowledge of teaching skills," and "Ability to motivate" were the top three rated criteria on both lists of professional criteria. The administrators from both areas were also in agreement on the three lowest ranking professional criteria: "Ability to teach in a 2nd area," "Depth of university work," and Scores on standardized tests." The criteria between the two extremes varied in how they were ranked by the two groups, but never by more than three rankings, except in the case of "Previous work experience", which the Non-MSA chief hiring officers rated four rankings higher than the MSA participants.

The personal criteria were also ranked closely between the two groups. The first three personal criteria were ranked similarly yet not exactly the same, and only two of the last three personal criteria matched between the MSA and Non-MSA groups. As with the professional criteria, there were no personal criteria that differed more than three rankings.

TABLE III

MSA AND NON-MSA FIRST RANKING BY MEANS

Professional Criteria	MSA		Non-MSA	
	Rank	Means	Rank	Means
Understanding of children	1	3.65	1	3.87
Knowledge of teaching skills	2	3.98	2	3.96
Ability to motivate	3	4.43	3	4.88
Classroom control	4	6.13	6	6.79
Use of English language	5	6.21	5	6.63
Student teaching	6	7.06	4	6.17
Ability to plan lessons	7	7.36	7	7.74
Provisions- indiv. differences	8	8.00	8	8.23
Clarity of goals	9	8.60	10	8.73
College grades	10	9.22	12	9.39
Knowledge of learning theory	11	9.70	13	9.42
Letters of recommendation	12	10.05	11	9.39
Previous work experience	13	10.11	9	8.45
Ability to teach in 2nd area	14	12.45	14	11.97
Depth of university work	15	12.55	15	12.69
Scores on standardized tests	16	13.03	16	12.85

Personal Criteria:

	MSA		Non-MSA	
Ability to work with students	1	3.45	1	4.09
Good communication skills	2	4.33	3	5.21
Enthusiasm	3	4.92	2	4.40
Ability to work with others	4	6.17	6	6.69
Attitudes	5	6.35	4	5.90
Self confidence	6	6.87	5	6.68
Dependability	7	7.23	7	7.36
Emotional balance	8	7.73	8	7.68
Maturity	9	8.38	9	7.90
Poise	10	10.27	11	9.74
Vitality	11	10.37	10	9.64
Ability to take advice	12	10.66	15	11.49
Health	13	11.25	13	10.83
Appearance	14	11.34	12	10.01
Courtesy	15	11.88	14	11.03
Tact	16	12.14	16	11.53

Movement Toward Consensus

The second question proposed for discussion is
concerned with obtaining consensus on the rankings from
Questionnaire I. The responses from Q I were compiled and a
mean ranking of each criterion was made. From this ranking
Questionnaire II (See Appendix D) was developed. It
contained the criteria ranked according to the means with
the smallest mean ranked highest; the chief hiring officer's
first ranking order of the criteria; a column for a new
ranking; and a column for comments. Q II rankings were sent
to the experts and who asked to consider changing their
rankings to concur with the mean rankings of their
respective group (MSA or Non-MSA). If they did not feel
they could make a change toward consensus, a section was
provided for the participants to make comments or
explanations as to the reason for their particular ranking.
The returns from Q II were ranked by means, and the results
are shown on Tables IV and V. The means and medians were
computed for each criterion, and the change between QI
responses and Q II responses were analyzed. The MSA chief
hiring officer's rankings for professional criteria changed
more than any of the other ranking list, as shown in Table
IV. "Student teaching" dropped from 6th to 7th place in the
ranking, switching places with "Ability to plan lessons."
In both questionnaires the mean for "College Grades,"
"Knowledge of learning theory," "Letters of recommendation,"

and "Previous work experience" were very close. The ranking

of these criteria in Questionnaire II responses changed, but

their relative position remained in the lower half of the

TABLE IV

MSA - FINAL RANKING BY MEANS

Professional Criteria	Questionnaire I			Questionnaire II		
	Rank	Mean	Median	Rank	Mean	Median
Understanding of Children	1	3.65	2.67	1	2.52	1.63
Knowledge of teaching skills	2	3.98	2.92	2	3.24	2.66
Ability to motivate	3	4.43	3.50	3	3.83	3.08
Classroom control	4	6.13	5.25	4	5.22	4.38
Use of English Language	5	6.21	5.56	5	5.91	5.26
Ability to plan lessons	7	7.36	7.19	6	7.07	7.09
Student teaching	6	7.06	6.67	7	7.24	6.90
Provisions- indiv. differences	8	8.00	8.08	8	7.77	7.77
Clarity of goals	9	8.60	8.83	9	8.70	9.07
Knowledge of learning theory	11	9.70	10.67	10	9.88	10.75
Previous work experience	13	10.11	10.68	11	10.18	11.34
College grades	10	9.22	9.25	12	10.36	10.42
Letters of recommendation	12	10.05	10.38	13	10.85	11.79
Ability to teach in 2nd area	14	12.45	13.25	14	13.17	13.87
Depth of University work	15	12.55	13.58	15	13.51	14.58
Scores on Standardized tests	16	13.03	14.54	16	14.59	15.60
Personal Criteria:						
Ability to work with students	1	3.45	2.21	1	2.35	1.00
Good Communication skills	2	4.33	3.13	2	3.63	2.58
Enthusiasm	3	4.92	4.19	3	3.95	3.36
Attitudes	5	6.35	5.71	4	5.39	5.09
Ability to work with others	4	6.17	6.00	5	5.76	4.94
Self Confidence	6	6.87	6.10	6	6.57	6.06
Dependability	7	7.23	7.21	7	7.28	7.18
Emotional Balance	8	7.73	7.30	8	7.41	7.71
Maturity	9	8.38	8.34	9	8.48	8.95
Vitality	11	10.37	11.25	10	10.77	10.96
Poise	10	10.27	10.35	11	10.83	10.45
Ability to take advice	12	10.66	10.33	12	11.64	12.03
Health	13	11.25	11.67	13	11.82	12.58
Appearance	14	11.34	12.56	14	12.53	13.57
Courtesy	15	11.88	12.56	15	13.17	14.54
Tact	16	12.14	13.00	16	13.66	14.79

TABLE V

NON-MSA FINAL RANKING BY MEANS

Professional Criteria	Questionnaire I			Questionnaire II		
	Rank	Mean	Median	Rank	Mean	Median
Understanding of Children	1	3.87	3.11	1	2.44	1.81
Knowledge of teaching skills	2	3.96	3.30	2	2.78	2.23
Ability to motivate	3	4.88	4.27	3	4.18	3.42
Student teaching	4	6.17	7.62	4	5.55	4.80
Use of English language	5	6.63	6.63	5	5.79	4.75
Classroom control	6	6.79	6.50	6	6.70	6.00
Ability to plan lessons	7	7.74	7.39	7	7.55	7.22
Provisions- indiv. differences	8	8.23	8.54	8	8.52	8.38
Previous work experience	9	8.45	9.37	9	8.71	9.13
Clarity of goals	10	8.73	8.50	10	9.39	10.00
Knowledge of learning theory	13	9.42	9.25	11	10.51	11.20
Letters of recommendation	11	9.39	9.75	12	10.58	11.04
College grades	12	9.39	10.43	13	10.71	11.97
Ability to teach 2nd area	14	11.97	12.87	14	12.38	13.50
Depth of University work	15	12.69	13.35	15	13.67	14.61
Scores on standardized tests	16	12.85	14.28	16	14.27	15.63

Personal Criteria:

	Rank	Mean	Median	Rank	Mean	Median
Ability to work with students	1	4.09	3.00	1	2.75	1.00
Enthusiasm	2	4.40	2.95	2	3.56	1.81
Good communication skills	3	5.21	3.75	3	4.03	3.35
Attitudes	4	5.90	5.29	4	4.88	4.50
Self confidence	5	6.68	5.79	5	6.05	5.27
Ability to work with others	6	6.69	5.83	6	6.17	5.81
Dependability	7	7.36	7.08	7	7.03	6.90
Emotional balance	8	7.68	7.22	8	7.43	7.78
Maturity	9	7.90	7.92	9	8.11	8.79
Vitality	10	9.64	10.50	10	10.24	10.41
Poise	11	9.74	10.08	11	10.38	10.82
Appearance	12	10.01	10.00	12	11.28	11.97
Health	13	10.83	11.61	13	11.84	12.76
Courtesy	14	11.03	11.92	14	12.33	13.61
Ability to take advice	15	11.49	12.00	15	12.84	14.43
Tact	16	11.53	12.09	16	13.46	15.00

list. Analysis of the second questionnaire responses also showed that the top and the bottom three criteria remained the same.

The MSA administrators also changed their ranking enough to cause two changes in the final ranking of the personal criteria. "Ability to work with others" and "Attitudes" switched positions (4th and 5th positions), as well as "Poise" and "Vitality"(10th and 11th positions). Although the rankings changed slightly, their relative placement in the hierarchy changed very little. Similar to the professional criteria, the top three criteria and the bottom four criteria remained the same.

MSA Consensus

The consensus of professional and personal criteria for the MSA administrators is revealed by comparing the medians of the first and second questionnaires. As the median becomes smaller in the first half of the listing and larger in the last half, it indicates less variability of rankings, hence more consensus. This was the case with most of the criteria, especially on the top and bottom three of each list. In the professional criteria list, the one criterion that showed more variability was "Student teaching," which changed from 6.67 median, to a 6.90 median with Q II. This would indicate that a number of respondents placed other criteria higher causing "Student teaching" to be reranked with a higher median score.

Two personal criteria received median scores indicating less consensus on the second questionnaire; "Enthusiasm," with a median change from 2.85 to 3.36, should have had a

decrease of score since its position is in the top half of
the hierarchy. The criterion "Vitality" (changed from 11.25
to 10.96) likewise should have had a larger median for
greater consensus to be obtained. The cause of this was a
number of participants did not go along with the group mean,
thus ranking the particular criterion either substantially
higher or lower than the group mean. Because the responses
to Q II showed major consensus on most of the rankings, as
well as less consensus on a few of the rankings, the
usefulness of allowing the participants to reconsider their
responses on successive rounds is confirmed.

Non-MSA Consensus

There were three Non-MSA criteria that changed ranking
position from Questionnaire I to Questionnaire II and they
were all on the professional criteria list (see Table V).
As in the MSA chief hiring officer's rankings, the three
criteria, "Letter of recommendation," "College grades," and
"Knowledge of learning theory" had very close means on
Questionnaire I, with two of the criteria having identical
means. Although the overall professional criteria ranking
changed little, the medians did change, showing increased
consensus on each item. While comparing the medians from Q
I and Q II, the first half of the list (1-8) had smaller
medians in Q II, showing that the hiring officers had more
agreement as to what criteria were more important. The last

half of the list likewise had medians that showed more consensus as to what criteria were less important.

The personal criteria ranking had no ranking position changes from Questionnaire I to Questionnaire II. As with the professional criteria, the medians did move to show more consensus on each criterion except one. That criterion was "Vitality" which was also a criterion that failed to reach consensus with the MSA educators. This would indicate that there might be some confusion as to just what "Vitality" meant as a criterion for hiring new teachers.

Further Data Analysis to Show Consensus

Several of the criteria were very close in mean ranking in both Q I and Q II, indicating the difficulty in differentiating between which criterion was more important than another. The respondents also made comments concerning the difficulty of ranking certain criteria higher than others. Therefore, to show relationships among criteria and as a further method to show consensus from Q I to Q II, the criteria were grouped into four quartiles. The first quartile (rankings 1-4) was considered "High" criteria. The second quartile (rankings 5-8) was "Moderately High" criteria. The third quartile (rankings 9-12) was labeled "Moderately Low" criteria, and the fourth quartile (rankings 13-16) would be "Low" criteria according to their heirarchy on the ranking list.

The number of responses given for each ranking within its respective quartile was counted, and a percentage for each criterion was computed. Tables VI, VII, VIII, and IX show the percents of interquartile responses for each item for both Questionnaire I and Questionnaire II.

TABLE VI

MSA QUESTIONNAIRE I AND QUESTIONNAIRE II
COMPARISON- PROFESSIONAL CRITERIA

		(a) Criteria ranking	(b)	(c)	(d)
High	1	Understanding of children	73%	88%	15
	2	Knowledge of teaching skills	68%	85%	17
	3	Ability to motivate	58%	75%	17
	4	Classroom control	40%	54%	14
Mod. High	5	Use of English Language	46%	55%	9
	6	Ability to plan lessons	52%	69%	17
	7	Student teaching	33%	53%	20
	8	Provisions- indiv. differences	31%	58%	27
Mod. Low	9	Clarity of goals	40%	59%	19
	10	Knowledge of learning theory	40%	54%	14
	11	Previous work experience	41%	29%	-12
	12	College grades	32%	48%	16
Low	13	Letters of recommendation	36%	36%	0
	14	Ability to teach in 2nd area	58%	70%	12
	15	Depth of University work	63%	76%	13
	16	Scores on Standardized tests	71%	86%	15

(b) - Percent of responses within respective quartile in
      Questionnaire I
(c) - Percent of responses within respective quartile in
      Questionnaire II
(d) - Amount of percentage point increase or (c) - (b)

Consensus was shown because in each case, the percentages were higher for the second questionnaire responses, revealing that more respondents ranked each criterion within its respective quartile position in the second questionnaire relative to the first

TABLE VII

MSA QUESTIONNAIRE I AND QUESTIONNAIRE II
COMPARISON- PERSONAL CRITERIA

		(a) Criteria ranking	(b)	(c)	(d)
High	1	Ability to work with students	73%	90%	17
	2	Good Communication skills	68%	75%	7
	3	Enthusiasm	54%	69%	15
	4	Attitudes	38%	39%	1
Mod. High	5	Ability to work with others	46%	48%	2
	6	Self Confidence	26%	48%	22
	7	Dependability	48%	71%	23
	8	Emotional Balance	47%	58%	11
Mod. Low	9	Maturity	27%	55%	28
	10	Vitality	30%	57%	27
	11	Poise	39%	62%	23
	12	Ability to take advice	29%	48%	19
Low	13	Health	42%	51%	9
	14	Appearance	51%	63%	12
	15	Courtesy	51%	72%	21
	16	Tact	50%	71%	21

(b) - Percent of responses within respective quartile in Questionnaire I
(c) - Percent of responses within respective quartile in Questionnaire II
(d) - Amount of percentage point increase or (c) - (b)

questionnaire. Each criterion showed an increase in percent

of responses given within its respective quarter from Q I to

Q II except for the MSA ranking of "Previous work

experience" and "Letters of recommendation," which had a

TABLE VIII

NON-MSA QUESTIONNAIRE I AND QUESTIONNAIRE II
COMPARISON- PROFESSIONAL CRITERIA

		(a) Criteria Ranking	(b)	(c)	(d)
High	1	Understanding of Children	62%	84%	22
	2	Knowledge of teaching skills	63%	88%	25
	3	Ability to motivate	54%	68%	14
	4	Student teaching	28%	48%	20
Mod. High	5	Use of English language	46%	61%	15
	6	Classroom control	43%	60%	17
	7	Ability to plan lessons	42%	59%	17
	8	Provisions- indiv. differences	30%	47%	17
Mod. Low	9	Previous work experience	36%	55%	19
	10	Clarity of goals	34%	58%	24
	11	Knowledge of learning theory	36%	41%	5
	12	Letters of recommendation	16%	52%	36
Low	13	College grades	30%	36%	6
	14	Ability to teach 2nd area	57%	66%	9
	15	Depth of University work	64%	82%	18
	16	Scores on standardized tests	65%	83%	18

(b) - Percent of responses within respective quartile in
      Questionnaire I
(c) - Percent of responses within respective quartile in
      Questionnaire II
(d) - Amount of percentage point increase or (c) - (b)

decrease or no increase of responses. This exception might be explained by the fact the both of these criteria changed positions from the first questionnaire thus putting them in a different quartile.

TABLE IX

NON-MSA QUESTIONNAIRE I AND QUESTIONNAIRE II
COMPARISON- PERSONAL CRITERIA

	(a) Criteria Ranking	(b)	(c)	(d)
High 1	Ability to work with students	64%	87%	23
2	Enthusiasm	60%	76%	16
3	Good communication skills	49%	71%	22
4	Attitudes	42%	50%	8
Mod. High 5	Self confidence	40%	56%	16
6	Ability to work with others	35%	56%	21
7	Dependability	32%	65%	33
8	Emotional balance	32%	46%	14
Mod. Low 9	Maturity	35%	52%	17
10	Vitality	26%	58%	32
11	Poise	29%	62%	33
12	Appearance	28%	45%	17
Low 13	Health	38%	59%	21
14	Courtesy	48%	68%	20
15	Ability to take advice	46%	63%	17
16	Tact	43%	66%	23

(b) - Percent of responses within respective quartile in Questionnaire I
(c) - Percent of responses within respective quartile in Questionnaire II
(d) - Amount of percentage point increase or (c) - (b)

Questionnaire II Response Comments

The second Delphi questionnaire asked the respondents to try to reach consensus on the ranking of the criteria from the first questionnaire. If they could not , they were asked to comment as to why they thought the criteria should be ranked differently. One of the advantages of a Delphi study is not only the ability to gain consensus on a problem but also to generate input and information on that problem. In this study the comments on each criterion generated information important to an understanding of the perception that experts have of the use of the criteria. Of the 60 returned questionnaires from MSA hiring officers, 72% included comments as to their feelings concerning the ranking of various criteria, giving a total of 226 comments. For the 68 Non-MSA hiring officers participating in the study, 78% responded with comments, for a total of 240 individual comments. Many of these were very pertinent to the understanding of the criteria responses and are included in the following sections. However, to include all of the comments would add unnecessary bulk to the research, and not all of the comments could be considered important. Therefore, comments that were not descriptive of the actual criteria were omitted from this list. Some examples of the omitted comments were "don't agree," " all the same," "reevaluated judgment," and " feel strongly about all categories."

The included comments are grouped according to MSA and Non-MSA and by ranked criteria they represent:

MSA Comments

Professional Criteria

1.Understanding of children

-Unless teacher has children of own this comes with experience

-I wonder if those who rank this no.1 really are making reference to learning theory (or how children learn). If not, I'm not sure what the term means

-Except as noted, #'s 1-10 are very difficult to distinguish between; all are critical

-This comes with maturity. It's hard to understand students as a young teacher.

-In some ways, I view these as related (1&2). An understanding of both enhance the other.

-If you understand children all other listings are possible

-It's very difficult to make this determination in hiring process

2. Knowledge of basic teaching skills

-School's basic purpose is to teach basics. That's why we exist.

-No question about the importance of this item

-Knowledge of skills does not insure application of this knowledge. Change wording to applies knowledge of...

-Difficult to determine-even by recommendations this is generally a "given" if the college or university graduates a person from the program or the person is tested. We also assume that we will have to help the person grow through inservice and prof. development programs. Certainly cannot be determined by transcripts or interview or from credentials.

-There is no way to assess this w/o some record of performance.

-Teaching skills more important than grades

3. Ability to motivate

-A priority

-A result of good planning and knowledge of theory

-Ability to motivate is a gift! concepts in sit. can be learned

-These skills can be taught if the teacher cares for children and is intelligent (includes classroom control)

4. Classroom control

-I am interpreting it to mean "classroom managment" - high priority

-Is a must but is a product of by 1,2,4,5 (Motivate,plan lessons,knowl.of teaching sk.,kn. of learn. theory)

-I don't like word "control". Prefer instills self-contol of students.

-Depends on "control" - vs. climate - neg. or positive.

-Hard to distinguish when hiring

5. Use of English Language

-NO WAY WILL I CHANGE! If a teacher does not display correct usage of the English language, the students will not either.

-Is of primary importance for modeling and teaching

-If above average student-assume in most cases good useage!

-America's basic language is English, teachers should be able to use proper English.

-Perhaps an expected standard by others. I include oral and written.

-Poor communication modeling teaches more poor communication

6. Student teaching experience

- Most teachers 'learn to teach' during their student teaching experience, not in college classes; so I believe this is critical.

-Is too uncontrolled-too much variance - to be more important.

-Evaluation of the master teacher is only one person's view.

-Only observable measurement experience in the classroom for pre-service teachers-a vital factor in assessment.

-A student can be placed in a setting with a teacher that does not allow for the student's own style and creativity to be evidences. The student might then exhibit a poorer performance than necessary.

-Important but not as highly significant as actual independent experience.

-Student teaching is like batting practice - not necessarily a predictor of success.

-The quality and depth of this experience can go far towards a successful first year

-I am more interested in actual indep. teaching experience than in student teaching

-Student teaching experience is often clinical in nature

-Allows for direct observation of teaching potential

-If student teaching is not in your school district. no personal observation

-This is important if you get an accurate assessment of the experience

-A good inservice program can easily replace most student teaching

-Not always a true indicator. Some of the best student teachers are unable to work a program alone.

7. Ability to plan lessons

- I believe the ability to plan lessons well takes care of motivation, classroom control and individual differences; therefore I listed planning higher than control or motivation.

-These skills should be developed in college

-This skill is important to success in teaching-learning process

-Good planning is the vital link between teaching skill (the act) and the understanding of how children learn.

-Would rather see "ability to implement and follow through our plans"

-This is key. Ability to plan implies knowledge of objectives, methods, etc.

-Good planning which includes selecting appropriate objectives etc. reflects a depth of knowledge of the students and subject.

-I believe that proper planning leads to motivation and control

-This can be determined in interview process

8. Provisions for individual differences

- Important for learning to take place.

-Unless a teacher individualizes to meet a variety of needs, knowledge of theories and prepared lesson plans won't reach most students.

-Very important in schools, particulary urban ones

-To meet individual needs is important

-Very important because of high number of special needs students

-More ability grouping is needed. We waste too much time soring out for individuals

9. Clarity of goals

-Unless teachers know where to lead, who leads?

-Teachers stated goals must be understood and attainable.

-People have goals, but important is ability to achieve goals

-Professional goals of educators often are very flexible

-Teachers fail because of inability to plan years' work

-Involves use of the English Language. Teaches ability to communicate

10. College grades

-Grades are one measurement of yet untested skills & abilities. How else are they to be determined. I do not believe grades should be relegated to 10th place

-We do want intelligent individuals in classrooms

-Just because a person is a student does not necessarily mean he/she will excel as a teacher

-Poor indicator of teaching success

-Gives evidence of "hard work". Don't want a C/D student.

11. Knowledge of learning theory

-Effective teaching probably will not occur unless teachers really understand how children learn

-Not so much concerned with "knowledge " as with the practical application of that knowledge.

-This comes later often

-I believe that to teach you must know how children tend to learn.

-An understanding of how children learn is basic to providing for individual differences, clarigying goals and planning lessons

-This is a mojor shortcoming with new staff.

-This and understanding of children are similar. You need to be aware of the various theories to apply them appropriately with students.

12. Favorable letters of recommendation

-There really is little discrepancy since I ranked these lowest of the ones I considered. I have learned that too often persons give good recommendations to those they want to replace.

-Prefer telephone conversation with reference

-In my experience, letters of recommendation are not good discriminators in the final analysis

-Not reliable or objective. Increasinly more difficult to obtain candid assessments/recommendations.

-Not too reliable under current federal laws

-Unless you are familiar with the person(s) sending the letters of recommendation, they may be invalid.

-I've changed - every recommendation seems to be a "good one"

-Must communicate with cooperating teacher or former employers

-We rely heavily on this and often follow up with a phone check to the same people

-Previous employers will have had more experience with candidate than what I can find out in an interviewl

13. Previous work experience

-Varies with the expectations of the organization where employed.

-Provides base for success

-The best single predictor is previous work experience.

-Most verifiable criterion in determining effectiveness, responsibility, reliability and dependability in a work environment.

-I still want to go with my first response, ranking this high because I believe that actual knowledge of performance is preferable to any other less definitive criteria

-The best predictor of future performance is past performance.

-I feel that it is very important to talk with previous employers to obtain historical background relating to the other 15 items.

-Previous work experience tells me a lot about future success

-Best indicator of type of employee your getting

-Being a proven employee is as essential as being a

qualified teacher

14. Ability to teach in second area

　　-Very important as districts strive to use human and financial resources effectively

　　-Very important for small secondary schools

　　-From a staffing point of view, We are much better off if candidate is not limited to one area

　　-Depends on grade level, but I like diversity of skill. Makes a teacher more interesting and capable of higher levels of understanding of various disciplines.

　　-This becomes important because it is an indicator of survival instinct

　　-In times of staff reductions, union agreements, this can be critical.

　　-It is helpful to me to hire someone with a diverse background

　　-Flexibility is essential

　　-Building principals need flexibility for assignments

15. Depth of university work

　　-Work in content area is important to secondary

　　-We do want teachers, especially secondary, who have depth of knowledge in their subject areas.

　　-If by depth you mean knowledge of many subjects I think it is more important than #15

　　-This is important, but other areas are more important

　　-Content preparation has been neglected in many teacher preparations

16. Scores on standardized tests

　　-Must be considered higher because it is a determinant for obtaining a teaching license

　　-How can educators place basic competence so low?

　　-We have found high correlation between scores and later performance.

-Must have basic skills - must pass NTE

Personal Criteria

1. Ability to work with students

-Given the poise, self-confidence, maturity, enthusiasm, and proper attitude, one should be able to work with any type student

-Important - difficult to measure objectively through personal contact. Only general assessment possible.

2. Good communication skills

-Attitude precludes communication

-Important, but not as important as the other top criteria

3. Enthusiasm

-Enthusiasm is part of ability to communicate and attitude.

-Much like self-confidence and poise

-I believe that enthusiasm 'tempered" is a good trait. Accompanied by wisdom, good sense.

-Attitudes, poise & courtesy are more significant

-Can be stifled or developed by assignment

4. Ability to work with others

-Teamwork is important, but it is not as imp. as other qualities necessary for the classroom

-This is more critical than my rank would indicate. Especially in a small school

-I sincerely believe a good teacher doesn't require this skill. It can be developed as well.

-More important to do a good job in classroom

-I am interpreting "others" as being other than students. It ranks lower than interrelationships with students

5. Attitudes

-Inappropriate attitudes will prohibit effectiveness in other ways.

-This is the "key" to success - attitude is the drive the motivator that sets these in motion. Most failures occur because of attitude rather than skills or knowledge deficiencies

-Attitudes regarding people-more especially students is extremely important in terms of relationships, rapport, empathy, acceptance, student success, etc. A teacher who likes students and is liked by students is generally a very successful teacher.

6. Self confidence

-People who do not believe in themselves do not inspire students

-Again - like poise, w/out other traits not very helpful or effective.

-Is of basic importance for the role of teacher

7. Dependability

-I believe dependability is assumed. If not, I could rank it 1st. I probably would consider emotional balance to be synonymous w/ dependability - thus reducing importantce in my mind of dependability.

8. Emotional balance

-All other 'met" criteria will be short-lived if this criterion is not up to par

-If a teacher is not well balanced emotionally, he/she presents problems in stressful situation.

-Can't teach without it

-Is of basic importance for the role of teacher

9. Maturity

-Maturity and emotional balance seem to work together

-If a teacher comes to a class and is not mentally mature, a classroom is no place for them to grow up

-This is so important. Schools are full of children. We need adults for teachers, not more children

-Results in ability to change behavior

-Maturity implies an ability to work well with others, to take advice, to keep life/work in perspective.

-Needed to deal with today's students, parents, and the total educational environment.

-Maturity can be developed with experience

10. Poise

-It is important in trying situations to retain poise, as a leader and example to children

-Poise w/out anything else is not very effective (i.e. ability to work with students)

-Poise implies knowing what to do or how to behave in adversity

-Observable in interview situation and pre-employment visits.

11. Vitality

-Some outstanding teachers aren't very "bouncy"

-Dependent on positive experience, climate, health, personal life, etc.

12. Ability to take advice

-Ability to take advice is part of working with others.

-Maybe the others don't find employees who are unable to take advice and act on it. I do and find it affects their ability to improve.

-Willingness to learn is a vital component for educational growth

-Vitally important in establishing a long term professional career.

13. Health

-You aren't effective if your not there

-If you aren't well the students will be unbearable

-Implications of this criterion are many. Health care cost, work habits, vitality, etc. Measurable through pre-employment physical

14. Appearance

-Appearance should be higher because we do consider and do look at an individual. First impressions go a long way.

-This is important to the image of the school and profession

-unkempt teacher is deplorable

-Role model and acceptance would indicate that this be ranked higher.

-I still think teachers are models!

15. Courtesy

-Courtesy to students is a model type performance and is important

-Courtesy towards children implies respect for them as human beings

-Courtesy is essential in a service occupation

16. Tact

-How can "courtesy" and "tact" be rated here and "ability to work with others" rated so much higher?

-One of the more important criteria if one is to work with a highly divergent group of children and public

-Essential in a service organization dealing with people.

Non-MSA Comments

Professional Criteria

1. Understanding of Children

- Must be well grounded in human behavior - must like children - be perceptive of needs and desires

-I couldn't begin to consider anyone who did not have a basic understanding of children first

-High but must follow the student teaching experience

-classroom is the best test

-Basic make up of students, economics of family, home environment, divorced, etc.

-More important things first. One can understand children and still not know how to teach

2. Knowledge of basic teaching skills

-You have to know what to teach-remember this is to all levels and all subjects

-classroom is the best test

-can be taught

-Our district will train

3. Ability to motivate

-I'm not sure anyone can motivate anyone else. We can structure the environment to promote self-motivation

-very important - question how this could be measured in interview

-Difficult to assess

-Classroom is best test

-Can be taught

-Have to make students want to learn

-Without this ability, no other skills will be effective.

4. Student teaching experience

-Can be very unlike a real situation

-I have not found that the student teaching experience is real for classroom teaching

-This is not an indicator of teaching ability

-Unfortunately, student teaching does not necessarily represent a prospective teacher's potential

-I feel like the student teaching will show some of the others

-This must be #1 for new teachers

-This is the best indicator of teaching success. It is and will be our most important criteria

-Good predictor

-New teacher, 1st call is to administrator and supervising teacher to see if they can handle teaching situation

-In this state there is no consistent process for supervision or evaluation of student teaching- too many variables!

-Even though this gives indication of performance, situation may be atypical

-Too many variables in student teaching. Supervising teachers tend to inflate effectiveness and play down weaknesses

-Best judge ability by previous teaching experience

-What was learned from the experience is more important than the experience

-Have been in charge of student teaching - it is not a realistic experience. All students get "B" or "A" grade

-Student teaching experience depends too much on school, district, and quality of cooperating teacher

-Many practice teaching experiences are to short, unrealistic or done under a poor role model

5. Use of English Language

-The role of a teacher is to model appropriate behavior

-I have never experienced this problem. Most college graduates in my experience can orally and written use our English language

-Not a problem in my geographic area

-Use of Eng. is an expected. Do not feel strongly about this decision

-Easy to discern

-Important, but should be a given

-Must be able to communicate properly

-Able to explain procedures to student and parents

-This is a very modifiable trait

6. Classroom control

-You can't teach if you don't have their attention

-Important - but many times not discernable in hiring process

-This could only be gained from "student teaching experience"

-"control" suggests suppression

-If a teacher understands children, has clarity of goals, the ability to motivate and how to plan, control will be present

-Hard to measure before employment

-More important than teaching experience

7. Ability to plan lessons

-This can be taught in a good staff development program

-I regard planning as more significant than others.

-Difficult to determine initially

-"If you don't know where you're going, any road will do"; effective teaching requires a plan

-Adequate pre-planning is a necessity

-Planning is key to good instruction. Without it, all teaching can be worthless

8. Provisions for individual differences

-Can not be taught quickly - attitude

-Students will work at different level or pace/be able to adjust teaching skills

-Flexibility is important

-Needs to be a proper balance between this and whole group instruction

9. Previous work experience

-Previous work experience establishes indicators of work behavior

-Research evidence shows that previous experience is the most reliable predictor of success

-Good predictor

-Most important criteria for "hiring"

-This indicates potential success more than any other variable.

-If they had to work while in school

-Can be either a positive or negative factor. Personal qualities

-Important but can be misleading

10. Clarity of goals

-Without a goal or mission in place, you can take any road, it won't make any difference

-Sense of values and professional goals cannot be taught

-Essential for planning lessons

-Know what you want the students to accomplish

11. Favorable letters of recommendation

-People go to people that will write them a good recommendation

-I respect thoughtful opinions

-Recommendations and follow-up phone calls are important background information which can lead to hiring excellent teachers

-"track record" important

-I use these to make initial separation

-Input from others is important

-Best predictor of teaching performance

-This is how decisions are made

-Work habits in previous jobs

-Least effective tool we have

-Can be manipulated by choice of references

12. College grades

-How do you measure understanding of children and basic teaching knowledge? Grades indicate intelligence, dependability, ability to plan, etc.

-Only available criteria for new teachers

-I use this as a qualifier

-Best predictor of teaching performance

-Fairly indicative of willingness to pursue excellence

-Not always a good measure of potential teaching success

13. Knowledge of learning theories

-This knowledge is the foundation of teaching effectiveness

-If planning is important, the wherewithal to explore options is equally important

-Considered as understanding of children

-more for other teachers

-It is important that teachers know how learners learn and that there are differences- should be able to apply same

-If you're goint to provide for differences, you best understand how to deal with them

-Important to understand in order to group and individualize

-If teacher does not understand this, teaching will be ineffective. We all learn differently

14. Ability to teach in second area

-Important in smaller schools

-A 2nd area in cert. makes it easier to place good teacher

-In rural state this is very important

-Important in a small school

-This is important in small secondary schools where the teacher will be teaching

-Flexible student enrollment demands flexible teacher cut

-Very important to our district

15. Depth of university work

-This is an indicator of love of learning

-Teachers must be scholarly with a depth of work

-Research shows this to be important

16. Scores on standardized tests

-A teacher cannot be certified in Miss. without a min. score on NTE. A certification is #1 requirement

-Good predictor

-The variables on standardized test is too great

Personal Criterial

1. Ability to work with students

-Important but other qualities must appear 1st

-How do you determine in an interview?

-When a new teacher is hired this factor is unknown

2. Enthusiasm

-Enthusiasm great but not as important as attitude, communication, etc.

-Must be tempered by other skills

-One cannot teach on enthusiasm alone

-Classroom best test; interview is not

-Positive attitude and dedication more important

3. Good communication skills

-This is inseparable from #1

-Communication skills are necessary but are not top priority

-We have got to provide role models if we plan to improve communication skills

4. Attitudes

-Attitude is key to everything we do

-Attitudes may be the result of past negative experiences and can be changed

-Essential to be effective, regardless of possession of other criteria

-difficult to measure

-Positive attitude is necessary just don't feel it is a top

5. Self Confidence

-Self confidence allows for good communication, positive attitudes, ability to work with other and enthusiasm

-Can be attained

-Confidence in your own abilities

-Show me confidence and I'll show you an effective person

- Can be built by positive reinforcement and successful experiences

6. Ability to work with others

-Am more interested in basic nature of attitudes and ability to teach

-Team work and cooperation will be of growing importance to professional

7. Dependability

-Needed for smooth operation

-What good is an undependable person regardless of knowledge or ability

-Have to be at work before you can work

8. Emotional Balance

-If you've ever experienced a teacher with problems in this area, you would rank it #1

-Emotional balance is important but the others must get advanced billing in my assessment

-Unstable emotional teachers do a disservice to students

-Key to working with pupils and others

-I feel it is as important as health

9. Maturity

-I can't separate maturity from attitudes, ability to work with others and dependability. Maturity is these items plus others!

-In order to deal with children a teacher must be mature above all else

-Frequently, with maturity comes self-confidence, balance, cooperation, positive role model, et. al. I prefer to not have to wait for the maturation process

10. Vitality

-Synonymous with enthusiasm

-I think this goes with enthusiasm

-Must be energetic, enthusiastic, able to handle stress,tense situations, etc.

11. Poise

-The interview and references is the only contact I may have - so poise is important

-Poise includes emotional balance

12. Appearance

-I think it is important to distinguish between teachers and students

-Would like to give this a higher priority but all is so important

-Important but have been fooled on this too many times

13. Health

-An individuals good health provides of emotional balance, vitality, poise and appearance

-Frequent absense or illness breaks the continuity for the students

14. Courtesy

- Courtesy shows respect for all people, regardless of your position

15. Ability to take advice

-Beginning teachers benefit from the advice of master teachers

-How can you assist or strengthen a person who cannot take advice?

-Must be coachable

-Difficult to improve instruction if one doesn't recognize the problem

16. Tact

-Trait of a professional

-Communicate positively - this requires tact - do not want people to be turned off with the program or the system

-Essential in dealing with parents - closely tied to #11 (poise)

-Very important for PR, etc.

-I question the success of a person without tact

-Respectful communications are more effective

-Without tact you may never get the chance to demonstrate other traits

-Tact will keep us all out of a lot of trouble

The professional criteria generated more comments than did the personal criteria, which indicates that chief hiring officers had stronger opinions concerning their ranking of professional than personal criteria. It was apparently easier for them to move toward consensus on the personal

criteria. These comments are important in this study
because they add scope to the process that aids a decision
maker in using the criteria for hiring newly certified
teachers.

Differences Between MSA and
Non-MSA Rankings

The literature indicates that, in hiring newly
certified teachers, school districts in smaller geographic
areas (Non-MSA) should rank some criteria differently than
school districts from larger metropolitan areas (MSAs)
(Calhune, 1964), i.e., criteria that are more professional
in nature would be more important to a MSA participant than
to a Non-MSA participant. Conversly, a criterion that
pertains to social systems would be more important to a
Non-MSA administrator. A comparison between the final
criteria ranking of MSA administrators and Non-MSA
administrators was conducted as shown in Table X. Medians
were used in the comparison between the two questionnaires
to compensate for the effect of any skewed data.

The professional criteria medians were very similar
with the three highest ranked responses and the three lowest
ranked responses. The MSA chief hiring officers rated
"Classroom control," "Clarity of goals," "Knowledge of
learning theories," "Provision for individual differences,"
and "College grades" appreciably higher (more than .50) than
did the Non-MSA chief hiring officers. The Non-MSA ranked
four criteria higher than the MSA chief hiring officers:

TABLE X

COMPARISON OF MSA TO NON-MSA BY MEDIANS

Rank	Professional Criteria	Medians for Questionnaire II MSA	Non-MSA
1	Understanding of Children	1.63	1.81
2	Knowledge of teaching skills	2.66	2.23
3	Ability to motivate	3.08	3.42
4	Classroom control	4.38*	6.00
5	Use of English Language	5.26	4.75*
6	Ability to plan lessons	7.09	7.22
7	Student teaching	6.90	4.80*
8	Provisions- indiv. differences	7.77*	8.38
9	Clarity of goals	9.07*	10.00
10	Knowledge of learning theory	10.75*	11.20
11	Previous work experience	11.34	9.13*
12	College grades	10.42*	11.97
13	Letters of recommendation	11.79	11.04*
14	Ability to teach in 2nd area	13.87	13.50
15	Depth of University work	14.58	14.61
16	Scores on Standardized tests	15.60	15.63

Rank	Personal Criteria:	MSA	Non-MSA
1	Ability to work with students	1.00	1.00
2	Good Communication skills	2.58*	3.35
3	Enthusiasm	3.36	1.81*
4	Attitudes	5.09	4.50*
5	Ability to work with others	4.94*	5.81
6	Self Confidence	6.06	5.27*
7	Dependability	7.18	6.90
8	Emotional Balance	7.71	7.78
9	Maturity	8.95	8.79
10	Vitality	10.96	10.41*
11	Poise	10.45	10.82
12	Ability to take advice	12.03*	14.43
13	Health	12.58	12.76
14	Appearance	13.57	11.97*
15	Courtesy	14.54	13.61*
16	Tact	14.79	15.00

note - Questionnaire II MSA Final Ranking

* Medium score is above .50 higher ranking

"Use of English language," "Student teaching," "Previous work experience," and "Letters of recommendation."

"Student teaching," "Previous work experience," and "Letters of recommendation" are all indicators of socialization of teachers, which would be important to the smaller school system because smaller school systems need newly certified teachers to become effective teachers, as well as to fit into the community in which the school is located. The MSA's higher medians for "Clarity of goals," "Knowledge of learning theory," "Provisions for individual differences," and "College grades" would indicate a greater concern with educational criteria.

The personal criteria showed that some criteria were ranked as being more important by MSA administrators and some by Non-MSA, but there was no trend or reason found by the researcher. The MSA administrators rated "Good communication skills," "Ability to work with others," and "Ability to take advice" more important than did the hiring officers from Non-MSA districts. The Non-MSA administrators ranked "Enthusiasm," "Attitudes," "Self-confidence," "Attitudes," "Appearance," and "Courtesy" appreciably higher than the MSA educators.

In summary, the analysis of the data showed that it was possible to generate a ranking of important criteria for hiring newly certified teachers. The rankings were divided according to whether the chief hiring officer came from a school district in a MSA or a Non-MSA. The rankings were very close to each other, especially with regard to the most important and least important criteria. There were some

changes in the rankings with the second questionnaire, which suggested the importance of rethinking the criteria ranking in comparison to mean rankings by other chief hiring officers. Thus the second round responses were more thorough and thought-out responses.

The Delphi technique used in this study showed that the two groups (MSA and Non-MSA) were in agreement as to what they felt were the most important and the least important of the criteria for the hiring of newly certified teachers. Differences between the groups were found between the two extremes. The second questionnaire analysis revealed a strong movement to consensus with a comparison of both the medians, as well as the percentages of the quarter grouping tallies. The comments from Q II help add scope and meaning to each criterion, and thus the selected comments of those who could not move toward consensus should be considered, along with the final consensus ranking of the criteria.

The professional criteria which MSA and Non-MSA chief hiring officers find most important were consistant with literature. MSA chief hiring officers were slightly more concerned with professional educational criteria and Non-MSA administrators placed criteria concerning the socialization of the teacher candidate slightly higher on the ranking hierarchy. There were differences in the personal criteria that were more important to MSA and Non-MSA chief hiring officers, but the reason for the differences were not readily discernible.

CHAPTER V

SUMMARY,CONCLUSION,IMPLICATIONS
AND RECOMMENDATIONS

Summary

The major purposes of this study were to use a Delphi technique to determine how hiring officers in Metropolitan Statistical Area and Non-Metropolitan Statistical Area districts across the nation ranked criteria for hiring new certified school teachers, and to determine whether they moved toward a stronger consensus if they were given a group mean for each criteria and asked to rethink their responses as compared to the group's ranking. Another purpose of the study was to see if there was a difference in the way that the criteria were ranked according to the statistical area that the administrators represented.

The criteria were developed from a number of studies which suggested criteria important to hiring new teachers. A pilot study was also done to gather other criteria from hiring officers in MSA and Non-MSA districts in Utah. The criteria were compiled and an instrument was developed for the ranking of the hiring criteria; 16 were identified as important professional criteria, and 16 important personal criteria were also identified. Another pilot study was

accomplished to test the instrument (i.e., questionnaire). Chief hiring officers in MSA and Non-MSA districts in Oklahoma were involved in the second pilot.

The next step was to choose three MSA and three Non-MSA districts from each state and request the participation of their chief hiring officer in the Delphi study. A letter and questionnaire were sent to each district superintendent asking him/her or the chief hiring officer to take part in the Delphi panel and to rank the criteria list provided from most to least important, with a space given for any additional criteria. The first questionnaire had a usable response rate of 50 percent of the original 280 districts that were asked to participate.

The returned questionnaires were divided into MSA districts or Non-MSA districts and means were computed for each criterion both in the professional and personal areas. The lists were then ranked with the smallest mean being the most important criterion.

From the two lists, one from MSA hiring officers and one from Non-MSA hiring officers, with a ranking of both personal and professional characteristics, Questionnaire II was developed. Questionnaire II contained the individual responses from Questionnaire I for each individual respondent and the group mean ranking for each criteria. The panel participants were asked in Questionnaire II to consider their previous responses against the group mean and to see if they could move their ranking toward consensus

with the group. If they were unable to do so, they were asked to give their reasons in the space provided. Questionnaire II received a 90% return.

From Questionnaire II a final ranking of professional and personal criteria by means was developed for the hiring officers in MSA districts and Non-MSA districts. The median scores for Questionnaire I and Questionnaire II were compiled and compared to show consensus. The criteria in each list were also grouped according to ranking into four quartiles: high, moderately high, moderately low and low. A percentage of responses was tabulated to show how often criteria were ranked within their respective quartile, to reveal the amount of movement toward consensus.

The final median rankings of the MSA administrators and those from the Non-MSA administrators were then compared to see if there were specific professional and personal criteria more important for one group over the other group.

It was found that the Delphi was an effective instrument in obtaining a ranking of the sixteen professional criteria and the sixteen personal criteria, according to whether they came from the MSA or Non-MSA rankings. The most important three criteria in the professional listing for both MSA and Non-MSA educators were "Understanding of children," "Knowledge of teaching skills," and "Ability to motivate." Both groups also agreed on the least important criteria; "Ability to teach in a second

area," "Depth of Uniberisty work," and "Scores on standardized tests."

The MSA and Non-MSA hiring officers also agreed on the top three personal criteria: "Ability to work with students," "Good communication skills," and "Enthusiasm." The criterion that was ranked least important was "Tact" by both groups.

There was a good deal of consensus movement shown from Questionnaire I to Questionnaire II. The median scores became smaller in the first half of the rankings and larger in the second half, showing less variance in the rankings. This was true for both the MSA and Non-MSA rankings. The exceptions to this were "Student teaching" and "Enthusiasm" on the MSA hiring officers professional list. Another exception is that both the MSA and Non-MSA ranking showed no movement toward consensus in the criterion of "Vitality." When consulting the comments, there is an indication that there was some confusion as to what "Vitality" meant, which could be the reason for lack of consensus.

Because all of the criteria would be classified as important, the final criteria ranking was grouped into quarters. The number of responses for each criterion within its respective quartile was recorded for both the first and second questionnaire and percentages were computed. The percentages showed a strong increase in every case for both criteria rankings and both statistical area groups. The exceptions were with the MSA hiring officers ranking of

"Previous work experience" and "Letters of recommendation," which showed little or no increase in percentage of response within their respective quartile. The changes of percent of response within the criterion's respective quartile (both positive and negative) did reveal that the hiring officers reconsidered their criteria rankings. Also the fact that almost all of the criteria changed positively, showed that movement toward consensus did occur.

The comments that the hiring officers included in Questionnaire II added scope to the criteria. The Delphi technique is important as a tool to gain positive and negative input. The comments showed that, although there was movement toward consensus on almost all of the criteria, there were also educators who had questions or concerns about the ranking placement.

The MSA and Non-MSA hiring officers' final rankings were compared with each other to determine the amount of difference of opinion because of the size or location of their districts. The professional criteria showed that, although with most of the criteria both groups were in agreement, a small number were not. The non-agreement criteria indicated that MSA hiring officers were more concerned with professional educator skills, and Non-MSA hiring officers were more concerned with social skills of the teachers.

One area of weakness that was noticed was the inablility to discern the amount of thought and analysis

that the participants gave to their responses. Some of the
returned Q II's showed a great deal of thought, through the
comments that were offered, but other returns only placed
number rankings. This second type of respondents, although
in the minority, left the researcher wondering how much time
the participant had spent on his/her responses. This
problem is not uncommon in other Delphi studies (Borg,
1983).

Conclusions and Implications

As a result of the analysis of the Delphi technique
using chief hiring officers in selected MSA and Non-MSA
districts across the United States, it was concluded that:

1. A Delphi Technique can be used to develop a
consensus ranking of important criteria for the hiring of
newly certified teachers, when the participants are given a
criteria list. Personal and Professional criteria lists
ranked by chief hiring officers in MSA and Non-MSA districts
developed two ranked lists of selection criteria in an order
of importance for that area. The efforts by the hiring
officers would indicate that such a list could be used when
hiring newly certified teachers. It would also indicate
that the criteria that are ranked highest should be
addressed in preparation courses for prospective teachers.

2. The Delphi Technique induced the participants
to move toward consensus from Questionnaire I to
Questionnaire II. Both groups of hiring officers showed less

variability of rankings over the two rounds. This would imply that the final ranking of the criteria would be valid to use in the hiring of newly certified teachers. For instance, the hiring officer could use techniques to ascertain if the candidate did have a good understanding of children or good communication skills. Also a teacher hired using the criteria rated high or moderately high on both the professional and personal lists would stand a very good chance of being a successful teacher.

3. The added comments are also very important to a Delphi Technique. The comments suggested that, although the criteria ranking gained consensus, there were also a number of participants who felt differently about the ranks, and their comments helped give scope to the consensus. This would imply that chief hiring officers could use the comments from this study to compare their own practices and philosophies for the hiring of newly certified teachers.

4. MSA hiring officers and Non-MSA hiring officers put different emphasis on various criteria even though their rankings are quite similar. The movement to consensus was less for some criteria, depending on whether the hiring officers were from MSA or Non-MSA groups. This implies that there is a difference in MSA and Non-MSA hiring practices. Districts that are within or close to urban areas and those that are within more rural areas have certain characteristics and needs that set them apart from each other. For this reason, consideration must be given to the

location and the size of a district when developing hiring procedures.

5. Differences between the medians of the professional criteria for MSA and Non-MSA hiring officers are tied to the expectations for newly certified teachers in the areas the participants represent. Although there are differences between the medians in the personal criteria, the reasons for these differences are not determined, but it can be implied that professional criteria are more specific and easy to determine than personal criteria. Professional criteria can therefore reflect the specific district requirements for a new teacher. These perceptions are easy to determine as characteristics for a MSA or Non-MSA school district. The personal criteria, being more nebulous and broad, could reflect the personality of the chief hiring officer or the entire individual school district (whether large or small).

Recommendations

The following recommendations are presented for further consideration based on the results of this study.

Recommendations for MSA and Non-MSA School Districts

1. Most school teachers are hired because they compare favorably to some sort of criteria, yet few districts have developed official, consistent lists of

criteria for hiring newly certified teachers. It has been shown that a hiring process based on criteria is more valid than one that is not. It has also been mentioned that each district has specific needs and should develop its own criteria. These listings of professional and personal criteria were ranked with the input of many chief hiring officers in both MSA and Non-MSA districts across the nation. Because the criteria listings from this study represent consensus, they should be used to help individual districts develop their own criteria listing. The individual districts should analyze the consensus listing from the chief hiring officers in this study, then add or delete those criteria that are specifically important to their distict.

2. The Delphi study generated hundreds of comments concerning the usefulness of the professional and personal criteria listings. These comments helped define the meaning that each criterion had for the individual hiring officers, as the comments indicated how these criteria were used or not used in the hiring process of various school districts. An analysis of these comments should be made by the educators and then compared with their own present hiring systems to see if this Delphi study produced more important criteria or increased insight into the use of the criteria in the hiring process.

<u>Recommendations for Colleges of Education</u>

     1. In an open system as described by Katz and Kahn
(1978), an institution or organization is dependent on the
outside environment for inputs and for assimilation of its
outputs or products. A college of education is an open
system dependent on the environment for inputs, which are
both students and financial support, and for assimilation of
its outputs, which are the graduates or newly certified
teachers. The open organization (college of education)
needs to be aware of the wants of the environment which, in
this case, is the chief hiring officers in districts across
the country. The professional and personal criteria lists
are valid messages from the environment as to what criteria
chief hiring officers are using in interviewing newly
certified teachers. Therefore it would be important for
colleges of education to consider the listings of criteria
as inputs from the environment and insure that those who are
certified in their system have acquired skills related to
the necessary criteria, such as "Understanding of children,"
"Ability to motivate." etc.

     2. Much is being done by colleges of education to
improve their preparation and certification programs to
comply with the educational reform movement (Grosman, 1985).
It is recommended that the criteria ranking be used to help
pre-service students become aware of what criteria against
which they will be measured when they become teachers. This
will help add motivation to the students' learning process,

as well as provide a rationale for non-continuance of students who are not acquiring the necessary skills.

Recommendations for Further Study

1. The chief hiring officers in both MSA and Non-MSA districts ranked "Scores on standardized tests" the lowest of all the professional criteria. This would indicate resistance on the part of educators to the use of standardized testing in the process of hiring newly certified teachers. However, there is a growing demand by the public to use testing to validate the hiring process (Mitzel, 1984). A study should be conducted on the use of tests and their effectiveness in selection process.

2. This research supported Culhane (1964), who concluded that there were differences between districts close to or in urban areas and those in rural settings. This research showed that there was a difference in what chief hiring officers perceived as necessary criteria in MSA as compared with Non-MSA school districts. However, it does not answer the question as to why these differences persist. A study should be conducted to ascertain why various criteria are more important for districts from one type of location and less crucial for districts from the second type of location (i.e., MSA or Non-MSA).

3. Strauss and Zeigler (1975) indicated that a problem with the Delphi technique is the possibility that items of the study may be misunderstood by both the

respondents and/or the intermediary. Several respondents made mention of their lack of understanding of what various criteria meant. To alleviate this confusion and to make certain that each criterion has a standardized meaning for all, a follow-up study should be conducted to clarify the definition that chief hiring officers have for each criterion.

4. This study showed how chief hiring officers ranked professional and personal criteria, yet the lists were kept separate. No effort was made to show what criteria would be more important in a combined listing, whether personal criteria would be ranked higher than professional or visa versa. A study, therefore, needs to be conducted to determine whether personal or professional criteria are more important to chief hiring officers.

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APPENDIX A

CRITERIA STUDIES SUMMATION

PROFESSIONAL CRITERIA

	Bryant et al. (1978)	May & Doerge (1972)	Rhodes & Peckham(1960)	Yanis & Carey (1972)	Napier (1975)	Lesher & Wade (1972)	Mortaloni (1974)	Gaugham (1967)	Johnson (1976)	Total Frequencies
Ability to teach in second area	X									1
College grades (scholarship)		X								1
Standardized test scores		X								1
Ability to plan lessons			X				X			2
Ability to motivate			X				X			2
Knowledge of basic teaching skills			X							1
Student teaching					X		X			2
Use of English language					X					1
Understanding of children							X			1
Classroom control							X			1
Clarity of goals									X	1
Favorable letters of recommendation		X		X			X		X	4
Provision made for individual differences when planning lessons							X		X	2
Depth of University work		X								1
Previous work experience	X	X								2
Knowledge of learning theories				X						1

PERSONAL CRITERIA

	Bryant et.al. (1978)	May & Doerge (1972)	Rhodes & Peckham(1960)	Yanis & Carey (1972)	Napier (1975)	Lesher & Wade (1972)	Mortaloni (1974)	Gaugham (1967)	Johnson (1976)	Total Frequencies
Maturity	X									1
Poise	X		X							2
Enthusiasm	X						X		X	3
Health		X	X							2
Tact			X							1
Vitality			X							1
Courtesy			X							1
Attitudes		X		X				X		3
Appearance		X			X	X				3
Self confidence						X				1
Ability to work with others	X									1
Emotional balance									X	1
Ability to work with students			X	X			X	X		4
Good communication skills						X			X	2
Dependability							X			1
Ability to take advice							X			1

APPENDIX B

PILOT STUDY I

November 7, 1986

Dear

    As a doctoral candidate at Oklahoma State University, I
am currently involved in a pilot study for my dissertation
concerning criteria school districts use when hiring new
teachers. You have been selected because of your
involvement in hiring new teachers. If you will allow me to
take a few minutes of your time, I would very much
appreciate your input.

    Past studies in this area have shown that new teachers
are selected on the basis of two major categories of
criteria; Professional, i.e. college degrees, student
teaching, ability to plan lessons, etc., and Personal, i.e.
enthusiasm, health, appearance, etc. Could you please list
the criteria you use in evaluating prospective teachers'
qualifications. A survey sheet is provided for your
convenience, as well as a self addressed envelope.

    Thank you for your assistance and cooperation in my
dissertaion pilot research. My final research plan involves
a consensus from all 50 states in the U.S. concerning the
most advantageous criteria to use when selecting new
teachers. If you would be interested in the results of my
research, please let me Know.

                              Sincerely,

                              John P. Broberg
                              543 N. 1000 E.
                              Orem, UT 84057

Dissertation Chairman
Dr. A. Kenneth Stern
309 Gundersen Hall
Oklahoma State University
Stillwater, OK 74078

CRITERIA FOR SELECTION OF NEW TEACHERS

Name of School District:_____

Professional Criteria:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Personal Criteria:

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX C

PILOT STUDY II

OSU

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

December 8,1986

Supt.

OK

Dear Superintendent   ,

As a doctoral candidate at Oklahoma State University, I
am currently involved in a pilot study for my dissertation
concerning criteria school districts use when hiring new
teachers. You have been selected because of your
involvement in hiring new teachers. If you will allow me to
take a few minutes of your time, I would very much
appreciate your input. If there is another person in your
district that has the primary responsibility with hiring you
are welcome to refer this questionnaire to him/her.

Past studies in this area have shown that new teachers
are selected on the basis of two major cat gories of
criteria; Professional, i.e. college degrees, student
teaching, ability to plan lessons, etc., and Personal, i.e.
enthusiasm, health, appearance, etc. Enclosed are two lists
of these criteria taken from prior research. According to
your assessment of prospective teachers, select the criteria
from each list in order of most to least importance, by
numbering 1,2,3, etc. (number 1 being the most important
criteria). If there is any item which you feel is
unimportant, please omit it. You are also welcome to add
any criteria that you feel should be included.

Thank you for your assistance and cooperation in my
dissertation research. My final research plan involves a
consensus from all 50 states in the U.S. concerning the most
advantageous criteria to use when selecting new teachers.
If you would be interested in the results, please let me
know.

Sincerely,

John P. Broberg
543 N. 1000 E.
Orem, UT 84057

Dissertation Chairman
Dr. A. Kenneth Stern
309 Gundersen Hall
Oklahoma State University
Stillwater, OK 74078

CRITERIA FOR HIRING OF NEW TEACHERS

District_____ Name_____ Position_____

Instructions: Number 1,2,3, etc. on each list, starting with what you feel is
    the most important professional or personal criteria for hiring new
    teachers. You may omit criteria from these lists, which you feel are
    unimportant and add criteria which you feel should be included.

List 1   List 2

Professional Criteria   Personal Criteria

_____ Ability to teach in second area   _____ Maturity

_____ College grades (scholarship)   _____ Poise

_____ Scores on standardized test   _____ Enthusiasm
        (such as NTE)
_____ Ability to plan lessons   _____ Health

_____ Ability to motivate   _____ Tact

_____ Knowledge of basic teaching   _____ Vitality
        skills
_____ Student teaching experience   _____ Courtesy

_____ Use of English language   _____ Attitudes

_____ Understanding of children   _____ Appearance

_____ Classroom control   _____ Self confidence

_____ Clarity of goals   _____ Dependibility

_____ Favorable letters of   _____ Ability to work with
        recommendation   others
_____ Provisions made for individual   _____ Ability to take
        differences when planning lessons   advice
_____ Previous work experience   _____ Emotional balance

_____ Knowledge of learning theories   _____ Ability to work with
                                                   students
_____ Depth of university work   _____ Good communication
                                                   skills

_____ _____   _____ _____

_____ _____   _____ _____

_____ _____   _____ _____

_____ _____   _____ _____

APPENDIX D

QUESTIONNAIRE I

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

January 19, 1987

Supt.

Dear Superintendent   ,

    As a doctoral student at Oklahoma State University, I am
currently involved in a dissertation study concerning criteria
school districts use when hiring newly certified teachers. I
plan to use a Delphi research technique and invite you to become
a participant in a panel of educators from school districts
throughout the United States. If there is another person in
your district office that has the primary responsiblity for
hiring, you are welcome to refer this invitation to him/her.
    The Delphi technique is intended to get expert opinion
without bringing the experts together face to face. This
research will utilize three successive mailings designed to
bring about a consensus concerning what is the most important
criteria when hiring newly certified school teachers.
Differences between schools from metropolitan and rural areas
will also be noted.
    The first questionnaire is included with this letter. It
asks you, the participant, to rank hiring criteria according to
their professional or personal listings, and add any new
criteria that you feel are necessary. The second questionnaire
will include the consensus rankings from the first survey and a
comparison of your rankings; asking you to revise your opinions
or to specify the reasons for not moving to consensus. The
final questionnaire will include the consensus and minority
opinions. It will also provide a final chance to revise
opinions.
    This study can be very helpful to school districts as well
as college teacher preparatory programs. I am asking your help
in completing this study by being a part of selected
administrators from each state. Please complete the attached
questionnaire and return it in the envelope provided as soon as
possible. Thank you very much for your cooperation.

        Sincerely,

        John P. Broberg
        543 N. 1000 E.
        Orem, UT 84057

Dissertation Chairman
Dr. A. Kenneth Stern
Oklahoma State University

CRITERIA FOR HIRING OF NEWLY CERTIFIED TEACHERS

District_____ Name_____ Position_____

Instructions: Number 1,2,3, etc. on each list, starting with what you feel is
    the most important professional or personal criteria for hiring newly
    certified teachers. You may omit criteria from these lists, which you
    feel are unimportant and add criteria which you feel should be included.

List 1

Professional Criteria

_____ Ability to teach in second area

_____ College grades (scholarship)

_____ Scores on standardized test
    (such as NTE)

_____ Ability to plan lessons

_____ Ability to motivate

_____ Knowledge of basic teaching
    skills

_____ Student teaching experience

_____ Use of English language

_____ Understanding of children

_____ Classroom control

_____ Clarity of goals

_____ Favorable letters of
    recommendation

_____ Provisions made for individual
    differences when planning lessons

_____ Previous work experience

_____ Knowledge of learning theories

_____ Depth of university work

List 2

Personal Criteria

_____ Maturity

_____ Poise

_____ Enthusiasm

_____ Health

_____ Tact

_____ Vitality

_____ Courtesy

_____ Attitudes

_____ Appearance

_____ Self confidence

_____ Dependability

_____ Ability to work with
    others

_____ Ability to take
    advice

_____ Emotional balance

_____ Ability to work with
    students

_____ Good communication
    skills

APPENDIX E

QUESTIONNAIRE II

⯅ Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

February 25, 1987

Superintendent

Dear Superintendent,

Thank you very much for your response to the first
questionnaire of this Delphi study concerning criteria for
hiring newly certified teachers. The second phase of the Delphi
technique requires your completion of a new questionnaire
containing the same criteria items, yet they are ranked
according to the average rating each item received from 70
educational leaders across the United States, including
yourself.

The objective of this second questionnaire is to bring
about a group consensus on the criteria ranking as well as
provide a place for contrary opinions. The purpose of the
Delphi technique is to bring group agreement or consensus and
thus, I ask you to reconsider your responses according to what
others in the group have responded.

In the second questionnaire please compare your responses
with the mean response given for each criteria, then once again
rank the various criteria (#1 being the most important criteria
and #16 being the least important criteria). In areas where you
are still not in agreement with the group mean please state your
reason, if any, in the space provided. Your dissenting comments
are also very important to this study. Please rank both the
professional and personal criteria (front and back of
questionnaire).

Some participants have mentioned the close relationship
that some items might have with one another. At the end of this
study, the list will be analyzed by quartiles, which will show
the similar groupings, so please mark each item. Again, thank
you so much for your time and cooperation in this study. Your
promptness in returning your questionnaire is greatly
appreciated.

Sincerely,

John P. Broberd.

DELPHI QUESTIONNAIRE II
CRITERIA RANKING FOR HIRING OF NEWLY CERTIFIED TEACHERS

District_____ Name_____

Accompanying each criteria are the rankings according to mean responses (Column b), your previous response (Column c), your new response (Column d) in light of knowing the mean response. If your new response is in great variance from the mean response (Column b), than please state the reason(s) if any, in Column e.

PROFESSIONAL CRITERIA	Ranking by mean response	Your Previous Response	Your New Response	Reason for variance between (b) and (d)
(a)	(b)	(c)	(d)	(e)
Understanding of children	1			
Knowledge of basic teaching skills	2			
Ability to motivate	3			
Student teaching Experience	4			
Use of English Language	5			
Classroom control	6			
Ability to plan lessons	7			
Provisions for individual differences	8			
Previous work Experience	9			
Clarity of goals	10			
Favorable letters of Recommendation	11			
College grades	12			
Knowledge of learning theories	13			
Ability to teach in second area	14			
Depth of university work	15			
Scores on standardized tests	16			

PERSONAL CRITERIA (a)	Ranking by Mean Response (b)	Your Previous Response (c)	Your New Response (d)	Reason for variance Between (b) and (d) (e)
Ability to work with students	1			
Good Communication skills	2			
Enthusiasm	3			
Ability to work with others	4			
Attitudes	5			
Self Confidence	6			
Dependability	7			
Emotional Balance	8			
Maturity	9			
Poise	10			
Vitality	11			
Ability to take Advice	12			
Health	13			
Appearance	14			
Courtesy	15			
Tact	16			

DELPHI QUESTIONNAIRE II
CRITERIA RANKING FOR HIRING OF NEWLY CERTIFIED TEACHERS

District_____ Name_____

Accompanying each criteria are the rankings according to mean responses (Column b), your previous response (Column c), your new response (Column d) in light of knowing the mean response. If your new response is in great variance from the mean response (Column b), than please state the reason(s) if any, in Column e.

PROFESSIONAL CRITERIA (a)	Ranking by mean response (b)	Your Previous Response (c)	Your New Response (d)	Reason for variance between (b) and (d) (e)
Understanding of children	1			
Knowledge of basic teaching skills	2			
Ability to motivate	3			
Classroom control	4			
Use of English Language	5			
Student teaching Experience	6			
Ability to plan lessons	7			
Provisions for individual differences	8			
Clarity of goals	9			
College grades	10			
Knowledge of learning theory	11			
Favorable letters of recommendation	12			
Previous work experience	13			
Ability to teach in second area	14			
Depth of university work	15			
Scores on standardized tests	16			

PERSONAL CRITERIA	Ranking by Mean Response	Your Previous Response	Your New Response	Reason for variance Between (b) and (d)
(a)	(b)	(c)	(d)	(e)
Ability to work with students	1			
Enthusiasm	2			
Good Communication skills	3			
Attitudes	4			
Self Confidence	5			
Ability to work with others	6			
Dependability	7			
Emotional Balance	8			
Maturity	9			
Vitality	10			
Poise	11			
Appearance	12			
Health	13			
Courtesy	14			
Ability to take Advice	15			
Tact	16			

OSU

Oklahoma State University /

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

March 25, 1987

Supt.

Dear Supt.   ,

     I have not yet received your response to the second
questionnaire in the delphi study on teacher hiring
criteria, which was sent on February 25th. The success of
this study is dependant upon the return of the
questionnaires. I would very much appreciate your
completion of this second questionnaire which asks for a
reevaluation of the criteria, according to what the mean
response from the other 70 participants in this study.

     If you have already forwarded the questionnaire to me
please excuse this reminder. If you have misplaced your
copy, I have included another copy along with a return
envelope. Quick response would be greatly appreciated.

                              Thank you again,

                              John P. Broberg
                              543 North 1000 East
                              Orem, UT 84057

APPENDIX F

SAMPLE DEMOGRAPHICS

MSA Participants in the Delphi Study

State	School District	School System Enrollment
Alabama	Anniston CSD	4,902
Arizona	Mesa USD 4	34,769
Arizona	Osborn ESD 8	3,126
Arizona	Tempe Union HSD #213	7,664
Arkansas	Fort Smith SD	12,100
Arkansas	Little Rock SD	19,100
California	Santa Rosa City EHSD	12,300
Colorado	Pueblo CSD	18,700
Conneticut	Waterbury SD	14,000
Delaware	Brandywine SD	NG
Florida	Broward SD 6	135,313
Georgia	Muscogee Co. SD	NG
Hawaii	Central Oahu SD	NG
Idaho	ISD of Boise City	21,900
Idaho	Madison SD 321	3,800
Illinois	Rockford SD 205	29,600
Indiana	Evansville-Vander. SD	22,000
Indiana	Fort Wayne Comm. SD	32,200
Indiana	Lafayette SD	7,700
Iowa	Des Moines Comm. ISD	30,300
Iowa	Waterloo Comm. SD	12,800
Kentucky	Jefferson Co. SD	104,867
Maine	Falmouth SD	1,100
Maryland	Montgomery Co. SD	90,200
Massachusetts	Brockton SD	16,200
Massachusetts	Attleboro SD	5,700
Michigan	Dearborn SD	12,400
Michigan	Flint SD	32,000
Michigan	Lansing	26,000
Mississippi	Jackson SSD	31,508
Missouri	Riverside Gardens SD	6,109
Missouri	St. Joseph SD	13,194
Nebraska	Lincoln SD	24,900
Nevada	Clark Co. SD	87,425
Nevada	Washoe Co. SD	31,700
New Hampshire	Dover SAU 11	3,300
New Jersey	New Brunswick SD	4,000
North Carolina	Fayetteville CSD	8,700
North Carolina	Wake Co. SD	54,709
North Dakota	Fargo SD 1	8,300
Ohio	Cincinnati CSD	54,400
Oregon	Eugene SD 4	17,500
Oregon	Salem-Keizer SD 24	22,200
Pennsylvania	Easton Area SD IU 20	7,597
Pennsylvania	New Castle Area SD IU 4	5,280
Rhode Island	Warwick SD	15,329
South Carolina	Richland SD 1	28,500
South Carolina	York SD	3,600

South Dakota	Brandon Valley SD 49-2	1,779
South Dakota	West Central SD 49-7	968
South Dakota	Sioux Falls SD 49-5	13,600
Tennesee	Chattanooga CSD	28,092
Texas	Corpus Christi ISD	38,500
Texas	Lubbock ISD	29,000
Utah	Alpine SD	32,400
Virginia	Lynchburg CSD	10,609
West Virginia	Cabell Co. SD	18,550
West Virginia	Wood Co. SD	19,196
Wisconsin	Wausau SD	8,040
Wyoming	Natrona Co. SD 1	13,800

Non-MSA Participants in the Delphi Study

State	School District	School System Enrollment
Alabama	Decatur CSD	8,475
Alaska	Kenai Pen. Borough SD	5,940
Arizona	Holbrook USD 3	2,424
Arkansas	Cabot SD	3,700
Arkansas	Russellville SD	4,300
Colorado	Buena Vista SD R-31	950
Colorado	Montrose Co. SD Re-1J	4,415
Delaware	Indian River SD	6,000
Florida	Collier Co. SD 11	13,868
Florida	Highland SD 28	7,322
Georgia	Appling Co. SD	NG
Hawaii	Hawaii SD	21,000
Idaho	Caldwell SD 132	4,300
Illinois	Batavia Unit SD 101	2,800
Illinois	Orion CUSD 223	1,500
Illinois	Northwest CUSD 175	NG
Indiana	Crawfordsville Comm. SD	2,300
Indiana	Jac-Cen-Del Comm. SD	NG
Iowa	Shenandoah Comm. SD 13	1,400
Kansas	Liberal USD 480	3,100
Kentucky	Ashland ISD	4,000
Kentucky	Covington ISD	6,200
Kentucky	Paducah ISD	3,800
Maryland	Frederick Co. SD	23,300
Michigan	Fenton Area SD	1,500
Michigan	Leslie SD	1,600
Michigan	Standish-Sterling SD	2,200
Minnesota	Stillwater SD	7,600
Minnesota	Rockford SD	1,400
Mississippi	Philadelphia SSD	1,209
Mississippi	West Point SSD	3,308
Montana	Bozeman HSD 7	4,100
Montana	Laurel HSD 7	1,600

Nebraska	Columbus SD	2,800
Nebraska	Gering SD	2,300
Nebraska	Neligh SD	600
Nevada	Douglas Co. SD	3,557
New Hampshire	Hanover SAU 22	1,700
New Jersey	Millville SD	5,400
New Jersey	Washington Twp. SD	300
New Mexico	Gadsden AU	7,400
New Mexico	Gallup-McKinley	11,600
New York	Homer Central SD	2,983
North Carolina	Tarboro City SD	3,200
North Carolina	Whiteville CSD	2,800
North Dakota	Minot SD 1	7,800
Ohio	Marysville EVD	2,800
Ohio	Ravena CSD	3,600
Oklahoma	Clinton ISD	1,836
Oklahoma	Waukomis ISD	465
Oregon	Bend Admin. SD 1	7,500
Pennsylvania	Chambersburg Area SD IU12	8,963
South Carolina	Beaufort Co. SD	9,900
South Carolina	Greenwood SD 50	8,500
South Dakota	McLaughlin SD 15-2	500
Tennessee	Union City CSD	2,215
Texas	Alpine ISD	1,100
Utah	San Juan SD	3,300
Virginia	Greensville Co. SD	3,493
Virginia	Warren Co. SD	4,085
Washington	Pullman Sd 267	2,370
West Virginia	Randolph Co. SD	5,907
Wisconsin	Reedsburg SD	2,168
Wisconsin	Rhinelander SD	3,908
Wisconsin	Wisconsin Rapids SD	6,470
Wyoming	Park Co. SD 6	200
Wyoming	Converse Co. SD 1	2,000
Wyoming	Sweetwater Co. SD 1	5,700

Note - NG= Not given

VITA

John Preston Broberg

Candidate for the Degree of

Doctor of Education

Thesis: RANKING CRITERIA FOR HIRING NEWLY CERTIFIED
TEACHERS: A DELPHI TECHNIQUE

Major Field: Educational Administration

Biographical:

Personal Data: Born in Phoenix, Arizona, April 16,
1945, the son of Charles W. and Lucy O. Broberg.
Married to Gayle Christensen on July 10, 1970.

Education: Graduated from North High School, Phoenix,
Arizona, in May, 1963; received Bachelor of Arts
degree in History from Brigham Young University in
August, 1969; received Master of Education degree
from Brigham Young University in August, 1976;
completed requirements for the Doctor of Education
degree at Oklahoma State University in December,
1987.

Professional Experience: Teacher, Alpine School
District, American Fork, Utah, August 1971, to
July, 1977; Counselor, Alpine School District,
American Fork, Utah, August, 1977 to July 1987;
Graduate Assistant, Oklahoma State University,
August, 1985, to June 1986; Assistant Principal
Shawnee School District, Shawnee, Oklahoma,
August, 1987 to present.