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AT THE UNIVERSITY OF OKLAHOMA.

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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

AN EVALUATION OF THE TEACHER EDUCATION PROGRAM
AT THE UNIVERSITY OF OKLAHOMA

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF EDUCATION

BY
BOB R. MOONEYHAM
Norman, Oklahoma

1975

AN EVALUATION OF THE TEACHER EDUCATION PROGRAM
AT THE UNIVERSITY OF OKLAHOMA

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DEDICATED

TO

NORMA JEAN MOONEYHAM

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AN EVALUATION OF THE TEACHER EDUCATION PROGRAM
AT THE UNIVERSITY OF OKLAHOMA

CHAPTER I

INTRODUCTION

The theoretical base for teacher education can be dated to 1929 with research conducted by A. S. Barr.¹ From this data a number of studies have been made. Yet, a question on the validity of knowledge that exists on effective programs for training teachers continues to plague the science of teacher education. Kirsner summarized the state of the art in the following statement:

The development of a comprehensive, educational science is still in its infancy. Teacher training, as presently practiced, is basically a pragmatic exercise subject to procedures that are largely dependent upon trial and error revision. Such methodology not only tends to be unsystematic but also frequently yields consequences which are neither predicted nor predictable. New ideas spring, Venus like, out of thousand serendipitous foreheads. Unexpected consequences, pedantic feelings, educated guesses, and biased opinions consistently ride their white,

¹A. S. Barr, Characteristic Differences in the Teaching Performance of Good and Poor Teachers of the Social Studies (Bloomington, Illinois: Public School Publishing Co., 1929).

red, and pale horses through teacher training curricula. Teacher education must come to be governed less by a 'cat in the box' approach and more by the results of careful and systematic investigation anchored to an operationally defined bedrock of models and definitions.²

Seemingly Kirsner was overzealous in his appraisal of teacher education programs. His call for systematic investigations and his emphasis on a need for operational models and definitions has not been neglected within the framework of teacher education. Smith and others have attempted to capture this framework of models and definitions in the notion teacher education has evolved to include four basic components: (1) Training in skills, (2) Teaching of pedagogical concepts and principles, (3) Developing relevant attitudes, and (4) Teaching the various subject matters of instruction.³ Other researchers in education have dissected the science of teacher education and the art of teaching into affective, cognitive, logical, pedagogical, linguistic, and social categories. Despite all these efforts no generally accepted conceptual system, psychological or otherwise, by which either to formulate or to identify the skills of teaching has been accepted.⁴

²Donald A. Kirsner, "A Cognitive Taxonomy of Objectives for Teacher Education in Education Psychology: (unpublished Ed. D. dissertation, University of Southern California, 1968), abstract.

³B. Othanel Smith, ed., Research in Teacher Education (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 2.

Some researchers agree teacher education may be described as a procedure for closing the gap between the behaviors which do occur and the behaviors which educators believe should occur by training the teacher in the desired behaviors.⁵ Thus the design of a teacher education program should incorporate professional concepts from at least three human elements; the professor, the teacher, and the administrator. The pedagogical theory espoused by the professor must satisfy the needs of the teacher. Professional practices by the teacher in the classroom must satisfy performance criteria in teaching and be logically necessary to teaching in order to satisfy the functional expectations of the administrator. Turner has stated:

For a preservice teacher education program to be demonstrably valid, relationships must be established between the treatments delivered in the program and performance criteria in teaching. For the performance criteria to be valid, they must be shown to be either logically necessary to teaching or associated with pupil learning attributable to teaching.⁶

The absence of an accepted conceptual system in teacher education does not eliminate the possibility of research

⁴Ibid., p. 3.

⁵Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria,": in Research in Teacher Education, ed. by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 39.

⁶Richard L. Turner, "Conceptual Foundation of Research in Teacher Education," in Research in Teacher Education, ed. by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 33.

on the subject. A systematic evaluation of a teacher education program can include a study of the relationships between behaviors which do occur and the behaviors which educators believe should occur as determined by professors, teachers, and administrators. To make this study one must accept the assumption that behaviors occur only when professors, teachers, and administrators agree on which behaviors should occur.

If the preceding assumption is accepted research on a teacher education program can be conducted. Information developed from correlational process-product studies⁷ makes it possible to study a teacher education program by determining the relationships between the ratings of high-inference variables, as constructed from low-inference variables, between professors, teachers, and administrators. Rosenshine and Furst projected this idea in the following passage;

In process-product studies the independent variables--the teacher behaviors--are recorded using observational category systems or rating systems. Category systems are classified as low-inference measures because the items focus upon specific, denotable, relatively objective behaviors (e.g., teacher use of student ideas, teacher use of evaluative questions), and because such events are recorded as frequency counts. Rating systems are classified as high-inference measures because the items on rating instruments (e.g., clarity, warmth, task-orientation, class cohesiveness) require that an observer infer these constructs from a

⁷Barak Rosenshine, Interpretative Study of Teacher Behaviors Related to Student Achievement (Philadelphia, Pa.: Temple University, 1970).

series of events.⁸

Evaluation of a teacher education program is important because only through the evaluative process can more concrete determinations be made regarding high-inference variables, low-inference variables, and treatment validity within preservice teacher education. The evaluative process can also provide a vehicle for going beyond the job of formulating, identifying, and testing skills and other aspects of teaching behavior. The evaluative process can allow researchers to dig deeper into the structure of teaching in a search for more powerful variables which in turn can be promoted through treatment validity in preservice teacher education. Smith has stated;

We can go ahead with the job of formulating, identifying, and testing our various skills and other aspects of teaching behavior as the winds of doctrine blow about use. On the other hand, it is clear that research would be advanced measurable by a conceptual system for formulating and identifying teaching skill. There is need, therefore, for continuous efforts to handle the problem of conceptualization, for by digging deeper into the structure of teaching, we may find more powerful variables.⁹

PROBLEM

A successful program of teacher education can be

⁸Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research in Teacher Education, ed. by B. Othanel Smith; (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 42.

⁹B. Othanel Smith, ed., Research in Teacher Education (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), pp. 3-4.

systematically observed at the University of Oklahoma in that preservice treatment in the program relates to performance criteria logically necessary to teaching.

Ho₁ There is no significant difference among professors', teachers', and administrators' ratings of selected low-inference variables in relationship to importance to effective teaching.

Ho₂ There is no significant difference among professors', teachers', and administrators' ratings of selected low-inference variables in relationship to priority level in a teacher education program.

Ho₃ There is no significant difference among professors', teachers', and administrators' ratings of high-inference variables constructed from selected low-inference variables.

Ho₄ There is no significant difference among professors', teachers', and administrators' ratings of high-inference variables constructed from selected low-inference variables, in relationship to importance to teaching as opposed to priority level in a teacher education program.

DELIMITATIONS

This study was limited to the teacher education program at the University of Oklahoma and the graduates of the program who received baccalaureate degrees in the Spring or Summer of 1969, and who were gainfully employed as

teachers in public schools in Oklahoma during the 1972-73 school year. This study was also limited to the professional personnel employed by the University of Oklahoma to teach within the undergraduate teacher education program. Further limitations were employed by restricting the professor sample to those professors who served as faculty advisors to one or more of the teachers included in the teacher sample. Finally, this study was limited to a sample of administrators who served as supervisors to one or more of the teachers included in the teacher sample.

This study was also limited by a list of high-inference variables identified by process-product studies and low-inference variables commonly acceptable to teacher performance rating scales.

This study was limited to the information collected from the teachers on the personal data sheet and the participants' responses to the Rating Scale.

DEFINITIONS OF TERMS

Teacher Education Program. The preservice educational program established by the University of Oklahoma as a preliminary procedure for classroom teachers.

Administrator/School Administrator. The public school administrators who were the immediate supervisors of the teachers involved in the study during the 1972-73 academic year.

Teacher/Classroom Teacher. The 59 public school teachers

who participated in the study who had graduated from the University of Oklahoma during the Spring or Summer of 1969 and taught in Oklahoma's public schools during the 1972-73 school year.

Professor/Supervising Professor. The 22 professors who participated in the study who supervised one or more of the teachers at the time they were in the teacher education program at the University of Oklahoma.

High-Inference Variables (Competencies). The ten concepts appearing on the Rating Scale which are generally regarded as accepted criteria for effective teaching. The ten high-inference variables used in constructing the data collection instrument and their general meaning are as follows:

1. Clarity: Ability to make clear presentations and to use time and materials efficiently
2. Variability: Ability to adjust time, materials, and methods to unusual classroom situations
3. Enthusiasm: Ability to display self confidence and interest in the subject being taught
4. Task-Oriented and/or Businesslike Behavior: Ability to adhere to rules and policies and display professional behavior
5. Student Opportunity to Learn: Ability to use positive reinforcement and motivate students
6. Use of Student Ideas: Ability to make students a part of the teaching/learning process

7. Control: Ability to maintain a learning atmosphere in the classroom
8. Use of Structuring Comments and Questions: Ability to structure lessons and discussions with comments and questions
9. Probing: Ability to promote learning by questioning, clarifying, or re-directing questions to students
10. General Competencies: Ability to understand children, the learning process, and the school's role in society.

Low-Inference Variables. The seven substatements comprising each high-inference variable.

Ratings/Variable Rating. The arithmetic sum of the ratings made on the seven substatements of any one high-inference variable.

Composite/Overall Rating (Factor A + B). The arithmetic sum of a participant's ratings on Scale A and Scale B of the data collection instrument.

Discrepancy/Differences Rating (Factor A - B). The arithmetic difference between a participant's rating on Scale A and Scale B of the data collection instrument.

Factor - A. Ratings of the ten high-inference variables as they relate to effective teaching.

Factor - B. Ratings of the ten high-inference variables as they relate to the content of the teacher education program.

Factor - A + B. The arithmetic total of Factors A and B.

Factor - A - B. The arithmetic difference between Factors A and B.

DATA

The primary source of data was obtained from a rating scale from which judgments were requested of three sample groups--professors, teachers, and school administrators--on ten high-inference variables containing seventy low-inference variables. The ten high-inference variables included Clarity, Variability, Enthusiasm, Task-Oriented and/or Businesslike Behavior, Student Opportunity to Learn; Use of Student Ideas, Control, Use of Structuring Comments and Questions, Probing, and General Competencies. The first nine high-inference variables were identified through process-product studies. The seventy low-inference variables were derived from two sources. Sixty-three were collected from teacher performance rating scales as reported in a nationwide sample of school districts with 16,000 or more pupils.¹⁰ The remainder were developed from objectives governing the teacher education program at the University of Oklahoma.

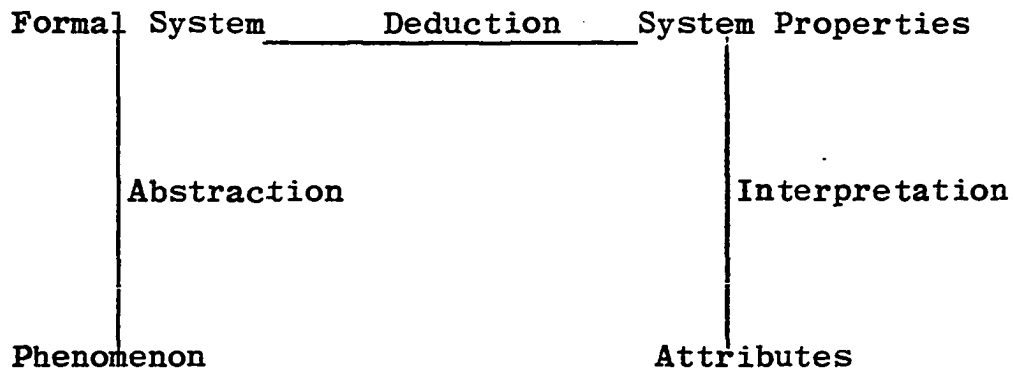
The secondary source of data was a review of literature which traced the history of teacher education from early 20th Century to the present. The review pointed up early research theories and teacher preparation practices.

¹⁰Research Division NEA, Evaluating Teacher Performance (Washington, D. C.: Education Research Service, 1969).

This review also identified competency-based teacher education and culminated with certain research concepts for evaluating teacher education programs.

THE METHOD OF RESEARCH

It was only reasonable to approach this study through a systems model for research as the study concentrated on a teacher education program. Mesarovic's model for studying the properties of a system was selected as the research design for this problem in that:



- (a) Abstraction--provides construction of a system and constructive specification for the system.
- (b) Deduction--provides a study of the properties of the system using deductive methods.
- (c) Interpretation--provides study of the meanings of the derived properties in the context of the phenomenon under consideration.¹¹

This model, originally designed for biological research, was adapted to the intent of this study.

¹¹Mihajlo D. Mesarovic, ed., Systems Theory and Biology (New York: Springer-Verlag New York Inc., 1968), pp. 62-63.

A rating scale was developed with which each of the ten high-inference variables was identified and constructed from seven low-inference variables. In each case, the respondent to the rating scale was asked to judge each low-inference variable on a scale ranging from 7-1. A judgment was asked for on Scale A relating to the importance of effective teaching. A judgment on priority level in a teacher education program was solicited on Scale B.

A follow-up of graduates from the teacher education program at the University of Oklahoma was also important. The fact this study was limited to graduates of the program gainfully employed four years following graduation from the baccalaureate program was important to the research model utilized. For this reason each subject in the teacher sample was asked to respond to a personal data sheet to aid in the development of a demographic sketch of the teacher sample in relation to educational background, professional experience, and advanced studies.

The data received from the rating scale were statistically treated through a computerized MANOVA program at the Merrick Computer Center. Significant results developed from each ANOVA were analyzed further by the Scheffe' method¹² to determine significance between groups. The demographic

¹²Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1970), pp. 381-397.

data were discussed in an effort to identify certain properties of the system.

ORGANIZATION OF THE REPORT

Chapter I contains information about the problem, delimitations, definitions, data, and the method of research. Chapter II reviews pertinent literature and discusses related research. Chapter III includes a review of the teacher education program at the University of Oklahoma. Chapter IV presents the methods and procedures used in conducting the study. Chapter V contains the results of the data analysis. Chapter VI constitutes a summary of the formal system in the form of system properties and attributes of the program and concludes with a set of recommendations based on results developed from this study.

CHAPTER II

REVIEW OF LITERATURE AND RELATED RESEARCH

This review of literature presents a brief discussion on some of the evolutionary trends which have characterized the history of teacher education. This review strives to identify certain characteristics of competency-based teacher education as well as introduce research concepts for evaluating teacher education programs.

The history of teacher education has been characterized by an evolutionary process which has yielded at best questionable and at worst invalid knowledge about effective programs for training teachers. This has been the case from early 20th Century research to current ideologies which identify skills, pedagogical concepts and principles, relevant attitudes, and subject matters of instruction as components of teacher education.

A. S. Barr cast a mold in 1929 by which teacher education research would be formed for many years to come. Barr hypothesized one would expect to find significant qualitative and quantitative differences in the teaching performance of "good" and "poor" teachers if supervisors were trained to observe, analyze, and describe teaching in terms of specific teacher-pupil activities. The thrust of Barr's research dealt with supervision. The most notable

results of his research were the characteristics of "good" and "poor" teachers.¹

Thus the die for teacher training and teacher education research was cast. Characteristics of "good" teaching became the vanguard of both research and training. This state of the art was due to a great extent, it seems, to the fact that teacher education was a relatively new phenomenon on the horizon of higher education.

It was nearly two centuries after Massachusetts had ordered the establishment of schools before the state provided for the training of teachers for their schools. After Connecticut had provided for schools it was nearly 175 years before there was a suggestion that the state establish an institution exclusively for training teachers, and it was several decades later before such a school was provided.²

The establishment of state normal schools did not mean teacher education programs would always serve teacher training as a first priority. Teacher education in the first half of the 20th Century also played a sociological role in which the children of rural and laboring families, who, it seemed were not as able and as promising as their contemporaries, were emerging to a higher level in the sociological strata by entering the teaching profession.

¹A. S. Barr, Characteristic Differences in the Teaching Performance of Good and Poor Teachers in the Social Studies (Bloomington, Illinois: Public School Publishing Co., 1929).

²Edward W. Knight, Education in the United States (Boston: Ginn and Company, 1951), p. 310.

It can be said teacher education did not begin to establish a professional hold on academism until the 1950's when teacher training institutions began to use wide and seemingly intelligent means for selective admissions.³ Many changes in teacher education theories are evident from 1950 to the present. Not the least of these changes were reforms in pedagogical concepts and principles.

Teachers of teachers recognized the need and sought to develop a new kind of teacher for new societal demands in the 1950's. The new kind of teacher was presumptuously a better educated teacher. It was during this time a desire to lengthen the preparation time for teachers emerged. In 1957, Glennon introduced a seven year teacher education program inclusive of four years general education and three years of professional study.⁴

The call for better prepared teachers was not limited to teachers of teachers. Other academicians recognized the same need and with the successful launch of Sputnik in 1957 greater demands were made upon teacher training institutions to strengthen teacher education programs. Sputnik caused a resurgence of emphasis upon subject matter in the teacher training process. Walter Lippman took a protagonistic stand

³Edward W. Knight, Fifty Years of American Education (New York: The Ronald Press Company, 1952), pp. 226-287.

⁴Vincent J. Glennon, The Road Ahead In Teacher Education (Syracuse, N. Y.: Syracuse University Press, 1957).

on teacher education.

So we have come to the point where we must lift ourselves as promptly as we can to a new and much higher level of interest, of attention, of hard work, of care, of concern, of expenditure, and of dedication to the education of the American people.

We have to do in the educational system something very like what we have done in the military establishment during the past fifteen years. We have to make a breakthrough to a radically higher and broader conception of what is needed and of what can be done. Our educational effort today, what we think we can afford, what we think we can do, how we feel entitled to treat our schools and our teachers--all of that--is still in approximately the same position as was the military effort of this country before Pearl Harbor.

In 1940 our armed forces were still at a level designed for a policy of isolation in this hemisphere and of neutrality in any war across the two oceans. Today, the military establishment has been raised to a different and a higher plateau, and the effort that goes into it is enormously greater than it was in 1940.

Our educational effort, on the other hand, has not yet been raised to the plateau of the age we live in. I am not saying, of course, that we should spend 40 billions on education because we spend that much on defense. I am saying that we must make the same order of radical change in our attitude as we have made in our attitude towards defense. We must measure our educational effort as we do our military effort. This is to say, we must measure it not by what it would be easy and convenient to do, but by what it is necessary to do in order that the nation may survive and flourish. We have learned that we are quite rich enough to defend ourselves, whatever the cost. We must

now learn that we are quite rich enough to educate ourselves as we need to be educated.

. . . For if, in the crucial years which are coming, our people remain as unprepared as they are for their responsibilities and their mission, they may not be equal to the challenge, and if they do not succeed, they may never have a second chance to try.⁵

A more antagonistic viewpoint was voiced some nine years later by James D. Koerner. These comments are typical of the critical backlash that followed Sputnik.

One of the reasons that the education of American teachers is fundamentally a failure is that professional education, which constricts and controls the training programs, has extremely poor credentials as an academic discipline. . . This general disability. . . is mostly traceable, as it would be in any other field, to the faculty. It is an indecorous thing to say and is obviously offensive to educationists, but it is the truth, and it should be said: the intellectual caliber of the education faculty is the fundamental limitation of the field. . . Because no educational program can transcend the quality of its faculty. . .

Weak students gravitate to weak faculties. Education students, along with students in agriculture and business administration, fill the lower ranks of the academic ladder. . . Every major study of the subject, beginning with a classic one in the state of Pennsylvania in 1928-32 and coming down to very recent ones, has arrived at the same conclusion: education students show up badly, both in achievement and native ability, when compared with students in other fields.⁶

⁵Walter Lippman, "The Shortage in Education," The Atlantic Monthly, May, 1954, p. 38.

The voices raised by critics of teacher education did not go unheeded. A virtual revolution in pedagogical research has occurred during the past fifteen years. Teacher education has become more accepted as a behavioral science. As a behavioral science teacher education has witnessed research on teacher effectiveness, teacher competencies, teacher behaviors, teacher and pupil relationships, microteaching, mini courses, and teacher education model programs. In effect teacher education has evolved from a rudimentary beginning to a more competency-based behavioral science that continues in its struggle to become of age. The most recent example of this struggle is characterized by modern designs for teacher education.

Modern teacher education programs have been affected greatly by the efforts of the federal government and the American Association of Colleges for Teacher Education. Initially the federal government, through the United States Office of Education, introduced financial grants during the 1960's for the development of model teacher education programs. As a result of financial grants nine model programs were developed in Phase I of the funding project and one additional grant was awarded in Phase II of the project.⁷

⁶James D. Koerner, "How Not to Teach Teachers," The Atlantic Monthly, February, 1963, p. 59.

⁷S. C. T. Clark, "The Story of Elementary Teacher Education Models," Journal of Teacher Education, Vol. 20, 1969, pp. 283-293.

These models have been identified in literature as the Comfield Model, Florida Model, Georgia Model, Massachusetts Model, Michigan State Model, Pittsburgh Model, Syracuse Model, Teachers College Model, Toledo Model, and Wisconsin Model and provide over two million words to guide and direct the development of modern teacher education. In addition, the American Association of Colleges for Teacher Education developed the Recommended Standards for Teacher Education⁸ (hereafter referred to as Standards) to establish minimum standards by which the National Council for Accreditation of Teacher Education could determine the accreditation status of institutional programs for preparing teachers and other professional school personnel.⁹

The ten Models and Standards are by no means the only sources for developing teacher education programs. There were 71 models that were not funded which have provided significant contributions to the development of teacher education.¹⁰ Smith also provides a well developed plan for the education of teachers in Teachers for the New World.¹¹ Thus an abundance of materials does exist on the development

⁸Evaluative Criteria Study Committee, Recommended Standards for Teacher Education (Washington, D. C.: The American Association of Colleges for Teacher Education, 1970).

⁹Ibid., p. 1.

¹⁰W. E. Engbretson, Analysis and Evaluation of Plans for Comprehensive Elementary Teacher Education Models, Final Report (Washington, D. C.: United States Office of Education, Bureau of Research, 1969).

of teacher education programs.

One of the more important characteristics of the models is the emphasis on the needs of the future. The Florida Model was based on a prediction of what society and education would be like in 1978.¹² The Syracuse Model was not so time-line oriented but did include a conceptual design for future needs.

Teachers educated today must be educated to be continually self-renewing as they adapt to and play a major role in shaping the changes that seem certain in the future world of education.¹³

Other factors common to modern designs for teacher education have been discussed by employing Mitzel's¹⁴ terminology for identifying, logically and psychologically, elements that precede one another in the preparation of teachers. Clarke asserts presage factors relate to decisions which must be made before a teacher education program can be developed. Process factors define the actual program of

¹¹B. Othanel Smith, Teachers for the New World (Washington, D. C.: American Association of Colleges for Teacher Education, 1969).

¹²J. W. Sowards, A Model for the Preparation of Elementary School Teachers (Washington, D. C.: United States Office of Education, Bureau of Research, 1968), p. 3.

¹³J. Hough, Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers (Washington, D. C.: United States Office of Education, Bureau of Research, 1968), p. 2.

¹⁴H. E. Mitzel, "Teacher Effectness," Encyclopedia of Educational Research, 3rd ed. (New York, N. Y.: The Macmillan Company, 1960).

experiences designed for teacher candidates. Product factors raise a final question in the training sequence. Are teacher candidates in fact able to perform as desired in the world of work?

Presage factors include decisions on context, cybernation, extent of lead, control, boundaries, and selection. Context decisions deal with the anticipated future state of the world, the nation, education, teaching, and the teaching profession. Cybernation decisions are built-in mechanisms in the design for periodically examining and updating a program. Extent of lead decisions concern the gap between what exists and the state of affairs for which teachers are being produced. Decisions on control govern who controls what in the program. Boundary decisions relate to the professional preparation of teachers and can be viewed as that which takes place in the preparing institution. The final presage factor, selection, is defined as the population to be educated and decisions on admission standards.

Process factors include dimensions, extent of individualization, graduated conceptualization--practice, support systems, and task-centered curriculum. Dimensions are governed by time, credits, and courses. Extent of individualization elements might include performance criteria in curricular modules, guidance services which propose differential emphases for different individuals, or self-selection by students. Graduated conceptualization--practice

is founded in the idea teacher education must be based on a career development ladder, which, if followed, would of itself provide graduated experiences within a program. Support systems confront the problems by modules, individualization, graduated conceptualization--practice, and the multiple entrances and exits provided for within a program. Task-centered curriculum is in effect the heart of teacher education. Regardless of its design, task-centered curriculum simply guarantees that content within a teacher education program must be based on the teaching act itself.¹⁵

Questions on product factors can only be answered through on-going and dynamic evaluations of teacher education programs. The Standards encourage each institution to periodically engage in research on its own program to ascertain whether its present practices are the most effective means for accomplishing its purposes.¹⁶

AN EVOLUTIONARY EXAMPLE:
THE COMPETENCY-BASED TEACHER EDUCATION PROGRAM

The competency-based teacher education concept did not just happen. It is a concept that has evolved with the aid of the federal government and may reflect increased demands

¹⁵S. C. T. Clarke, "Designs for Programs of Teacher Education" in Research in Teacher Education, ed., by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), pp. 121-149.

¹⁶Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research in Teacher Education, ed., by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 42.

made for accountability, relevance, and cost-effective schooling within teacher education programs. Two of the most important factors in the development of the competency based teacher education movement were the technological readiness of the education community and the willingness of the federal government to invest federal funds in research and development of this educational concept.¹⁷ The cooperation between educationists and the federal government was also shared by private industry. A Rockefeller Brothers Fund grant to Educational Testing Service provided financial support to the establishment of the National Commission on Performance-Based Education. Following much effort the National Commission of Performance-Based Education identified a pressing need in the competency-based movement to be a research and development effort to describe and measure teaching competence.¹⁸

Rosner agreed with the Commission on the need to develop instruments to define performance criteria. Rosner considered the development of such instruments to be crucial in the success of competency-based teacher education. Rosner went one step further in his effort to plan a

¹⁷Benjamin Rosner and Patricia M. Kay, "Will the Promise of C/PBTE Be Fulfilled," Phi Delta Kappan, Vol. IV, No. 5 (January, 1974), p. 290.

¹⁸Frederick J. McDonald, "The National Commission on Performance Based Education," Phi Delta Kappan, Vol. IV, No. 5 (January, 1974), pp. 296-298.

theoretical competency-based teacher education program. He called for long ranged program planning, extensive retaining of educational personnel, and the development of instructional materials in order to facilitate competency-based teacher education programs.¹⁹

Rosner's recommendations on competency based teacher education seemed to fall short in one regard. The Rosner report did not dwell on future expectations in teacher education. Joyce did summarize future expectation of teacher education in a paper on reforms in teacher education.

The teacher education program must be related to the field which it serves. Teacher education has to supply the institution with competent and humanistic personnel; these institutions must share in the identification of competencies and the development of training procedures. A smooth transition needs to be provided between any training institution and the educational institution in which the teacher will work. In fact, the creation of the setting for teacher education is a joint problem for universities, training institutions, and elementary and secondary schools. The problems of reconciliation with the field become particularly acute when the training program is designed to produce a teacher who is in any way different from the typical functionary in the existing schools.²⁰

¹⁹Benjamin Rosner, The Power of Competency-Based Teacher Education: A Report (Boston: Allyn and Bacon, Inc., 1972), pp. 23-34.

²⁰Bruce Joyce, "Comprehensive Reforms in Teacher Education," in Perspectives for Reform in Teacher Education, ed., by Bruce Joyce and Marshall Weil, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1972), p. 207.

It should be noted the summation by Joyce expressed only one school of thought regarding competency-based teacher education. Emphasis has been placed on many uses of theoretical knowledge pertaining to teacher education. There are some who would reduce the training of teachers to the development of skills used in a replicative sense. Others would eliminate formal courses in pedagogy, but would place primary interest upon student teaching and internships. A third group supports undergraduate training of teachers with emphasis on a large body of interpretive knowledge about teaching.²¹ A common bond among the groups can be found, though, in the concept of competency-based teacher education--a competent teacher should be the end product of every teacher education program regardless of the philosophical base governing that program.

A recent issue of the Phi Delta Kappan was devoted entirely to competency based teacher education. According to the article competency based teacher education promises four sets of goals.

Long Range: 1. To improve quality of instruction in the nation's schools as a consequence of improved teacher education.

Intermediate Range 1. To prepare knowledgeable and skillful teachers in a curriculum whose elements have

²¹B. Othanel Smith, Teachers for the Real World (Washington, D. C.: The American Association of Colleges for Teacher Education, 1968), pp. 46-47.

been tested for validity against criteria of school effectiveness.

Short Range: 1. To identify tentative teacher competencies to prepare instructional materials and evaluation procedures, and to establish conditions to validate the teacher education curricula and promote teacher behavior research.

Immediate: 1. Stronger relationships between teacher educators, public schools, and the organized teacher profession.

2. Greater student satisfaction with skill-oriented teacher education programs.

3. Increased accountability of teacher education programs.²²

These promises should not be misinterpreted as a panacea for all problems in teacher education. Broudy cautioned that the fractionization of teaching, as a result of the competency-based movement, will break teaching down into parts which, when put together, will not equal the whole. He also cautioned against the number and character of performance units differing from one program to another.²³

Rosner and Kay also visualized problem areas in competency based teacher education. The problems of "tooling-up" for the movement generate many questions. Questions

²²Benjamin Rosner and Patricia M. Kay, "Will the Promise of C/PBTE Be Fulfilled," Phi Delta Kappan, Vol. IV, No. 5 (January, 1974), pp. 290-294.

²³Harry S. Broudy, A Critique of Performance-Based Teacher Education (Washington, D. C.: The American Association of Colleges for Teacher Education, 1972), p. 3.

concerning the identification of tentative competencies, development of assessment systems, the development of instructional materials, the development of management systems, and research funding must be answered. The development of the answers to these problems over the next decade will support the notion competency-based teacher education is not an end in itself, but a process of moving from an ambiguous state of teacher education to a more clearly articulated program of professional education.²⁴

RESEARCH CONCEPTS FOR EVALUATING
TEACHER EDUCATION PROGRAMS

Process-product studies record teacher behavior by using observational category systems or rating scales, and seem to be promising in areas of research which relate observed teacher behaviors to measures of student achievement. Of the variables which have been investigated in process-product studies to date, eleven high-inference variables seem to have promise in competency-based teacher education research. The eleven high-inference variables include Clarity, Variability, Enthusiasm, Task-Oriented and/or Businesslike Behaviors, Student Opportunity to Learn Criterion Material, Use of Student Ideas and General Indirectness, Control, Use of Structuring Comments, Types of Questions, Probing, and Level of Difficulty of

²⁴Benjamin Rosner and Patricia M. Kay, "Will the Promise of C/PBTE Be Fulfilled," Phi Delta Kappan, Vol. IV, No. 5 (January, 1974), pp. 294-295.

Instruction.²⁵ The information provided by process-product studies on these eleven high-inference variables lend support to the assumptions these variables are identified criteria against which teaching performance can be appraised with some degree of validity and possibly form a hierarchy of teaching behavior if not a learning hierarchy.²⁶

Low-inference variables are the only means by which high-inference variables can be researched operationally. Low-inference variables focus upon specific, denotable, relatively objective behaviors by the teacher whereas high-inference variables require an observer to infer a construct from a series of events.²⁷ In effect process-product studies dictate high-inference variables be defined by a set of related low-inference variables.

Clarity, as a high-inference variable, denotes a teacher's ability to explain concepts clearly. Seven correlational studies developed significant results ranging from .37 to .71 on at least one relationship between teacher

²⁵Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research in Teacher Education, ed., by B. Othanel Smith (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), pp. 37-55.

²⁶Richard L. Turner, "Conceptual Foundations of Research in Teacher Education," in Research in Teacher Education, ed., by B. Othanel Smith (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 30.

²⁷Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research in Teacher Education, ed., by B. Othanel Smith (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 42.

presentation and student achievement. In studies involving low-inference variables investigators found most effective teachers spent less time answering student questions which required interpretation of what the teacher had said. Low-inference studies also found effective teachers phrased questions so the questions were answered without additional information or additional questions before students responded.

Variability is a high-inference variable which relates to a teacher's ability to employ a variety of materials or behaviors during a lesson. Significant correlations ranging from .24 to .54 were obtained on four studies relating Variability to at least one measure of student achievement.

Enthusiasm can be characterized by a number of low-inference behaviors. These behaviors may include stimulating vs. dull relationships, the amount of power and vigor exhibited by a teacher during a presentation, or a teacher's involvement, excitement, or interest in the subject matter. Studies on low-inference behaviors suggest teacher movements, gestures, and voice inflections form a significant part of Enthusiasm. Positive correlations ranging from .36 to .62 were obtained on five correlational studies relating Enthusiasm to at least one criterion for student achievement.

Task-Oriented and/or Businesslike Behaviors relate to a teacher's ability to reach Task-Oriented goals and to conform to established organizational patterns or policies. Six of seven studies on Task-Oriented and/or Businesslike

Behaviors yielded positive correlations ranging from .42 to .61 between Task-Oriented and/or Businesslike Behaviors and at least one criterion for student achievement. In particular, a teacher who focused upon the learning of cognitive tasks obtained the highest student achievement.

Student Opportunity to Learn Criterion Material is a self-explanatory high-inference variable. Correlational studies have produced significant results ranging from .16 to .40 on studies relating Student Opportunity to Learn Criterion Material and at least one criterion for student achievement.

The variable identified as Use of Student Ideas and General Indirectness can be divided into five subcategories of behavior. These subcategories can be summarized as acknowledging the idea, modifying the idea, applying the idea, comparing the idea, and summarizing the idea. Seven of eight studies produced positive correlations ranging from .17 to .40 between Use of Student Ideas and student achievement.

Control, sometimes referred to as criticism, is one of the most frequently counted variables in process-product studies. Unlike the previously mentioned variables, significant negative relationships were found between some form of criticism and at least one criterion for student achievement in six of 17 studies. (-34 to -57) was the range on these negative relationships between teacher criticism and

at least one criterion for student achievement. Criticism, as used in the context of these studies, was in itself of a negative nature. If negative Control has a negative relationship, then, positive Control should produce positive correlations.

Use of Structuring Comments is a variable which concerns statements made at the beginning or ending of a lesson. In three studies in which raters estimated the adequacy of the beginning or ending of the lesson, there were significant correlations ranging from .35 to .69 between ratings for either the beginning or the end of the lesson and at least one criterion for student achievement.

Types of Questions is a variable composed of two classifications. The lower cognitive level classification focuses on "what" or "where." The higher cognitive level classification focuses on "why" or "how." Some significant results have been developed on this variable. However the classification of all questions into only two forms has not yielded consistently significant results.

Probing refers to a teacher's responses to a student's answer which encourages the student to elaborate upon the answer. Significant relationships ranging from .29 to .54 were found in three studies involving Probing and at least one criterion for student achievement.

Level of Difficulty of Instruction deals with the relationship between student perception of difficulty and

student achievement. To date this variable has not been fully explored. However two of four studies yielded positive relationships between student perception of difficulty and student achievement.²⁸

Thus a question arises in competency-based teacher education research. Do criteria exist upon which judgments can be made regarding teacher education and teaching effectiveness? The Committee on National Program Priorities in Teacher Education has established a set of Criterion Levels which are applicable to teacher trainees and performance-based teacher education programs. These Criterion Levels include:

1. The observation of the acts of behaviors in which the teacher engages in a classroom with a set of instruments which permit classification of teacher behavior in both the cognitive and affective domains.
2. A systematic analysis of the level of cognitive and affective outcomes achieved by the teacher with the pupil he teaches.
3. The observation of behaviors of the teacher rather than on the pupil outcome associated with these behaviors.
4. The observation of teacher behavior as restricted to a few categories in the cognitive or in the affective domain.
5. The observation of a teacher's ability to produce or show in his behavior at least one teaching skill, e.g., probing.
6. The observation of a teacher's understanding of some behavior, concept, or

²⁸Ibid., pp. 42-54.

principal germane to teaching.²⁹

Any one of the above Criterion Levels provides an answer to the foregoing question and provides an avenue to teacher education research. For all practical purposes Criterion Level 3 seems to provide the greatest flexibility for competency-based teacher education research.

The use of Criterion Level 3 to evaluate the effectiveness of teacher education programs and to evaluate the competencies of individual trainees for certification integrates the objectives of the teacher education program with the requirements for professional services in the classroom.³⁰

This does not mean there are no pitfalls in the results of process-product studies or the above Criterion Levels. The reverse may be a greater truth. At best researchers have been able to determine when a teacher is competent. Yet few if any facts seem to have been established concerning teacher effectiveness, no approved method of measuring competence has been accepted, and no methods of promoting teacher adequacy have been widely accepted.³¹

The above premise was fashioned in 1964. Seven years later this same premise was similarly worded by Smith³² and

²⁹Benjamin Rosner, The Power of Competency Based Teacher Education, A Report (Boston: Allyn and Bacon, Inc., 1972), pp. 3-10.

³⁰Ibid., pp. 7-8.

³¹Bruce J. Biddle and William J. Ellena, Contemporary Research and Teacher Effectiveness (New York: Holt, Rinehart and Winston, 1964, pp. 1-2.

later voiced by Rosner.³³ Educators must be cautious not to lapse into the notion that measurement of effective teaching is a judgment decision by a professional educator charged with the responsibility of making evaluative judgments on the performance of an individual teacher. Educators may, however, utilize the results of research as methods for observing teacher behaviors as the behaviors relate to behaviors which do occur and the behaviors which educators believe should occur as a result of treatment validity in a teacher education program.

³²B. Othanel Smith, ed., Research in Teacher Education, (Englewood Cliffs, N. J.: Prentice-Hall Inc., 1971), p. 3.

³³Benjamin Rosner, The Power of Competency Based Teacher Education, A Report (Boston: Allyn and Bacon, Inc., 1972), p. 3.

CHAPTER III

THE TEACHER EDUCATION PROGRAM AT THE UNIVERSITY OF OKLAHOMA

The research design employed in this study dictates the construction of a system and constructive specifications for the system. This chapter provides a narrative reconstruction of the teacher education program at the University of Oklahoma by utilizing Mintzel's¹ terminology to identify the constructive specifications for the system.

A review of available information provided by the College of Education at the University of Oklahoma does not specifically identify components of the system in terms of presage, process, and product factors. These factors are identifiable within the literature, but are intertwined within the total scope of the system. A single model does not exist for the total program. The organization and structure of the program can best be described as a composite of models, each serving a specific task within the system. For this reason, the identification of presage, process, and product factors and the respective components of the factors will require the factors to be discussed in a

¹H. E. Mintzel, "Teacher Effectiveness," Encyclopedia of Educational Research, 3rd. ed., (New York, N. Y.: The Macmillan Company, 1960).

sequential manner irrespective of the order in which factor components appear in the existing literature.

STATED OBJECTIVES

The College of Education has been assigned as its major responsibility the preparation of qualified teachers for the public schools. Essential to this preparation are the activities of planning, organizing, and conducting programs in teacher education.

The University, however, does not view the training of teachers as belonging strictly to the College of Education, therefore, it has established the Education Professions Division. The Education Professions Division functions at the University level, in close coordination with the College of Education. Its activities include planning, organizing, and conducting programs in teacher education.

The objectives established by the Division for the Teacher Education Program are listed below:

1. To provide for each student in the program a broad general education which will give him an understanding of himself and of the culture in which he lives and works, so that he can better achieve his own potential and contribute to society.
2. To provide adequate mastery of written and spoken English so that his communication with others may be effective.
3. To develop an adequate understanding of the history and role of the public school in our American culture.
4. To develop an adequate understanding of child and adolescent development to enable teachers to effectively work with and teach children and adolescents.
5. To provide an adequate understanding

of learning processes so that his teaching may be effective.

6. To provide an understanding of the organization and curricula currently employed in schools in which he is likely to teach.
7. To provide adequate depth in and understanding of the subject matter which he plans to teach.²

It should be noted provision has been made in the program for developing more specifically stated objectives. This provision is tempered with an urging for more interaction among the various committees in the following passage:

By design, the determination of objectives has been basically a function of each certificate committee. As the Education Professions Division continues to work toward increasingly effective programs, it is hoped that more interaction concerning general and specific objectives or goals will be encouraged among the various committees.³

Two teacher training models developed by the Education Professional Sequence Committee serve as examples for this provision to develop more specific objectives. Model I was designed to place the prospective teacher in the classroom as soon as possible and for as long as possible. Secondly, Model I was designed to relate course work and the classroom experience in a meaningful manner. Model II, the Cooperative Urban Teacher Education Program, was designed as

²College of Education, Institutional Report of The University of Oklahoma (Norman, Oklahoma: The University of Oklahoma, 1972), pp. 48-49.

³Ibid., p. 66.

an experimental teacher education program to prepare elementary teachers for work in inner-city schools.⁴ Each certificate committee also has the prerogative to develop more specific objectives. It should be noted, however, all objectives within the program must assure that only persons adequately trained in their teaching field,⁵ with adequate understanding of the role of the school in society and of the nature of children and their learning processes, will be recommended for certification.

This reservation concerning certification is important because the teacher education program at the University of Oklahoma spans the College of Education, the College of Arts and Sciences, and the College of Fine Arts. In addition students who enter the program from high school preparing for certification must complete at least two semesters of college work in the University College before entering a structured degree program in one of the respective colleges which grant certification. Thus the teacher education program at the University of Oklahoma must conform to the stated objectives and purposes of these several colleges as well as the stated objectives of the program itself.

PRESAGE FACTORS

A review of the seven objectives developed by the

⁴Ibid., pp. 179-187.

⁵Ibid., p. 66.

Education Professions Division reveals the objectives, by definition, relate most closely to the presage factor. The first objective is best described as a context decision. That is, the objective anticipates the future life and works of the student. The remaining six objectives are boundary decisions that deal specifically with professional preparation of teachers in terms of content taught in the program.

Other context decisions exist in the program. In some situations these context decisions do not concern the teacher education program specifically. For example the State Regents for Higher Education, as the governing body of higher education, has specific goals of context nature concerning the economic growth of the state, the social and moral well being of the state, and the cultural development of the state.⁶

The Campus Master Plan developed by the University of Oklahoma in 1971 states a context objective relative to teacher preparation.

Not only must the University prepare its students for their vocations and human lives, but it must be committed to the renewal of the people in the state and region so that they may adapt to change and lead fuller lives. As a caretaker of the knowledge and wisdom of the past and a developer of that of the future, the University of Oklahoma must contribute significantly to the intellectual, cultural,

⁶Dan S. Hobbs, Oklahoma Higher Education, A State Plan for 1970's (Oklahoma City: Oklahoma State Regents for Higher Education, 1971), pp. 47-48.

economic, and professional life of the state and region and indeed, in many respects, of the nation.⁷

A context objective in the University College states student progress must be directed along lines suited to the student's interests and abilities.⁸ The general course of study in the College of Arts and Sciences can be identified as a context decision which introduces students to an understanding of the complex world in which we live.⁹

The objectives governing the College of Fine Arts and the College of Education can best be described as boundary decisions. The College of Fine Arts has as its purpose the training of individuals in the performing and expressive arts.¹⁰ The College of Education proposes to prepare qualified teachers for the public schools.¹¹

Other presage decisions governing the teacher education program include cybernation, extent of lead, control, boundaries, and selection. Cybernation decisions, built-in mechanisms in the design for periodically examining, and

⁷The University of Oklahoma, Campus Master Plan (Norman, Oklahoma: The University of Oklahoma, 1971), p. 1.

⁸The University of Oklahoma, Bulletin Issue for the University College (Norman, Oklahoma: The University of Oklahoma, 1970), p. 15.

⁹Education Professions Division, Handbook for Student Advisement, 1974-75 (Norman, Oklahoma: The University of Oklahoma, 1974), p. 9.

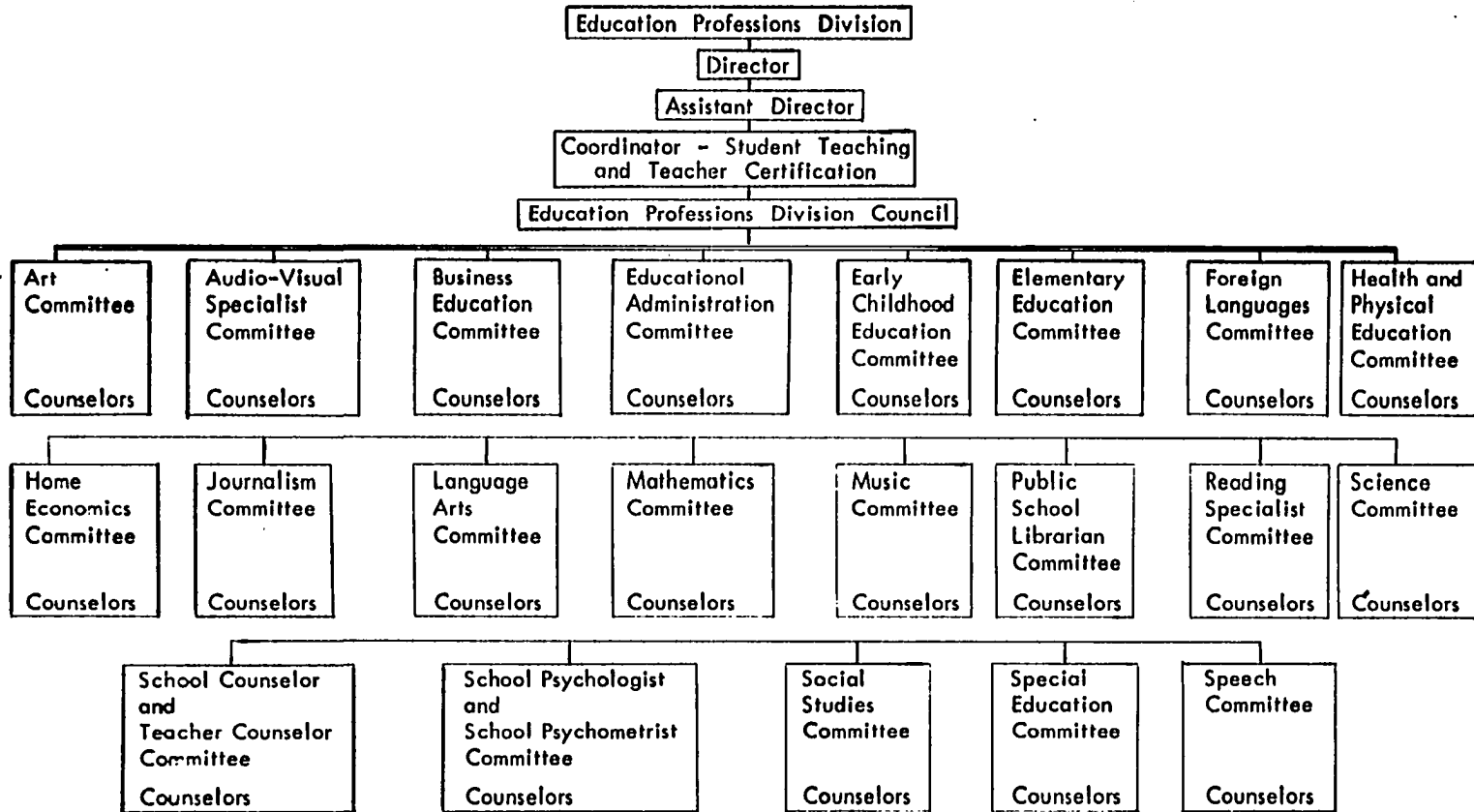
¹⁰Ibid., p. 13.

¹¹Ibid., p. 11.

updating the program, is the task and function of the Education Professions Division. The Education Professions Division is best described by an organizational chart which established the Director as the executive officer of the teacher education program. The Director is appointed by the President of the University and presently holds the title as Dean of the College of Education. The Director is assisted by the Executive Committee in the governance of the program. The Executive Committee is composed of the Director, Assistant Director of the Education Professions Division, the Director of Student Teaching and Certification, and three members elected from the Education Professions Division Council. These relationships are shown in Chart 1.

The Education Professions Division is governed by the Education Professions Division Council. This council is composed of representatives from each certificate committee within the program by its chairman as an ex-officio member. The Director of the Education Profession Division, The Assistant Director, the Dean of the College of Education, the Coordinator of Student Teaching and Certification, and the teacher education counselors for each certification program also serve on the Council. It should be noted, however, governance of individual programs lies within carefully designed Teacher Education Committees representing the various areas of specialization. The Teacher Education

CHART 1
ORGANIZATIONAL CHART - EDUCATION PROFESSIONS DIVISION



¹²ibid., p. 50.

Committees are comprised of representatives from the teaching department or departments responsible for instruction in the field of specialization, representatives of the faculty of the College of Education, and student representatives selected by each Teacher Education Committee.

Changes in the teacher education program originate with the Teacher Education Committee. The committee agrees that some program changes are needed. From a perceived need, a proposal is submitted to the Education Professions Division Director. The Director, with the assistance of the Executive Committee, places the proposal for change on the agenda for Education Professions Division Council action. The council either accepts the proposal or requests the committee do further study for re-submission at a later date. The Education Professions Council is authorized only to approve proposals. The authority of the council does not supersede the authority which resides within departmental and college faculties in matters concerning control of courses content, degree programs, and student personnel administration.¹³

Extent of lead decisions in the basic teacher education program may differ from college to college and student to student. This is true because extent of lead decisions make it possible to bridge the gap between what exists and

¹³Ibid., pp. 57-59.

the state of affairs for which teachers are being produced. Thus extent of lead is best described by the courses that constitute a step-by-step curriculum sequence. As an example a typical program for an elementary teacher trainee at the University of Oklahoma could include the following courses:

GENERAL STUDIES COMPONENT

<u>Symbolics of Information</u>	<u>Hours</u>
Eng 1113 English Composition	3
Eng 1323 English Composition	3
Speech 1713 Fundamentals of Speech	3
Bus Comm 2113 Business Communications	3
Speech 3783 Free Speech	3
	<u>15</u>
<u>Natural and Behavioral Sciences</u>	
Soc 1113 Introduction to Sociology	3
Psych 1113 Introduction to Psychology	3
Pol Sci 1013 U. S. Government	3
Pol Sci 2112 National Politics-current Issues	2
Soc 2113 Introduction to Social Work	3
	<u>14</u>
<u>Other</u>	
Home Ec 2562 Marriage and Family Re- lations	3
Home Ec 3 Design and Color	3
HPER 2102 First Aid	2
HPER 2281 Beginning Tennis	1
	<u>9</u>
Total General Studies	<u><u>55</u></u>

PROFESSIONAL EDUCATION COMPONENT

Content for the Teaching Speciality and
Teaching and Learning Theory

HPER 2233 Elementary School Physical

	Education	3
Lib 5223	Children's Books and Materials	3
Educ 1732	Music Skills in the Classroom	2
Educ 2903	Health Education	3
Educ 2014	Geography for Elementary Teachers	4
Educ 3502	Public School Art	2
Educ 1742	Music Materials and Methods	2
Educ 3172	Reading in Elementary Schools	2
Educ 3152	Basic Reading Skills	2
Art 1103	Understanding Art	3
Phys 1045	Physical Science for Teachers	5
Educ 3192	Science in Elementary Schools	2
Math 2413	Arithmetic for Teachers	3
Educ 4833	Speech in Elementary Schools	3
Bot 1045	Biology for Teachers	5
Educ 4152	Arithmetic in Elementary Schools	2
Educ 4252	Language Arts in Elementary Schools	2
Educ 4322	Social Studies in Elementary Schools	<u>2</u>
Total Specialized Education		<u>50</u>

Humanistic and Behavioristic and Teaching and Learning Theory

Educ 1424	School in American Culture	4
Educ 3422	Psychology in Education	2
Educ 3443	Psychology of Education	3
Educ 3403	Curriculum and Instruction in Elementary Schools	<u>4</u>
		13

Practicum

Educ 4450	Student Teaching	<u>8</u>
		8

Total Professional Education¹⁴ 21

Extent of lead is determined to a great extent by the degree program a student wishes to pursue. A student in the College of Arts and Sciences and the College of Fine Arts

¹⁴Ibid., pp. 147-148.

must complete 21 hours of professional education and a student in the College of Education must complete 26 hours of professional education as a result of extent of lead decisions. Elementary major students and elementary-secondary major students must complete Psychology in Education and Psychology of Childhood. Secondary majors must complete Psychology in Education and Psychology of Adolescence. Students in a K-12 certificate program may choose between Psychology in Childhood and Psychology in Adolescence. Every student must establish an understanding in curriculum and instruction based on individual interests and the needs of the student.

Control decisions in the program are evident in the same information detailing cybernation decisions. Control rests with the faculty of a department or departments, comprising an area of specialization, in matters affecting course content, degree programs, and student personnel administration. The College of Education is one example of this control in that affairs of the College of Education are conducted by the faculty in regularly scheduled meetings presided over by the Dean and through three representative bodies:

1. The Education Council is comprised of four elected representatives plus members from Committee "A".
2. Committee "A" of the College of Education is comprised of two faculty members with the Dean serving as chairman.

3. The Student Personnel Committee is made up of four faculty members and is under the direction of the Associate Dean.¹⁵

Decisions regarding boundary have already been discussed in the seven objectives developed by the Education Professions Division. Boundary decisions go beyond the statement of objectives. Unique aspects of Model I provide excellent examples of boundary decisions in a precriptive sequence to teacher preparation.

1. Each student is required to be a teacher aide for four hours each week.
2. There are two small discussion groups; one is composed of elementary majors and the discussion leader is a graduate student with experience in the elementary schools; the other is composed of secondary majors and the discussion leader is a graduate student with experience in the secondary schools.
3. The mid-week discussions are usually oriented toward the material presented earlier in the week, and attempts are made to clarify and extend the information so that it is meaningful. The discussions center around the student's experience as teacher aides.
4. The students in the class develop their own test plan, test questions, construct a classroom examination, and are given an examination from their test items. After taking the examination, the students then calculate the reliability of the examination and conduct an item analysis.
5. The students are exposed to a variety of teaching methods (lecture, videotape, field experience, small group

¹⁵Ibid., p. 47.

discussion, etc.)¹⁶

Selection decisions are perhaps the best defined pre-sage components to be found in the teacher education program. This paper will not dwell on the basic entrance requirements for resident and non-resident students entering the University of Oklahoma. More attention will be given to the selection process once the student has been admitted and wishes to enter the teacher education program.

All students admitted as freshmen are enrolled in the University College, which was established to co-ordinate the program of the freshman year, to provide a uniform advisory system and to assist students in the University College until they have completed 26 semester hours of college work with a grade average of "C" or higher, and have completed all requirements for sophomore standing in the undergraduate degree-recommending college of their choice.

After a prospective teacher completes at least 26 semester hours in University College with a grade-point average of 2.0, he enters the Education Professions Division. He decides upon his major and selects the college that offers the area of specialization he wants.

In choosing one college over another, the student may be influenced by one or more of these variables:

1. Advisors prefer one college over another.
2. Colleges have requirement.
 - a. Arts and Sciences require a foreign language.

¹⁶Ibid., pp. 180-181.

- b. Education requires 26 semester hours in Education whereas Fine Arts and Arts and Science require only 21 semester hours.
 - c. Education requires a grade point average of 2.25 for graduation while Arts and Science and Fine Arts require a 2.0.
3. All who become certified must eventually attain a 2.25 grade point average prior to student teaching. Those who have apprehension about making a 2.25 average may choose a college in which they can attain a degree without student teaching.

Every student entering the Education Professions Division must complete an application detailing objective and subjective data. A student is not automatically accepted into the Education Professions Division. An application must be acted upon by the appropriate certificate committee.

If the committee acts unfavorably on the application, it is automatically reviewed by the Executive Committee. If an exception is made regarding acceptance of a student, it is made by the certificate committee and the Executive Committee.¹⁷

Obviously evaluation of students in the program is an important function in making selection decisions as selection extends from entrance into the program throughout the certification granting process by the certificate committees. However evaluation as a decision component in the system will be discussed as a product factor in this narrative reconstruction of the program.

¹⁷Ibid., pp. 99-109.

PROCESS FACTORS

It is difficult to discern presage and process factors in the teacher education program at the University of Oklahoma because a single model does not exist for the total program. However certain process decisions--dimensions, extent of individualization, graduated conceptualization-practice, and task-centered curriculum--can be identified and are evident in Model I and Model II.

Model I was designed to place prospective students in the classroom as soon as possible and for as long as possible. Model I was also designed to relate course work and the classroom experience in a meaningful manner. Students who participated in Model I enrolled first in five semester hours of Psychological Foundations during the sophomore year. This was followed by five semester hours in Social Foundations during the junior year. Model I culminated with 15 hours of practicum during the senior year.

COURSE OUTLINE

Psychological Foundations

For those in Elementary Education this program replaces:

Psychology in Education (2 hrs.)
Psychology of Childhood (3 hrs.)

For those in secondary education this program replaces:

Psychology in Education (2 hrs.)
Psychology of Adolescence (3 hrs.)

Week

1. A. Overview of the course
B. Divide into groups (elementary, secondary) and discuss class outline, goals, etc.
C. Introductory lecture on concepts and theories and their usefulness to educators
D. Presentation on Instructional Theory
2. A. Presentation on Evaluation Systems
 1. Mastery, competence, contracts, "curve", interindividual, intraindividual, group evaluations
B. Behavioral Objectives: Presentation and self-test
C. Groups
D. Groups
3. A. Presentation of Bloom's Taxonomy
B. Overview of different types of tests: different types of achievement tests
C. Groups
D. Groups
4. A. Test plan; writing test items
B. Evaluating teacher-made tests
C. Groups
D. Groups
Assignment: Examination questions to be handed in by students
5. A. Human learning; Psychological Theorists
B. Examination
C. Class Discussion of Examination
D. Groups
6. A. Human learning: Education Theorists
B. Human learning: Chapter 2, Social Learning
C. Groups
D. Groups
7. A. Human Learning: Concepts and Principles
 1. Reinforcement Theory
 2. Teaching machines and programmed learning

3. Sign on/Sign off
B. Groups
C. Groups
Assignment: Examination questions to be handed in by students
8. A. Review and application of human learning
B. Midterm examination
C. Class discussion of examination
D. Groups
9. A. Human Motivation; White: Chapter 1
Film: Need to Achieve
B. Personality, White: Chapter 3 & 6
C. Groups
D. Groups
10. A. Intelligence and intellectual development; White; Possible films:
1. Calif. Proj. Talent: 6-Evaluation (Bloom)
2. CPT: 10-Divergent thinking (Guilford)
3. CPT: B-Transformation (Bruner)
11. A. Developmental Psych Childhood
Film: Conscience of a Child
B. Groups
C. Groups
- (Elementary)
12. A. Developmental Psych Childhood
B. Groups
C. Groups

-
11. A. Developmental Psych Adolescence
Film-Games People Play: The Theory
B. Groups
C. Groups

(Secondary)

12. A. Developmental Psych Adolescence
B. Groups
C. Groups
-

Assignment: Prepare examination questions

to be handed in by students

13. A. Examination
B. Class discussion of examination
14. A. School and Classroom Structure;
White: Chapter 10, 11, and 12
Film: The Social Animal
B. Groups
C. Groups
15. A. Classroom Group Dynamics;
White: Chapter 8
Film: Impact of a Teacher's Behavior on Learners and Learning
B. Groups
C. Groups
16. A. Classroom Group Dynamics
B. Groups
Assignment: Examination questions to be handed in by students
17. A. Final Examination
B. Discussion of final examination

Social Foundations

1. The Educated Man--Models

- | | | |
|---------------|---------------|----------------|
| (1) Plato | (6) Herbert | (11) Dewey |
| (2) Aristotle | (7) Jefferson | (12) Hutchins |
| (3) Comenius | (8) Marx | (13) Piaget |
| (4) Locke | (9) Spencer | (14) Conant |
| (5) Rousseau | (10) James | (15) Whitehead |

2. The Uses of the University

3. Values and the Youth

- A. Changing Role of the Student
- B. Student Violence
- C. Nature of the Child
- D. The Drop-Outs

4. The Industrial, Technical, Urbanized Society

- A. The Knowledge Explosion
- B. Culture Lag
- C. The Ghetto
- D. Poverty and the School
- E. Intergration

- F. The Eroding Environment
- G. Population Trend
- 5. Social Classes in America
- 6. Conflicting Conceptions of Democracy and Education
 - A. Academic Freedom
 - B. Extremism and Education
- 7. Professionalization
- 8. Religion
- 9. The Curriculum
 - A. Old and New
 - B. Order and Clarity
 - C. Sex Education
 - D. Book Banning
 - E. Pressure Groups
 - F. Organizational Patterns
6-3-3; 8-4; 3-3-2-4; etc.
- 10. The Federal Government
 - A. Support and Control
- 11. The Operating Educational Philosophies
 - A. Essentialism
 - B. Perennialism
 - C. Progressivism
 - D. Reconstructionism
- 12. Educational Innovations
 - A. Team Teaching
 - B. T. V.
 - C. Headstart
 - D. Follow-up
 - E. Upward Bound
 - F. Job Corps
 - G. Teacher Corps
 - H. Non-Graded Schools
- 13. Criticism of Teacher Education in America
- 14. Criticism of American Education
- 15. Any area that the students feel is important¹⁸

¹⁸Ibid., pp. 179-185.

Model II, the Cooperative Urban Teacher Education Program, was designed to prepare elementary teachers for inner-city schools. Model II is not as extensive in course offerings as Model I. Model II usually requires 14 semester hours inclusive of eight hours of student teaching, two hours in language arts methods, and four hours in independent study.

Major activities in Model II include:

1. An extended period of full-day student teaching in an urban-deprived school under the supervision of experienced supervising teacher and field experienced staff.
2. Orientation to education problems of large, urban communities by cooperating public school personnel.
3. Visits to schools and homes in urban-deprived communities.
4. Conference with personnel from public and private agencies concerned with problems of an urban-deprived society.
5. Contracts with culturally-disadvantaged children through classroom observations, playground supervision, tutorial programs, community service schools, and community center activities.
6. Seminars coordinated with each of the field experiences. Seminars provide a basis for possible solutions to sociological, psychological, and educational problems encountered.¹⁹

The problems associated with dimensions, extent of

¹⁹Ibid., pp. 186-187.

individualization, graduated conceptualization-practice, and task-centered curriculum require decisions on record keeping and student accounting. Thus support systems decisions provide an individual folder be kept on file in the College of Education for every student admitted to the teacher education program by the Education Professions Division. The record folder might contain information relative to admissions, course credits, grades, standardized test scores, faculty committee evaluations and actions, advisor reports, practice-teaching evaluations, and other data pertinent to each individual student. The folder is kept on active file in the Office of the Dean until the student is graduated or terminated from the program. The record is then microfilmed and filed.

It should be noted that duplicate records for many students enrolled in the Education Professions Division are kept also by their respective colleges. This duplication is necessary in order for the respective colleges to be able to certify their students have satisfied all university degree requirements prior to graduation.

PRODUCT FACTOR

Student evaluation within the program and student follow-up studies are two surveillance procedures used to observe the products of the program. Evaluation within the program is basically a function of the professor.

Throughout the student's course work,

various surveillance procedures are in constant operation. Every teacher observes and evaluates his students, not only in order to assign marks or grades but also to act as an advisor to students, at least insofar as the individual course is concerned. Professional education courses provide many opportunities for the student to practice and thereby demonstrate competencies which he has acquired toward his professional education. Examples of these opportunities are student aide work, the video-taping of mini-lessons, the presentation of reports, and the opportunity to take part in panel and group discussions.²⁰

In recent years five sources of data have been documented from student follow-up procedures. Data have been collected within one school system on an index for rating graduates on a scale ranging from Outstanding to Unsatisfactory. A second follow-up procedure surveyed student teaching experiences for elementary student teachers. The National Teacher Examination has been used to measure the scoring ability of students in the program as a third source of data. A teacher education survey in all 77 counties in the state was used as a source for follow-up information on demographic data, data on the quality of preparation and data on staff ratings. Finally, feedback developed in human relations seminars has tended to increase knowledge on what procedures to follow in making prospective teachers aware of problems in human relations, as well as what procedures may develop the skills with which to handle these problems.

²⁰Ibid., p. 109.

SUMMARY

This chapter has listed presage, process, and product factors in sequential patterns which identify component decisions that relate to teacher certification. A single context decision has been made, however, within the program which recognizes the fact teacher education extends beyond certification and classroom teaching as a vocational pattern. Thus the program provides a teacher education program which does not lead to certification in an effort to prepare persons who wish to work in societal institutions which have educational functions but are not related to pre-collegiate education.

CHAPTER IV
METHODOLOGICAL CONSIDERATIONS

Administrators, teachers, and professors acted as subjects in evaluating the teacher education program at the University of Oklahoma. This chapter contains an explanation of the methods and procedures used in conducting the evaluation study.

Fifty-nine (N=59) teachers who had graduated from the University of Oklahoma in 1969 and taught in Oklahoma's public schools during the 1972-73 school year, the teachers' immediate supervisors (N=52), and the teachers' supervising professors in college (N=22) made ratings of ten high-inference variables (competencies) and the importance of these competencies to effective teaching and teacher training.

An instrument was developed which contained ten high-inference variables (competencies) composed of seven sub-statements each. The three groups of participants made two ratings of each of these variables. First, they rated the importance of each variable as it relates to effective classroom teaching. Next, they rated the importance of the same variable as it relates to the content of the teacher education program. These ratings were used to test four null hypotheses which had been stated earlier.

POPULATION AND SAMPLES

Teacher Sample

The overall population of this study was comprised of teachers, administrators and college professors. The teacher group was selected from classroom teachers in the State of Oklahoma who received baccalaureate degrees from the University of Oklahoma in the Spring or Summer of 1969 and were employed as teachers in public schools in Oklahoma during the 1972-73 school year. The time-line sequence between the degree date and the professional experience date was necessary to assure the teacher group had acquired at least two years teaching experience. Teaching performance increases with relevant methods courses and student teaching, and also increases during the first two years of teaching experience, contingent upon the amount of supervision received during this period.¹

With this time-line established it was possible to identify the teacher group by the following method. The 1969 Spring and Summer Commencement Programs were used to construct a list of 583 teacher candidates who were graduated from the teacher education program. The numbers of students who graduated from each degree program are presented in Table 1.

¹Richard L. Turner, "Conceptual Foundations of Research in Teacher Education," in Research in Teacher Education, ed. by B. Othanel Smith (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), p. 15.

TABLE 1

THE NUMBER OF STUDENTS WHO GRADUATED FROM EACH DEGREE PROGRAM
OFFERED BY THE UNIVERSITY OF OKLAHOMA DURING THE
SPRING AND SUMMER OF 1969

Degree Program	Number of Spring Graduates	Number of Summer Graduates	Total Number of Graduates
Bachelor of Science in Education	252	55	307
Bachelor of Science in Business Education	29	6	35
Bachelor of Fine Arts	1	0	1
Bachelor of Fine Arts in Art	17	3	20
Bachelor of Fine Arts in Drama	8	1	9
Bachelor of Fine Arts in Dance	0	1	1
Bachelor of Music	6	0	6
Bachelor of Music Education	22	1	23
Bachelor of Arts	122	14	136
Bachelor of Arts in Journalism	7	2	9
Bachelor of Arts in Letters	3	2	9
Bachelor of Science	6	1	7
Bachelor of Science in Chemistry	1	0	1
Bachelor of Science in Home Economics	13	2	15
Bachelor of Science in Mathematics	2	0	2
Bachelor of Science in Microbiology	1	0	0
Bachelor of Science in Physics	1	0	1
Bachelor of Science in Zoology	5	1	6
Total	495	87	583

The list of 1969 teacher candidates was crosschecked with teaching certificates issued by the Oklahoma State Department of Education to University of Oklahoma graduates for the period of time from January 1, 1969 to December 31, 1969. This made it possible to determine the number of teacher candidates who were issued valid teaching certificates by the Oklahoma State Department of Education during the 1969 calendar year. The number of graduates from each degree program and the number of teaching certificates issued for those graduates are presented in Table 2.

From a possible 583 eligible teacher certificate candidates, 275 certificates were issued to 1969 graduates of the Oklahoma University teacher education program during the 1969 calendar year. The names and certificate numbers of the 275 graduates who received certificates were used to determine the number who were teaching in Oklahoma Public Schools during the 1972-73 school year. Only 77 of the 275 certificated graduates of the teacher education program were teaching in public schools. Three of these 77 certificated personnel were excluded from the teacher group because of position assignments. Two had been promoted to supervisory positions and one was listed as a school nurse. Two teachers were unavailable to respond at the time of the survey. Five teachers refused to respond and returned uncompleted rating scales. Thus the total usable response

TABLE 2
THE NUMBER OF STUDENTS WHO GRADUATED FROM EACH TEACHER EDUCATION PROGRAM IN 1969 AND THE NUMBER OF TEACHING CERTIFICATES ISSUED TO THESE GRADUATES

Degree Program	Number of Graduates	Number of Certificates Issued
Bachelor of Science in Education	307	155
Bachelor of Science in Business Education	35	11
Bachelor of Fine Arts	1	1
Bachelor of Fine Arts in Art	20	8
Bachelor of Fine Arts in Drama	9	0
Bachelor of Fine Arts in Dance	1	0
Bachelor of Music	6	1
Bachelor of Music Education	23	9
Bachelor of Arts	136	76
Bachelor of Arts in Journalism	9	2
Bachelor of Arts in Letters	3	0
Bachelor of Science	7	5
Bachelor of Science in Chemistry	1	0
Bachelor of Science in Home Economics	15	7
Bachelor of Science in Mathematics	2	0
Bachelor of Science in Microbiology	1	0
Bachelor of Science in Physics	1	0
Bachelor of Science in Zoology	6	0
Total	583	275

group was limited to 67 teachers. Fifty-nine teachers responded to the rating scale. This represented a teacher response of 88%. The number of questionnaire responses made by teachers from each degree program is presented in Table 3.

Administrator's Sample

The administrator group was determined from a computer print-out furnished by the Oklahoma State Department of Education which identified the school districts and building sites in which the teachers included in the sample were employed. It was then possible to identify individual building site administrators through the Oklahoma Educational Directory, 1972-73. A composite listing of 61 administrators was constructed from this information. Fewer administrators than teachers were included in the sample as some administrators supervised more than one teacher from the teacher group. Fifty-two of the administrators responded to the rating scale to constitute an 85% return on the instrument.

Professor's Sample

The college professor group was more difficult to develop than either the teacher or administrator group. Teachers were asked to identify their college advisor on the personal data sheet. Seventeen teachers either could not recall their advisor's name or failed to complete this portion of the personal data sheets. It was necessary to

TABLE 3
THE NUMBER OF QUESTIONNAIRE RESPONSES RECEIVED FROM
THE TEACHERS IN EACH DEGREE PROGRAM

Degree Program	Number of Certificates Issued	Number of Questionnaires Sent	Number of Responses
Bachelor of Science in Education	155	49	46
Bachelor of Science in Business Education	11	2	2
Bachelor of Fine Arts	1	0	0
Bachelor of Fine Arts in Art	8	1	1
Bachelor of Fine Arts in Drama	0	0	0
Bachelor of Fine Arts in Dance	0	0	0
Bachelor of Music	1	0	0
Bachelor of Music Education	9	2	2
Bachelor of Arts	76	10	7
Bachelor of Arts in Journalism	2	0	0
Bachelor of Arts in Letters	0	0	0
Bachelor of Science	5	2	0
Bachelor of Science in Chemistry	0	0	0
Bachelor of Science in Home Economics	7	2	1
Bachelor of Science in Mathematics	0	0	0
Bachelor of Science in Microbiology	0	0	0
Bachelor of Science in Physics	0	0	0
Bachelor of Science in Zoology	0	0	0
Total	275	67	59

acquire this information from records supplied by the College of Education.

Only 22 college professors shared advisor responsibilities for the 67 teachers in the teacher groups. This small number made it necessary to achieve a high response percentage from the professors. Through time and diligence the researcher was able to achieve a 100% response from the professor group.

DEVELOPMENT OF A DATA COLLECTION INSTRUMENT

The primary data collection instrument, a rating scale, was designed and constructed solely for this study. The origin of the instrument was rooted in prior process-product studies. Rosenshine and Furst² reported findings on process-product studies which identified Clarity, Variability, Enthusiasm, Task-Oriented and/or Businesslike Behaviors, Student Opportunity to Learn Criterion Material, Use of Student Ideas and General Indirectness, Control, Use of Structuring Comments, Types of Questions, Probing, and Level of Difficulty of Instruction as the eleven strongest variables for studying the relationships between teacher behavior and student achievement. The findings from these process-product studies were correlational results but provided a basis for defining teaching skills which focused

²Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research In Teacher Education, ed. by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), pp. 37-72.

upon specific, denotable, and relatively objective behaviors.

Ten of the preceding variables were used in the development of the instrument. Level of Difficulty of Instruction was excluded from the study because it dealt specifically with student perception. Use of Structuring Comments and Types of Questions were combined to form one variable--Use of Structuring Comments and Questions. Thus, nine variables were identified from the original eleven high-inference variables for the purpose of this study. These variables have been identified in this study as Clarity, Variability, Enthusiasm, Task-Oriented and/or Businesslike Behavior, Student Opportunity to Learn Criterion Material, Use of Student Ideas, Control, Use of Structuring Comments and Questions, and Probing.

One other variable was included in the instrument. This variable, General Competencies, has not been supported by research. This variable was developed from the seven objectives governing the teacher education program at the University of Oklahoma. They are as follows:

1. To provide for each student in the program a broad general education which will give him an understanding of himself and of the culture in which he lives and works, so that he can better achieve his own potential and contribute to society.
2. To provide adequate mastery of written and spoken English so that his communication with others may be effective.

3. To develop an adequate understanding of the history and role of the public school in American culture.
4. To develop an adequate understanding of child and adolescent development to enable teachers to effectively work with and teach children and adolescents.
5. To provide an adequate understanding of learning processes so that his teaching may be effective.
6. To provide an adequate understanding of the organization and curricula currently employed in schools in which he is likely to teach.
7. To provide adequate depth in and understanding of the subject matter which he plans to teach.³

It became necessary to develop sub-statements for each of the high-inference variables once the 10 high-inference variables were identified. These sub-statements (low-inference variables) were developed from definitions identifying the high-inference variables in prior studies,⁴ teacher evaluation criteria materials⁵ and research developed on evaluating teaching performance in 110 public schools enrolling 16,000 or more students.⁶

³Education Professions Division, Teacher Education at the University of Oklahoma, A Special Report (Norman, Oklahoma: The University of Oklahoma, 1971), pp. 1-2.

⁴Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in Research in Teacher Education, ed. by B. Othanel Smith, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971), pp. 42-54.

⁵Educational Research Service, Evaluation Guide, ERS Circular, No. 3 (Washington, D. C.: National Education Association, 1969), pp. 26-28.

Numerous inferential statements were identified for each of the nine variables identified by process-product studies. The inferential sub-statements were pared to seven for each of the nine high-inference variables. It was necessary to have seven statements for each high-inference variable in order to match them in number.

Scale A and Scale B were developed on the notion a relationship must be established between the competencies taught in a teacher education program and performance criteria in effective teaching. Scale A asked the respondents to rate each statement on a scale from 7 (Extremely Important) to 1 (Extremely Unimportant) concerning its importance to effective teaching. Scale B asked the respondents to rate the same statement on a scale from 7 (Extremely High Priority) to 1 (Extremely Low Priority) concerning its priority level in a teacher education program. The marking instructions for Scale A and B were based on a seven-point continuum.

Once the instrument was completed, it was subjected to a review by a public school faculty of 50 teachers. The teachers were asked to note the number of minutes it took to complete the rating scale, to note items they did not understand, and to note instructions which were not

⁶Educational Research Service, Evaluating Teaching Performance, ERS Circular, No. 2 (Washington, D. C.: National Education Association, 1972), pp. 1-60.

clear. Following this evaluation the rating scale was revised and submitted for approval. The rating scale, as approved, is contained in Appendix F.

DATA COLLECTION PROCEDURES

The same five steps were followed for collecting data from each of the groups included in the sample. The teachers received the first questionnaires, since composition of the administrator and professor groups was dependent upon information reported by the individual teachers.

The first questionnaires were mailed to the teachers in the Fall of 1973. The procedure was initiated by mailing the instrument (Appendix F), a personal data sheet (Appendix E), and a cover letter to each teacher (Appendix C). A coded, self-addressed, stamped envelope was enclosed in the mailing to facilitate the return of completed materials. A post card was mailed to each subject who had not responded within three weeks of the first mailing (Appendix D). A second mailing, which included the same materials as the first, was subsequently sent to those subjects who failed to respond to the first mailing or the post card reminder. Another post card was mailed three weeks after the second mailing. Finally, each subject who had failed to respond to either mailing was contacted by telephone and requested to respond to the questionnaire.

The administrators were sent questionnaires in the Winter of 1973-74. The professor group received materials

in the Spring of 1974. The only differences in the data collection procedures for the three groups were the contents of each mailing. The administrator's and professor's mailings did not contain personal data sheets. In addition the cover letters contained in each group mailing were designed for the respective group. Thus there were three different cover letters used in the sampling process. However the letters were very similar in content and nature (See Appendix C).

STATISTICAL ANALYSES OF DATA

The data collected in this study were coded, key-punched and processed by personnel from the Merrick Computer Center at the University of Oklahoma. A Multivariate Analyses of Variance, MANOVA, was run. The MANOVA performed univariate and multivariate analyses of variance, covariance, and regression. It provided an exact solution in either the orthogonal or nonorthogonal case. Options in the program included single or multiple degree of freedom contrasts in the main effects or transactions, transformations of variables, and orthogonal polynomial contrasts with equally or unequally spaced points. Reanalyses could have been done with different criteria, covariates, contrasts, and models.⁸

A MANOVA was run because Scales A (Effective Teaching)

⁸Reprinted from MANOVA Instructions as prepared by the University of North Carolina, Psychometric Laboratory.

and B (Content of Teacher Education Program) on the instrument were treated as Factors A, B, A + B, and A - B. This treatment caused a need for four Univariate Analyses of Variance, ANOVA, to study the relationships between groups.⁹ An ANOVA on Factor A was an analysis of the differences among professors', teacher's and administrator's ratings of importance of selected variables on effective teaching. The ANOVA on Factor B was a similar analysis of the importance of selected variables as content to be taught in a teacher education program. The ANOVA on Factors A + B was an analysis of high-inference variables as constructed from selected low-inference variables. The ANOVA for Factor A - B was an analysis of high-inference variables, which emphasized the difference between the importance of low-inference variables to effective teaching as opposed to content to be taught in a teacher education program.

Each ANOVA produced means and standard deviations for the ratings made by the three groups on each of the ten variables. Each ANOVA also produced Univariate F tests for each of the ten variables contained on the instrument. Significant F values were followed by studentized range statistics as a means of locating specific differences.

⁹Fred N. Kerlinger, Foundations of Behavioral Research (New York, N. Y.: Holt, Rinehart and Winston, Inc., 1967), pp. 187-212.

The particular range test chosen to make the post hoc comparisons in the present study was the Scheffé Method (S-Method).¹⁰

¹⁰Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences (Belmont, Calif.: Brooks-Cole Publishing Company, 1968), pp. 90-91.

CHAPTER V

RESULTS OF DATA ANALYSIS

Ratings made by one-hundred thirty-three (N=133) public school administrators, teachers, and college professors were compared in an attempt to determine any differences among the three groups' ratings concerning the importance of ten different factors on effective teaching and the importance of these same factors to the content of teacher education programs. Fifty-nine (N=59) teachers who graduated from the University of Oklahoma in 1969 and who were teaching in Oklahoma's public schools during the 1972-73 school year were asked to complete a biographical information sheet (Appendix E) and to complete the rating scale shown in Appendix F.

The scale consisted of ten variables (high-inference) which were composed of seven substatements. Ratings of these substatements (low-inference variables) were combined to form a single rating of the importance of each variable to effective teaching (Factor A) or its importance to the content of the teacher education program (Factor B). This resulted in a total of twenty ratings for each participant, ten on Factor A (Effective Teaching) and ten on Factor B (content of the teacher education program).

Teachers' ratings were compared with ratings made by their administrative supervisors (N=52) in the local school systems where they taught and with ratings made by the college professors who supervised them in the teacher education program (N=22). A multivariate analysis of variance (MANOVA) and a univariate analysis of variance (ANOVA) were used to compare the three groups' responses. Four general null hypotheses were tested during the study.

This chapter contains a summary of the results of the statistical analysis. The results include the findings taken from testing the hypotheses, information taken from the personal data sheets completed by the teachers, and a summary of all results at the end of the chapter. The format used in presenting the results of each hypothesis was as follows: (1) a restatement of the general hypothesis tested, (2) the descriptive statistics pertinent to the hypothesis being tested, (3) the inferential statistic used to test the hypothesis, (4) the results of testing the null hypothesis, (5) the decision made about the null hypothesis, and (6) the results of any post hoc tests if they were in order.

Results of Testing Null Hypothesis Number One

Null hypothesis number one was stated earlier in the following form:

Ho₁ There is no significant difference among administrators', teachers', and professors' ratings of selected low-inference variables

and their relationship to effective classroom teaching.

Hypothesis number one was tested by comparing the administrators', teachers', and professors' ratings of the ten variables and their importance to effective teaching. Means (M) and standard deviations (SD) computed for the three groups' ratings on each of the ten variables are presented in Table 4.

Mean ratings of each variable were compared with an analysis of variance (ANOVA) test. A summary of the ANOVA results is presented in Table 5. This table contains the mean Square, F value, and significance level of the F value computed for each variable.

The results presented in Table 5 indicate that there was a significant difference among the administrators', teachers', and professors' ratings of the variable of General Competencies and its relationship to effective teaching ($F = 5.968$, $df=2/130$; $p < .01$). These results allowed the researcher to reject the first null hypothesis.

Although a significant F value resulted from the testing of the first null hypothesis, there was no indication of the precise location of such differences. It was necessary to perform post hoc comparisons using the Scheffé Method (S-Method) of pair-wise comparisons among multiple mean values. The results of the additional testing are presented in Table 6.

TABLE 4

MEANS AND STANDARD DEVIATIONS OF ADMINISTRATORS', TEACHERS', AND PROFESSORS' IMPORTANCE RATINGS OF TEN DIFFERENT VARIABLES RELATED TO TEACHING EFFECTIVENESS (FACTOR A)

Instrument Variables		Administrators	Teachers	Professors
Clarity	M	41.423	40.034	40.318
	SD	5.169	4.962	3.933
Variability	M	43.115	42.915	44.136
	SD	4.792	3.874	3.590
Enthusiasm	M	42.250	41.458	40.136
	SD	5.152	4.987	5.651
Task-Oriented and/or Businesslike Behavior	M	43.865	41.407	42.773
	SD	5.905	5.679	4.320
Student Opportunity to Learn	M	42.731	42.237	42.273
	SD	4.895	4.415	4.881
Use of Student Ideas	M	42.904	42.458	40.455
	SD	4.460	5.485	8.667
Control	M	41.885	42.153	41.318
	SD	5.793	3.718	5.411
Use of Structuring Comments and Questions	M	37.904	35.424	34.455
	SD	7.601	7.023	5.334
Probing	M	40.038	39.576	37.591
	SD	5.944	5.995	7.294
General Competencies	M	42.231	38.576	40.273
	SD	5.589	5.490	5.684

TABLE 5

A COMPARISON OF ADMINISTRATORS', TEACHERS', AND PROFESSORS' RATINGS OF THE IMPORTANCE WHICH SHOULD BE GIVEN TO TEN DIFFERENT VARIABLES RELATED TO TEACHING EFFECTIVENESS (Factor A)

Questionnaire Variable	Mean Square	F - Value	Significance Level
Clarity	27.899	1.164	> .05
Variability	12.222	0.687	> .05
Enthusiasm	34.969	1.311	> .05
Task-Oriented and/or Businesslike Behavior	83.951	2.701	> .05
Student Opportunity to Learn	3.717	0.169	> .05
Use of Student Ideas	47.672	1.429	> .05
Control	5.605	0.233	> .05
Use of Structuring Comments and Questions	126.689	2.572	> .05
Probing	47.458	1.233	> .05
General Competencies	184.561	5.968	< .01

TABLE 6

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' RATINGS OF THE "GENERAL COMPETENCIES" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING (FACTOR A)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 38.576$	----	1.697	3.655**
Professors	$\bar{X}_3 = 40.273$		----	1.958
Administrators	$\bar{X}_1 = 42.231$			----

$MS_{Error} = 30.925$

**p <.01

The results presented in Table 6 show that the administrators made significantly higher ratings of the General Competencies variable than the ratings made by the teachers. Professors' ratings of the variable were also higher than the teachers' ratings, but the difference was not significant.

Results of Testing Null Hypothesis Number Two

Null hypothesis number two was stated earlier in the following form:

Ho₂ There is no significant difference among administrators', teachers', and professors' ratings of selected low-inference variables and their relationship to priority level as content in a teacher education program.

Hypothesis number two was tested by comparing the administrators', teachers', and professors' ratings of the ten variables and their priority as content of a teacher education program. Means (M) and standard deviations (SD) computed for the three groups' ratings on each of the ten variables are presented in Table 7.

Mean ratings of each variable were compared with an analysis of variance (ANOVA) test. A summary of the ANOVA results is presented in Table 8. This table contains the mean square, F value, and significance level of the F value computed for each variable.

The results presented in Table 8 indicate that there were significant differences among the administrators', teachers', and professors' ratings on the three variables of Enthusiasm, Task-Oriented and/or Businesslike Behavior, and General Competencies and their relationship to the content of teacher education programs. These results allowed the researcher to reject the second null hypothesis.

Even though significant F values resulted from the testing of the second null hypothesis, there was not an

TABLE 7

MEANS AND STANDARD DEVIATIONS OF ADMINISTRATORS', TEACHERS', AND PROFESSORS' RATINGS OF THE PRIORITY WHICH SHOULD BE GIVEN TO TEN DIFFERENT VARIABLES WHEN PLANNING THE CONTENT OF THE TEACHER EDUCATION PROGRAM (Factor B)

Instrument Variables		Administrators	Teachers	Professors
Clarity	M	39.692	37.102	39.364
	SD	5.998	6.194	4.796
Variability	M	41.538	40.339	41.455
	SD	5.849	5.993	4.974
Enthusiasm	M	39.500	36.017	39.136
	SD	6.955	7.866	6.010
Task-Oriented and/or Businesslike Behavior	M	42.327	36.407	41.818
	SD	6.364	9.095	6.666
Student Opportunity to Learn	M	42.731	39.763	41.364
	SD	5.696	6.095	6.138
Use of Student Ideas	M	41.404	39.763	40.909
	SD	5.085	7.968	7.628
Control	M	40.385	39.356	40.091
	SD	6.613	6.389	6.286
Use of Structuring Comments and Questions	M	35.942	33.390	33.909
	SD	7.855	7.652	5.154
Probing	M	38.577	37.068	35.364
	SD	6.191	7.801	7.712
General Competencies	M	41.712	37.441	39.727
	SD	5.889	6.246	6.009

TABLE 8
A COMPARISON OF ADMINISTRATORS', TEACHERS', AND PROFESSORS' RATINGS
OF THE PRIORITY WHICH SHOULD BE GIVEN TO TEN DIFFERENT
VARIABLES WHEN PLANNING THE CONTENT OF THE
TEACHER EDUCATION PROGRAM

Questionnaire Variable	Mean Square	F - Value	Significance Level
Clarity	102.831	2.942	> .05
Variability	22.694	0.679	> .05
Enthusiasm	187.966	3.586	< .01
Task-Oriented and/or Businesslike Behavior	548.235	9.141	< .01
Student Opportunity to Learn	60.608	1.713	> .05
Use of Student Ideas	38.525	0.805	> .05
Control	15.209	0.364	> .05
Use of Structuring Comments and Questions	94.233	1.725	> .05
Probing	84.841	1.638	> .05
General Competencies	252.815	6.862	< .01

indication of the precise location of such differences. It was necessary to make the same type of post hoc comparisons as that made in conjunction with the first hypothesis. The results of making the pair-wise comparisons on the three variables involved are presented in Tables 9, 10, and 11.

TABLE 9

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' RATINGS OF THE "ENTHUSIASM" VARIABLE AS IT RELATES TO THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor B)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 36.017$	----	3.119**	3.483**
Professors	$\bar{X}_3 = 39.136$		----	0.364
Administrators	$\bar{X}_1 = 39.500$			----

$MS_{Error} = 52.417$

*p < .05

**p < .01

The results presented in Table 9 indicate that the administrators made significantly higher ratings of the Enthusiasm variable than did the teachers. Professors also felt that Enthusiasm was more important to the content of teacher education programs than teachers, but the differences between the two groups' ratings were not significant.

TABLE 10

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' RATINGS OF THE "TASK-ORIENTED AND/OR BUSINESSLIKE BEHAVIOR" VARIABLE AS IT RELATES TO TEACHER EDUCATION PROGRAMS (Factor B)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 36.407$	----	5.411**	5.920**
Professors	$\bar{X}_3 = 41.818$		----	0.509
Administrators	$\bar{X}_1 = 42.327$			----

$MS_{Error} = 59.975$

*p < .05

**p < .01

The results presented in Table 10 show that both the administrators and professors made significantly higher ratings of the Task-Oriented and/or Businesslike Behavior variable than the ratings made by the teachers. The administrators and professors felt that Task-Oriented and/or Businesslike Behavior should be an important part of the content of the teacher education program. However, the teachers did not believe the variable to be very important, and rated it accordingly.

The results presented in Table 11 show that the group of administrators made significantly higher ratings of the General Competencies variable than the ratings made by the teachers. Professors' ratings of this variable were also

TABLE 11

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' RATINGS OF THE "GENERAL COMPETENCIES" VARIABLE AS IT RELATES TO TEACHER EDUCATION PROGRAMS (Factor B)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 37.441$	---	2.286	4.271**
Professors	$\bar{X}_3 = 39.727$		----	1.985
Administrators	$\bar{X}_1 = 41.712$			----

$MS_{Error} = 36.843$

*p < .05

**p < .01

higher than the teachers' ratings, but the differences were not significant.

Results of Testing Null Hypothesis Number Three

Null hypothesis number three was stated earlier in the following form:

H_{03} There is no significant difference among administrators', teachers', and professors' ratings of high-inference variables constructed from selected low-inference variables as they relate to effective teaching and the content of teacher education programs.

Hypothesis number three was tested by comparing the administrators', teachers', and professors' combined ratings of the ten variables related to effective teaching and the

content of teacher education programs. Means and standard deviations computed for the three groups' combined ratings on each of the ten variables are presented in Table 12.

Combined mean ratings of each variable were compared with an analysis of variance (ANOVA) test. A summary of the ANOVA results is presented in Table 13. This table contains the mean square, F value, and significance level of the F value computed for each variable.

The results presented in Table 13 indicate that there were significant differences among the administrators', teachers', and professors' ratings on the two variables of Task Oriented and/or Businesslike Behavior and General Competencies. These results allowed the researcher to reject the third null hypothesis.

Although significant F values resulted from testing the third null hypothesis, the results did not indicate the precise location of such differences. It was necessary to make additional pair-wise comparisons among the means to locate specific differences. The results of making additional comparisons on the two variables where significant F values were noted as presented in Tables 14 and 15.

The results presented in Table 14 show that both the administrators and professors made significantly higher combined ratings of the Task-Oriented and/or Businesslike Behavior variable than the ratings made by the teachers. Administrators and professors felt that Task-Oriented and/or

TABLE 12

MEANS AND STANDARD DEVIATIONS OF COMBINED RATINGS OF TEN
 VARIABLES AND THEIR RELATIONSHIP TO EFFECTIVE TEACHING
 AND THE CONTENT OF TEACHER EDUCATION PROGRAMS
 (Factors A + B)

Instrument Variables		Administrators	Teachers	Professors
Clarity	M	81.118	77.136	79.682
	SD	10.331	10.353	8.120
Variability	M	84.654	83.254	85.591
	SD	9.865	8.823	7.229
Enthusiasm	M	81.750	77.475	79.273
	SD	10.757	11.698	11.158
Task-Oriented and/or Businesslike Behavior	M	86.192	77.814	84.591
	SD	11.584	13.289	10.257
Student Opportunity to Learn	M	84.519	82.000	83.636
	SD	10.243	9.436	10.848
Use of Student Ideas	M	84.308	85.220	81.364
	SD	8.939	12.697	16.052
Control	M	82.269	81.509	81.839
	SD	11.946	8.707	10.839
Use of Structuring Com- ments and Questions	M	73.846	68.814	68.364
	SD	14.995	14.041	9.540
Probing	M	78.615	76.644	72.955
	SD	11.527	12.734	14.331
General Competencies	M	83.942	76.017	80.000
	SD	11.313	11.258	10.184

TABLE 13

A COMPARISON OF THE ADMINISTRATORS', TEACHERS', AND PROFESSORS' COMBINED RATINGS OF TEN VARIABLES RELATED TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A + B)

Questionnaire Variable	Mean Square	F - Value	Significance Level
Clarity	223.144	2.224	> .05
Variability	53.009	0.652	> .05
Enthusiasm	252.985	1.999	> .05
Task-Oriented and/or Businesslike Behavior	1044.865	7.039	< .01
Student Opportunity to Learn	89.610	0.897	> .05
Use of Student Ideas	91.108	0.629	> .05
Control	9.903	0.091	> .05
Use of Structuring Comments and Questions	422.352	2.213	> .05
Probing	249.053	1.580	> .05
General Competencies	868.683	7.034	< .01

TABLE 14

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' COMBINED RATINGS OF THE "TASK-ORIENTED AND/OR BUSINESSLIKE BEHAVIOR" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A + B)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 77.814$	----	6.777**	8.378**
Professors	$\bar{X}_3 = 84.591$		----	1.601
Administrators	$\bar{X}_1 = 86.192$			----

$MS_{Error} = 148.439$

*p <.05

**p <.01

Businesslike Behavior was significantly more important to effective teaching and the teacher education program than did the classroom teachers.

The results presented in Table 15 show that the administrators' ratings of the General Competencies variable were significantly higher than the teachers' ratings of this same variable. Professors' ratings of this variable were also higher than the teachers' ratings, but the differences were not significant.

TABLE 15

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' COMBINED RATINGS OF THE "GENERAL COMPETENCIES" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A + B)

Rank-Ordered Means		\bar{X}_2	\bar{X}_3	\bar{X}_1
Teachers	$\bar{X}_2 = 76.017$	----	3.983	7.925**
Professors	$\bar{X}_3 = 80.000$		----	3.942
Administrators	$\bar{X}_1 = 83.942$			----

$MS_{Error} = 123.498$

*p <.05

**p <.01

Results of Testing Null Hypothesis Number Four

The final comparisons were made between the two sets of ratings made by each group. It was decided that such a measure would give some indication of the importance of a particular variable to effective teaching and the importance of that same variable to the content of the teacher education program at the University of Oklahoma. For example, teachers may give Enthusiasm an average rating of 42 on Factor A. This would indicate that they feel that Enthusiasm is very important to effective teaching. On the other hand, they may give Enthusiasm an average rating of 35 on Factor B. This would indicate that they believe

that Enthusiasm should be a relatively important part of the teacher training program. However, the difference between the two ratings indicates that the teachers feel that Enthusiasm is important to effective teaching, but it should not be given a higher priority in the teacher education program. Obviously, the greater the discrepancy between the two ratings, the greater the need to emphasize a particular competency (such as Enthusiasm) in training classroom teachers.

It should further be noted that a negative value would indicate that a particular competency (variable) is receiving less emphasis in the teacher training program than the person or group feels is necessary for effective teaching.

Null hypothesis number four was stated earlier in the following form:

Ho₄ There is no significant difference among administrators', teachers', and professors' ratings of high-inference variables constructed from selected low-inference variables in relationship to effective teaching as opposed to priority level in a teacher education program.

Difference scores were computed for each individual by comparing their ratings of ten variables related to effective teaching with the ratings they made of these same variables as they relate to the content of a teacher education program. The Means and standard deviations of the administrators', teachers', and professors' difference

(discrepancy) ratings are presented in Table 16. Discrepancy ratings on each variable were compared with an analysis of variance (ANOVA) testing statistic. A summary of the ANOVA results is presented in Table 17. This table contains the mean square, F value, and significance level of the F value computed for each variable.

The results presented in Table 17 indicate that there were significant differences among the discrepancy ratings made by the three groups on the three variables of Enthusiasm, Task-Oriented and/or Businesslike Behavior, and Use of Student Ideas. These results allowed the researcher to reject the fourth null hypothesis.

Again, it was necessary to perform post hoc tests in order to find specific mean differences among the three groups' discrepancy ratings. The results of making additional comparisons on the three variables where significant F values were noted are presented in Tables 18, 19, and 20.

The results presented in Table 18 show that the teachers had significantly higher discrepancy ratings than the administrators and professors. The administrators also showed higher discrepancy ratings than the professors, but the differences were not significant.

The results presented in Table 19 show that the teachers had significantly higher discrepancy ratings than the administrators and professors on the Task-Oriented

TABLE 16

MEANS AND STANDARD DEVIATIONS OF DIFFERENCES BETWEEN RATINGS OF
TEN VARIABLES RELATED TO EFFECTIVE TEACHING AND RATINGS OF
THESE SAME VARIABLES AS THEY RELATE TO TEACHER EDUCATION
PROGRAMS (Factor A - B)

Instrument Variables		Administrators	Teachers	Professors
Clarity	M	1.731	2.932	0.955
	SD	4.321	4.335	3.316
Variability	M	1.577	2.576	2.682
	SD	4.127	4.900	4.795
Enthusiasm	M	2.750	5.441	1.000
	SD	5.841	6.055	3.409
Task-Oriented and/or Businesslike Behavior	M	1.538	5.000	0.955
	SD	4.065	7.304	4.582
Student Opportunity to Learn	M	0.942	2.475	0.909
	SD	2.810	4.925	2.308
Use of Student Ideas	M	1.500	2.695	-0.455
	SD	3.404	5.093	2.988
Control	M	1.500	2.797	1.227
	SD	3.44	5.786	4.482
Use of Structuring Com- ments and Questions	M	1.962	2.034	0.545
	SD	3.757	4.311	4.361
Probing	M	1.462	2.508	2.227
	SD	3.801	5.606	4.471
General Competencies	M	0.519	1.136	0.545
	SD	1.965	3.401	5.755

TABLE 17
A COMPARISON OF ADMINISTRATORS', TEACHERS', AND PROFESSORS' DISCREPANCY
RATINGS OF TEN VARIABLES RELATED TO EFFECTIVE TEACHING AND RATINGS
OF THESE SAME VARIABLES AS THEY RELATE TO TEACHER
EDUCATION PROGRAMS (Factor A - B)

Questionnaire Variable	Mean Square	F - Value	Significance Level
Clarity	38.325	2.192	> .05
Variability	16.824	0.797	> .05
Enthusiasm	192.899	6.101	< .01
Task-Oriented and/or Businesslike Behavior	219.527	6.519	< .01
Student Opportunity to Learn	39.043	2.642	> .05
Use of Student Ideas	81.300	4.630	< .01
Control	31.728	1.390	> .05
Use of Structuring Com- ments and Questions	19.495	1.153	> .05
Probing	15.550	0.678	> .05
General Competencies	6.084	0.506	> .05

TABLE 18

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' DISCREPANCY RATINGS OF THE "ENTHUSIASM" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A - B)

Rank-Ordered Means		\bar{X}_3	\bar{X}_1	\bar{X}_2
Professors	$\bar{X}_3 = 1.000$	----	1.750	4.441**
Administrators	$\bar{X}_1 = 2.750$		----	2.691**
Teachers	$\bar{X}_2 = 5.441$			----

$MS_{Error} = 31.618$

*p < .05

**p < .01

TABLE 19

THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' DISCREPANCY RATINGS OF THE "TASK-ORIENTED AND/OR BUSINESSLIKE BEHAVIOR" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A - B)

Rank-Ordered Means		\bar{X}_3	\bar{X}_1	\bar{X}_2
Professors	$\bar{X}_3 = 0.955$	----	0.583	4.045**
Administrators	$\bar{X}_1 = 1.538$		----	3.462**
Teachers	$\bar{X}_2 = 5.000$			----

$MS_{Error} = 47.418$

*p < .05

**p < .01

TABLE 20
 THE PAIR-WISE COMPARISONS OF THE THREE GROUPS' DISCREPANCY RATINGS OF THE "USE OF STUDENT IDEAS" VARIABLE AS IT RELATES TO EFFECTIVE TEACHING AND THE CONTENT OF TEACHER EDUCATION PROGRAMS (Factor A - B)

Rank-Ordered Means		\bar{X}_3	\bar{X}_1	\bar{X}_2
Professors	$\bar{X}_3 = -0.455$	----	1.045	2.240**
Administrators	$\bar{X}_1 = 1.500$		----	1.195
Teachers	$\bar{X}_2 = 2.695$			----

$MS_{Error} = 17.559$

*p <.05

**p <.01

and/or Businesslike Behavior variable. Again, the administrators showed higher discrepancy ratings than the professors, but the differences between the two groups' scores were not significant.

The results presented in Table 20 show that the teachers had significantly higher discrepancy ratings than the administrators. This indicates that they felt there was a wide discrepancy between the role of Student Ideas in effective teaching and the importance which should be given to Student Ideas as part of the teacher education

program. Teachers gave a relatively high rating of the importance of Student Ideas to effective teaching ($X = 42.46$), but gave a more moderate rating of the same variable as part of the content of the teacher training program ($X = 39.76$). The administrators showed a higher rating than the professors, but differences between the two groups' scores were not significant.

The professors showed a negative discrepancy rating on the variable of Use of Student Ideas. This indicates that the professors' ratings of the importance of Student Ideas in effective teaching was lower than their ratings of the importance of Student Ideas as part of the teacher training program.

ADDITIONAL FINDINGS

Additional information was collected from the teacher participants. The information from the personal data sheets gave some insight to the results presented in Tables 4 through 20.

Teacher respondents indicated that they had accumulated an average of 3.7 years of teaching experience at the conclusion of the 1972-73 school year. No teacher respondent had less than two years teaching experience at the time of the survey. Twelve teachers had taught in other school districts in Oklahoma prior to their current assignments and two had out-of-state teaching experience. Forty-five of the respondents had taught in the same school

districts throughout their teaching careers, and 24 respondents had taught at the same building sites throughout their professional tenure.

At the time of the survey 47 of the respondents were teaching only in the area of their baccalaureate majors, while 11 were teaching in the areas of both their baccalaureate major and minor.

Fifty of the respondents began teaching in the area of their baccalaureate majors. Three respondents began teaching in the area of their baccalaureate minors, while six respondents began teaching in the area of both their baccalaureate majors and minors.

Twenty-eight respondents had earned graduate hours ranging from six to 42 hours beyond the baccalaureate degree. Twelve respondents had earned advanced degrees. Ten of these advanced degrees had been earned at the University of Oklahoma with five advanced degrees in baccalaureate majors, two advanced degrees in baccalaureate minors, and three advanced degrees in other fields of study. Two advanced degrees had been earned at other state institutions in a field other than the baccalaureate major or minor.

Sixteen respondents had taken graduate work but had not completed an advanced degree. Six respondents had completed graduate hours at the University of Oklahoma. Three had completed graduate hours in baccalaureate majors, and three had completed hours in other fields of study.

Ten respondents had completed graduate hours at other institutions. Of these 10 respondents, five had completed graduate hours in other fields of study at other institutions. Of the 31 respondents who had not pursued graduate work, 12 planned to pursue graduate study, and 19 indicated no ambition to earn graduate hours or an advanced degree.

Ancillary Findings

The data presented as a result of testing the hypotheses fail to provide a complete explanation of the ratings made by the administrators, teachers, and professors. A more thorough investigation of each groups' ratings shows some major discrepancies. To investigate these discrepancies it was necessary to rank-order the ten high-inference variables.

First, the ten variables were ranked in descending order according to their mean rating by a particular group. Next, the means were assigned a numerical value according to their rank-order. The highest mean rating was assigned a value of ten, the second highest was assigned a value of nine and so on, with the lowest mean value being assigned a value of one. These same procedures were used to assign numerical values to the mean ratings made by all three groups. Finally, the three values assigned to each variable were summed as a means of arriving at a composite rating. Composite ratings were then arranged in descending order as a means of rank-ordering the ten variables. Each groups'

rankings of the ten high-inference variables and an overall ranking of the variables is presented in Table 21. The variables are presented in decending order of importance as they relate to effective teaching.

TABLE 21
ADMINISTRATORS', TEACHERS', AND PROFESSORS' RANKINGS OF TEN
VARIABLES IMPORTANT TO EFFECTIVE TEACHING

Overall Rank Order	Instrument Variables	Administrators' Ranking	Teachers' Ranking	Professors' Ranking
1st	Variability	2	1	1
2nd	Task-Oriented and/or Businesslike Behavior	1	6	2
3rd	Student Opportunity to Learn	4	3	3
4th	Use of Student Ideas	3	2	5
5th	Control	7	4	4
6th	Enthusiasm	5	5	8
7th	Clarity	8	7	6
8th	General Competencies	6	9	7
9th	Probing	9	8	9
10th	Use of Structuring Comments and Questions	10	10	10

Table 21 shows that the variables which received the highest overall ratings were Variability, Task-Oriented and/or Businesslike Behavior, and Student Opportunity to Learn.

The concept of Variability was composed of statements based primarily around the ability to adapt teaching methods and materials to the immediate classroom situation and the ability to adjust to "unusual" teaching situations. Both the teachers and professors ranked Variability as the highest competency needed for effective teaching, while the administrators ranked the variable second.

Perhaps the most controversial variable and the variable which received the most diverse ratings from the three groups was the concept of Task-Oriented and/or Businesslike Behavior. This variable was rated first by the administrators, second by the professors, and sixth by the teachers. The reasons for such disparate ratings become apparent when the seven substatements are listed. They are as follows:

1. To realize the value of punctuality and regular attendance in job performance.
2. To maintain appropriate emotional control within the classroom.
3. To fulfill responsibility without constant supervision.
4. To make practical, common sense judgments through tactful behavior.
5. To realize the value in personal responsibility for professional growth and improvement.
6. To accept improvement of the total school program as an individual as well as a group responsibility.
7. To follow prescribed school policies.

An examination of the seven statements reveals that

the underlying theme is the adherence to certain rules, regulations, and policies and behaving in a professional manner. The administrators and professors felt that this was extremely important to effective teaching, but the teachers gave the variable a relatively low rating among the ten concepts.

Ancillary Findings Concerning the Content of
Teacher Education Programs

A more thorough investigation was also made of the ten high-inference variables' relationship to the content of teacher education programs (Factor B). Each groups' rankings of the ten variables and an overall ranking of each concept is presented in Table 22. The variables are presented in decending order of priority as they relate to the content of teacher education programs.

Table 22 shows that the variables which recieved the highest overall ratings were Student Opportunity to Learn, Variability, and Task-Oriented and/or Businesslike Behavior. Variables which received the lowest ratings were Enthusiasm (eighth), Probing (ninth), and Use of Structuring Comments and Questions (tenth).

The Student Opportunity to Learn variable was composed primarily of statements which are oriented toward the motivation of students: All three groups gave this concept a very high rating. This indicates that the motivation of students should be given the highest priority when planning the content of teacher education programs.

TABLE 22
 ADMINISTRATORS', TEACHERS', AND PROFESSORS' RANKINGS OF TEN
 VARIABLES IMPORTANT TO PLANNING THE CONTENT OF A
 TEACHER EDUCATION PROGRAM

Overall Rank Order	Instrument Variables	Administrators' Ranking.	Teachers' Ranking	Professors' Ranking
1st	Student Opportunity to Learn	1	2	3
2nd	Variability	4	1	2
3rd	Task-Oriented and/or Businesslike Behavior	2	8	1
4th	Use of Student Ideas	5	3	4
5th	General Competencies	3	5	6
6th	Control	6	4	5
7th	Clarity	7	6	7
8th	Enthusiasm	8	9	8
9th	Probing	9	7	9
10th	Use of Structuring Comments and Questions	10	10	10

Again, the most discrepancy among the three groups' ratings was evidenced on the variable of Task-Oriented and/or Businesslike Behavior. This variable was rated first by the professors, second by the administrators, and eighth by the teachers. Such divergent views concerning the importance of adhering to rules and regulations and behaving in a professional manner may result in wide differences of opinion about how education should be conducted. The administrators and professors felt that this variable must be given high priority in the teacher education program, while the teachers gave the concept a very low rating.

Summary of Results

All four null hypotheses were rejected as a result of the statistical analyses. A summary of the hypothesis testing and the secondary findings are presented in the following sections.

The results of testing the first hypothesis showed that there was one significant difference among the three groups' ratings of the ten variables related to effective teaching. Teachers' ratings of the General Competencies variable were significantly lower than the administrators' ratings of the same variable. Administrators felt that the General Competencies were much more important to effective teaching than did the teachers.

Results of testing the second hypothesis showed that the teachers' ratings of three variables (Enthusiasm, Task-Oriented and/or Businesslike Behavior, and General Competencies) were significantly lower than administrators' and professors' ratings of these same variables. Administrators and professors felt that these three variables should be given high priority when planning the content of teacher education programs, but teachers did not share their views.

The results of testing the third hypothesis only supported the findings of the first two hypotheses. The teachers' composite ratings of the Task-Oriented and/or Businesslike Behavior and General Competencies variables

were significantly lower than the administrators' and professors' composite ratings of these same variables.

The results of testing the fourth hypothesis showed that the teachers' discrepancy ratings of the Enthusiasm, Task-Oriented and/or Businesslike Behavior variables were significantly higher than the administrators' and professors' discrepancy ratings of these same variables. These results indicated a wide discrepancy between what competencies the teachers felt were needed for effective teaching and the competencies which should be taught in the teacher education program.

Further analysis of the data showed that the three groups considered Variability, Task-Oriented and/or Businesslike Behavior, and Student Opportunity to Learn as the most important variables to effective teaching, they also felt these same competencies should receive the highest priority when planning the content of the teacher education program. The conclusions drawn from these results are presented in the final chapter of this dissertation. Chapter VI also contains a summary of the study and implications for further research.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to compare professors', administrators', and teachers' ratings of ten high-inference variables which are related to effective teaching and the content of teacher education programs. This comparison was made in an attempt to evaluate the teacher education program at the University of Oklahoma.

Fifty-nine (N=59) teachers who graduated from the University of Oklahoma in 1969 and who were teaching in Oklahoma's public schools during the 1972-73 school year served as the basic data collection group. These teachers, their immediate supervisors (administrators) (N=52), and the teachers' supervising professors in college (N=22) made ratings of ten variables and their importance to effective teaching. The groups also made ratings of these same variables and their relationship to the content of the teacher education program.

An instrument was developed which contained ten high-inference variables (competencies). Variable ratings were the result of summing seven substatement ratings. The ten variables and the primary theme of their substatements were as follows:

1. Clarity: Ability to make clear presentations and to use time and materials efficiently
2. Variability: Ability to adjust time, materials, and methods to unusual classroom situations
3. Enthusiasm: Ability to display self confidence and interest in the subject being taught
4. Task-Oriented and/or Businesslike Behavior: Ability to adhere to rules and policies and display professional behavior
5. Student Opportunity to Learn: Ability to use positive reinforcement and motivate students
6. Use of Student Ideas: Ability to make students a part of the teaching/learning process
7. Control: Ability to maintain a learning atmosphere in the classroom
8. Use of Structuring Comments and Questions: Ability to structure lessons and discussions with comments and questions
9. Probing: Ability to promote learning by questioning, clarifying, or redirecting questions to students
10. General Competencies: Ability to understand children, the learning process, and the school's role in society

The three groups of participants made two ratings of each variable. First, they rated the importance of each variable as it relates to effective classroom teaching. Next, they rated the importance of the same variable as it relates to the content of the teacher education program.

A multivariate analysis of variance (MANOVA) and an analysis of variance (ANOVA) were used to compare the administrators', teachers', and professors' responses.

Four general hypotheses were tested during the study. The results of these hypotheses were as follows: (1) The administrators' ratings of the General Competencies variable were significantly higher than the teachers' ratings of the same variable as it relates to effective teaching. There were no significant differences among the three groups' ratings of the other nine variables. (2) Administrators' and professors' ratings of the variables of Enthusiasm, Task Oriented and/or Businesslike Behavior, and General Competencies were significantly higher than teachers' ratings of these same variables as they relate to the content of a teacher education program. There were no significant differences among the three groups' ratings of the seven remaining variables. (3) All three groups considered Variability, Task Oriented and/or Businesslike Behavior, and Student Opportunity to Learn the most important variables to effective teaching. They also felt that these same competencies should receive the highest priority when planning the content of the teacher education program.

CONCLUSIONS

Several Conclusions were drawn from the results of the study. These conclusions are presented in the following sections.

Conclusion Number One: One area considered by the three groups of participants was the teacher's ability to

understand children, the teaching/learning process, and the school's role in society. The administrators and professors felt that this area was very important to effective teaching, but the teachers felt that it was not important to effective teaching.

Conclusion Number Two: The importance which administrators and professors believed should be given to three particular areas of the teacher training program was much greater than the emphasis which teachers felt should be given to these same areas. The particular areas involved were as follows:

1. The teacher's ability to display self-confidence and interest in the subject taught.
2. The teacher's ability to adhere to rules and regulations and to display professional behavior.
3. The teacher's ability to understand children, the teaching/learning process, and the school's role in society.

Conclusion Number Three: The overall importance which administrators and professors felt should be given to two areas related to effective teaching and teacher training programs was much greater than the emphasis teachers thought should be given to these same areas. The two particular areas involved were as follows:

1. The teacher's ability to adhere to rules and regulations and to display professional behavior.
2. The teacher's ability to understand children, the teaching/learning process, and the school's role in society.

Conclusion Number Four: There were wide discrepancies between the importance teachers placed on certain factors in effective teaching and the amount of emphasis these same areas should receive in the teacher training program. These particular areas were as follows:

1. The teacher's ability to express self-confidence and interest in the subject matter.
2. The teacher's ability to adhere to rules and regulations and to act in a professional manner.
3. The teacher's ability to incorporate student ideas into the teaching/learning process.

Conclusion Number Five: The areas which the administrators, teachers, and professors felt were most important to effective teaching were very similar to the areas which they felt should receive the most emphasis in the teacher training program. The three areas most germane to effective teaching were as follows:

1. The teacher's ability to adapt time, materials, and teaching methods to unusual classroom situations.
2. The teacher's ability to adhere to rules and regulations and to act in a professional manner.
3. The teacher's ability to use positive reinforcement and to motivate students to learn.

The three groups felt that these same areas should receive the most emphasis in the teacher training program, but they were arranged in a different order.

1. The teacher's ability to use positive reinforcement and to motivate student to learn.

2. The teacher's ability to adapt time, materials, and teaching methods to unusual classroom situations.
3. The teacher's ability to adhere to rules and regulations and to act in a professional manner.

Conclusion Number Six: The administrators and professors felt that the teacher's ability to adhere to rules and regulations and to act in a professional manner was very important to effective teaching and to the content of the teacher education program. Both groups rated this area as the most important of the ten areas considered. On the other hand, the teachers regarded such competencies as very unimportant to effective teaching (sixth-place rating) and equally unimportant to the content of the teacher education program (eighth-place rating).

Concluding Remarks

The teacher education program at the University of Oklahoma was established in 1890 and is as old as the University itself. In the beginning the program was designed to provide a means of acquiring a thorough knowledge of the theory and art of teaching. The program was identified as the School of Teaching in the College of Arts and Sciences in 1912. By 1913 the program had evolved to be known as the School of Education. The program had its own faculty with a Dean as the administrative head by 1921. In 1929 the College of Education was organized to coordinate the teacher education program.

Properties

The teacher education program at the University of Oklahoma functions at the University level. The program is not oriented to any one college. It is governed instead by the Education Professions Division Council which is representative of Teacher Education Committees from the College of Education, the College of Arts and Sciences, and the College of Fine Arts. The Dean of the College of Education is the administrative head of the program. However, each Teacher Education Committee retains authority for decisions on matters concerning course content, degree programs, and student personnel administration. The program actually spans the University College, the College of Education, the College of Arts and Sciences, and the College of Fine Arts and encompasses 23 certificate areas and 18 different baccalaureate degrees.

The purposes of the program are identified by seven stated objectives which reflect the philosophy of the Education Professions Division. Each Teacher Education Committee is encouraged to develop specific objectives for each certificate area. The program also incorporates the objectives stated by the University of Oklahoma as well as those developed by the State Regents for Higher Education.

The program is not so structured as to regiment students in their preparation. General Education components and Professional Education components in the program

provide basic outlines for each student to follow in preparation for a certificate. The program minimizes required courses and strives to satisfy the purposes of the colleges and the needs of the teacher candidate.

The program has been expanded to include three innovative components. Model I and II were designed to meet specific teacher education needs. The non-certification degree program was designed to provide teacher education training for those students who wish to pursue education-related vocations in societal institutions which do not require teacher certification.

The teacher education program at the University of Oklahoma is not identifiable in contemporary literature as a model program. It is possible, however, to identify components within the program that typify decision making in model programs.

A review of existing literature identified presage, process, and product factors within the program. Context, cybernation, extent of lead, control, boundaries, and selection decisions are identified as presage decisions in the program. The curricula within the program provided process factor examples in the form of decisions on dimensions, extent of individualization, graduated conceptualization practice, and task-centered curriculum. Support systems, process decisions, are identified in the program as decisions on record keeping and student accounting.

Product decisions in the program are characterized by evaluative surveys, follow-up studies, and feedback from program graduates.

Attributes

From the origin of the College of Education in 1929 to the present, teacher education at the University of Oklahoma has become an abstract system composed of colleges, faculties, committees, curricula, degrees, objectives, and regulations. The organization, the objective, and the flexible and innovative components of the program make it possible to identify decisions which are characteristic of modern designs for teacher education. It is possible to identify presage, process, and product factors within the program on an individual, non-sequential basis. The program does not reflect planning typical of a modern teacher education model. Synthesized planning, a characteristic of model teacher education, is evident in the statement of seven general objectives, Model I, and Model II. In effect the development of the program is more typical of an evolutionary process than a planned process.

Presage and process factors are readily identifiable in the program. Product factors are evaluation decisions which deserve more attention. Very few scientifically controlled studies concerning the program have been conducted from within. Evaluation has been limited to follow up studies and surveys on graduates. These evaluative

procedures have limited or unsuccessfully employed statistical analyses of data to test stated hypotheses on the effectiveness of the program or performance of the products.

The statistical analyses of the data collected in this study provides a means to evaluate the program which goes beyond evaluation procedures now in existence.

Recommendations

In light of the findings and conclusions of the study, several recommendations are formulated. It is recommended that each Teacher Education Committee develop teacher training models which will identify specific presage, process, and product factors that will draw component decisions within the models into a synthesized teacher education program at the University of Oklahoma.

It is recommended that support systems in the program be revised to assure student records are accounted accurately and completely.

It is recommended that an on-going scientific evaluation component be developed within the program which will draw on the expertise of the faculty to provide data concerning the products of the program.

It is recommended that a scientific follow-up study be conducted on the products of Model I, Model II, and the noncertification degree program in an attempt to identify significant differences in teacher behavior between these special program graduates and other teacher education

program graduates.

It is recommended treatment validity in the program be revised in order to cause:

- (1) Administrators, teachers, and professors to agree congruously to the stated objectives of the program.
- (2) Professors to practice characteristics of the Variability concept in the teacher education program in order to instill within students the importance of Variability to effective teaching.
- (3) The promotion of Task-Oriented and/or Businesslike Behavior as an important variable in effective teaching and the content of the teacher education program.
- (4) The Use of Student Ideas to be a variable which teacher trainees can experience in the teacher education program in an effort to develop this variable as a skill which is fundamental to effective teaching.

Finally, it is recommended that provisions be made in the teacher education program to strengthen practices and procedures which will continue to promote the development of Clarity, Enthusiasm, Student Opportunity to Learn Criterion Material, Control, Structuring Comments and Questions, and Probing as variables characteristic of effective teaching.

Implications For Research

The idea of Task-Oriented and/or Businesslike Behavior seems to be a major point of departure on the rating of effective teaching and teacher training. As a means to

reconcile this issue, it seems appropriate for further research to identify "effective teachers" and to determine if these teachers possess the abilities stated in the variable of Task-Oriented and/or Businesslike Behavior. Results from such a study would not only resolve many of the questions posed by this research effort, it would allow the Education Professions Division to alter treatment validity to include activities to develop abilities characteristic of effective teaching.

This research effort was limited to information solicited by the data collection instrument. Based on this limitation, it seems appropriate for further research to be developed to explore the dimensions of Task-Oriented and/or Businesslike Behavior as a source of conflict between teachers, administrators, and professors.

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APPENDIX A

**LETTER OF INQUIRY SENT TO OKLAHOMA STATE DEPARTMENT OF EDUCATION
CONCERNING THE TEACHER POPULATION AND SAMPLE**

APPENDIX A

Bob R. Mooneyham
P. O. Box 64
Okemah, Oklahoma
December 20, 1972

J. W. Godfrey
P. O. Box 52993
Oklahoma City, Oklahoma

Dear Mr. Godfrey:

I am presently engaged in an effort to complete a doctoral dissertation in education through the University of Oklahoma and I have a request to make of the Data Center. To complete my sample, I need to identify those 1969 bachelor degree level graduates from the University of Oklahoma who were granted teaching certificates by the State Department of Education. This sample will include January, May and August graduates. Thus I need a list of all University of Oklahoma graduates who were granted certificates between January 1969 and December 1969.

May I request a listing of these persons from the Data Center? Please include on this listing the graduate's teacher number, name, last address, major, minor, degree and certificate class, type and kind. If possible, I would like to identify from the above list those teachers engaged in teaching in Oklahoma this 1972-73 school year. That is, how many of the 1969 graduates appear on 1972-73 personnel reports? In this case, I need the school name, county code, district number and the data included in columns 2, 3, 4, 5, 6, 7, 8, 12, 18, 19, 20, 21, 22, 23, 24, and 25 on the Oklahoma Annual Personnel Report.

I hope this request will not be taxing upon you and the Data Center. Please contact me concerning extra cost to the Data Center that might be engendered by this request.

May I hear from you in the near future regarding this request?

Respectfully Yours,

Bob Mooneyham

APPENDIX B

**RESPONSE FROM THE OKLAHOMA STATE DEPARTMENT OF EDUCATION
CONCERNING THE TEACHER POPULATION AND SAMPLE**

State Department of Education

LESLIE FISHER, Superintendent
E. H. McDONALD, Deputy Superintendent
LLOYD GRAHAM, Associate Deputy Superintendent

Oklahoma City, Oklahoma 73105

May 1, 1973

Mr. Bob Mooneyham
Superintendent
Okemah Public Schools
Okemah, Oklahoma 74859

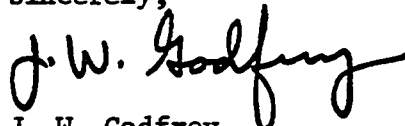
Dear Bob:

I am enclosing a printout of the teachers which you requested and a blank teacher personnel report with the various codes on the back.

I have marked off the first hit and identified the various areas of data. All of the codes can be found on the back of the teacher personnel form.

It has been a pleasure for me to be of some assistance to you, and if I may help further, please let me know.

Sincerely,



J. W. Godfrey
Coordinator, Data Center

JWG:jj

Enclosure

APPENDIX C

**LETTERS OF TRANSMITTAL SENT TO ADMINISTRATORS, TEACHERS,
AND PROFESSORS IN CONJUNCTION WITH THE
DATA COLLECTION INSTRUMENT**

APPENDIX C

Dear Colleague:

As a 1969 University of Oklahoma, College of Education graduate, you personally have been selected to assist in a study which is designed to evaluate the teacher education program at the University of Oklahoma. This study will comprise a doctoral dissertation. Therefore, I solicit your immediate assistance in this effort.

The enclosed materials include a personal data sheet and a rating scale. Will you please complete both the personal data sheet and the rating scale and return both to me in the self-addressed stamped envelope. I know the time burden this request places upon you. However, the rating scale has been timed. You should be able to complete all of the items in approximately 22 minutes. Please read the instructions carefully before you begin to mark the rating scale.

Your cooperation in this effort will be sincerely appreciated. This is especially true if I can avoid a second mailing. The cost for mailing this survey has been financed through a limited budget. Thus, an immediate response from you will be helpful in more ways than one.

Thank you for your assistance.

Sincerely,

Bob Mooneyham,
Supt. of Schools
Okemah, Oklahoma

APPENDIX C (Cont'd)

Dear Colleague:

I am currently engaged in the preparation of a doctoral dissertation at the College of Education, University of Oklahoma. I have chosen as my problem and evaluation of the teacher education program at the University of Oklahoma. In order to make this evaluation, it became necessary for me to follow-up a particular graduating class of students. I chose those University of Oklahoma, College of Education teachers who completed the baccalaureate degree in 1969.

According to records at the State Department of Education, you were a supervising principal for such a teacher during the 1972-73 school year. Thus, you have been personally selected as a respondent in the sample for this study.

The enclosed material includes a rating scale. Will you please complete the rating scale and return it to me in the self-addressed stamped envelope. I know the time burden this request places upon you. However, the rating scale has been timed. You should be able to complete all items in approximately 22 minutes. Please read the instructions carefully before you begin to mark the rating scale.

Your cooperation in this effort will be sincerely appreciated. This is especially true if I can avoid a second mailing. The cost for mailing this survey has been financed through a limited budget. Thus, an immediate response from you will be helpful in more ways than one.

Thank you for your assistance.

Sincerely,

Bob Mooneyham,
Supt. of Schools
Okemah, Oklahoma

APPENDIX C (Cont'd)

Dear Professor:

I am currently engaged in the preparation of a doctoral dissertation at the College of Education, University of Oklahoma. I have chosen as my problem an evaluation of the teacher education program at the University of Oklahoma. In order to make this evaluation, it became necessary for me to follow-up a particular graduating class of students. I chose those University of Oklahoma teacher education program teachers who completed the baccalaureate degree in 1969.

According to records at the University of Oklahoma, you were a faculty advisor to at least one 1969 teacher education program graduate. Thus, you have been personally selected as a respondent in the sample for this study.

The enclosed material includes a rating scale. Will you please complete the rating scale and return it to me in the self-addressed stamped envelope. I know the time burden this request places upon you. However, the rating scale has been timed. You should be able to complete all items in approximately 22 minutes. Please read the instructions carefully before you begin to mark the rating scale.

Your cooperation in this effort will be sincerely appreciated. I must obtain 100% response from the professional sample in order to proceed with this study. Thus, an immediate response from you will be helpful and sincerely appreciated.

Thank you for your assistance.

Sincerely,

Bob Mooneyham,
Supt. of Schools
Okemah, Oklahoma

APPENDIX D

FOLLOW-UP CORRESPONDENCE SENT TO NON-RESPONDENTS

APPENDIX D

Dear Colleague:

I recently mailed you a rating scale on which I requested your reactions to a set of teacher competencies as these competencies relate to teaching and to a teacher education program. To date I have not received your reply. Will you please complete and return the requested materials as soon as possible?

Please accept my thanks of gratitude if you have already returned these materials.

Bob Mooneyham
Supt. of Schools
Okemah, Oklahoma 74859

APPENDIX E

PERSONAL DATA SHEET COMPLETED BY THE CLASSROOM TEACHERS

APPENDIX E

PERSONAL DATA SHEET

Name _____ Address _____

College Major(s) _____ Minor(s) _____

Name of school district in which you teach: _____

Current building site assignment: _____

Do you teach? Full time _____ Part time _____

Total completed years teaching experience: _____ Total years teaching experience in this district: _____

How many years have you taught in your current building site assignment? (Do not count 1973-74) _____

Do you currently teach in your college major field? Yes _____ No _____

Do you currently teach in your college minor field? Yes _____ NO _____

When you began your teaching career did you teach in your college major field? Yes _____ No _____

Have you done graduate work since you earned your bachelor degree? Yes _____ No _____

If yes, have you completed an advanced degree? Yes _____ No _____

Name degree _____

If yes, give the total number of graduate hours earned to date: _____

If yes, list the colleges or universities at which this work was done: _____

If yes, was your graduate work in: Major field: Yes _____ No _____
Minor field: Yes _____ No _____
Other field(s) Yes _____ No _____

Please list other field(s) _____

If no, do you plan to begin graduate work in the near future? Yes _____ No _____

When you complete your teacher education program at the University of Oklahoma, did you graduate from the: College of Education _____
College of Arts & Science _____
College of Fine Arts _____
Other _____

Name your college advisor in your teacher education program at the University of Oklahoma: _____

APPENDIX F

**RATING SCALE USED AS THE PRIMARY DATA COLLECTION
INSTRUMENT: COMPLETED BY THE ADMINISTRATORS,
TEACHERS, AND PROFESSORS**

APPENDIX F

RATING SCALE

The following are ten variables comprised of competencies generally accepted as criteria for effective teaching. This investigator is interested in your reactions to these competencies as they apply to effective teaching and as they apply to content taught in a teacher education program. Please respond by checking your judgments according to the following instructions.

Each competency is followed by two scales, Scale A and Scale B. Your response to Scale A is requested to determine the importance of the competency as a measure of effective teaching. Scale B is intended to obtain your response with respect to content which should be taught in a teacher education program.

Scale A: If you believe a competency is Extremely Important to effective teaching, circle number 7. If a competency is Important, circle number 6. If you consider a competency Above Average in Importance, circle number 5. If a competency is Average in Importance, circle 4. A competency you consider Below Average in Importance should be indicated by circling number 3. A competency of Unimportance should be given a 2. Circle 1 if you think a competency is Extremely Unimportant.

7 Extremely Important
6 Important
5 Above Average in Importance
4 Of Average Importance

3 Below Average in Importance
2 Unimportant
1 Extremely Unimportant

APPENDIX F (Cont'd)

Scale B: If you believe a competency should be taught as Extremely High Priority Content circle number 7. If a competency should be taught as High Priority Content, circle number 6. If you think a competency should be taught as Above Average Priority Content, circle number 5. If a competency should be taught as Average Priority Content, circle number 4. A competency you consider to be Below Average Priority Content should be indicated by circling number 3. A competency to be taught as Low Priority Content should be given a 2. Circle 1 if you think a competency should be taught as Extremely Low Priority Content.

- | | | | |
|---|---------------------------------|---|--------------------------------|
| 7 | Extremely High Priority Content | 3 | Below Average Priority Content |
| 6 | High Priority Content | 2 | Low Priority Content |
| 5 | Above Average Priority Content | 1 | Extremely Low Priority Content |
| 4 | Average Priority Content | | |

Sometimes you may feel as though you have answered the same item before on this rating scale. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in this rating scale. Make each item a separate and independent judgment. Work at a fairly high speed through this rating scale. Do not worry or puzzle over individual items. This investigator wants your first impression, your immediate judgment about each competency. On the other hand, please do not be careless, it is important for you to list your true impression in this rating scale. Respond to every item on the scale.

APPENDIX F (Cont'd)

CLARITY

1. To present instructional materials to students so that each student clearly understands the content of the subject matter at hand.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To organize classroom procedures and instructional techniques to realize optimum utilization of time allotted to the instructional period.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To present instructional materials so that student responses to questions from the teacher need not be preceded by additional information or interpretation by the teacher.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To select and organize instructional materials by thorough definitions of aims or objectives.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To prepare units of study and daily lesson plans.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To generate a desire to learn through the presentation of subject matter content in a clear and convincing manner.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To approach classroom procedures systematically.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

VARIABILITY

1. To use a variety of classroom techniques, procedures, and materials in the instructional process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To convert digressions from planned subject matter or planned classroom procedures into real life learning situations.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To act in an unusual classroom situation without supervisory direction.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To be receptive to the professional expertise of other professional resource people within the school system.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To be imaginative in the adaptation of resource materials for instructional purposes.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To adjust instructional level to students' needs and abilities.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To direct interesting, varied, and stimulating classes.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

ENTHUSIASM

1. To express involvement, excitement, and interest in the subject being taught.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To express an inherent value in the subject matter being taught.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To be enthusiastic in the presentation of the subject matter being taught.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To express an interest in student extracurricular activities.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To exhibit physical vitality and good health.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To express self confidence in personal capabilities.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To take pride in being a teacher.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

TASK-ORIENTED AND/OR BUSINESSLIKE BEHAVIOR

1. To realize the value of punctuality and regular attendance in job performance.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To maintain appropriate emotional control within the classroom.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To fulfill responsibility without constant supervision.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To make practical, common sense judgments through tactful behavior.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To realize the value in personal responsibility for professional growth and improvement.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To accept improvement of the total school program as an individual as well as a group responsibility.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To follow prescribed school policies.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

STUDENT OPPORTUNITY TO LEARN

1. To comprehensively cover materials included in a lesson.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To exhibit a sincere concern for student achievement.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To be oriented to cognitive classroom activities.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To promote learning.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To be aware of the importance of student motivation in the learning process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (priority level in teacher education program) 7 6 5 4 3 2 1

6. To transfer the importance of appropriate individual or group goals to students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To accept students as they are as a basis for teaching.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

USE OF STUDENT IDEAS

1. To acknowledge student ideas in the instructional process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To use feedback of students in the instructional process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To be receptive to constructive criticism and suggestions from students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To meet students on a courteous level of mutual self-respect.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To organize classroom activities so students share responsibility in the instructional process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To use student experiences to enrich and give meaning to the content of the lesson.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To develop a relationship among students which is warm and inspiring to students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

CONTROL

1. To avoid prolonged criticism of students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

2. To use an incorrect student response for providing
academic direction.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

3. To make teacher authority understood and accepted in a
gracious manner.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

4. To possess knowledge of and rapport with students as a
means to classroom control.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

5. To remain consistent in classroom control without overt
behavior such as criticism or threats.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

6. To remain calm in reaction to overt behavior by a student.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

7. To control students through positive control techniques.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education
program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

USE OF STRUCTURING COMMENTS AND QUESTIONS

1. To precede a question with a positive statement.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To summarize interchange of ideas.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To use a clear verbal signal to indicate when one part of a lesson ends and another begins.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To emphasize important verbal markers in a lesson.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To emphasize important concepts through verbal and/or non-verbal procedures.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1

6. To structure questions on a meaningful level.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To respond to student questions without prolonged interpretations.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

PROBING

1. To respond to student answers in such a manner as to encourage other students to elaborate upon the answer.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To elicit clarification of a student answer in a non-threatening manner.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To encourage interpretations, generalizations, and solutions from students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To redirect student questions to other students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To answer student questions by asking other questions that require student answers.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To conduct a sequence for learning by asking questions to students.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To communicate with students on an informative level.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

APPENDIX F (Cont'd)

GENERAL COMPETENCIES

1. To contribute to society as a result of a broad general education.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

2. To communicate in the English language with a degree of adequate mastery.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

3. To understand the history and role of the public school in American culture.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

4. To understand child and adolescent development.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

5. To understand the learning process.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

6. To understand the organization and curricula currently employed in public schools.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1

7. To understand and possess adequate background in the subject matter a teacher chooses to teach.

Scale A (Importance to effective teaching) 7 6 5 4 3 2 1
Scale B (Priority level in teacher education program) 7 6 5 4 3 2 1