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POSITIONS ON SELECTIVE ADMISSION AND RETENTION AND THEIR IMPLICATIONS FOR A TEACHER EDUCATION PROGRAM

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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*****

The Ohio State University

1977

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CHAPTER I

INTRODUCTION

The study of teacher education students is an important approach to the larger study of teacher education. The personnel selected and retained in teacher education institutions vitally affect the goals and setting in which learning takes place. The teaching process also will be affected by the nature of the learner involved. The selection and retention processes of preservice teachers are designed to continually improve programs by controlling the constraints of time, talents, and financial resources necessary to accomplish the task.

Some institutions concerned with teacher education do not seek to create teachers but to help them develop teaching skills in a variety of ways such as demonstrating competencies, developing perceptual views of themselves, and of learners, or nurturing personality, values, and life style shaped before admission. The institution whose goals are firmly established will find a well-defined position regarding selective processes beneficial in helping them to achieve unique purposes and exert influences on preservice teachers.

The demand for screening of applicants for teacher education arises from within the profession and from the public. A candidate for an important public service such as teaching has obligations as a
subsidized social officer which far outweigh any individual right he may possess (Learned and Wood, 1938). The 1960 Golden Anniversary White House Conference on Children and Youth recommended "that criteria for selection include: mastery of subject matter; sympathetic understanding of students and willingness to confer freely with them; effective classroom presentation; recognition of the partnership nature of the learning process; and teaching methods which will inspire love of learning, stimulate civic responsibility and instill democratic ideals" (Lindsey, p. 161).

From within the profession there is a demand for procedures to be implemented which allow for self-appraisal and termination of aspirants who lack the personal and intellectual attributes for becoming effective teachers. After entry, steps must be taken to weed out the demonstrably incompetent (Di Pasquale, p. 24). Many institutions do select students for admission although the selection is more nominal than functional (Ebel, p. 16). Most teacher education institutions observe some form of a four-point screening process including admission to the institution, admission to formal professional education courses, admission to student teaching, and admission to approval for graduation and certification (McClure, p. 144). However, evidence points to the conclusion that programs of teacher education have not thus far selected the most able students (Ebel, p. 17). The need for selection is also recognized by schools employing beginning teachers. Supply and demand changes throughout the years have made the "desirability" of selection evident from a pragmatic point of view.
As more teachers become available, selection of the best qualified becomes a realistic goal.

Since institutions vary in the nature of their programs in diverse ways, any generalizations regarding selection and retention should be based upon a conceptual framework that takes into account the philosophical, psychological, and methodological stance of the institution. Screening and retention practices should match the structure of an institution's program reasonably well or they will be ineffective in contributing to the development of the desired product. This is especially evident when a teacher education institution views its purpose as an alternative to other programs which adhere to certain admission and retention standards. For an institution which views preservice selection of teachers as incompatible with democratic ideals, guidelines for developing a selection process have little to offer. Principles for developing admissions policies have no meaning for an institution devoted to lowering the attrition rate of university underachievers by screening them into a program for teaching the disadvantaged.

This study presents a framework within which an institution can identify its position and can evaluate the effectiveness of the screening processes by comparing them to generalizations derived from current literature. It is based upon the belief that selection criteria should derive from program goals and the capabilities needed by individuals to achieve those goals (Haberman, p. 234).
Through its program of selection and retention, each college controls the quality and characteristics of the teachers it provides for the schools. Such a program should be guided by policies derived from the purposes of the institution. The extent to which institutional purposes are realized indicates the adequacy of the policies and the procedures. (Wilk, p. 308)

The study of selection and retention criteria and procedures is mandated by existing standards. A specific, immediate need has been manifested by the newly adopted Standards for Colleges or Universities Preparing Teachers, the framework for sweeping institutional reforms for the professional preparation of teachers by the Ohio State Board of Education.

Thorough, comprehensive and appropriate restructuring of teacher education had been called for by the State Board of Education on May 14, 1973, culminating six years of research-based, long-range planning in anticipation of an improved supply of teachers, a condition essential for the transformation of teacher education. (Ohio Department of Education, p. i)

In the process of implementing these standards, the Ohio Department of Education has set priorities for research. Included in these priorities are the recruitment, selection, retention, and counselling of teacher education students. The standards and the research priority designation point to the specific, immediate need for research in this area and would indicate that clarification of theoretical frameworks for selection and retention are realistic at this juncture in the history of teacher education.
The Purpose of the Study

There exists within the literature several distinctive positions regarding selection and retention. This study is an attempt to identify these positions, to articulate the basic assumptions upon which they are based and to suggest guidelines which are consistent with these unique positions. The purpose of this study is to generate a body of knowledge from which institutions can develop positions regarding the selective admission and retention of preservice teachers. An attempt will be made to discover viable and adaptable generalizations about selective admission which can be used to guide teacher education institutions in establishing or modifying selection criteria and processes unique to individual programs. The goal will be to produce a body of knowledge consisting of generalizations which can be implemented by institutions concerned with the preparation of teachers. Specifically, the study will attempt to answer these questions:

1. What explicit or implicit assumptions exist in the literature regarding selective admission and retention?

2. What distinctive positions, if any, regarding selection and retention can be identified? How can they be described?

3. What criteria exist in the literature for each of these positions with regard to selection and retention which are presumed to be conducive to the acquisition of the body of knowledge, skills, attitudes and values necessary for becoming a teacher?
4. What procedures exist in the literature for implementing each of these positions which are presumed to be conducive to the acquisition of the body of knowledge, skills, attitudes and values necessary for becoming a teacher?

**Significance of the Study**

The *Review of Educational Research* (1967) found four questions about admission and retention treated in the literature: "What are current selection and retention practices? What are the results of institutional and individual decisions? What variables are useful in predicting subsequent behavior? and What measurement concerns are relevant to admission and retention in teacher education?" (Wilk, Edson, and Jing Jyi Wu, p. 221).

The National Council for Teacher Education and Professional Standards has classified recent research into four categories: (1) efforts to identify good teachers and thus to identify qualities which may be predictive of effective teaching as these findings may apply to selection and retention in the preparation program; (2) identification of characteristics which, when fostered, or developed, may be supposed to result in the preparation of effective teachers; (3) elements, procedures, and apparent effects of selective admission and retention programs in specific institutions; and (4) general studies of selective admission and retention practices (Lindsey, pp. 166, 167).

Publications between 1905 and 1952 concerning various problems incident to the preservice selection of teachers were reporting investigations conducted for one of the following purposes: (a) to ascertain
the desirability of preservice selection; (b) to formulate a criterion of teaching success; (c) to identify the factors related to teaching success; (d) to formulate an effective technique for the preservice selection of teachers; (e) to ascertain the practices in regard to selective admissions, selective retentions, and recruitment. Empirical data from previous descriptive-comparative studies are especially limited because adequate conceptual foundations are lacking (Review of Educational Research, p. 230). Evaluation of entire teacher education programs, or even segments of programs, is spotty and inadequate (Encyclopedia of Educational Research, 1968, p. 1418). Woodruff (1963) proposed the identification of a basic set of segments or elements common to all teacher education programs so that appropriate tests could be designed which could be administered by institutions preparing teachers.

A more accurate conceptual description of the selection process and a valid theoretical formulation is needed in the literature to encourage meaningful implementation of theory in teacher education practice. The principles derived from this study will provide a context of theoretical positions for meaningful thought and action in the practice of selection of preservice candidates. Institutions offering alternative programs of teacher education could adapt criteria or modify existing procedures by applying the principles unique to their situations.

Because the study of teacher education students is an important approach to the larger study of teacher education, this attempt to
develop a body of concepts, theories, and positions uniquely adapted to the sphere of preservice teacher selection and retention is designed to move toward the development of a more adequate conceptual foundation for further research in teacher education.

**Pattern of Presentation**

The pattern of presentation of this study will begin with an introduction in which the context is identified and described and the purpose of the study is stated. Chapter two will present the procedures to be conducted including methodology utilized, the significance of the study, the limitations of the study, and the rules for conceptual analysis.

Chapter three will describe positions which emerge from the literature regarding selection and retention. Subsequent chapters will outline criteria and procedures which follow from the assumptions upon which each position is based. The criteria and procedures will be classified in relation to the acquisition of the body of knowledge, skills, and attitudes and values necessary for becoming an effective teacher. Implications will then be drawn from the definition of positions, including the concern for application in clarifying an institution's position for the purpose of generating practice based upon theory. The study will conclude with a summary of the findings, conclusions, and recommendations.
CHAPTER II

PROCEDURES

The procedures for this study are described in this chapter, including the methodology employed and the limitations of the study.

Methodology

Content analysis has been used as the means of identifying assumptions, processes, and criteria of selection and retention in teacher education as proposed in the literature. Both inductive and deductive processes were involved in the analysis. The technique involved making inferences from the literature by systematically and objectively identifying specific characteristics of messages. The specific use of content analysis in this study is for the purpose of auditing content against standards. Standards utilized include comparison against other sources and, when appropriate, comparison to a priori standards. Each of these procedures will be explained in this section of the study. Content analysis procedures require objectivity, systematic treatment, and generality (Holsti, p. 598). The analysis has objectivity because it has been carried out on the basis of explicitly formulated rules. It is systematic in that inclusion or exclusion of content or categories is done according to
consistently applied criteria of selection. The analysis has generality because the information is presented with a theoretical relevance to other attributes of the content.

The process of analyzing the literature involved a series of sequential steps followed by the researcher. First, extensive reading of the literature was done to inductively identify a problem and to establish possible approaches to solve the problem. Preliminary reading of the literature revealed various approaches to the problem of selecting prospective teachers. Various prescriptions were identified which offered criteria or procedures to be followed in the practice of selection and retention. The researcher noted a wide disparity between recommendations due to implicit or explicit assumptions held by writers. This disparity led to the formulation of four questions to be answered by the study. Subsequent readings and conceptual analysis centered around these central questions of the study.

The methodology employed in each step of the analysis is diagrammed in Figures one through four. Figure 1 depicts the procedures involved in answering questions one and two of the study. During the first analysis substantial notes were recorded on index cards which represented a synthesis of viewpoints regarding the desirability and appropriateness of selection at various levels in teacher education programs. Subsequently, the cards were sorted into various categories representing similarities in assumptions. Specifically, sources have been compared to other sources to identify explicit assumptions characterized by terminology such as "should be," "need," "ought," and other related
Selection based on Subjective Judgment

Toward Openness in Admission

Selection Based on Individual Diversity

Reluctance to Select Because of Predictor Limitations

Inductive Identification of Assumptions Regarding Selection and Retention (notes, card system)

Inductive Classification of Assumptions Regarding Selection and Retention (sorting)

Selection based on Measurable Characteristics or Behavior

Figure 1. Analysis of Assumptions and Positions
phrases. Implicit assumptions are inferred from the context. The literature was then reread to verify differences or similarities in viewpoints. These messages have been compared to other messages to discover key concepts which are grouped together to form coherent positions relative to selection and retention. This inductive procedure is an accepted methodology for content analysis.

One answer to the difficult problem of defining standards against which to audit sources is to make comparisons against other sources; that is, general norms for classes of communicators are developed inductively. (Holsti, p. 619)

Finally, the cards were grouped together inductively from a synthesis of specific and implied messages within the literature. Five distinct positions emerged from the above described inductive process. The last position, toward openness in admissions, is somewhat more limited in scope than some of the other positions; however, the researcher treats it as a separate position on the basis of unique underlying assumptions that do not characterize the other positions. Another position, selection based on individual diversity, is also limited in scope in that relatively few illustrations of this position appear in the literature. It is included in the study, however, as a distinct alternative to the other positions more widely held.

Analysis of Criteria and Procedures

The second part of the conceptual analysis represented in Figures 2 and 3 involved a deductive study of the criteria and procedures described in the literature representing each of the positions by comparing those criteria and procedures to the a priori standards
### Figure 2. Analysis of Criteria

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<tr>
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- Implications Position 1
- Implications Position 2
- Implications Position 3
- Implications Position 4
- Implications Position 5

**Reading:** Identification of Criteria Relating to Selection and Retention
Selection Based on Measurable Characteristics or Behavior

Selection Based on Subjective Judgment

Selection Based on Individual Diversity

Reluctance to Select Because of Predictor Limitations

Toward Openness in Admission

Figure 3. Analysis of Procedures
Teacher education students shall be selected and admitted pursuant to criteria and procedures adopted by the governing body of the college or university which are conducive to the acquisition of the body of knowledge, skills, attitudes, and values necessary for becoming an effective teacher. The phrase "attitudes and values" means those characteristics necessary for a prospective teacher to successfully contribute to pupil growth; development; and tolerance for, and understanding of, human diversity.

Retention of teacher education students shall be pursuant to established criteria predicated upon satisfactory progress toward acquiring and utilizing the requisite body of knowledge, skills, attitudes, and values while completing course work and clinical field-based experiences.

All messages regarding criteria within the universe of content are categorized as specified in the questions of the study; namely, criteria relating to the acquisition of the body of knowledge, skills, and attitudes and values necessary for becoming an effective teacher.

An extensive effort was made to subcategorize criteria relating to knowledge, skills, and attitudes and values by developing extensive definitions of these terms using philosophical literature. This method proved to be of little use, however, since the writers of the content being analyzed did not use the terms knowledge, skills, attitudes, and values in relation to those philosophical meanings. The philosophical definitions were discarded and definitions were sought by inductively deriving subcategories from the comparison of messages against messages.

Subcategorization has subsequently been accomplished by grouping messages in relation to knowledge, skills, attitudes, and values. The content was again read to determine what was meant by criteria presumed to be conducive to the acquisition of the body of
knowledge necessary for becoming an effective teacher. These messages were recorded and organized in outline form to develop an instrument for systematically recording criteria in relation to each of the positions. The same procedure was used to identify criteria presumed to be conducive to the acquisition of attitudes and values.Ultimately, an outline was developed drawn from a comparison of messages against messages which was comprehensive enough to provide a means of recording messages in the literature regarding criteria. This outline was transferred to a system of cards and all messages regarding criteria were labeled and indexed numerically. Findings were reported directly from the numerical card system. Figure 4 represents the outline developed and gives the numerical code used in the card system.

In a separate reading of the body of literature, descriptions of procedures were identified and recorded on cards. By means of comparison, individual and institutional procedures emerged as basic categories since the literature seems to indicate that most teacher education institutions employ procedures in both of these areas. By comparing messages against messages, subcategories were developed. The categories and subcategories of procedures were recorded on a numerical index of cards in the same manner as the classification of criteria. The literature was then read to label and classify all messages relating to procedures numerically. The findings were reported directly from this numerical index. The numerical index for procedures is presented in Figure 5.
1.0 Knowledge
   1.1 Academic competence
      1.11 Course content
      1.12 Grade point average
      1.13 Achievement testing
   1.2 Academic aptitude
      1.21 Cognitive ability
      1.22 Performance measurements
         1.221 College entrance scores
         1.222 H.S. courses, scholarship, rank
         1.223 Scholarship tests
         1.224 Teacher aptitude tests
         1.225 Other tests
         1.226 Scholarship in college courses
         1.227 Pattern of college courses completed

2.0 Skills (Performative Knowledge)
   2.1 Facilities (routinizable, institutional acts)
      2.11 Capacities
      2.12 Tendencies
         2.121 Behavioral
         2.122 Preferential
   2.2 Critical skills
      2.21 Following or judging performance
         2.211 Logical acts
         2.212 Strategic acts
      2.22 Executing performance
         2.221 Logical acts
         2.222 Strategic acts

3.0 Attitudes and Values
   3.1 Emotions
      3.11 Motives
      3.12 Commotions
      3.13 Feelings
   3.2 Beliefs
      3.21 In relation to subject matter
      3.22 In relation to people
      3.23 In relation to self
      3.24 In relation to purpose
      3.25 In relation to approaches to teaching

Figure 4. Criteria for Selection and Retention
1.0 Individual procedures
   1.1 Individual decisions
   1.2 Individual evaluations

2.0 Institutional procedures
   2.1 Admission to institution
   2.2 Preprofessional program
   2.3 Admission to education program
   2.4 Evaluation for retention
   2.5 Admission to student teaching
   2.6 Evaluation of readiness to teach
   2.7 Recommendation for certification

Figure 5. Procedures for Selection and Retention

Implications Drawn from the Analysis

This study has been conducted within the context of the belief that the distinct position with which a teacher education institution identifies will lead to broad implications for program development. In the third step of the content analysis, implications have been drawn for program development which are based on the researcher's synthesis of specific and implied concepts in the literature. Generalizations regarding the establishment of criteria and procedures for specific programs are classified by the positions they represent.

Other implications for program development are presented from the researcher's view based on inferences made from the messages of the content. In some instances implications are cited from the literature and documented. Implications for institutions are presented within
the context of a meaningful conceptual framework based on a clarification of the position and assumptions of a given program.

In the final procedures of the study, diagrammed in Figure 6, conclusions are generated from principal findings about theoretical stances regarding selection and retention, their underlying assumptions, and the criteria and procedures which follow from the position. Recommendations are offered by the researcher based on those conclusions. The recommendations are directed at the improvement of teacher education through clarification of purposes in selection and retention practices. Alternatives are provided in the form of guidelines for use by institutions within the framework of five distinct positions.

Limitations of the Study

The study of the literature on selection and retention will be comprehensive in nature, including all of the reviews of literature published from 1960 to 1976. Publications will be selected from those reviewed in Encyclopedia of Educational Research, Review of Educational Research, and Handbook of Research on Teaching, from 1960 to 1976. Other current literature will be identified from 1960 to 1976 as listed in Dissertation Abstracts, Eric Retrieval Information System, and Education Index. The descriptors used included "selection," "screening," "retention," and "teacher education."

The study of selection and retention is conducted from within the context of teaching effectiveness and the measurement of teaching effectiveness, yet no attempt will be made to treat these broader topics comprehensively.
Figure 6. Analysis of Findings
Traditional teacher education, with its frequently lengthy stays in the semantic stratosphere, has not done a very effective job of developing teaching skills, particularly at the preservice level. Accumulating evidence does suggest, however, that a genuine revolution in the nature and quality of teacher education is already visible on the horizon. It may not be implemented effectively in very many places, as yet, but the direction of movement does seem rather clear. . . . We are genuinely in sight of the theoretical principles, the operational measures, and even the developmental technology for moving onto a performance-based method of appraising teaching. A great deal of research remains to be done to discover additional theoretical principles which would lead to a more effective training. (Peck and Tucker, pp. 970-971)

This chapter has described the inductive and deductive procedures utilized in the content analysis.
CHAPTER III

POSITIONS IN THE LITERATURE REGARDING SELECTION AND RETENTION

In this chapter several positions which have been identified by this study will be described and illustrated. These positions have distinct features which separate them from the theoretical stance of other positions. Those writings which have been found to possess commonalities have been grouped together to form five distinct positions. Assumptions which characterize each of the positions are inferred from the explicit and implicit messages of the literature of this study. Writings relating to the position selection based on measurable characteristics or behavior are those by Etten, Broadbelt, Magee, Edson, Pigge, Simun, Lindsey, Ryans, Cline, Crocker, Slaughter, Wilk, DiPasquale, Ebel, Boze, and Ulibarri. Sources for the position of selection based on subjective judgment include the writings of Andrews, Haberman, Combs, and Denemark. The primary source for the position selection based on individual diversity is Olmstead. The position representing reluctance to select because of predictor limitations has been alluded to in the works of Fattu, Flanders, Durflinger, Ort, and Biddle. The position toward open admission to teacher education has been identified primarily from the writings of Gold, Houston, Getzels, and Jackson.

Reporting in relation to the positions is presented on three levels: descriptive, inferential, and prescriptive. On the descriptive level, messages are recorded which represent direct quotations from the writers regarding their beliefs in relation to selection and retention. These are presented within the context of the researcher's synthesis of their meanings. In subsequent chapters implications are offered by the researcher which seem to be appropriate for institutions holding similar assumptions.
Position: Selection Based on Measurable Characteristics or Behavior

A large body of literature in the 1960's and 70's has taken the position that teacher education institutions are responsible for practicing the selection of students with the most potential for teaching. One of the first major publications to take this position in the 1960's was the report of the task force on New Horizons in Teacher Education and Professional Standards for the National Commission on Teacher Education and Professional Standards:

The profession must assume responsibility for identifying qualities that can be measured accurately enough to provide bases for evaluation. Instruments and procedures must be set up to ensure evaluation of each prospective teacher by competent personnel, self-evaluation by each student, and continuous analysis of the evaluation processes themselves. (Lindsey, p. 162)

The task force constructed an extensive list of assumptions supporting selection:

The quality of teaching in our schools is of first importance to preservation and growth of a democratic society.

Members of a profession must themselves be well qualified in order to determine standards and develop processes for achieving the goals of education.

The profession has a right to expect its new members to be well qualified.

New members of the profession have a right to expect that acceptance indicates they are well qualified as persons and by preparation, that they have not been victims of poor guidance.

Each state is responsible for official recognition that there are bases for selection of competent teachers.

A competent teacher is a reasonable expectation for every pupil.
The teacher is an important influence on the learning process and on what is learned.

Teaching demands specific abilities and qualities of personality not possessed in sufficient degree by all people.

Although there may be some few characteristics required for persons in all specialities, different characteristics will be needed in different kinds of educational work. (Lindsey, p. 164)

Citing examples of early research and programs with a substantial history and consistent pattern in selection, the task force took the position that selection was not only desirable but feasible.

The assumption is therefore made that the ability to select for teacher preparation does exist with some reasonable assurance of success. (Lindsey, p. 168)

Certain characteristics are held to maximize the likelihood of success in teaching:

Although there is no single "teaching personality," there are personality characteristics which, along with certain knowledge and skills, maximize the likelihood of success in teaching, and other personality characteristics whose existence, under most circumstances and as a part of most constellations of knowledge and ability, may preclude effective teaching. (Lindsey, p. 171)

This mandate for selective practices is based upon a belief that responsibility is fourfold:

It is to the pupils who will be taught by the selected teachers, and through these pupils to society. Responsibility is also to all the students preparing for teaching and to the profession itself. In turn, all segments of the profession . . . have responsibility for elevating standards of the profession and for selecting those persons who will be prepared for the profession and accepted and retained in it. (Lindsey, p. 168)
The task force further stated these assumptions:

1. Abilities and characteristics desirable in teachers can be stated.

2. A sufficient number of the abilities and characteristics desirable in teachers can be measured or identified accurately enough to provide a basis for evaluation.

3. The college has a unique and essential part in the selection of teachers because it can provide a sequence of selection points, adequate control of the program by means of degree requirements, and a continuing knowledge about the student; and

4. The college can and should make provision for its evaluation of each student preparing to teach and also provide for self-evaluation by each student. (Lindsey, p. 170)

This position was again endorsed by Wilk in 1967 in a review of research on student personnel in teacher education:

... the teaching profession has responsibility for determining the student characteristics required in the preparation of effective teachers. Knowledge of such characteristics should guide recruitment and selection activities. The current reviewers accept this point of view but recognize that it is not held universally. (Wilk, Edson, and Jing Jyi Wu, p. 219)

Wilk's review of research concluded that there are significant differences among students in teacher education that should affect personnel practice and research and that institutional admission standards ought to take these into account and to research variability due to these differences.

The quality of students in teacher education ought to be an institution's continuing concern. Research should describe the institution's "pool of talent" from which teacher education students are recruited. With knowledge of the student population, standards ought to be set to admit and retain students who are appropriate for the teacher education programs. Continuing research should describe the effectiveness of the established standards, providing data for a kind of quality control. (Wilk, p. 229)
Flanders lends support to this optimistic view of selection capability in his 1966 review of teacher effectiveness:

"... research has begun to relate certain teacher behaviors to specific consequences in the climate of the classroom and in the academic achievement of pupils. The shift has been from subjective evaluations to a more objective counting of teacher-pupil interactions, using more sophisticated observation systems, and handling the larger quantities of data by taking full advantage of computer capability. Further discriminations and additional relationships now seem within reach as future research builds on present progress. (Flanders, p. 1423)

Much of the current research being conducted focuses upon the identification of the behaviors of teachers and with the description of those behaviors. "Good" teaching may be defined for a particular group by giving systematic attention

"... to the designation of expected teacher behaviors and educational goals acceptable to the particular group and to the characteristics of the teacher that have been identified and for which reliable methods of observation and assessment exist. (Ryans, p. 292)

Predictors have been slow to accumulate because the criteria of effectiveness is relative. Some relationships do exist, however, between behaviors or characteristics and "teacher effectiveness." Their usefulness is greatest when the results are considered in an actuarial context rather than in applying accurate prediction for given individuals (Ryans, p. 293).

Several recent research studies have attempted to confirm significant positive correlation between verbal skills of prospective teachers and teaching performance. As a result:

Since all evidence indicates that verbal skills and reading ability are important for college success now and for later teacher performance and success, it seems plausible to use a reading test, such as the Nelson-Denny, as a means of evaluating
student applicants into teacher education programs. A certain percentile rank for sub-scores or totals could be agreed upon as a desired level for the various teaching majors. These additional insights into the student's ability, correlated with his established grade point average, could give a much more complete picture of his potential for success in the teaching profession. (Cline, p. 680)

The immediate advantage to institutions of implementing a screening program is control over the constraints of time, talents, and financial resources necessary to accomplish the task of producing fully certifiable teachers.

. . . there will always be those desiring to enter the profession whose competence in areas important to success as a teacher is very low. When this level of competency is so low that to raise it to the desired output level would require greater effort than the training institution can undertake, the candidate should be screened from the program. When such screening is necessary, it should be done promptly, in fairness to both the student and to the institution. (Ott, p. 355)

Personality is the vehicle through which teaching behavior is manifest. Since personality development involves an extensive process, there are some individuals who are unfit to be teachers, in the sense that institutions cannot afford the time, money, or competence necessary for their development (Smith, p. 128).

The potential for using measurement instruments to successfully predict teaching effectiveness is one of the most important features of this position.

The future of measurement in teacher education will depend largely on the extent to which excellence is emphasized in education. If intellectual excellence becomes the primary goal, measurements will be used increasingly in all aspects of the selection and education of prospective teachers. Research leaves little doubt that tests and measurements can help education toward excellence, if that is where educators want it to go. Some of us do. (Ebel, p. 24)
Assumptions of the Position Selection Based on Measurable Characteristics or Behavior

1. The ability to select for teacher preparation does exist with some reasonable assurance of success.

2. Certain characteristics maximize the likelihood of success in teaching.

3. Abilities and characteristics desirable in teachers can be measured or identified.

4. Behaviors of teachers can be identified, described, and analyzed.

5. Measurement tools play a significant role in helping education move toward excellence through the continuous process of selection.

6. Teacher education institutions do not have the competence, time, or money required to bring about extensive personality development.

7. Early identification of the student whose competence is very low is beneficial for the student and for the institution.

8. The college of education can provide control through its procedural plan for screening.

9. Responsibility for selection is to pupils, society, teacher education students, and to the profession.

Position: Selection Based on Subjective Judgment

Some theorists and practitioners subscribe to the position that selection should be accomplished primarily as the result of the subjective judgments of experts. This position rests on at least two basic
assumptions. One basic assumption is that professional people are in a position to make reliable judgments based upon their knowledge and experiences.

... if we are to improve our selective processes, it will be necessary for us to accept human judgments, values, and feelings as valid data upon which to make decisions. ... A professional worker is a person whose judgment can be relied upon. It is this quality of judgment that separates professional work from mechanical. Only the profession can judge the effectiveness of its members. ... Teaching is a profession dependent upon human values, and these must be accepted as valid data for our operations. In thirty years of teaching and selecting students, I do not recall an instance in which I was disappointed in a student when I let my judgment overrule the statistics. All of my failures in selection have been in those instances when I have succumbed to the belief that the statistics must surely be right and my own judgment wrong. (Combs, p. 75)

Another basic assumption is that the knowledge base provided by research is so limited that educators are forced to make such selection and retention decisions, at least, until more reliable predictors can be substantiated.

But given the limited knowledge base on which to draw, the best approach seems to be to place the responsibility for establishing and applying admission and retention standards on the shoulders of the experts ... trained and experienced teachers and administrators in the schools and the trained and experienced professors and administrators in the colleges and universities ... the best combined professional judgment and experience. (Bush and Enemark, pp. 277-278)

Some who hold this position would ignore traditional admission criteria and combine subjective judgment of experts with subjective decisions made in self-selection.

Subjective judgments of professional experts (faculty and practitioners) regarding self-selected students are the ultimate basis for full admission to programs of teacher education. ... Traditional admission criteria such as college requirements and objective examinations should be used after selection as a basis for planning subsequent work, not as a basis for determining admission. (Haberman and Stinnett, pp. 67-68)
In reviewing research on preservice selection, Sanford concluded:

Research studies do not point to a scientific basis for preservice selection of teachers. A valid and reliable criterion of teaching success has not been found, the factors conditioning success in teaching are not definitely known, and a satisfactory technique of investigation for applying the criterion and the factors has not been formulated. At present the best criterion of teaching success is the judgment of experts . . . (Sanford, p. 1394)

An important aspect of the selection process based on subjective judgments of experts is the guidance and counselling of prospective teachers in helping them to arrive at decisions and to develop potential.

Responsibility for both the administration and implementation of specific phases of the guidance program is clearly defined and understood by those affected. Attention must be paid to the role of department chairmen and faculty members in arts and science departments responsible for the teaching majors associated with the program. Continuing counsel and critical evaluations of teacher candidates should be available from these persons as well as from those in the professional sequence. (Denemark, p. 17)

The subjective judgments of experts is regarded as valuable at points beyond initial entry into a teacher education program. While tests, grades, and inventories are assumed to have low predictive value, ratings by supervisors provide valuable information for the prediction of success in teaching.

The best predictions of the future success of a student teacher even though limited, can be made by the supervising teacher and the campus supervisors. The narrative description made by the supervising teacher and the campus supervisor concerning the student teacher, together with the scale evaluations made by these supervisory persons, provides the most valuable type of recommendation. (Ort, p. 70)
Assumptions of the Position Selection
Based on Subjective Judgment

1. Professionals are in a position to make valid and reliable judgments based upon their knowledge and experiences.

2. The knowledge base provided by research is limited; educators are forced to make decisions subjectively until more reliable predictors can be substantiated.

3. Self-selection should accompany the subjective judgments of professionals.

4. Guidance and counselling services are necessary to make sound professional judgments and to enhance individual decisions.

5. Ratings by supervisors are valuable in selecting students at points beyond admission.

Position: Selection Based on Individual Diversity

Another position from which selection practices emerge is one which recognizes the complexity of teaching performance, the difficulties in predicting success, and the value of human diversity. In a frank recognition that research has been unable to define "the good teacher," theorists and practitioners have sought to establish types or to view teachers as successful in diverse kinds of ways. Emphasis has been placed upon identification of potential for growth and encouragement of self-development.

There appears to be no such single person as the universally effective teacher. . . . The notion of "the good teacher" so basic to study of teacher effectiveness turns out to be almost as vague and diffuse as the range of human experience relative to teaching . . .
Successful teachers are a heterogeneous lot and they can be successful for diverse, if not mutually exclusive reasons . . . there is no simple set of rules for success in teaching, and a large degree of uncertainty beclouds our efforts to predict teaching success. (Ebel, pp. 18, 19)

The emphasis upon divergent stances is illustrated by an experimental model program at Michigan State University which is centered around selection and development of seven major stance types. They recommend that schools of education accept only candidates who are "Child Focusers," "Pragmatists," "Task Focusers," and, perhaps, "Contented Conformists." It is noted that an ideal faculty would draw from each of these types for an efficient working team. "Time-savers," "Ambivalents," and "Alienateds" are not recommended for acceptance into teacher education programs.

Over time, each teacher develops a "professional stance." Professional training and work experience function mainly to allow the participants to elaborate upon personal and attitudinal tendencies already present. Early identification of patterns most likely to result in the various "professional stances" would be of significance to institutions seeking rational means for establishing admissions criteria and more efficient instructional programs. . . . Information is needed about three belief domains which are manifest in behavior: the ways in which a person defines her purpose as a teacher; views of children and adults with whom she interacts; and commitment to teaching. . . . (Olmstead, et al., p. 330)

This program of selection, designed for elementary education programs, is based upon the assumption that the essence of elementary teaching is the teacher's communication with the multidimensionality of the child, involving all-day, every-day contact (Olmstead, p. 330). The "selective perception" argument of social psychology is essentially that people perceive what is comfortable for them to perceive; thus,
teachers can be typed according to their beliefs in relation to purpose, views of people, and commitment to teaching.

Individual development is another feature of this position:

An appropriate balance is determined by those responsible for student guidance and evaluation between fostering individual development and maintaining exacting professional standards. Because of the complexity of teaching, preservice programs cannot be expected to produce graduates who are finished products and skilled in the full range of performance associated with a high quality of teaching. However, evidence of ability to analyze his teaching and to profit from additional experience should be expected of every teacher education graduate. (Denemark, p. 17)

Assumptions of the Position Selection
Based on Individual Diversity

1. The universally effective teacher does not exist.
2. Beliefs can be classified to represent types of personality that should be selected for teaching.
3. Since teaching is a complex performance, graduates will not be skilled in the full range of performance associated with a high quality of teaching.
4. Emphasis should be placed upon analytical skills and ability to profit from analyzing one's own teaching performance.

Position: Selection Limited by Lack of Reliable Predictors

All of the literature which reflects this position cites research of the early 1960's and the possibility exists that subsequent research together with changes in supply and demand may cause theorists to shift their position in time. There is a body of literature, however,
that supports the belief that selection practices should be restricted because of a lack of reliable predictors of success in teaching.

Research has faced the continued difficulty of relating teacher traits to performance variables. The methodological problems of keeping conditions constant in the performance setting so that correlations with possible traits can be maximized have resulted in low utility of findings. Errors in selecting prospective teachers by a predictor test have been too high except in extreme cases (Flanders, p. 1431). Negative development has been found easier to predict than positive development:

Most of the unsuccessful teachers appeared to lack sensitivity to and understanding of children's thinking and attitudes and to exhibit low capacity for effective structuring of instructional situations, whereas no corresponding similarities between the most efficient teachers were discernible. (Flanders, p. 1432)

The efficiency of testing procedures employed in admissions is relative, depending upon the size of the selection ratio.

When the proportion of applicants to be admitted is rather high, the efficiency of any feasible and valid procedure is low. (Rabinowitz, p. 158)

Since a perfect relationship between test or admission procedure and criterion is never found in practice, decisions made based on tests cannot be perfect. In the selection of teachers, the relationship is apparently far from perfect.

Each college faculty will have to weigh for itself the relative cost of admitting students whom it cannot later certify against the cost of rejecting students whom it would be desirable to certify as teachers . . . data should provide a corrective for shallow optimism concerning the benefits of selection . . . (Rabinowitz, p. 164)
Rabinowitz and Mitzel contend further that combined predictors resulting in a multiple R no higher than .40 with a reliable measure of teaching success screen out too many students with potential to become successful teachers and retain too many unfit ones.

It seems to us that an effort to estimate the relative accuracy of selection decisions based on a test with a given validity is logically prior to an effort to develop such a test. In some settings it is quite possible that the increase in selection efficiency with the use of a test may be too small and costly to justify the effort. (Rabinowitz, p. 159)

The risks involved in selection decisions are further delineated by Caldwell in a discussion of student selection, risk, and the error continuum:

First, the chance of making incorrect decisions can never be completely eliminated, and, as a result, teacher educators must be concerned with the different ways in which they can be wrong or--if you will--with the different types of error which are possible. Second, consideration must be given to the seriousness or risk involved in making a given type of wrong decision. Third, teacher educators must be aware of the way in which movement of the critical decision point affects the chances of making a given kind of error. (Caldwell, p. 323)

The decision to select or reject a particular student in teacher education can be represented by an either/or continuum:

Given a two-alternative either/or problem framework, the decision maker is faced with two right decision possibilities and two wrong decision possibilities. The decision maker may make correct decisions in the following ways:
A. Select the student who should be selected.
B. Reject the student who should be rejected.

This same decision maker may also make an incorrect decision in the following two ways:
A. Reject the student who should be selected.
B. Select the student who should be rejected. (Caldwell, p. 232)
Holding to the assumption that the primary responsibility of teacher educators is to the public school student rather than to the teacher education student, Caldwell concludes:

. . . the more serious error is to select the student who should be rejected rather than to reject the student who should be selected. . . with the burden of proof on the student the teacher educator is justified in making a firm no selection decision. . . (Caldwell, p. 235)

The difficulty in predicting success in teaching is due largely to the lack of conclusive research in the area of teacher effectiveness.

Although only a few classes of variables are closely related to the effectiveness of teachers, little distinct evidence relates these classes to one another. In many cases, it is not known which variables are important for further study. This suggests that selection, training, and rating programs presently in operation have little to recommend them for empirical knowledge of competence. The school of education . . . facing real problems, can operate as well extemporaneously as they can by study of the best contemporary research on competence. (Biddle, p. 389)

Research of a conventional nature into the evaluation and prediction of teaching proficiency using predictor and various sorts of criterion variables has reached a dead end in the opinion of some (Anderson and Hunka, p. 74). The writers of this position assert that relationships are not high enough within and among various criteria of teaching proficiency to be reliable. Attempts to identify characteristics of successful teachers appear largely sterile in terms of usability for selective purposes (Fattu, p. 26). Neither academic achievement in college nor the results of personality, attitude, and various other tests have significant value in predicting how successful a student will be as a student teacher or as a first-year teacher.
Academic achievement in college does not seem to have any predictive value as to how successful a student will be as a student teacher or as a teacher in his first year of experience. . . . on the extreme ends of the scale there were more inadequate teachers with low academic achievement records than there were inadequate teachers among the high achievers. (Ort, p. 70)

Further research studies are needed for the development of more adequate measuring devices so that the professional responsibility of prediction and selection can become more scientific and, hopefully, more certain (Ort, p. 71).

These researchers and theorists represent a position of considerable reluctance to practice selection. This reluctance is based on inadequacies of tests and measures of characteristics or other factors in establishing relationships between predictors and effectiveness in teaching.

Assumptions of the Position Selection

1. Predictor tests are presumed to have a high rate of error in selecting prospective teachers except in extreme cases.

2. The chance for making many incorrect decisions cannot presently be eliminated.

3. Conclusive research is lacking in the area of teacher effectiveness.

4. Much of the data that have been gathered on teacher effectiveness cannot be generalized to other situations and so is of little use in making selective decisions.

5. Lacking conclusive research on competence, schools of education should select prospective teachers "extemporaneously."
6. Teacher educators must avoid making decisions of the most serious type of error; i.e., selecting the student who should be rejected.

Position: Toward Open Admission to Teacher Education

A body of literature has been identified that represents theory and practice in selection that is relatively open in nature. Specific features of this position include a trend against reliance on cognitive performance or personality measures, a trend toward pluralizing the criteria of selection, and in some instances a trend in deemphasizing the importance of initial criteria for entrance into teacher education.

The position for open admissions in teacher education may be summarized by the following statements:

1. Open admissions promises to recruit to the teaching profession students from minority groups who often fail to meet conventional criteria.

2. It is essential that school faculties include to some degree teachers with backgrounds similar to those of the children they teach.

3. The existing pattern of selection has not proved to be an outstanding success; self-selection may be more valid than the employment of too narrow a basis for choice.


5. The major obligation of teacher education is not polishing up potential that is already obvious, but lies instead in the development of potential that is waiting to be uncovered. (Gold, p. 29)
Some studies point to the inadequacy of intelligence and personality measures as reflected in testing for predicting potential of future teaching success (Gold, p. 42). Cognitive performance is not a dominant criterion for admission to teacher education. Grade point averages and scores on such instruments as the Scholastic Achievement Test are typical measures of cognitive performance that are no longer considered criteria for identifying teacher potential. Teacher characteristics thought to be related to teaching effectiveness are not dominant in this position. Those who hold a more open position on selection would seek to pluralize the criteria beyond cognitive performance to other characteristics found to be desirable by the Teacher Characteristics Study of the American Council on Education.

Some traits of teachers rated high in effectiveness are described:

There was a general tendency for high teachers to: be extremely generous in appraisals of the behavior and motives of other persons; possess strong interest in reading and literary affairs; be interested in music, painting, and the arts in general; participate in social groups; enjoy pupil relationships; prefer non-directive (permissive) classroom procedures; manifest superior verbal intelligence; and be superior with respect to emotional adjustment. (Ryans, p. 293)

In an effort to meet the needs of an underprivileged community, divergent thinking is valued, along with empathy with children; ability to relate to children, to co-workers, and to parents; ability to project maturity; self-actualization and openness to experience (Gold, p. 32). Those who hold this position assert that while intelligence is recognized as desirable, to employ this criterion as the sole basis for admission to teacher education would eliminate many potentially
effective teachers. Those who have a real interest in becoming teachers should be given an opportunity to develop characteristics as well as competencies, according to proponents of this position.

Jackson concluded:

... the proposition that very high cognitive ability is a sine qua non of the good teacher has relatively little empirical support. The relevance of general intellectual ability to success in teaching (within the range set by those who enter the profession) is small at best and is certainly of little value for predictive purposes. (Getzels and Jackson, p. 574)

The "fad of measurement" has caused some educators to question whether it is "democratic" to segregate prospective teachers on the basis of cognitive tests. Discrimination is cited against so-called "lowers" and in favor of "uppers" (Rugg, p. 222).

The American dream dating back to Jefferson—that this is a land where one can fulfill one's potential—and the American conception and view of education as a ladder which all can climb from Grade 1 through at least four years of higher education must neither be forgotten nor embalmed in histories of American public education. (Rugg, p. 222)

In actual practice, institutions have demonstrated various degrees of openness in the selection of students. In reviewing research, Ebel noted that selection has been more nominal than functional.

Students must demonstrate academic ability in order to be admitted to some, but by no means all, programs of teacher preparation. Few of the programs that are selective are highly selective. Many students of very ordinary ability are admitted. (Ebel, p. 16)

New arguments based on a new rationalism have hindered institutions from practicing the selection processes even when they endorse criteria in official statements:
There appears to be no evidence at this time that there is any great concern on the part of teacher educators to become more selective now of students to be admitted to teacher education programs than they have been in the past. It may be that the national trend toward reduced enrollments in teacher education programs has caused education deans, department chairmen, and faculty to become even more lenient in their admission policies than before. If selection be too restrictive, there may well be too few students to support the number of teacher educators in a given situation. (Sinclair, p. 542)

At least one institution has sought to maintain high enrollments by recruiting for teacher education those freshmen on probation for academic reasons. The major problem of high attrition among college freshmen led to a program for the development of teachers of the disadvantaged at the University of Wisconsin-Oshkosh:

It was felt that by providing these students with an empathic faculty, giving them the necessary help, and supplying them with an imaginative, appropriately paced, and relevant curriculum, it would be possible to develop them into fully certifiable, effective teachers of the disadvantaged. (Bowman, p. 210)

Competency-based teacher education is open in the sense that it placed emphasis on exit rather than on entrance requirements:

With this approach the possibility is opened for admitting a wider variety of persons to the group entering the program. Continual assessment of progress, optional choices of learning experiences, and performance criteria within the program make entrance requirements far less crucial than they are in traditional programs. Many who previously would have been precluded from entrance by their cultural development or by their previous educational choices and performance safely can be admitted to a competency-based program. Many of these students may be expected to enter and to complete successfully such a program. The result can be a wholesome diversity of backgrounds in the teaching profession. (Howsam, p. 9)
Self-selection can serve as the foundation for other accomplishments:

... self-selection may be a feasible way to identify future teachers. Such a hypothesis would not rule out subsequent application of other measures. Simply wanting to be a teacher and yearning to help poor children are no substitutes for personal qualities and achievement of necessary academic learning and professional skills. (Gold, p. 33)

Openness by default can be observed in practice by some who have not openly promoted the position. The extent to which openness in admissions is being practiced can be obtained in part from the critics of teacher education. Some professionals charge that teacher education institutions are ineffective in practicing selection of future teachers. Colleges are still enrolling huge numbers of future teachers although positions for graduates are more difficult to obtain; critics charge that professors retain a vested interest in producing trained teachers despite projected percentage drops (Muente, p. 236). Nationwide public school teachers are pressing for a stronger voice in standards for admission to their preparation programs. Current supply-demand imbalance has caused teachers to seek a say as to who shall teach. In the quest for professional autonomy, teachers are seeking to become self-managing. Several states are moving toward the establishment of statutory teacher-oriented Professional Practices Boards. Teacher involvement could mean stricter admission standards, since teacher education institutions have been ineffective in implementing selection processes:

These teachers may do what education faculties have so far been reluctant (or unable) to do—upgrade admission standards (Teeter, p. 358)
Teacher organizations are further seeking to develop Professional Practices Boards which would be controlled largely by members of the profession and the organizations they represent.

Assumptions of the Open Admissions Position

1. Students from minority groups can be more readily recruited and accepted when admissions policy is open.

2. Teachers can be developed from those with backgrounds similar to the children they will teach.

3. Potential is not only to be "polished" by teacher education, but discovered.

4. Cognitive performance should not be an important criterion for admission.

5. Heavy reliance on cognitive performance and characteristics are "undemocratic."

6. The foundation for uncovering and developing potential should begin in the process of self-selection.

In this chapter positions which have emerged in this study are briefly described and documented. The essential assumptions of each position are listed at the end of each section. This definition of the positions identified by the study will provide a framework for presenting criteria and procedures appropriate to each position in subsequent chapters.
In this chapter the criteria specified in the literature on selection based on measurable characteristics or behavior will be described. They are drawn from the writings of Etten, Brodbelt, Magee, Edson, Pigge, Simun, Lindsey, Ryans, Cline, Crocker, Slaughter, Wilk, DiPasquale, Ebel, Boze, and Ulibarri. Following the criteria will be a description of procedures identified in the universe of content. Implications for program development are given for use by institutions which base their selection and retention position on measurable characteristics or behavior.

**Criteria for Selection and Retention**

The criteria for selection and retention mentioned by writers of this position have been classified according to knowledge, skills, or attitudes and values in accordance with the system developed for this analysis.
Knowledge

The writers of this position clearly indicate that there is a body of knowledge necessary for effective teaching and that the knowledge can be measured in various ways. One of the traditional means of measuring knowledge is by use of the grade point average. Students with low grade point averages should be screened out of teacher education in the view of some:

If a student is on probation in a teacher-training institution, he should be counselled out of teaching as a profession. How can we expect a great improvement in our teaching program if students on academic probation are allowed to continue? (Etten, p. 138)

Early selection is also recommended as a solution to teacher oversupply:

One effective way of eliminating large numbers of prospective teachers is through the requirement of higher point hour standards. For example, to go from a 2.0 minimum to a 2.5 in G.P.A. would eliminate 35 to 50 per cent of all prospective teachers. (Brodbelt, p. 13)

Institutions have historically been practicing selection based in part upon grade point average. In studying teacher education programs operated by publicly supported institutions accredited by the National Council for Accreditation of Teacher Education (NCATE) in 1961, Magee found that 80 per cent of the institutions considered a C average (2.00) scholarship in the preprofessional program adequate for consideration of eligibility for admission to and continuance in the advanced teacher preparation program. Only 3.3 per cent of the institutions reported a requirement of scholarship average of 2.50 as a minimum for retention. More than half of the institutions that require
something higher than a 2.00 average for survival restrict the require-
ment to scholarship in the major field and/or in professional courses
to candidates for secondary school teaching (Magee, p. 85). Earlier
studies substantiate the practice of selection based on grade point
average and in recent years there appears to be somewhat more emphasis
upon academic achievement as a basis for selection in Minnesota
colleges and universities (Edson, p. 334).

In 1968 a study was conducted at Bowling Green State University
to ascertain whether elementary principals rated teachers who had been
"A" students in college significantly higher than they rated teachers
who had "C" grade point averages. The conclusion was drawn that
former "A" students were rated significantly higher than were former
"C" students (Pigge, p. 102). Studying singly and in combination the
value of certain undergraduate variables for predicting the ratings
a first-year teacher would receive, another researcher found that
the school administrators' rating of teaching ability correlates
significantly with student-teaching grade and academic average, among
other factors. These findings agree with those reported earlier by
Barr concerning college grades and student teaching grades as predictors
of teaching success.

Administrators' ratings of first-year teachers reveal significant
correlation between academic average and preparation of subject
matter and between academic average and discipline (Simun, p. 300).

Knowledge is also measured by various tests of cognitive ability for
prediction of success in teaching. Keen intellectual ability is listed
among essential criteria for selection of all persons for teaching by
the National Commission on Teacher Education and Professional Standards (NCTEPS). Other minimum criteria relating to knowledge include possession of ability, interests, and self-direction appropriate to success in college and continuing development as a scholar; evidence of being (or having the probability of becoming) broadly educated and of having (or having the desire and ability to secure) a comprehensive knowledge of that which he would teach; and the ability to control and give direction to learning activities (Lindsey, pp. 171-172).

Teacher characteristic studies have revealed several areas of knowledge necessary for effective teaching:

Measured cognitive or intellectual abilities, achievement in college courses, knowledge of subject matter to be taught, general cultural knowledge, knowledge of professional information, and student teaching marks . . . all appear to be characteristics of the teacher which are likely to be positively correlated or associated with teacher effectiveness. (Ryans, p. 293)

Knowledge of subject matter is regarded as essential especially in the academic major on the secondary level. Outstanding teachers have been rated significantly higher by their principals on knowledge of subject matter, and stricter requirements of prospective teachers in major subject areas are regarded as desirable (Brodbelt, p. 14).

**Skill**

Minimum criteria of performance listed by the National Council for Teacher Education and Professional Standards include the ability to carry out work throughout the day each day; to guide learning; to respond to the intellectual and affective state of pupils; and to control and give direction to learning activities. NCTEPS further
states that characteristics which, when examined, should provide means for evaluating these criteria include emotional maturity, communication skills, basic computational skills, ability to work with others, understanding of and participation in democracy, and health (Lindsey, pp. 186-189).

Special emphasis is placed upon acquiring necessary communication skills. A 1953 survey of opinion and practice regarding selection and retention in teacher education programs nationwide concluded that communication skills may well be one of the crucial criteria for determining admission to teacher preparation and retention in the program (Stout, p. 432). A follow-up of this study five years later found an increased emphasis by institutions preparing teachers upon English usage as a basis for selection (Edson, p. 334). The Nelson Denny reading test is one instrument that has been regarded as useful in predicting success in communication skills. It is recommended that institutions agree upon percentile ranks for sub-scores or totals as a screening device for various teaching majors (Cline, p. 680).

Another recent study was conducted to see whether it was possible to predict how well students would be judged to be performing in the classroom. A test of verbal flexibility was developed and found to predict classroom performance in communication. It is recommended that one way to screen is to use the criterion of verbal flexibility (Crocker, p. 172).

Emotional stability appears to be regarded by many institutions as the most important characteristic of a teacher candidate (Edson, p. 331).
Estimated emotional adjustment is a characteristic of the teacher likely to be positively correlated or associated with teacher effectiveness (Ryans, p. 293).

One of the most important personality traits that has been identified as significantly related to teaching success is the ability to get along with students. In order to measure this trait it has been proposed that instruments be used to record children's perceptions of teaching behavior.

This aspect of a screening program would appear to have its greatest utility after some course work in educational methods and prior to student teaching or an internship. . . . If the colleges are to fulfill their screening role, the crucial teacher-screening acts should logically precede experiences that insure licensing. (Slaughter, p. 345)

Other characteristics associated with teacher effectiveness include early experiences in caring for children or teaching and a history of teaching in the family (Ryans, p. 293).

The criterion for teaching proficiency should, in the view of some, be renovated to follow strict lines of performance. Competency should be measured in terms of pupil gains demonstrated on learning-based achievement tests (Brodbelt, p. 14). Retention in the program and recommendation for graduation would thus be based on effectiveness demonstrated by pupil gains in a grade level and subject matter of the candidate's choice.

Atitudes and Values

The motives of a student desiring to major in education are regarded as an important indication of his subsequent success as a teacher. A common practice of teacher education institutions involves
requiring applicants to record reasons for selecting teaching as a career. The practice of admitting students who are not certain they want to become teachers to teacher training institutions is suspect:

A student who is not really certain that he wants to become a teacher probably will not "blossom forth" as a dedicated member of the profession. (Etten, p. 138)

A high level of motivation is seen as an early screening device for use in the first phase of selection before measures of competency are applied (Brodbelt, p. 13). NCTEPS prescribes minimum criteria which may be assumed as essential in the selection of all persons for teaching including interests, abilities, and values that give some assurance to the individual that he will find satisfaction in a teaching career. The standard further notes that this satisfaction can rarely be derived unless the teacher is more concerned for others than for himself (Lindsey, p. 171). Other minimum criteria listed by NCTEPS in relation to attitudes and values include character, attitudes, and action worthy of emulation by pupils. The importance of example is stressed in relation to habits of thought, attitudes, and values which should be expressed in acceptable ways (Lindsey, p. 171).

Characteristics of teachers in the realm of values which are likely to be positively correlated or associated with teacher effectiveness include attitudes favorable to students, generosity and tolerance in appraisals of the behavior and motives of other people, strong interest in reading and in literary matters, and interest in music and painting (Ryans, p. 293).
The model "student product" recommended for a teaching certificate has been described by NCTEPS:

The primary criterion for certificate recommendation should be whether or not the selective and educative processes have resulted in a person who can achieve success and derive satisfaction in the kind of position for which his program was designed to prepare him . . . produce a graduate who has made the most of his potential toward becoming the kind of person who possesses scholarship and integrity, has firm goals without rigid patterns; is patient and permissive but persevering; has appreciation of people and respect and concern for them; is critically sensitive to change, has ability to influence both people and change for the better; and is eager systematically to augment his specialized knowledge and skill so that he may utilize in practice the best that is known, and may make a contribution to the knowledge in his field and the knowledge and its use by other people. (Lindsey, p. 197)

Procedures for Selection and Retention

The procedures employed to implement a program of selection and retention based on measurable characteristics or behaviors involve individual decisions, individual evaluations, institutional decisions, and institutional evaluations.

Individual Procedures

Individuals desiring to become teachers implement these goals through application, enrollment, graduation and certification procedures within a teacher education program. Prior to the decisions leading to these procedures are some decisions at the precollege level. These decisions are made largely on the part of the student, based on his own system of values. The greatest need an individual has in making these decisions is the ability to recognize his own values. Colleges can offer assistance through professional counselling to help the student explore
interests, attitudes, abilities, experiences, or achievements and supply some kind of probability statement concerning his likely success in teaching. The student, however, is responsible to evaluate his own decision in the light of his economic resources, college marks, subjective satisfactions, or potential contribution to society (Lindsey, p. 183).

**Institutional Procedures**

Three strategic points are common elements of the program for teacher education in nearly all institutions. The application procedures, enrollment procedure and continuance in the program require decisions by the institution if students are to be certified. All institutions make decisions at these points, either by design or by default (Wilk, p. 220). However, most institutions have been found to make decisions in at least four ways regarding admission to the institution: admission to formal professional education courses, admission to student teaching, and admission to approval for graduation and certification (McClure, p. 144). Proponents of this position, however, tend to recommend other procedures complementary to these more common ones to insure careful screening of the best candidates for teaching. Additional procedures include evaluation of performance in the preprofessional program, evaluation for retention during the professional program, admission to student teaching, and evaluation of readiness to teach.
These procedures serve as a continuing series of screening devices so that selection is accomplished through a process of decision-making rather than at one crucial point. The process is sometimes seen as diagnostic in nature, serving as a review of accomplishments and as a needs assessment for future training. Emphasis is moving away from effective selection until student teaching in the senior year toward early identification and evaluation of aptitude and achievement, although the gap between belief and practice is illustrated by results of a study of institutions listing important "next steps" in selective processes for teacher education. These include:

1. Consideration of evidence in addition to grades and rank in class;
2. Provision for better vocational guidance and counselling for high school students;
3. Extension of recruitment and orientation programs;
4. Establishment of specific criteria for periodic review of students' progress;
5. Use of more nearly objective measures of personality;
6. Use of a greater number of persons to pass on admission, retention, and recommendation of the prospective teacher. (Lindsey, p. 85)

NCTEPS recommends that selection begin even before admission in a precollege identification and orientation program. Procedures relating to precollege identification and orientation include literature distribution, conferences with high school personnel, "open house" on campus, statewide testing programs, summer orientation programs, and sponsorship of FTA and other organizations related to professional development (Lindsey, p. 193).

Admission to the institution. Admission to the institution is the first formal institutional procedure in the screening process in many instances. At this point standardized tests or inventories are sometimes
administered. Special orientation sequences for teacher education majors are sometimes offered and in some cases a special application is required for admission to the preprofessional program in addition to whatever admission procedures are required by the institution. These procedures are designed to give institutions descriptive data about the population of the program and to give individuals opportunities to see their strengths and weaknesses.

Admission to the preprofessional program. Admission to the preprofessional program is another step in the selection program for some institutions. A special application to the preprofessional program could require data regarding the reasons for selecting teaching as a career, health information, precollege academic records, or other information relating personality traits or mental stability. During the preprofessional program, candidates may be expected to demonstrate knowledge and understanding to a greater extent than that required of other majors in a liberal arts program. In addition to demonstration of knowledge, a student in the preprofessional program is increasingly required to demonstrate the ability to relate and transmit knowledge to others, to clarify a basic philosophy of life and to clarify his role in society. Information regarding these areas of growth is gained through the use of standardized inventories, observation of curricular and cocurricular activities and from interviews (Lindsey, p. 194).
Admission to the teacher education program. Admission to the teacher education program is another important step in the process of selection and retention. One procedure implemented at this point is the interview of applicants by individuals or committees. The interview is used primarily with students experiencing difficulties, although some institutions report using it with all students. The manner in which the interview is carried out and its purposes are not specified in the literature.

There is a definite trend toward early and sequential field experiences to provide opportunity for observation of skills in working with children and youth. A full-time professional semester has been recommended built around early screening and early field experiences (Brodbelt, p. 14).

Completion of specific courses is a common requirement of institutions for admission to teacher education programs, but these colleges do not agree on the courses required prior to admission (Wilk, p. 222).

Psychological screening is sometimes accomplished at the point of application to upper division teacher education courses. This screening is accomplished by use of interviews, tests, and "qualified opinion" reviews of faculty members. "Spot cards" are used to record evidence of a need for help in a particular area of development. The "spot cards" are forwarded to the academic advisement office and to the office of student teaching by faculty members. Crosschecking then occurs and follow-up is done upon entrance into the professional sequence (Etten, p. 138).
Specific requirements for admission to teacher education programs are prescribed by NCTEPS.

Admission to the professional program of preparation should require:

That a student make formal application. He should make application according to an established procedure that is published and available within the college community.

That the candidate and the institution give careful attention to factors important in making a decision. A thorough review is important at this point in order that the student who shows little promise for teaching may learn this early and may seek a more nearly appropriate goal. One purpose of early screening is to avoid lost time for the student and for the college.

That the final decision on the part of the college rest with a committee. A committee's decision is desirable for several reasons . . . the college should have the benefit of many points of view in making a serious decision about a human being . . . (and) denying admission to an individual is too serious a responsibility for any one person to carry. (Lindsey, p. 194)

Provision is recommended for appeal of negative decisions so that errors can be reduced and a "second chance" will be afforded in the retention program which follows admission to teacher education.

Evaluation for retention. Evaluation for retention in a teacher education program is another procedure in the continuous process of screening for the best possible teacher candidates. Research findings in recent years are the beginnings of a foundation for evaluation of teaching; however, the essential behaviors involved in teaching have not been fully identified. Recommendations for evaluation, then, emerge from descriptions of theory and practice and are not always fully substantiated by sufficient research:
"good teaching" may be defined for a particular group only to the extent that the members of that group agree with regard to the principal behaviors expected of teachers and the goals of teaching. (Ryans, p. 292)

Research emphasis in recent years has shifted from teacher evaluation to teacher description in an attempt to reserve value judgments made in light of agreed upon educational objectives, expectations, and other criteria. It is hoped that a reliable knowledge base of essential behaviors involved in teaching and the basic characteristics of teachers will provide a foundation for evaluative criteria in the future.

It seems safe to say that, largely because of the relative nature of teacher effectiveness, teacher education would do well to focus attention on teacher behavior per se and to consider particularly: (a) the internal inputs contributing to teacher information processing and the cultivation of those teacher characteristics that do indeed seem modifiable and (b) the logical process we have called teacher information processing and how teachers can best be prepared to carry out such functions as they participate in the communication of meaningful facts, concepts, and rules to pupils and seek to facilitate their incorporation into the pupil's information hierarchy. (Ryans, p. 293)

The establishment of such models makes it possible for an institution to allow evaluation to become a built-in feature of the program. Different models will be appropriate for various stages of the program and for different teaching subject areas. Models defined for the kinds of persons eligible for admission to the college will aid the college in developing a program appropriate to the defined student population (Lindsey, p. 182).

Another procedure used by institutions in evaluation for retention is testing of student achievement in each of the courses and other
experiences that constitute the program:

It seems reasonable to assume (and in the absence of specific research one can only assume) that tests are widely used for this purpose. The tests used are probably about as good--or as bad--as those used in other collegiate programs. (Ebel, p. 71)

Evaluation for retention should consider early field experiences recommended during the preprofessional program:

Prepractice experiences are essential to a practice-teaching assignment. . . . The prepractice term should precede the practice term and provide a sufficient number of "trial and error" experiences in order to determine whether or not the student will be a contribution to the public school classroom the succeeding term. (Etten, p. 139)

Children's perceptions, as well as professional judgments, are being used to measure success in field experiences. Children are asked to recall specific behaviors of the teacher candidate and to rate them (Slaughter, p. 345).

Admission to student teaching. Admission to student teaching represents another strategic point in the progress of a student toward becoming a fully certifiable teacher. The trend of opinion and practice revealed by responses from Minnesota colleges is that the greatest increase in selective practices since 1953 has been at the point of admission to student teaching (Edson, p. 332). The most commonly used screening device is formal acceptance for student teaching (Magee, p. 85). A formal application to student teaching is generally required. Acceptance into student teaching is a recognition of accomplishment by a student in general education, specialization fields and in professional knowledge and skill. It should include a comprehensive evaluation of readiness to teach with emphasis on
demonstrated performance. The review procedure includes criteria used in previous selection processes and calls for reexamination of information from all appropriate sources, e.g., instructors, advisor, physician, speech clinician and supervisors of previous laboratory experiences (Lindsey, p. 196).

Another technique sometimes employed in screening for student teaching is the interview. Its usefulness as a predictor of classroom behavior has been questioned (Wilk, p. 223).

**Evaluation of readiness to teach.** The evaluation of readiness to teach is another point in the process of screening according to proponents of this view. This procedure takes place during the student teaching experience. As a result of evaluation a student may be recommended for extended or different field experiences or it may be indicated that he is not suited for teaching. These decisions may be made by college faculty members, the director of student teaching, and personnel in the school where the experience takes place.

**Recommendation for certification to teach.** The final point in selection for a teacher education institution is recommendation for certification to teach. Tests and measurements are helpful in determining competence to teach although limited use is made of them by institutions. There are three types of examinations available for measurement of teacher candidates: college examinations, state teacher-certification examinations, and National Teacher Examinations supplied by the Educational Testing Service.
Although examinations do not play as crucial a role in the certification of teachers as they do in other professions, some efforts are being made to develop tests of teacher competence in specific subject matter areas. The Modern Language Association and the American Association of Physics Teachers have developed tests of competence in their areas (Ebel, p. 22). The lack of achievement testing at the end of most teacher preparation programs creates a significant gap between theory and practice (Ebel, p. 23).

The National Committee for Teacher Education and Professional Standards concluded its report with several recommendations regarding the procedures of selection and retention:

That a cooperative process of selection and evaluation be carried on by the total profession so that a favorable climate is created for preparation, entrance into the profession, and continued effective performance in it.

That only those institutions be accredited for teacher preparation which have definable operating programs of continuous selection.

That the selective processes at least be based on evaluation of emotional maturity, moral and ethical fitness, health, demonstrated ability to work with children and youth, academic aptitude and intelligence, academic achievement, demonstrated competence in speech and basic skills, and professional interest and motivation.

That responsibilities for selection be clearly placed, that instruments and processes be well planned and diversified, and that sequential steps be sensitively applied and systematically followed.

That the staff in student personnel services be an integral part of the teacher education program and that personnel from all faculties dealing with the education of prospective teachers be involved in the evaluative processes.
That the total profession, as defined above, accept recognition of the need and responsibility for helping develop and apply a continuing program of selection throughout the teaching careers of its members.

That programs of selection, admission, and retention for preparation and performance have as a primary goal securing qualified staffs for quality educational programs. (Lindsey, p. 203)

Implications for Program Development

Interpretation of the above messages has resulted in several implications drawn from the researcher's view. The criteria and procedures given for a selection program based on measurable characteristics or behavior of teachers lead to some important implications for program development within institutions. The comprehensive nature of the continuous process of evaluation of teacher candidates necessitates provision for greatly increased support in terms of finance, professional development, supportive services and facilities. In order that gaps between theory and practice may be filled, institutions need to seek ways to appropriate funds for the support of an effective selection and retention program that is implementing the best measurement tools available at the present time. As a body of knowledge, skills, or attitudes and values is identified as necessary for effective teaching, resources should be appropriated for measurement of those objectives.

Institutions committed to this position also have a clear responsibility to devote time, talents, and resources for research purposes. Research should describe the pool of talent within student population so that standards can be set to admit and retain students who are appropriate for a specific teacher education program.
Continuing research should describe the effectiveness of the established standards, providing data for quality control (Wilk, p. 229). These standards could take the form of lists of criteria for admittance and retention or could be structured as models for various stages of the selection process. The standards should include reference to knowledge, skills, and attitudes and values which the education program is seeking to develop.

If the selection of students has been based on institutional goals, its evaluation of the "student product" should also be consistent with these goals and objectives. (Lindsey, p. 197)

Resources need to be provided for research on descriptions of teacher behavior and characteristics and the ways in which teachers can best be prepared to communicate subject matter to pupils.

Follow-up studies of graduates will provide information regarding the adequacy of his preparation and will reveal deficiencies in course content or other experiences that need to be corrected.

The members of the professional staff need competence in areas of evaluation, guidance, administrative activities, and in interpersonal relations (Lindsey, p. 170).

This chapter has identified criteria and procedures mentioned in the literature regarding selection and retention practices based on measurable characteristics or behavior. Some implications for program development have also been identified.
In this chapter findings will be presented from the literature which apply to the use of specific criteria or procedures by those who subscribe to the position that selection should be based on the subjective judgment of professionals. Resources include the writings of Andrews, Haberman, Combs, and Denemark. The criteria and procedures have been organized according to the classification structure developed to provide continuity in the study; namely, knowledge, skills, attitudes and values.

Criteria for Selection and Retention

Knowledge

Some proponents of this position advocate that traditional admission criteria such as college requirements and objective examinations be used after selection as a basis for planning subsequent work, not as a basis for determining admission.

All college requirements (e.g., grade point average, total course credits, specific course requirements, proficiency examinations in English and speech, and physical fitness) that are used in planning students' subsequent work should be explained by a careful rationale of their relationship to success in teaching.
All standardized tests (e.g., The National Teachers Examination or The Minnesota Teacher Attitude Inventory) should be explained by a careful rationale of their relationship to success in teaching. (Haberman, p. 68)

Traditional criteria are considered to detract from the value of self-selection or faculty interviews in which subjective decisions are made. "Outstanding" students need to be identified by means other than traditional ratings. Traditional criteria have been relegated to a later phase of the screening process. It is believed that by placing grades, tests and proficiencies first, institutions undervalue self-selection and faculty interviews. In practice and interviews, outstanding students can better demonstrate that they deserve special treatment and individualization than they can utilizing traditional criteria (Haberman, p. 68). It is charged, further, that grades, English and speech proficiencies, and academic references are used inappropriately by institutions for pragmatic reasons. Such criteria are regarded as inexpensive, efficient ways of screening large numbers of students, yet undesirable because they undervalue subjective methods. These criteria merely predict students' future success as students and do not predict teaching success (Haberman, p. 234).

Selection criteria instead should derive from program goals and the capabilities needed by individuals to achieve those goals. As the clarification of those goals emerge, students can be selected who are predisposed to achieve the goals. Mere enforcement of existing standards is ill-advised; criteria should be developed by institutions which logically connect with program goals (Haberman, p. 234, 235).
Skills

Capacities such as health, speech, and communication skills are often mentioned in the literature, although specific measures of adequacy are not prescribed but are left to the subjective judgments of experts. Critical skills of executing performance of logical acts are considered valuable by those who would make subjective judgments about those who should teach:

Professional education, then, is not a matter of teaching people to perceive something entirely new and unique. Rather, it is a question of helping people to change the perceptions they already have or to discover new and deeper meanings of already existing concepts.

A teacher training program must weigh the cost of its program not only in dollars and cents but also in terms of the most efficient use of the time and energies of its faculty and the time and anguish of its students. The prospects for a teacher-education program might be divided into three groups:

1. Those who already possess a considerable measure of the perceptual qualities of the good teacher we have indicated in these discussions;

2. Those who have a fair degree of these conceptual qualities and who seem likely to profit from professional education;

3. Those who have very little such perceptual organization and seem to change only very slowly.

The first of these groups we need to recruit into our profession as rapidly as possible. The third group will require so much time, effort, and expense as to make the task too inefficient. These people should probably be helped to explore other alternatives. From the middle group we need to accept as many as possible, working down from the top until we have filled our facilities to capacity. (Combs, p. 73)

Some consideration is also given in the literature to subjective judgments regarding skill in performing strategic acts. These skills
are often described as demonstrated competence to work with children or youth, or the ability to relate to children or youth (Denemark, p. 15).

The capacity for sharing self is regarded as an important prerequisite for professional workers. Relationships based on personal interaction with students and colleagues are held to be crucial to effective teaching. The quality of openness, or willingness to disclose self, enables other people to see the teacher as he is, to know what he thinks, believes, and stands for (Combs, p. 68).

Another important capacity is that of disciplining self so that the teacher is able to minister to the needs of others with dignity and integrity. This capacity is dependent upon the degree of personal adequacy the teacher feels. Adequate personalities exhibit behavioral tendencies of expressive behavior and show far less coping behavior (Combs, p. 72).

**Attitudes and Values**

Professional interest and motivation are important factors that professionals look for in interviewing and counselling prospective teachers. Objective measures are not totally disregarded, although the search for criteria is held to be a blind alley and the use of professional judgment is considered the best device available at this time (Combs, p. 76).

The beliefs ascribed to prospective teachers are of particular interest to professionals who rely upon subjective judgments in selection practices. The good teacher is regarded as one who holds a
healthy respect for subject matter and has a rich, extensive, and available field of perceptions about his subject (Combs, p. 20).

The prospective teacher's beliefs in relation to people are also regarded as vitally important. It is desirable that they possess accurate understandings about people and their behavior. Belief in the capacity to learn, for instance, inspires confidence and trust in students and leads to the certainty that learning will take place if the teacher is successful in facilitating and encouraging the learning process. Another important ingredient in the prospective teacher's belief system is a clear and consistent frame of reference about people and their behavior to which the teacher is deeply committed. This frame of reference is to be fostered throughout the teacher preparation program (Combs, p. 21).

The essence of successful professional work is the effective use of self. The prospective teacher's view of self is regarded as important since his person-ness is the vehicle through which teaching is accomplished. From a perceptual point of view, highly adequate personalities seem to be characterized by four general qualities:

1. They tend to see themselves in essentially positive ways ... generally liked, wanted, successful, able persons of dignity, worth, and integrity.

2. They perceive themselves and their world accurately and realistically ... confront the world with openness and acceptance ... with a minimum of distortion or defensiveness.

3. They have deep feelings of identification with other people ... a feeling of oneness in the human condition.

4. They are well informed ... they have perceptual fields which are rich, varied, and available for use when needed. (Combs, p. 70)
The beliefs of a student about the purposes and process of learning are also viewed as important since his perception of his own and society's purposes affect behavior. Fulfillment of society's purposes will be achieved through resolution of the prospective teacher's personal economy with the purposes of the nation, community, school, parents and children. (Combs, p. 22)

The kind of person a teacher is will affect his approach to teaching. Teaching is viewed as a creative act, involving the use of one's self as instrument. Methods are selected which are best suited to a teacher's personality and which are most effective in a given situation. The prospective teacher needs a good understanding of himself as a person in order to learn to make appropriate choices in learning situations.

**Procedures for Selection and Retention**

The procedures for selection and retention of students for teacher education involve activity of individuals and institutions. Individuals are primarily concerned with decision making and with self-selection. Institutions employ a series of procedures at various points in the educational process including admission to the institution, the preprofessional program, admission to teacher education, evaluation for retention, admission to student teaching, and recommendation for student teaching, evaluation of readiness to teach, and recommendation for certification to teach.
Individual Procedures

Individual decisions involving self-selection should precede any judgment by admissions committees. The direct participation by individuals in self-selection allows for open and equitable judgments external to the institution. Individual decisions need to be confirmed by the subjective judgments of professionals since students are sometimes forced to lie to themselves about their real motives for teaching (Haberman, p. 70).

Self-selection out of a program offers a distinct advantage to students when the exit is made early enough that the penalty for changing is small. An early major experience affords students the opportunity to evaluate their own qualifications with the assistance of a counsellor (Andrews, p. 23-24).

Institutional Procedures

Institutional procedures in selection begin at the point of initial admission to the institution where provision should be made for recruitment and screening. This involves dissemination of information regarding opportunities in education and identification of students displaying promise in intellectual and personal qualities. Those who express desire to become teachers but whose abilities and competencies are not fitted to teaching are, at this point, counselled into other directions (Denemark, p. 15). This concept of early deselection by individuals or institutions is a distinguishing feature in this position in sharp contrast to a policy of open admission in which potential is regarded as not always obvious early in the program but lies waiting to be uncovered.
The preprofessional program is a vital part of screening procedures involving faculty and administrators. Evaluations by faculty members in general education and academic subject matter courses are sought. Programs are viewed as schoolwide, not the domain of individual faculty members. Genuine admission interviews are recommended to be conducted by a committee made up of persons representing diverse philosophical backgrounds (Haberman, p. 67).

Another procedure designed to involve preprofessional faculty members in this decision-making process is described in the literature which involves the use of forms to be completed by faculty members.

All faculty who have courses in which a majority of the students are headed into certification programs should be required to complete a simple one-page form at the conclusion of each course. The instructor would be asked to list in the top spaces at least one and not more than five students who, in his best, overall judgment impressed him as having the highest potential for becoming strong teachers. Conversely, he would list at least one and not more than five who impressed him as having the least potential for becoming good teachers. This data would be converted to symbols and recorded. Whenever any student showed up with two or three low potential designations, and no high ones, he would be called in for a conference, review seriously his potential for teaching, given every opportunity to develop his potential and demonstrate it specifically at this time. (Andrews, p. 24-25)

The utilization of this form would offer a management system to record valuable feedback involving subjective judgments from many professionals. This procedure, followed by an institution, affords an opportunity to select in the apparent best on all criteria available rather than to select out for reasons which are hard to defend. The conference and review procedure is designed to place responsibility on the personnel of the institution to help students find ways to improve to meet demands of the program (Andrews, p. 26).
Institutions practicing selection based on subjective judgment of experts place emphasis upon the establishment of quotas which provide for selection "into" a teacher education program in contrast to those who attempt to select "out" those who are judged to be unfit. These quotas are established by committees of faculty, practitioner-graduates, and others. This policy of selecting in students to meet a predetermined number of students who can be properly prepared is much safer than selecting out students in view of the frequent legal actions to determine "rights" which students feel are being denied them (Andrews, p. 25).

Quotas should be based on the resources of the institution, not on student demand or the current supply-demand situation. The real educational potential of a teacher education program is a function of four factors:

(1) its faculty resources, (2) the number of cooperating schools and teachers, considered suitable as training partners, (3) its media supports, simulation materials and curriculum library, and (4) the assumptions of the faculty regarding the nature of school staffing for which it is preparing practitioners. (Haberman, p. 235)

Admission to the teacher education program is a strategic point in the process of screening. This point should be clearly defined, formalized, and understood by all faculty members and students. Procedures may include interviews, written applications, and establishment of permanent files. Data is gathered regarding academic performance; evaluative statements by instructors or others familiar with the student's performance are recorded (Denemark, p. 15).
Subjective judgments at the point of admission to the teacher education program are never made on the basis of cursory meetings or reactions to written documents. Intensive interviews or oral examinations using simulated experiences are recommended together with direct observation of students' work (Haberman, p. 67).

Selection procedures for students preparing to teach should include provision for continuing screening and selective retention throughout the program (Denemark, p. 14). The procedure of advisement serves to guide students in areas of specialization appropriate to their interests and competencies. Experiences involved in this selection procedure should be designated as fieldwork but not as student teaching or internship (Haberman, p. 67).

The opportunity to work in classrooms with students early in teacher education is seen as an essential part of the selection process so that future teachers can assess their potential as teachers, and have that potential assessed by school teachers and college professors (Bush, p. 278).

Admission to student teaching represents another strategic point in the selection process. The evaluation of readiness to teach is based on subjective judgments of classroom teachers and college professors regarding demonstrated success in the classroom setting. Flexibility is recommended in programs so that the strengths and weaknesses of individuals can be provided for in differentiated programs. Modifications in time and setting for student teaching, additional coursework, or short-term, specialized experiences may compose variations in the professional program. These arrangements help to provide
for an appropriate balance between fostering individual development and maintaining exacting professional standards:

Because of the complexity of teaching, preservice programs cannot be expected to produce graduates who are finished products and skilled in the full range of performance associated with a high quality of teaching. However, evidence of ability to analyze his teaching and to profit from additional experience should be expected . . . (Denemark, p. 17)

Candidates must be susceptible to future growth and demonstrate potential to function as continuous learners (Haberman, p. 235).

**Implications for Program Development**

Institutional procedures for subjectively selecting prospective teachers will be more efficient in the researcher's view when institutional responsibilities are clearly placed. Continuity can be provided throughout the process of selection through a total guidance program beginning with initial admission of the student, continuing through the preservice program to job placement services and followup services in the field. At least one faculty member should know the student well enough to assume responsibility for the student's program (Denemark, p. 17).

Student records should be maintained reflecting the use of multiple criteria. These records should be readily accessible to advisors.

The selection process involves a series of procedures employed by an institution:

The selection process covers a period of up to one year, involves students in credit and non-credit activities, requires substantial clerical support, and involves a major commitment of faculty time.
Approximately the first half of the programs now offered as teacher education must be reconceptualized as the process of selection and admission. (Haberman, p. 68)

Some principles exist in the literature for developing admissions programs in teacher education based on this position:

1. All students have the right to general education. The right to pursue professional education may be extended only by the recommendation of professional experts employing selection criteria that have been carefully conceived, systematically applied, and regularly evaluated.

2. Clerical and bureaucratic requirements should be met before initiating any processes of admission and selection; these should be of minimal nature, easily and quickly completed.

3. Self-selection is a necessary but insufficient condition for determining admission to teacher education programs; it occurs in stages over a one-year period.
   a. The basis of initial self-selection is brief and varied observation of the work activities and professional life style of the teacher.
   b. The basis of final selection is self-selection after an extended period of participation in all phases of the teachers' work.
   c. Selection experiences should carry college credit and be designated as fieldwork, never as student teaching or internship.

4. Subjective judgments of professional experts (faculty and practitioners) regarding self-selected students are the ultimate basis for full admission to programs of teacher education.
   a. Programs are schoolwide not the domain of individual faculty; genuine admission interviews are conducted by a committee of at least three, composed of faculty and practitioner-graduates who do not agree on their philosophy and practices in teacher education.
   b. Subjective judgments are based on intensive interviews, oral examinations using simulated experiences, or direct observation of students' work and are never limited to cursory meetings or reactions to written documents.
   c. Students' opportunities for self-selection based on their direct participation should precede any judgments by admission committees.
5. Traditional admission criteria such as college requirements and objective examinations should be used after selection as a basis for planning subsequent work, not as a basis for determining admission.
   a. All college requirements (e.g., grade point average, total course credits, specific course requirements, proficiency examinations in English and speech, and physical fitness), that are used in planning students' subsequent work should be explained by a careful rationale of their relationship to success in teaching.
   b. All standardized tests (e.g., The National Teachers Examination or The Minnesota Teacher Attitude Inventory) should be explained by a careful rationale of their relationship to success in teaching.

6. Quotas for limiting admission to the various programs should be established by a committee of faculty, practitioner-graduates, and others and should be approved annually by the total school of education faculty.
   a. Specific quotas and their rationale should be current, public information.
   b. Quotas for each program should include places for transfer students and certification-graduate students.

7. The selection process covers a period of up to one year, involves students in credit and noncredit activities, requires substantial clerical support, and involves a major institutional commitment of faculty time. Approximately the first half of the programs now offered as teacher education must be reconceptualized as the process of selection and admission. (Haberman, pp. 67-68)

Perhaps the most pressing concern for program development in institutions relying on subjective judgments of professionals is the composition of the faculty itself. Every precaution should be taken to determine that those charged with the responsibility for making decisions and implementing them are truly professional in discharging that responsibility. Recruitment of professional educators should be based on the assessment of candidates' demonstrated ability to judge effective teaching and the assurance that the prospective judges are truly in a position to know the characteristics and behavior traits most likely to
produce effective teachers. In the final analysis, subjective judgments will be no more reliable than the judges themselves.

The subjective judgment of professionals is the ultimate basis for selection and retention within the position discussed in this chapter. Specific criteria and procedures prescribed by those professionals are given. Implications for program development are given.
CHAPTER VI

CRITERIA AND PROCEDURES FOR THE
POSITION SELECTION BASED ON
INDIVIDUAL DIVERSITY

In this chapter the criteria will be described which are specified in the literature for the position advocating selection based on individual diversity. Principal works identified with aspects of this position include Ryans and Olmstead. Following the criteria will be a description of procedures identified through the analysis of the universe of content. Implications will be drawn from this data for program development for use by institutions which identify with this position.

Criteria for Selection and Retention

The criteria have been classified as they relate to the system devised for analysis in three major categories; namely, knowledge, skills, and attitudes and values.

Knowledge

There are no detailed references to the acquisition of knowledge as related to professional performance in the literature supporting selection based on individual diversity. Most writers propose emphasis
upon personality types or the development of unique skills or behaviors consistent with those types. The assumptions regarding knowledge necessary for effective teaching are not specified. It can be inferred from the content that the traditional criteria of acquisition of knowledge is deemphasized; the search for predictors focuses upon belief domains.

**Skill**

Research on the human, interpersonal dimensions of teacher effectiveness is moving away from paper-and-pencil tests of personality toward observation of prospective teachers' actual behavior. The description of these behaviors leads to results which hold far more intrinsic, logical validity than traditional paper and pencil kinds of tests (Ebel, p. 21).

Investigations of teacher behavior have been descriptive in nature and do not provide explanations of that behavior. Some attention has been given to behaving styles in recent research:

A substantial amount of information is becoming available about the "behaving styles" of teachers as they go about performing their responsibilities. It is important that such behaving styles not only be recognized but that individual differences among teachers with respect to them be considered and that relationships between such teacher behavior patterns and their effects upon pupils in the information-transmission process be studied. It seems probable that teacher education of the future will give serious attention to teacher behaving styles. (Ryans, p. 291)

Stance typing procedures are based upon the predictability of behavior patterns on the basis of entry information. Skill development is seen as providing students with technical and pedagogical tools
required to shape their work in ways congenial to their own belief patterns.

Attitudes and Values

The belief patterns of prospective teachers form the major criteria for selection in this position. Stance typing was used at the University of Michigan to classify teacher education applicants in seven major categories: Child Focusers, Pragmatists, Task Focusers, Contented Conformists, Timeservers, Ambivalents, and Alienateds.

Applicants in the last three categories were considered less fit for teaching. Timeservers considered teaching a job rather than a profession, and this belief was manifest in behavior. Timeservers did not have positive feelings about teachers and teaching; they accepted authority less willingly than other types. Lack of integrated beliefs about education were identified in Timeservers through observing their inadequate concern for excellence and personal achievement, and their experience of being easily threatened by children or adults. They tended to keep youngsters at a distance and assign intrinsic value to order and management. Another stance type (Ambivalent) considered undesirable for teaching represented a cluster of beliefs that was fragmented. The conflict between idealism and the reality they perceived led to inconsistent practices by the prospective teachers. The Alienateds were rejected from teacher education on the basis that they were unable to identify with other teachers or to accept the worth of tasks set for children by schools. These people were highly
egocentric and easily threatened, but otherwise diverse in personality and beliefs relating to curriculum, faculty, or children (Olmstead, p. 332).

Belief patterns leading to more desirable stances form types described as Child Focusers, Pragmatists, Task Focusers, or "perhaps," Contented Conformists (Olmstead, et al., p. 334). Child Focusers maintain single-minded devotion to the pupil as an unfinished personality and behave in ways that indicate belief in the principle that schools exist for individual children. Pragmatists focus upon loyalty to the school as an institution and seek to shape the individual through experience; they have positive organizational identification and accept responsibility willingly. Task Focusers value the ability to guide children toward mastery of assignments and focus upon practical problems of instruction such as motivation, concept development, and integration. Contented Conformists find work with children satisfying yet they value more highly the achievement of their personal goals. They perceive teaching as doing what one is told rather than as a decision-making process. Contented Conformists value the security and self-fulfillment that comes from following curriculum syllabi or the principal's directives. Ideally, a school faculty would be regarded as most efficient with a mix of teachers of the types Child Focuser, Pragmatist, Task Focuser, and perhaps, Contented Conformist (Olmstead, p. 333).
Procedures for Selection and Retention

No procedures involving individual evaluations or decisions within this position are reported in the literature reviewed in this study. Institutional procedures utilized in the Michigan experimental study were based upon a two-year internship in which prospective teachers were fully responsible for a class and performed all the duties of a beginning teacher. Intern consultants guided the interns through the two-year experience. Prior to the first professional education course, each intern was interviewed in depth. At five critical points the interns were again interviewed. These interviews were supplemented with data from such standard instruments as the College Qualification Test (CQT), the Edwards Personal Preference Schedule, the Allport-Vernon Scale of Values, Rokeach's Dogmatism Scale, the Strong Vocational Interest Test, and the Minnesota Teacher Attitude Inventory. The researchers found that the data suggests strongly that the stances students developed could have been predicted on the basis of entry information.

Implications for Program Development

Some implications arise from the researcher's interpretation of these messages. A program of teacher education proposing to select students based on individual diversity is faced with numerous challenges. The student population must be studied to determine what differences exist in students on the entry level. The institution will need to provide the necessary resources for this kind of study, including
provision for adequate control over the study. Throughout the program, experiences should be accompanied by continuous observation and evaluation of behavior through the use of instruments designed to record teaching behavior. Adequate personnel will be needed for guidance and counselling of interns and for conducting depth interviews. The purposes of the teacher education program will need continuous updating as the faculty moves toward clarification of the descriptions of teaching behavior and of stances teachers take.

The literature reviewed in this study would indicate that there is a pressing need for institutions to find ways to help individuals participate in the selection process through self-evaluation and decision-making. Allowing individuals to participate in the process of "typing" their stances and understanding their own beliefs could lead to a better understanding of why certain individuals are considered to be unsuited for teaching. Timeservers, Alienateds, and Ambivalents may be able to recognize early in the program that their goals are not in accord with professional development and may deselect themselves from the program. Adequate provision of counselling services would offer guidance to those students in reshaping goals consistent with their beliefs. This kind of service provided by the institution could effect mutual benefit for individuals and the institution.

This chapter has addressed the position advocating selection based on individual diversity as revealed through typing of stances a teacher takes. Specific criteria and procedures identified through an analysis of the literature have been given. Implications are drawn for institutions developing programs around a similar position.
In this chapter the findings from the literature will be reported that support a position that represents a reluctance to practice the screening of prospective teachers because research has not fully substantiated the relationship between predictors and criterion variables. Writers addressing this position include Fattu, Flanders, Durflinger, Ort, and Biddle. The criteria for selection are held to be unsupported or inconclusively supported by research by proponents of this position; therefore, the findings regarding criteria and procedures are presented as those which should not be followed until the results from further research can be obtained.

Criteria for Selection and Retention

The statements regarding various criteria employed in the selection of teachers have been classified as they relate to the acquisition of knowledge, skills, or attitudes and values, in consistency with the classification system devised to guide the conceptual analysis of the literature in this study.
**Knowledge**

The proponents of this position assert that, generally, research findings do not support the popular assumption that subject matter mastery assures success as a teacher. Neither intelligence nor subject matter mastery appears to be a major factor in teacher competence (Fattu, p. 25). Professional knowledge, however, has proved to be a somewhat more successful predictor, particularly of teaching performance. Slight positive correlations are shown between scholarship and teaching performance, although no particular course or group of courses has been shown to be a predictor (Flanders, p. 1424). The positive correlation coefficients usually found probably are reflective of the relationship between intelligence and academic or teaching success (Fattu, p. 25). In a study of some techniques used for predicting the success of teachers, academic achievement was not found to have any predictive value as to how successful a student would be as a student teacher or as a first-year teacher. It was noted, though, that on the extreme ends of the scale there were more inadequate teachers with low academic achievement records than there were inadequate teachers among the high achievers (Ort, p. 70).

In a study of 48 universities and 132 colleges concerning screening devices for admission to upper division or professional courses, a grade of C was generally adequate. Only 3.3 per cent reported a grade point standard of 2.5 or greater. The findings of this survey would seem to indicate that in the early 1960's, in practice at least, many institutions did not rely heavily on the criteria of knowledge as measured by scholarship in college courses.
The criterion of teacher aptitude has not been productive in early research findings. Data fail to establish the existence of any specified aptitude for teaching with any degree of certainty and in some cases tests used have been shown to be inappropriate to the measurement of aptitude (Fattu, p. 24).

Ort's study of techniques used for predicting success resulted in the conclusion that there is no correlation between the score of the student's reading test, his A.C.T. score, and his success as a student teacher or first-year teacher (Ort, p. 70).

Skill

Reviewing the research on predictor criteria, some have concluded that capacities such as voice quality and speech produce no links with teacher effectiveness (Fattu, p. 26; Flanders, p. 1424). Similarly, instruments measuring behavioral tendencies such as the Minnesota Multiphasic Personality Inventory had no significant correlation with evaluations made by supervising teachers (Ort, p. 69).

Attitudes and Values

Early results from personality and teacher attitude inventories did not have any predictive value as to how successful a person would be as a teacher (Ort, p. 70). Attitude toward teachers and teaching as measured by the Yeager Scale seems to bear a small but positive relationship to teacher success, measured in pupil gains (Fattu, p. 26).
Factors underlying the motives for becoming a teacher have been identified:

(a) desire to work with children or adolescents, (b) liking for a particular subject, (c) opportunity to leave the profession and to return to it later, (d) increasing salary trend, (3) scores on inventories of vocational interest, (f) possibility of using teaching as a steppingstone to another career, and (g) membership in an FTA group. (Durflinger, p. 356)

Other factors which influence students to aspire to become teachers are the beliefs that teaching is interesting, satisfying, challenging, and imaginative. However, correlations resulting from the use of several standard interest tests are so inconsistent as to render such tests of doubtful value as predictors of success (Fattu, p. 26; Flanders, p. 1424).

Statistically significant, low positive correlations have been found between "warmth" as measured on the Cattell 16 P F Tests and the Minnesota Teacher Attitude Inventory and patterns of behavior observed with the ten Flanders categories (Flanders, p. 1429).

Procedures for Selection and Retention

An individual procedure utilized in the process of entering teacher education includes self-rating. These ratings have proved to be of little use because there is a consistent bias toward overrating (Flanders, p. 1424).

Traditional means of evaluating readiness to teach are utilized by the institution through the services of supervising teachers and college supervisors of student teaching. Narrative descriptions and scale
evaluations are used for recommendation in the belief that the best predictions of the future success of a student teacher, even though limited, can be made by the supervising teacher and the campus supervisors (Ort, p. 70).

**Implications for Program Development**

Recent research has shown that measuring devices for predicting the future performance of man need to be refined. Facing many variables difficult to control, persons responsible for teacher education tend to operate extemporaneously using recommendation forms and rating scales developed over the years without validation through research. Lack of replication in the investigations which have been conducted has caused teacher educators to operate without a systematic body of knowledge upon which to base decisions.

Proponents of this position have been less than optimistic toward the utilization of research findings for reliable progress in program development. They recommend that, facing real problems, schools of education can operate as well extemporaneously as they can by study of the best research on competence available in the early 1960's (Biddle, p. 389). Criteria should be based on a careful explanation of their relationship to success in teaching. The first step toward developing a defensible program involves the implementation of research projects which may lead to data establishing some correlations with effective teaching. This research could be conducted by institutions using applicants for teacher education. Most productive research would
involve long-range studies involving the followup of graduates of the program. Specific data needed include information relating to kinds of knowledge needed by teachers at various levels, relationship between scholastic achievement and successful teaching, identification of teaching aptitude, development of reliable interest inventories and taxonomies of teaching behavior, and means to eliminate bias in ratings.

Literature reflecting this position cites research completed prior to the early 1960's and subsequent research may cause a shift toward a more optimistic view of the feasibility of authentic selection practices. By virtue of the fact that the position is based upon the lack of research, there is the potential open for progress in research to change this position in time. There is, however, a body of literature identified within the universe of content in this study that supports the belief that the contemporary practice of selection is restricted because of a lack of reliable predictors for success in teaching.

The findings from the analysis of the literature have been reported in this chapter as they relate to the position that holds that selection practices must be limited because of a lack of reliable predictors. The criteria for selection used by some professionals are rejected. Procedures are discussed with an emphasis upon their weaknesses. Implications which follow from this position are offered for consideration in program development. A rationale is given to explain why this position has unique potential for change as more research findings become available.
In this chapter the criteria specified in the literature on open admission will be described. Following the criteria will be a description of procedures described in the universe of content which are recommended or are actually in practice. The universe of content for this chapter includes writings of Houston, Gold, and Getzels and Jackson. Several implications are discussed for program development following an open admissions policy.

Criteria for Selection and Retention

The criteria for selection and retention mentioned by proponents of openness in admission have been classified as relating to the acquisition of knowledge, skills, or attitudes and values using the classification system presented in the methodology section of this study.

Knowledge

In relation to knowledge as measured by grade point average, writers of this position tend to agree that the traditional criteria of "better" students should be de-emphasized. This position can be illustrated by recent descriptions of practice. In 1974 a study was
conducted to determine what colleges across the country were doing through selection procedures to solve problems involved in what was considered to be an oversupply of teachers. The achievement of a minimum grade point average as a criteria at the point of application for acceptance into a teacher education program was employed by only 44 per cent of the institutions responding. The specific requirement ranged from 2.0 to 2.5 on a four-point scale; some institutions listed "satisfactory" grade point average. The researchers concluded that there appears to be no evidence at this time that there is any great concern on the part of teacher educators to become more selective now of students to be admitted to teacher education programs than they have been in the past (Sinclair, p. 54). This evidence seems to indicate that institutions still are practicing "openness" in relation to grade point average as a criteria for admission into teacher education.

In September, 1970, Hunter College abandoned a long-standing policy of admitting only the elite student and implemented a special open admissions policy for 100 high school graduates screened for expressed interest in improving education in inner city schools. Traditional criteria of academic averages, leadership in school activities, and other identifiable personal attributes were ignored. Some provision was made, however, for subsequent evaluation based in part on achievement:

To enter the teacher education program after three or four semesters in the college, the student had to submit a record that was above average even for the selected population from which he came. (Gold, p. 30)
The foregoing examples reveal two distinct illustrations of ways in which institutions currently endorse the practice of openness in regard to academic competence. In the first instance, institutions endorse the position by virtue of the fact that they have failed to specify and enforce a grade point average criteria for admission to teacher education. In the second instance, a deliberate attempt has been made to solve the problem of creating teachers for diverse subcultures by eliminating traditional criteria.

Academic aptitude is defined by most competency-based programs as the "... amount of time required by the learner to attain mastery of a learning task" (Houston, p. 124). It is assumed that the potential for becoming a teacher is possessed by most persons and that, given enough time, they could become competent teachers. More emphasis is therefore placed upon exit behaviors and less upon knowledge, skills, and attitudes at the beginning of the program. Potential is held to be "waiting to be uncovered" (Gold, p. 29). The relevance of general intellectual ability to success in teaching is held to be small and of little value as a predictor (Getzels and Jackson, p. 574).

No data was found in the content of this study regarding the use of criteria based on knowledge of course content or results of achievement testing. Other performance measures of knowledge not identified by this analysis include college entrance scores or teacher aptitude tests.
Skills

The performative knowledge of prospective teachers is held to be enhanced when they have a background of common experience with that of the children they will teach.

... children should come into more frequent contact than is now possible with teachers who can express empathy born of a common experience and who can serve as models that motivate academic aspirations. (Gold, p. 31)

A crucial aspect of competency-based teacher education is the assessment of the mastery of concepts and skills. This assessment typically takes place in at least three phases: initial screening, on-going assessment, and end-of-program assessment. In the initial screening phase devices such as grade point averages, S.A.T. scores, or psychological projective techniques are employed, yet few institutions have batteries that they regard as valid or effective. The initial screening devices are typically most helpful as aids to self de-selection. The end-of-program assessment asks the neophyte to prove his effectiveness in the real world of teaching. Performance objectives must be demonstrated in teaching situations. Feedback is provided on effectiveness and interpersonal relationships with pupils. However, a lack of universal agreement about what is to be measured exists. Taxonomies are needed to organize descriptors of teaching behavior into common and interrelated categories. Several taxonomies have been developed by researchers arising from theories of teaching or from descriptors in the literature, yet they tend to accommodate some aspects of teaching performance but to neglect others (McDonald, p. 68).
Selecting criteria for evaluating teaching performance centers around either the criterion of classroom performance or the criterion of pupil performance. It is almost universally agreed that the ultimate criterion for evaluating a teacher is the performance of his students; however, criteria of classroom performance are more widely used since identification of the relations between teaching behavior and student performance require substantial long-term research (McDonald, p. 70).

Attitudes and Values

Interest in improving the educational lots of "sisters and brothers" in inner-city schools was the primary criterion for admission into Hunter College's special open admission program:

They all shared several basic feelings: a deep concern for other young people in the communities from which they came, a commitment to improve conditions in the slums they knew, a conviction that education was their best instrument to secure this improvement, and a commitment to become teachers themselves so they could share in this process . . . (Gold, p. 31)

Emphasis is also placed upon beliefs in relation to self in some institutions practicing open admissions. The Wisconsin State University-Oshkosh holds regularly scheduled personal development seminars required each summer session and semester during which students are enrolled. The objective of the personal development seminar is to effect in each student a more realistic perception of self in relation to the world around him.

Beliefs about subject matter, approaches to teaching, or people were not identified in the universe of content as criteria for selection by proponents of this position.
Procedures Implemented for Selection and Retention

The procedures employed to implement a program based on open admissions involve individual decisions, individual evaluations, institutional decisions, and institutional evaluations.

Individual Procedures

Individual evaluations and decisions play a unique role in this position since interest, or desire to become a teacher, is the primary requisite for beginning a program. This is often referred to as self-selection. The individual is further involved in deselection in some instances. A student may deselect himself for various reasons. After weighing his ultimate goal with his present condition, he may discontinue the program. If he finds himself unable or unwilling to perform some program objectives, he may deselect himself. He may withdraw from the program because of time constraints. This self-selection process is seen to have potential for being more valid than other selection processes employing what is thought to be too narrow bases for choice (Gold, p. 29). It does not rule out subsequent application of other measures but is seen as a highly important prerequisite for other accomplishments.

Institutional Procedures

The decisions and evaluations made by institutions regarding prospective teachers are referred to as institutional procedures. Most institutions employ a series of steps in the selection process. This
continuous process often includes some of these checkpoints: admission to the institution, admission to the preprofessional program, admission to the teacher education program, evaluation for retention in the program, admission to student teaching, evaluation of readiness to teach, and recommendation for certification or graduation.

As a result of open admissions, the range of academic preparedness is considerably broadened. At the City University of New York, the parent organization of Hunter College, special services and administrative arrangements were made available in order to prevent open admissions from becoming "a revolving door and hence a cruel hoax to newly admitted students" (Gold, p. 30). The procedure involved administration of placement examinations, guidance services, and opportunity to complete three full semesters before dismissal for academic failure. Stipends and work-study arrangements were also provided.

To facilitate the success of prospective teachers in the preprofessional program, Hunter College provided faculty retraining and curriculum redevelopment. Under the Federal Training of Teachers program, teachers of the liberal arts and field experience phases of teacher education were upgraded. Faculty members of various disciplines were given a year to cooperatively plan new approaches.

Similarly, the Oshkosh project recognized the need for additional institutional services to the university underachievers they had recruited for teacher education. The special preprofessional curriculum was based on three assumptions:
1. Though the curriculum would probably take longer to complete than the typical four-year program, it would not necessarily be less rigorous or encompassing than the present curriculum.

2. It would be designed also to accommodate incoming freshmen who could be recruited because of their interest in the disadvantaged and/or because they present a poor prognosis for success.

3. Most aspects of the curriculum would contain innovative attempts at individualizing instruction, making course content relevant to the concerns of the student and the needs of the prospective teacher, and providing important direct experiences with children, youth, and society. (Bowman, p. 211)

Three unique program components of the curriculum at Oshkosh were the personal development seminar, learning centers in each curriculum division, and early skill training in school-related areas.

The requirement of an interview to determine desire to teach or commitment to teaching is a fairly common procedure among institutions at the point of admission to teacher education. Sinclair found 42 percent of the institutions responding utilized this procedure although none listed the criteria by which subjective judgments of faculty members were made (Sinclair, p. 542).

Evaluation for retention in programs with open admission requires a system of feedback to aid students in their own selection or deselection. Some competency-based programs have developed systems approaches which serve as models. The Research and Development Center for Teacher Education at the University of Texas at Austin developed an assessment package to feed back information about individual students to themselves. No cutting points or minimum standards are available. The self-descriptive summary information is provided by the institution for specific purposes directly beneficial to them and to the student.
Admission to student teaching is not treated as a separate step in the literature on the selection process in institutions with open positions. Emphasis is placed on continuous self-evaluation, early field experiences, and personalized programs.

The evaluation of readiness to teach is accomplished by team assessment in some institutions. The team in competency-based education consists of college faculty, school administrators, school faculty, pupils, and the teacher education students themselves.

Recommendation for certification to teach in a competency-based program is given to a "safe" teacher. This "safe" teacher is certified as being safe for pupils when he or she starts teaching because he has demonstrated minimal competencies assessed through written instruments, interviews, role playing, and in teaching situations.

**Implications for Program Development**

The implications given are based on the researcher's interpretation of messages in the literature and represent prescriptions for action by practitioners in teacher education.

The characteristics of the personnel selected for a particular teacher education vitally affects the goals and setting in which learning takes place. The learning process is shaped in part by the beliefs of educators regarding the nature of the learner involved. Institutions which value the potential of all individuals to become teachers assume an awesome responsibility to expend the necessary time, talent, and resources to accomplish this task. Screening and retention
practices thereby necessitate certain provisions in the program if a reasonable number of students are to complete the program successfully. This study has been conducted within the context of the researcher's view that selection criteria and procedures should evidence reasonable congruence with program goals and the capabilities needed by individuals to achieve those goals.

It would appear that such an approach would require special preparation of the faculty to effectively guide students of wide cultural, academic, and social backgrounds. Further, it seems reasonable to suggest that expertise will be needed in the area of measurement including placement testing, diagnostic testing, and criterion-referenced testing. Specialized skills in "uncovering potential" will be needed. Guidance services will be required to provide for extensive counselling to aid students in interpreting feedback for their self-evaluations. Facilities need to be provided for acquiring, reporting, and storing data used in the self-selection process. Program improvement will be dependent upon a continuous process of evaluating the system since the proponents of this position do not seek to improve the program by controlling the constraints of time, talents, and financial resources through screening at the point of initial admission to the institution.

Institutions which identify with the open admission policy have made commitments to expend necessary resources for particular purposes. Without the specialized objectives to reach particular groups or subcultures, this open policy may be more difficult to justify if present
supply-demand trends continue. There appears to be at the present time a viable position for open admissions specially adaptable for institutions with an alternative program developed to achieve a unique purpose in meeting special needs.

In this chapter a position toward openness in admission has been examined to reveal specific criteria for selection and retention in teacher education programs. The processes by which these criteria are applied have been discussed as they relate to individual procedures and institutional procedures. Implications for program development are discussed at the conclusion of the chapter and principles to be followed are enumerated.
CHAPTER IX

SUMMARY AND RESULTS OF THE STUDY

In this chapter a summary is provided of the purposes and procedures for this study. The results are reported in the form of findings, conclusions, and recommendations.

Summary

This study has been conducted for the purpose of identifying current theory and research regarding selection and retention of preservice teachers. Five distinctive positions have been identified, and the basic assumptions upon which these positions are based have been articulated. Each position has been further clarified with a classification of criteria given in the literature for selection and retention which are conducive to the acquisition of the body of knowledge, skills, attitudes and values considered necessary for becoming a teacher. Procedures implemented by proponents of various positions are explained for the purpose of providing resource material for institutions desiring to develop selection and retention programs that will fit unique purposes. The findings lead to conclusions which represent a conceptual description of current theories concerning selection and retention of preservice teachers. They are limited to
the manifest content of the communications in the universe of content analyzed in this study.

The methodology used to identify positions, assumptions, processes, and criteria has been content analysis. Inferences were drawn from the literature by systematically identifying and classifying specific characteristics of messages according to the standards EDb 303-01I and EDb 303-01J from Ohio's 1980 Standards for Colleges or Universities Preparing Teachers.

Results

Findings related to the first two questions posed for the study are summarized in this section: (1) What explicit or implicit assumptions exist in the literature regarding selective admission and retention; (2) What distinctive positions, if any, regarding selection and retention can be identified? The five distinct positions have been identified by this study which are unique in their theoretical stance toward selection and retention.

The position most frequently described in the literature of this study is one which supports selection based on measurable characteristics or behavior. The position was stated in 1961 by the National Commission on Teacher Education and Professional Standards and was subsequently endorsed by reviewers of research. The essential assumptions of this position are summarized:

1. The ability to select for teacher preparation does exist with some reasonable assurance of success.
2. Certain characteristics maximize the likelihood of success in teaching.

3. Abilities and characteristics desirable in teachers can be measured or identified.

4. Behaviors of teachers can be identified, described, and analyzed.

5. Measurement tools play a significant role in helping education move toward excellence through the continuous process of selection.

6. Teacher education institutions do not have the competence, time, or money required to bring about extensive personality development.

7. Early identification of the student whose competence is very low is beneficial for the student and for the institution.

8. The college of education can provide control through its procedural plan for screening.

9. Responsibility for selection is to pupils, society, teacher education students, and to the profession.

Some theorists and practitioners subscribe to the belief that selection should be accomplished primarily on the basis of the subjective judgments of experts. The assumptions upon which this position is based are:

1. Professionals are in a position to make valid and reliable judgments based upon their knowledge and experiences.

2. The knowledge base provided by research is limited; educators are forced to make decisions subjectively until more reliable predictors can be substantiated.
3. Self-selection should accompany the subjective judgments of professionals.

4. Guidance and counselling services are necessary to make sound professional judgments and enhance individual decisions.

5. Ratings by supervisors are valuable in selecting students at points beyond admission.

Another position from which selection practices emerge is one which is based on individual diversity, or teaching stances. The assumptions of this position are:

1. The universally effective teacher does not exist.

2. Beliefs can be classified to represent types of personality that should be selected for teaching.

3. Since teaching is a complex performance, graduates will not be skilled in the full range of performance associated with a high quality of teaching.

4. Emphasis should be placed upon analytical skills and ability to profit from analyzing one's own teaching performance.

There is a body of literature that supports the position that selection practices are restricted because of a lack of reliable predictors for success in teaching. The assumptions underlying this belief are as follows:

1. Predictor tests are presumed to have a high rate of error in selecting prospective teachers except in extreme cases.

2. The chance for making incorrect decisions cannot presently be eliminated.
3. Conclusive research is lacking in the area of teacher effectiveness.

4. Much of the data that have been gathered on teacher effectiveness cannot be generalized to other situations and so is of little use in making selective decisions.

5. Lacking conclusive research on competence, schools of education should select prospective teachers "extemporaneously."

A body of literature has been identified that represents theory and practice in selection that is relatively open in nature. It is based upon the following assumptions:

1. Students from minority groups can be more readily recruited and accepted when admissions policy is open.

2. Teachers can be developed from those with backgrounds similar to the children they will teach.

3. Potential is not only to be "polished" by teacher education but discovered.

4. Cognitive performance should not be a criterion for admission.

5. Heavy reliance on cognitive performance and characteristics are "undemocratic."

6. The foundation for uncovering and developing potential should begin in the process of self-selection.

Findings are recorded in Tables 1 through 5 in the Appendix for the third question of the study: What criteria exist in the literature for each of these positions with regard to selection and retention which are presumed to be conducive to the acquisition of the body of knowledge, skills, attitudes and values necessary for becoming a teacher?
Table 1 represents concepts identified relating to criteria for the position selection based on measurable characteristics or behavior. Criteria recommended by proponents of this position include measurement of knowledge by means of grade point average, tests of cognitive ability, and achievement tests. Other minimum criteria relating to knowledge have been identified: possession of ability, interest, and self-direction appropriate to success in college and continuing development as a scholar; evidence of being broadly educated and having a comprehensive knowledge of subject matter; the ability to control and give direction to learning activities; general cultural knowledge; and knowledge of professional information. Minimum criteria of performance require the ability to carry out work throughout the day and to respond to the intellectual and affective state of pupils. Characteristics which provide means for evaluating these criteria include emotional maturity, communication skills, basic computational skills, ability to work with others, understanding of and participation in democracy and health. Motives are regarded as an important indication of future success; interests, abilities and values should give some assurance that an individual will gain satisfaction in teaching. Other criteria related to values include character, attitude and action worthy of emulation by pupils. Characteristics deemed desirable are attitudes favorable to students, generosity and tolerance in appraisals of the behavior and motives of other people, strong interest in reading and literary matters and interest in music and painting.
Table 2 reports the number of instances in which concepts have been identified relating to specific criteria for the position selection based on subjective judgment. The criteria identified in this study for this position emphasize self-selection and capabilities to meet program goals in the early stages. Traditional criteria of grade point average, total course credits, specific course requirements, proficiency examinations in English and speech, and physical fitness are believed to be more useful in planning subsequent work than in screening for admission to teacher education. Capacities such as health, speech, and communication skills are necessary for retention although no measures of adequacy are specified. Behavioral tendencies of emotional maturity, moral and ethical fitness are judged on the basis of professional opinion and experience. Performance of conceptual skills and strategic acts are seen as important criteria. The capacities for sharing self and for disciplining self are regarded as important. In relation to values, professional interest and motivation rank high among criteria. Others include a healthy respect for subject matter, accurate understandings about people and their behavior, and an adequate personality. The beliefs of a student about the purpose and process of learning are also held to be important predictors of success.

Table 3 presents the number of instances in which concepts have been identified relating to criteria for the position selection based on individual diversity. Within this position criteria for the acquisition of knowledge is deemphasized; the search for predictors focuses on stance typing as a predictor of behavior patterns. Beliefs
form the major criteria within this position and applicants are
classified in seven major categories: Child Focusers, Pragmatists,
Task Focusers, Contented Conformists, Timeservers, Ambivalents,
and Alienateds. Child Focusers, Pragmatists, and Task Focusers were
considered to be desirable stance types for teaching. Contented
Conformists were sometimes acceptable, while Timeservers, Ambivalents
and Alienateds were not recommended for acceptance in teacher education.

Table 4 reports the number of instances in which concepts have
been identified relating to specific criteria for the position
selection limited by lack of predictors. The proponents of this posi-
tion reject subject matter mastery, aptitude, achievement, or intelli-
gence as a predictor of successful teaching. Professional knowledge
holds some promise for predicting teaching performance. No specific
skills are named as predictor criteria. Standard interest inventories
are regarded as doubtful in value as predictors of success, although
"warmth" has been found to have low positive correlation with patterns
of behavior observed with Flanders' categories.

Table 5 reports the number of instances in which concepts relating
to specific criteria for the open admissions position have been
identified by the content analysis. Traditional criteria for admission
to teacher education are ignored by proponents of this position. Some
provision is made for subsequent evaluation based in part on achievement.
Intellectual ability in general is disregarded as a predictive factor.
Criteria based on knowledge of course content, results of achievement
testing, college entrance scores or teacher aptitude tests were not
specified by the writers. Criteria relating to skill, or performative
knowledge recommended by proponents of this position are limited to the ability to empathize; no findings resulted from a search for criteria based on other capacities or tendencies. Special emphasis is placed upon beliefs in relation to self and purpose within this position. There were no findings relating to beliefs about subject matter, approaches to teaching or people as criteria for selection.

Findings are enumerated in Tables 6 through 10 in the Appendix relating to the final question in the study: What procedures exist in the literature for implementing each of these positions?

Table 6 presents findings relating to procedures implemented by institutions basing selection and retention on measurable characteristics or behavior. The procedures employed begin on the precollege level as individual decisions based on the student's own system of values. Colleges offer assistance in understanding those values through counselling services. A continuous series of screening devices provided for a process of decision-making rather than at one crucial point. Admission to the institution often is the first formal procedure in the screening process. Standardized tests or inventories are administered, orientation is provided and, in some cases, application is made to the preprofessional program. Admission to the preprofessional program gives opportunities for demonstration of knowledge, the ability to relate and transmit knowledge to others, to clarify his role in society and to clarify a basic philosophy of life. These areas of growth are demonstrated through standardized inventories, observation of curricular and cocurricular activities and from interviews. The interview is a fairly common procedure at the point of admission to teacher
education programs as well. Early and sequential field experiences and completion of specific courses are recommended, although there is no agreement on which courses should be taken prior to admission to the program. Evaluation for retention is sometimes done on the basis of behavior, yet the essential behaviors involved in teaching have not been fully identified. In the absence of complete descriptions of behavior, models of appropriate characteristics and tendencies are developed for various stages of the program and for different teaching subject areas. Evaluation is also accomplished by testing in course experiences and through children's perceptions of field experiences. There has been an increase in selective practice at the point of admission to student teaching in recent years. A formal application is generally required and acceptance is recognition of accomplishment in general education, specialization fields and professional knowledge and skill. The evaluation of readiness to teach takes place during student teaching and is made by faculty members, the director of student teaching, and school personnel. Recommendation for certification can be implemented by use of tests and instruments although limited use is made of them by institutions. The lack of performance and achievement testing at this juncture creates a significant gap between theory and practice.

Table 7 displays the number of messages identified relating to procedures employed by institutions relying upon subjective judgment of professionals for selection and retention. Procedures for selection and retention within this position originate with self-selection which is then confirmed by the subjective judgment of professionals through
the processes of recruitment, counselling, direction into other vocations, evaluation by faculty members in the preprofessional program, admission interviews conducted by a committee, establishing quotas, applications, and direct observation of students' field work. Admission to student teaching is a strategic point in this selection process, involving demonstrated success in the classroom setting as judged by teachers and classroom professors.

Table 8 displays the findings related to procedures involved in selection based on individual diversity. No procedures involving individual evaluations or decisions were identified. Institutions' procedures included depth interviews and observation and guidance throughout a two-year internship. Other procedures involved the use of standard instruments to measure attitudes and values.

Table 9 displays the number of concepts identified relating to procedures to be employed by institutions with an open admissions policy. The procedures involving self-rating have been rejected because of consistent bias toward overrating. Retention procedures, however, are derived from traditional patterns of supervising teachers and college supervisors of student teaching. Narrative descriptions and scale evaluations are believed to be highly biased and subjective.

Table 10 reports the number of concepts identified through the analysis relating to procedures to be implemented by programs identifying with the position toward openness in admission. The procedures for implementing these criteria include self-selection, self-evaluation, and deselection, on the part of the individual. Institutions provide
special services for less able students and make provisions for placement examinations, guidance services, financial assistance, interviews, personal development seminars, learning centers, early skill training, assessment packages, team assessment role playing, and written assessments.

Table 11 summarizes findings relating to criteria for the various positions. Table 12 enumerates findings relating to procedures for each of the positions. The range of content of messages within each position can be clearly seen from these tables.

Discussion

Conclusions from this study are generated from principal findings about theoretical stances regarding selection and retention, their underlying assumptions, and the criteria and procedures which follow from the position. Consequent recommendations are directed at the improvement of preservice teacher education through clarification of the purposes for selection and provision of alternatives for program development.

Conclusions

1. Distinct positions regarding selection and retention practices can be identified in current literature.

2. The positions can be represented by descriptive phrases: toward openness in admissions, selection limited by lack of predictors, selection based on subjective judgment of professionals, selection
based on individual diversity, selection based on measurable characteristics or behavior.

3. The positions are not necessarily mutually exclusive; a program of selection and retention could implement elements of more than one position in an eclectic manner.

4. The description of positions provides a conceptual foundation for further research in selection and retention.

5. Criteria for selection have been identified and classified relating to each position.

6. Procedures for implementing selection and retention have been identified and classified relating to each position.

7. Procedures described for selection and retention programs have been organized to serve as resource material for program development by institutions.

**Recommendations**

The following recommendations are appropriate, based on the findings and conclusions of the study. They are presented in the form of guidelines to help institutions develop effective programs of selection and retention. Since selection practices are an integral part of a total teacher education program, policies regarding criteria and procedures should be based on a clear definition of the purposes of the institution. Identification with one or more of the positions articulated in this study could serve as an initial step in developing
selection and retention policies for an institution. The guidelines are provided as resource material in further developing programs.

**Guidelines for the Position Selection**

*Based on Measurable Characteristics or Behavior*

1. Institutions have a responsibility to appropriate resources for research, including human, material, and financial resources, to describe those characteristics and behaviors necessary for effective teaching.

2. Long-range follow-up studies of graduates should be conducted to provide a defensible basis for program change.

3. Standards, or models of characteristics and behavior should be available for reference at every point in the selection process. The standards should include reference to knowledge, skills, attitudes and values in harmony with the institutions' purposes.

4. The professional development of faculty should provide opportunity to develop competence in guidance, administrative activities, and interpersonal relations.

5. The criteria for selection should at least include evaluation of emotional maturity, moral and ethical fitness, health, demonstrated ability to work with children and youth, academic aptitude and intelligence, academic achievement, demonstrated competence in speech and basic skills, and professional interest and motivation.

6. The procedures for selection and retention should be sequential and an integral part of the teacher education program.
7. Institutions have a responsibility to appropriate funds for the best measurement tools available which are suited to their purposes.

Guidelines for the Position Selection Based on Subjective Judgment

1. An institution has a responsibility to provide personnel and supportive services necessary to make sound judgments regarding individuals.

2. The recruitment of faculty members should be done with some consideration for candidates' ability to judge effective teaching in relation to precisely stated objectives. Faculty development should include evaluation skill and reliability.

3. Faculty members in the preprofessional program should share in the evaluation of students for teacher education.

4. The opinions of public school personnel and other professionals outside the institution should be sought in the evaluation of students for teacher education.

5. Adequate time and resources should be provided for the observation of field work by professionals.

6. Traditional criteria of admission should be replaced by the professional judgment of experts centered around observation of the students' work in field experiences and by use of interviews, oral examinations, and simulations.

7. Responsibilities for the procedures involved in selection should be clearly placed. Clerical records should be kept for the use of professionals.
8. Self-evaluation should precede the judgments of professionals and institutions should provide means to assist students in self-evaluation.

9. Establishing quotas is an effective means for implementing selection procedures based on subjective judgments.

Guidelines for the Position Selection
Based on Individual Diversity

1. Studies of the student population on the entry level should be conducted to note what differences exist in the beliefs of applicants.

2. Continuous observation and evaluation of behavior throughout the program should be conducted to determine if belief patterns remain constant.

3. Adequate personnel should be provided for guidance and counselling of interns.

4. The purposes of the program will need constant updating and revision as descriptions of belief patterns emerge.

5. Institutions should provide means for helping individuals to participate in the decisions of the selection process.

Guidelines for the Position Selection
Limited by Lack of Predictors

1. Institutions should keep informed on current research in selection and teacher effectiveness.

2. Institutions should study long-range effects of selective practices in other teacher education programs.
3. Institutions should compare the products of their programs with graduates of more selective programs.

4. Institutions should regularly evaluate their positions toward selection and retention policies in light of current research.

Guidelines for the Position Toward Openness in Admission

1. When an institution elects to practice an open admissions policy, it has an obligation to provide the necessary resources and support for helping students to complete the program successfully.

2. The additional time, talents, and financial resources required to operate an "open" program seem to indicate that institutions should hold to this position only as a means to achieve some special purpose.

3. The faculty of the preprofessional and professional phases of the program will need special preparation to guide students of diverse backgrounds. Faculty development should include provision for development of diagnostic and prescriptive skills, counselling skills, and skill in "uncovering potential."

4. Facilities will be needed for special learning assistance such as laboratories and learning centers.

5. Facilities and personnel will be needed for acquiring, storing, and reporting data on student progress.

6. Studies of students and graduates should be conducted to determine the effectiveness of special provisions for less able students.
Finally, institutions can evaluate selection and retention processes by following some sequential steps:

1. A conceptual analysis of literature representing the college should lead to the identification of basic assumptions underlying the teacher education program. Typical resource materials might include catalogs, handbooks, application forms, or self-study documents.

2. The opinions of the faculty of the teacher education department or college of education could be sought to ascertain whether the basic assumptions of each position are representative of the college's stance. The opinions could be obtained through interviews or a questionnaire. In large institutions a sample of opinions could be obtained.

3. Findings from the analysis and opinions should lead to the identification of the theoretical stance of the institution toward selection and retention. The institution may identify with one position or may be eclectic in its position.

4. Criteria and procedures utilized by the college of education may be compared to those recommended by the proponents of appropriate positions. From the comparison, alternatives may arise for consideration in developing the program. Those alternatives should be adopted which can be substantiated as effective through long-range study of students and graduates.

The foregoing conclusions and recommendations are given as resource material for institutions developing and evaluating programs of selection and retention. As a result of this study, a conceptual
foundation has been laid for further research in teacher education relating to selection and retention.
APPENDIX
Table 1

Number of Messages Identified Relating to Criteria for the Position Selection Based on Measurable Characteristics or Behavior

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Table 6

Number of Messages Identified Relating to Procedures for the Position Selection Based on Measurable Characteristics or Behavior

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<td>06</td>
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<td>2.2 Preprofessional program</td>
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<td>2.3 Admission to education program</td>
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<tr>
<td>2.4 Evaluation for retention</td>
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<tr>
<td>2.5 Admission to student teaching</td>
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<td>07</td>
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<tr>
<td>2.6 Evaluation of readiness to teach</td>
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<td>04</td>
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<tr>
<td>2.7 Recommendation for certification</td>
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Table 7

Number of Messages Identified Relating to Procedures for the Position Selection Based on Subjective Judgment

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<td>2.6 Evaluation of readiness to teach</td>
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Table 8
Number of Messages Identified Relating to Procedures for the Position Selection Based on Individual Diversity

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<td>2.6 Evaluation of readiness to teach</td>
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Table 9
Number of Messages Identified Relating to Procedures for the Position Selection Limited by Lack of Predictors

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Table 10
Number of Messages Identified Relating to Procedures for the Position Toward Openness in Admission

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Table 11
Summary of Findings Relating to Criteria

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1.0 Knowledge
1.1 Academic competence
   1.11 Course content
   1.12 Grade point average
   1.13 Achievement testing
1.2 Academic aptitude
   1.21 Cognitive ability
   1.22 Performance measurements
     1.221 College entrance scores
     1.222 H.S. courses, scholarship, rank
     1.223 Scholarship tests
     1.224 Teacher aptitude tests
     1.225 Other tests
     1.226 Scholarship in college courses
     1.227 Pattern of college courses completed

2.0 Performative Knowledge (Skill)
2.1 Facilities (routinizable, institutional acts)
   2.11 Capacities
   2.12 Tendencies
     2.121 Behavioral
     2.122 Preferential
2.2 Critical Skills
   2.21 Following or judging performance
     2.211 Logical acts
     2.212 Strategic acts
   2.22 Executing performance
     2.221 Logical acts
     2.222 Strategic acts

3.0 Attitudes and Values
3.1 Emotions
   3.11 Motives
   3.12 Commotions
   3.13 Feelings
3.2 Beliefs
   3.21 In relation to subject matter
   3.22 In relation to people
Table 11 (continued)

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Table 12
Summary of Findings Relating to Procedures

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BIBLIOGRAPHY

Books


Periodicals


Wilk, R. E. and Edson, W. H. Predictions and performance: An experi­
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September 1963, 14, 308.


Other References

Andrews, L. O. Rationale and suggested components for a program to 
evaluate programs of vocational teacher education. Unpublished 
document, The Ohio State University, 1972.

Boze, N. S. and Day, W. E. Screening Points in Secondary Teacher 
Education Programs, July 1968. (EDRS No. ED031-454)

DiPasquale, V. C. Teacher Selection as an Imperative for the Improve­

Ohio Department of Education. Standards for Colleges or Universities 
Preparing Teachers. Columbus, Ohio: Ohio Department of Education, 
1975.

Ort, E. P., II. Behavior of beginning student teachers: an aid to 
Microfilm No. 73-29, 395).

Rutherford, R. D. Recommendations for improved selection and retention 
processes for elementary teacher candidates in selected state 
teachers colleges. (Doctoral dissertation, Denver, Colorado: 
University of Denver, 1961). Dissertation Abstracts International, 
1962, 22 3939-3940A. (University Microfilms No. 61-69,261).