ABSTRACT

A STUDY TO DETERMINE THE PROFILE OF ESSENTIAL TEACHING COMPETENCIES OF A COPING FIRST-YEAR TEACHER

By

Warren William Starr

The main purpose of this investigation was to determine, through the use of expert judgment, the profile of essential teaching competencies of a coping first-year teacher. A second purpose was to ascertain if a modified form of the Delphi Technique could be used to promote cooperative decision making on behalf of professional college and public school personnel.

A review of the literature shows that many research studies have investigated the variables of teaching effectiveness, however no over-all criteria for measuring teacher effectiveness have been identified or universally accepted. Therefore, this study sought to determine only those competencies which, in the opinion of professional educators, are critical to the success of a first year teacher.

The Delphi Technique was modified and used as the research tool. The sample population consisted of 20

a. The profile of essential teaching competencies of a coping first-year teacher consists of twenty-three items sub-divided into the areas of knowledge, skill, and behavior. The competency statements in the three categories can be summaried as follows:

Knowledge.--A coping first-year teacher must have a demonstrable knowledge of:

1. instructional materials
2. instructional methods
3. classroom (environmental) management techniques
4. human learning processes
5. child growth and development
6. school building policy
7. motivational techniques
8. positive disciplinary techniques

Skill.--A coping first-year teacher must:

1. set reasonable behavior standards
2. effectively enforce behavior standards
3. maintain personal health and vitality
4. be truthful when communicating with parents
5. be considerate of individual learning rates and styles
6. be self-confident
7. demonstrate courteous and moral behavior

university professors, 20 public school teachers, and 20 public school principals who remained anonymous to each other throughout the three phases of this study.

In Phase I the respondents were asked to list the knowledge, skill, and behavior competencies which are essential to the success of a first year teacher in any public school classroom. These statements were collated and returned to the respondents who were asked to rate how essential they believed each item to be. The Phase III questionnaire contained the items which received a mean priority equal to or greater than the Phase II sample mean. The respondents were then asked to select the competency statements which should be included in the profile of an effectively coping first-year teacher. A group consensus level of 94.3 per cent determined the Phase III teaching competencies which were included in the final profile.

Additional analyses of the data were done to determine the percentage of the original items retained in the final profile; to ascertain the level and internal range of sub-group agreement with Phase II and III outcomes; to judge the consistency of response throughout the questionnaires; and to determine the effects of several modifications of the instrument used in this study.

Within the limitations of this research, the following was determined:

8. demonstrate interest in pupils and their progress
9. be enthusiastic when working with children.

Behavior.--A coping first-year teacher must be able to:

1. assess student achievement levels
2. provide for individual learning
3. organize for instruction
4. be flexible in use of plans
5. relate well with others
6. think of students as individuals

b. The Delphi Technique, as modified and used in this study, was successful in promoting cooperative decision making on behalf of professional college and public school personnel.

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By

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DEDICATION

This work is dedicated to my loving wife Donna and to my sons Peer John and Banning James. May they never again have to so totally sacrifice and suffer through the absence of a husband and father, and may I in some small way be able to repay them for their love, which made this study possible.

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CHAPTER I

BACKGROUND OF THE PROBLEM

Throughout the United States there has been, in recent years, a dramatic increase in the number of teacher preparation institutions, state departments of education and professional education associations which have dedicated their energies to the revision of undergraduate teacher education programs. Many of these efforts are aimed at the development of Competency Based Teacher Education (CBTE) programs.

Concurrently a vast number of other teacher training institutions and state departments have decided to delay the implementation of such projects until research and development clearly proves the worth of the revised models.

In 1971 the American Association of Colleges for Teacher Education published the document Performance Based Teacher Education: What is the State of the Art. In the introductory statements of this work the author, Stanley Elam, briefly compared traditional teacher education

programs with performance based teacher education[1] programs. He stated,

> Much traditional teacher education can best be described as experience-baed. That is, it assumes that if a student, planning to teach, experiences a specified number of courses in specified areas of study and undergoes some kind of student teaching experience, he is ready to begin teaching. Such programs are performance-based only inso far as the required grade-point average can be considered a performance measure. They do not specify what prospective teachers need to be able to do or accomplish.
>
> By contrast, in performance-based programs performance goals are specified, and agreed to, in rigorous detail in advance of instruction. The student must either be able to demonstrate his ability to promote desirable learning or exhibit behaviors known to promote it. He is held accountable, not for passing grades, but for attaining a given level of competency in performing the essential tasks of teaching; the training institution is itself held accountable for producing able teachers. Emphasis is on demonstrated product or output.[2]

Later in the same work Elam presented a conceptual model of CTBE. As the first essential elements of a CBTE

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[1]The term "performance based teacher education" is commonly held to be synomyous with CBTE. CBTE will be used throughout this introduction because in the words of Dr. Judith Henderson and Dr. Perry Lanier of Michigan State University in a discussion paper titled Competency/ Performance Based Teacher Education: Discussion Paper #1:

> We prefer the term competency-based to performance-based because it makes explicit the value judgment inherent in the selection of the behaviors that must be demonstrated. The word "performance" does not connote "good" or "desirable" or "effective" in the way that "competence" does. "Competency-based" also makes more obvious the program designer's responsibility and accountability for defining what constitutues effective, i.e., competent, professional behavior.

[2]Stanley Elam, Performance-Based Teacher Education: What is the State of the Art? (Washington, D.C., 1971), p. 1.

project he states that teacher competencies are to be "role derived, specified in behavioral terms, and made public."[3]

It is logical, then, to assume that the foundation of a revised teacher education project must be an agreed upon model of what a competent teacher is.

Schmieder, in a 1973 review of national CBTE programs, summarized the questions and issues foremost in the minds of teacher educators involved in competency based programs.

Under the heading of the "Most Important Current Problems" he listed the following questions.

> What are the "essential competencies" of teachers, supervisors, administrators? Which will be given highest priority in measuring performance?[4]

A great amount of effort, time, and expense has been devoted to identifying role-derived competencies (i.e., The Florida Catalogue of Teacher Competency by Norman R. Dodd); however, Elam writes that "Unfortunately, we do not even have a satisfactory list of crucial skills and behaviors which a teacher must possess in order to perform reasonably well and to survive in the ordinary classroom with personal satisfaction."[5] Because we cannot answer the questions of what a competent teacher is and what crucial skills are,

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[3] Ibid., p. 8.

[4] Allen A. Schmieder, Competency-Based Education: The State of the Scene (Washington, D.C., 1973), p. 28.

[5] Elam, Performance-Based Teacher Education, p. 15.

Henderson and Lanier believe that teacher educators should not throw up their hands in despair.

As a point of departure, they suggest that we use "whatever assumptions and conceptual systems we currently have" to develop a tentative, working list of competencies. They also caution us to "continuously acknowledge that our assumptions are tentative and represent only our best reasoning to date."[6]

Elam supported this view when he stated that "until relationships between teacher behavior and pupil learning can be more firmly established through research and improved measurement, judgments will have to be made on a priori grounds."[7]

Significance of the Problem

To be successful, the revision of undergraduate teacher education programs must be inherently more than a redefinition of the traditional goals and objectives. The primary structure must be constructed around a model of a competent teacher. However, since no empirically supported model exists there is a need to create many tentative conceptual models, which can be evaluated and redefined as

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[6]Judith E. Henderson and Perry Lanier, "Competency/Performance Based Teacher Education: Discussion Paper #1" (prepared for the faculty of the School of Teacher Education, College of Education, Michigan State University, 1972), p. 7.

[7]Elam, Performance-Based Teacher Education, p. 23.

empirical evidence becomes available to support such work.

This study attempted to identify the essential teaching competencies of a coping first-year teacher, which could then be used to create a tentative model of a competent teacher.

For decades professional educators at the local, state, and national levels have insisted that to be more effective and relevant, teacher education programs should be designed through the cooperative efforts of teacher training personnel and practioners in the field. Unfortunately such cooperative efforts have been either non-existent or greatly superficial in nature.

Hopefully, the model of this investigation into the components of a coping first-year teacher can serve to demonstrate that important decisions about teacher education can be made by experts in both the teacher training institutions and in the field without being greatly influenced by the status or position of the individuals involved.

Purpose of the Study

The purpose of this investigation was to determine, through the use of expert judgment, the profile of essential teaching competencies of a coping first-year teacher.

Objectives

The objectives of this research were:

1. To determine a profile of the essential teaching competencies of a coping first-year teacher, and
2. To determine if a modified form of the Delphi Technique could be used to promote cooperative expert decision making on behalf of college and public school professional personnel.

Definition of Key Terms

Competent.--Having the necessary knowledge, skills, and judgment to perform a task effectively as measured by a given standard of performance.

Competency.--Demonstrable knowledge, skills, and behaviors derived from explicit conceptions of teacher roles.

Role-derived.--Acquired from the functions performed by teachers in particular situations, processes, or operations.

Essential competencies.--The crucial knowledge, skills, and behaviors a teacher must possess in order to perform reasonably well and to succeed in any kindergarten through twelfth grade public school classroom with personal and professional satisfaction.

Clinically oriented classes.--College courses which require students to observe or to participate in public school classrooms or activities.

Coping first-year teacher.--The term "coping first-year teacher" is used in this study to denote the competent individual who is able to overcome problems and difficulties in his initial professional teaching assignment.

Success (of a first year teacher).--Success is determined if a first-year teacher is offered a second-year contract within the same school district.

Cooperative (decision making).--The term signifies equal decision making powers on the part of all individuals participating in the study.

Limitations of the Study

This study was limited to:

1. Teacher education faculty members of Michigan State University who had attained the rank of assistant, associate, or full professor, and who were on staff during the 1973-1974 academic year.
2. Michigan elementary and secondary principals who were employed by public schools during the 1973-1974 school year.
3. Certified Michigan public school teachers who had graduated with baccalaureate degrees from Michigan State University between July 1, 1971 and

June 30, 1972, and who had completed one year of teaching by June 30, 1973.

4. The identification of essential teaching competencies which make up the profile of a coping first-year teacher in any public school classroom.

Some Basic Assumptions

The assumptions upon which this study was based were:

1. That improvements or innovations in teacher education programs are best carried out through the cooperative efforts of teacher training institutions and the public schools.
2. That college based professors of teacher education, certified public school teachers, and public school administrators are knowledgeable in the field of public school education.
3. That essential teaching competencies exist in the areas of knowledge, skill, and behavior.
4. That university professors of teacher education play a significant role in determining the goals and objectives of undergraduate teacher education programs.
5. That the ultimate objective of undergraduate teacher education is to produce effective teachers.

6. That school administrators play a significant role in determining the success of first year teachers.
7. That second year teachers are able to identify the specific competencies which helped determine their success or failure in an initial teaching position.
8. That professors of teacher education, certified public school teachers and public school administrators will be able to define, in writing, essential teaching competencies.
9. That public school administrators, certified public school teachers, and professors of teacher education will be able to agree upon the teaching competencies which are most essential.
10. That the essential teaching competencies to be defined in this study will apply to any public school classroom teaching situation.

Organization of the Study

Chapter I contains a description of the general nature of the study, indicating the background of the problem and its significance. The purpose, objectives, and operational definitions are included as well as the limitations, some basic assumptions, and the organization of the study.

Chapter II is devoted to a review of the literature related to the studies which have attempted to define the parameters of teacher effectiveness.

Chapter III contains a description of the procedures utilized in the study. The data gathering instrument and an examination of its usefulness, the sources of data, the design of the study, and the collection and tabulation of the data are illustrated.

Chapter IV is devoted to the presentation and interpretation of the data. A presentation of the findings is made with relevance to the objectives.

Chapter V includes the summary and conclusions derived from this study, along with recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

No issue in the field of education has been more perplexing than the search for reliable criteria to measure teacher effectiveness. Ackerman[1] stated that "The desirability of such a tool hardly needs elaboration." His view is readily supported by the fact that no aspect of education has been more thoroughly investigated.

Over the past eight decades approximately a thousand research studies have disected the teaching-learing phenomenon, and the number of variables that have been investigated is nearly as great.[2]

Objective studies of teacher effectiveness began about 1891. Their frequency increased slowly and only began to gain some momentum during the period of 1908 to 1923. In the five years from 1923 to 1928 the quantity of research

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[1]Walter I. Ackerman, "Teacher Competency and Pupil Change," Harvard Educational Review, XXIV (Fall, 1954), 273.

[2]Ibrahim Q. Saadeh, "Teacher Effectiveness on Classroom Efficiency: A New Direction in the Evaluation of Teaching," Journal of Teacher Education, XXI (Spring, 1970), 73-91.

efforts reviewed in the literature peaked at almost triple the number reported prior to 1923.[3]

"The advent of Gestalt psychology and organismic view is reflected by a significant decrease in the number of studies based upon objective data."[4] This decline continued until approximately 1933 at which time it plateaued at nearly double the pre-1923 level. By 1943 a nonexplosive and yet steady growth in the quantity of research studies began to appear and probably continues.[5] Tomlinson's[6,7] history of growth of educational research is complete in its description of the movement.

There are several comprehensive summaries, bibliographies, and reviews of the more serious research on the topic of teacher effectiveness. Major and extremely comprehensive reviews have been published by Gage,[8] Domas and

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[3]Who's A Good Teacher? (Washington, D.C.: The American Association of School Administrators, 1961), p. 13.

[4]Ibid., p. 12.

[5]Ibid., p. 13.

[6]L. R. Tomlinson, "Pioneer Studies in the Evaluation of Teaching," Educational Research Bulletin, XXIV (March, 1955), 63-71.

[7]L. R. Tomlinson, "Recent Studies in the Evaluation of Teaching," Educational Research Bulletin, XXXIV (October, 1955), 172-86, 196.

[8]N. L. Gage, ed., Handbook of Research on Teaching (Chicago: Rand, McNully and Co., 1963).

Tiedemann,[9] and by Morsh and Wilder.[10] Walters[11] published a 1954 annotated bibliography in the same style and as an additional five year supplement to the Domas and Tiedman work.

Other worthwhile reviews and summaries which concern themselves with teacher effectiveness were prepared by Betts,[12] Barr,[13] Costetter, Standlee, and Fatta,[14] and Ackerman.[15]

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[9]S. J. Domas and D. V. Tiedemann, "Teacher Competence: An Annotated Bibliography," Journal of Experimental Education, XIX (December, 1950), 101-218.

[10]Joseph E. Morsh and Eleanor W. Wilder, Identifying the Effective Instructor: A Review of the Quantitative Studies 1900-1952 (Chanute Air Force Base, Ill.: Training Aids Research Laboratory, Air Force Personnel and Training Research Center, Research Bulletin AFPTRC-TR-54-44, October, 1954).

[11]William A. Walters, "Annotated Bibliography of Publications Related to Teacher Evaluation," Journal of Experimental Education, XXII (June, 1954), 351-67.

[12]Gilbert L. Betts, "The Education of Teachers Evaluated Through Measurement of Teaching Ability," National Survey of the Education of Teachers, Vol. V, Part II, Bulletin No. 1, United States Office of Education, Department of the Interior (Washington, D.C.: Government Printing Office, 1933), pp. 87-153.

[13]A. S. Barr, "The Measurement and Prediction of Teaching Efficiency: A Summary of Investigations," Journal of Experimental Education, XVI (June, 1948), 203-83.

[14]D. D. Costetter, L. S. Standlee, and N. A. Fatta, "Teacher Effectiveness: An Annotated Bibliography," Bulletin of the Institute of Educational Research, Vol. 1, No. 1 (Bloomington, Indiana: Indiana University School of Education, 1954).

[15]Ackerman, "Teacher Competence and Pupil Change," pp. 273-89.

Any summarization of the results of the past decades of research shows that most of the findings have been inconclusive, insignificant, and often contradictory.

Support for the above opinion can be found in the writing of many persons who have devoted their talents to the search for the key to decipher teacher effectiveness, and in the conclusion of the most comprehensive review yet published in the field.[16] A sample of statements relating to this problem are offered below.

In 1953, the Committee on Teacher Effectiveness of the American Educational Research Association had this to say: "The simple fact of the matter is that, after forty years of research on teacher effectiveness during which a vast number of studies have been carried out, one can point to few outcomes that a superintendent of schools can safely employ in hiring a teacher or granting him tenure, that an agency can employ in certifying teachers, or that a teacher-education faculty can employ in planning or improving teacher education programs."[17]

Nearly ten years later, Ryans concluded that; "Embarrassing as it may be for professional educators to recognize, relatively little progress has been made in supplementing this definition [effective teaching] with the

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[16]Gage, Handbook of Research on Teaching.

[17]A. S. Barr, "Second Report of the Committee on Criteria of Teacher Effectiveness," Journal of Educational Research, XXXXVI (May, 1953), 657.

details that are necessary for describing competent teaching or the characteristics of effective teachers for a specific situation or cultural setting."[18]

Brain[19] agreed with the lack of conclusive results and tempered the statement by reminding his reader that he was not attempting to belittle past efforts, because of the evident difficulty of research problems found in the behavioral sciences.

In his 1971 report for the American Educational Research Association, Smith stated,

> It is barely four decades since the first empirical studies of teacher education were made, if we count the studies of Barr (1929) as the beginning. Since that time a large number of such studies have been made. How many is anyone's guess, but enough to fill a handbook of research on teaching and to justify a revision of it. Yet we keep asking ourselves how much dependable knowledge do we have with which to build more effective programs of teacher education? Some critics, viewing the mountain of data interpreted by statistical techniques--standard deviations, coefficients of correlation, regression equations, and what have you--exclaim that there is less here than meets the eye.[20]

Popham[21] concluded that the search for adequate criteria to measure teaching efficiency has been one of

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[18]David G. Ryans, Characteristics of Teachers (Washington, D.C.: American Council on Education, 1960), p. 2.

[19]George Brain, "Evaluating Teacher Effectiveness," National Education Association Journal LIV (February, 1965), 65.

[20]B. Othanel Smith, ed., Research on Teacher Education (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1971), p. 1.

[21]W. J. Popham, "Teaching Skill Under Scrutiny," Phi Delta Kappan, LKK (June, 1971), p. 599.

the most high cost, low yield activities ever to be undertaken in the educational field.

In the pages to follow there will be a review of a selection of studies which have attempted to define the parameters of teacher effectiveness. In order to facilitate the handling of the material to be presented here, the studies will be arranged in terms of the following categories: (1) the Prediction of Teacher Effectiveness, (2) Characteristics of Effective Teachers, (3) Pupil Ratings and Teacher Effectiveness, (4) Teacher Effectiveness and Pupil Gain, (5) Teacher Effectiveness and Teacher Intelligence, and (6) Miscellaneous Studies.

Within each category an illustrative number of studies will be reviewed. No importance is to be attached to the cronological order of the studies reported, nor is it suggested that any one reportedly significant variable be taken as conclusive evidence that a direct and definable relationship exists between that variable and teacher effectiveness. As a rule, it can be said that for almost every study which finds a significant correlation between a variable and teacher effectiveness another study can be found to refute the validity of that evidence.

The Prediction of Teacher Effectiveness

In a 1970 report of the American Association of Colleges of Teacher Education it was stated: "The ultimate criterion for judging a teacher education program is

whether it produces competent graduates who enter the profession and perform effectively."[22] Many researchers have attempted to identify the variables which would aid the colleges of teacher education in predicting post-graduate teacher effectiveness.

Boyce[23] attempted to discover if a relationship existed between general teaching ability and the education levels of the teachers. He found that the high school teachers rated best in general teaching ability were predominantely college graduates, however he reported that a similar rule did not seem to exist when elementary teachers were considered.

Hughes[24] investigated the effects of teacher training on the achievement of pupils in physics. Students in twenty-nine schools of various size were given three achievement tests which were constructed to cover the basic classroom materials used in each of the schools. The pupils were equated on the basis of intelligence.

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[22] Recommended Standards for Teacher Education: The Accreditation of Basic and Advanced Preparation Programs for Professional School Personnel (Washington, D.C.: American Association of Colleges for Teacher Education, 1970), p. 12.

[23] C. A. Boyce, "Qualities of Merit in Secondary School Teachers," Journal of Educational Psychology, III (1912), 157.

[24] J. M. Hughes, "A Study of Intelligence and of Training of Teachers' Factors Conditioning Achievement of Pupils," School Review, XXXIII (March, 1925), 191-200, 292-302.

In every test the students of instructors who had majored in physics made average scores which exceeded the mean scores for all those who took the test.

Morton[25] in a study of 151 rural and 71 city secondary school teachers found that pupil ratings of the efficient teacher positively correlated with the college scholarship of the teachers ($p = .45$ small towns and $p = .60$ large cities).

Pursuing the same variable, Stuit[26] asked superintendents of school districts to rate 146 teachers as to their effectiveness. These ratings were then compared with the college grades of the teachers.

It was found that the teachers rated superior by their supervisors had also been above average in their college scholarship. Using a bisireal correlation a relationship of $r = .314$ was reported. However, Stuit went on to explain that the forty-six teachers rated inferior in the study were found to hold average grades which were also above the college wide scholarship averages.

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[25] R. L. Morton, "Qualities of Merit in Secondary Teachers," Educational Administration and Supervision, V (May, 1919), pp. 225-38.

[26] Dewey B. Stuit, "Scholarships as a Factor in Teaching Success," School and Society, XXXXVI (September, 1937), 382-84.

In his investigation of the college scholarship variable, Pigge[27] asked 154 principals to rate the characteristics and traits of a similar number of elementary school teachers. One-half of the teachers rated in the study held college grade point averages (G.P.A.) of "A", while the others held a college G.P.A. of "C". Pigge found that the principals rated the "A" teachers significantly higher ($p < .001$) than the "C" teachers.

Anderson[28] studied 590 elementary and secondary teachers who were rated by their school principals. He found the correlations between academic achievement and teaching success to be low, and summarized by stating that average college scholarship seemed to be a minimal requirement for teacher success. Long[29] also supported the finding that average or better scholarship is a minimal criterion for predicting teacher effectiveness.

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[27]Fred L. Pigge, "Teaching Effectiveness of "A" and "C" Elementary Teachers," Journal of Educational Research, L (November, 1968), 99-102.

[28]H. J. Anderson, "Correlation Between Academic Achievement and Teaching Success," Elementary School Journal, XXXII (September, 1931), 22-29.

[29]Sister M. B. Long, "A Synthesis of Recent Research Studies on Predicting Teaching Efficiency," Catholic Educational Review, LV (April, 1957), 217-30.

Principals were again used by Cornett[30] who asked them to rate whether sixty-eight first year elementary and secondary teachers were effective or ineffective. He then compared these ratings to see how they correlated with the teachers' over-all G.P.A., the grades received in their introduction to education courses and their freshmen English grades.

No significant correlations were found between the principals' ratings of all teachers and their G.P.A. ($r = .17$), grades in the introduction to education course ($r = -.09$), or the freshmen English grades ($r = .11$). Similar findings were reported when the principal ratings were correlated with the three criteria for the elementary teachers.

Correlations which involved only the secondary teachers' group were reported as significant at the .05 level when the college G.P.A. ($r = .37$) and the freshmen English grades ($r = .26$) were considered.[31]

Whitney,[32] in studying the prediction of teacher effectiveness, obtained information from 1,200 college

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[30]J. D. Cornett, "Effectiveness of Three Selective Admissions Criteria in Predicting Performance of First Year Teachers," LXII (February, 1969), 247-50.

[31]Ibid., p. 249.

[32]F. L. Whitney, "The Analysis of Teaching Functions," Journal of Educational Research, VII (April, 1923), 297-309.

graduates. He found that the criteria for predicting success fell in this order: (1) student teaching grade and evaluation, (2) college grades received in education courses, (3) college G.P.A., (4) personal physique, (5) high school grades, and (6) intelligence.

Almy[33] and his colleagues found that significant correlations existed between teacher ratings and last term college grades (r = .45) and student teaching grades (r = .69).

Bach[34] and Garvey[35] summarize their research by reporting that the relationships between student teaching and success in the field are negligible.

Characteristics of Effective Teachers

Many statistical and descriptive research studies have been undertaken to define the characteristics of teachers and how these characteristics relate to effectiveness and ineffectiveness. Hubert LaGrone[36] in a speech,

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[33]H. C. Almy and H. Sorenson, "A Teacher-Rating Scale of Determined Reliability and Validity," Educational Administration and Supervision, XVI (March, 1930), 179-86.

[34]J. O. Bach, "Practice Teaching Success in Relation to Other Measures of Teaching Ability," Journal of Experimental Education, XXI (September, 1952), 57-80.

[35]R. Garvey, "Self-Concept and Success in Student Teaching," Journal of Teacher Education, XXI (Fall, 1970), 357.

[36]B. O. Smith, ed., Partnership in Teacher Education (Washington, D.C.: American Association of Colleges for Teacher Education, 1959), p. 9.

discussing the conceptualization of teaching, stated that an undergraduate teacher education program should place its emphasis on teaching students generally acceptable teaching behavior, as well as specific methods in the individual subject matter areas. Openshaw[37] supports a similar view and has stated that "the surest road to improving teacher education was through research concerning teaching as a composite of behaviors."

The Teacher Characteristics Study, conducted by the American Council on Education and the Grant Foundation, qualifies as the major research project in the field of teacher behavior.[38] The project, which formally began in 1948, was directed by David G. Ryans and lasted nearly two decades. During that time

> . . . approximately one hundred separate researches were carried out, and over six thousand teachers in seventeen hundred schools and four hundred and fifty school systems participated in various phases of the investigation. Some of the basic studies undertaken involved extensive classroom observation of teachers by trained observers with the purpose of discovering significant patterns of teacher classroom behavior. Other activities of the project had to do with the development of paper-and-pencil tests and inventories for the identification of teacher differences relative to selected patterns of classroom behavior, attitudes and educational viewpoints; verbal intelligence; and emotional stability.

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[37] Ibid., p. 9.

[38] Ryans, Characteristics of Teachers.

Still other investigations were undertaken in an effort to compare "defined groups of teachers from the standpoint of personal and social characteristics."[39]

As a prelude to the intensive study of teacher characteristics, Ryans and his colleagues defined teacher behavior "as the behavior, or activities, of persons as they go about doing whatever is required of teachers, particularly those activities which are concerned with the guidance or direction of the learning of others."[40] Three major objectives divided their research into the areas of the description; the appraisal; and the comparison of teacher characteristics.[41]

The primary studies, concerned with description, ultimately defined three principal dimensions, or clusters, of teacher classroom behavior. These were Teacher Characteristic Patterns:

X_o: understanding, friendly vs. aloof, egocentric, restricted teacher behavior.

Y_o: responsible, business-like, systematic vs. evading, unplanned, slipshod teacher behavior.

Z_o: stimulating, imaginative, surgent or enthusiastic vs. dull, routine teacher behavior.[42]

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[39] Ibid., p. 368.

[40] Ibid., p. 15.

[41] Ibid., p. 369.

[42] Ibid., p. 77.

These three major clusters of observable teacher behaviors were then accorded primary attention throughout the duration of the study.

The second objective of the teacher characteristics study was devoted to the development of devices which would use correlates of the behavioral dimensions, identified in the first phase of the project, in an attempt to predict such characteristics. Twenty-five instruments were devised, implemented, and evaluated by the project staff. The Teacher Characteristics Schedule was assembled by collecting the most selective and valid materials to be found in the original instruments. The Schedule was found to be reliable ($r = .70$ to $.80$) and valid ($r = .20$ to $.50$). Its predictive validity was generally low, seldom exceeding .20.[43]

Using the Teacher Characteristics Schedule, the third and final major objective of the study was considered. The research compared the characteristics of teachers with regard to various conditions (i.e., age, experience, men vs. women, marital status, etc.).[44]

Ryans, in summarizing the Teacher Characteristics Study, warned that the major behavior patterns identified and their correlates are not to be used to evaluate specific situations. He suggested that the true value of

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[43] Ibid., pp. 387-88.

[44] Ibid., pp. 389-98.

the study was the determination of general patterns of behavior and in the future research encouraged by the study.[45]

The details and findings of the Teacher Characteristics Study are too voluminous to mention in this review. Ryans' report is recommended to anyone interested in research related to teacher behavior.

Other research reported in the general area of teacher characteristics tends to be less expansive and more definitive in nature. Many of the findings are comparable to those reported by Ryans.

Ban,[46,47] Peronto,[48] and Haberman[49] report research related to the differences in the behaviors of good and

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[45] Ibid., pp. 398-99.

[46] A. S. Ban, An Introduction to the Scientific Study of Classroom Supervision (New York: D. Appleton and Co., 1931), pp. 295-365.

[47] A. S. Ban, ed., Wisconsin Studies of the Measurement and Prediction of Teacher Effectiveness--A Summary of Investigations (Madison: Denbar Publications, Inc., 1961).

[48] A. L. Peronto, "The Abilities and Patterns of Behaviors of Good and Poor Teachers," in Wisconsin Studies of the Measurement and Prediction of Teacher Effectiveness--A Summary of Investigations, edited by A. S. Ban (Madison, 1961), VIII, p. 97.

[49] Martin Haberman, "The Teaching Behavior of Successful Interns," Journal of Teacher Education, XVI (June, 1965), 215-20.

poor teachers. Simeon[50] did extensive research on the same topic, using the critical incidents technique.

In other studies of teacher effectiveness, Levin,[51] Brookover,[52] Hellfritzsch,[53] Cogan,[54] and Heider[55] found characteristics which paralleled Ryans' findings and supported the view that teacher behavior does tend to be related to teacher effectiveness.

No review of the literature dealing with teacher characteristics would be complete without a mention of teacher personality and its effects on teacher competence.

Many tests and scales devised to measure the characteristics of an individual's personality, have been

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[50] D. J. Simeon, Report of an Explanatory Study of Teacher Competence (Cambridge: The New England School Development Council, 1950), p. 15.

[51] H. Levin, T. L. Hilton, and G. F. Leidermann, "Studies of Teacher Behavior," Journal of Experimental Education, L (September, 1957).

[52] W. B. Brookover, "The Relation of Social Factors to Teaching Ability," Journal of Experimental Education, XIII (June, 1945), 82.

[53] A. C. Hellfritzsch, "A Factor Analysis of Teaching Abilities," Journal of Experimental Education, XIV (September, 1945), 166-69.

[54] M. L. Cogan, "The Behavior of Teachers and the Production Behavior of Their Pupils," Journal of Experimental Education, XXVII (January, 1958), 89-105.

[55] F. Heider, The Psychology of Interpersonal Relations (New York: John Wiley and Sons, Inc.), pp. 174-217.

applied to the search for teacher effectiveness criterion. Rostker[56] and Rolfe[57] both administered the Bunreuter Personality Inventory and the Washburne Social Adjustment Inventory in an attempt to measure the personality traits of the teachers used in their separate samples. Rostker found no relationship between teacher personality and teacher competence, while Rolfe reported finding a small negative relationship between teacher effectiveness and scores on the Bunreuter Inventory. Gotham[58] using the Bunreuter, Washburne and Rudisil scales failed to find a significant relationship between pupil change and teacher personality.

Pupil Ratings of Teacher Effectiveness

The use of pupil ratings in the search for the criterion of teacher effectiveness began as early as 1896. Kratz[59] asked 2,411 elementary and junior high school age

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[56]L. E. Rostker, "The Measurement of Teaching Ability: Study No. I," Journal of Experimental Education, XIV (September, 1945), 6-51.

[57]J. F. Rolfe, "The Measurement of Teaching Ability: Study No. 2," Journal of Experimental Education, XIV (September, 1945), 52-74.

[58]R. E. Gotham, "Personality and Teaching Efficiency," Journal of Experimental Education, XIV (December, 1945), 157-65.

[59]H. E. Kratz, "Characteristics of the Best Teachers as Recognized by Children," Pedagogical Seminary, III (June, 1896), p. 414.

children to write papers describing the best teachers they had ever experienced. In summarizing the student responses he found the six items most often referred to by the children were: helpfulness, teacher's personal appearance, goodness or kindness, patience, politeness, and neatness.

In 1917 Bird[60] asked 392 students essentially the same question as Kratz. He then gathered criteria used by superintendents when they hired teachers. The responses of the two groups did not compare so he suggested that teachers meet both sets of criteria to be successful.

Summarizing nearly two hundred studies concerning the opinions of pupils relative to the desirable traits of successful teachers, Butseh[61] found that the most frequently mentioned items were; fairness, kindness, pleasantness, and patience.

Brookover[62] found that the teachers with a high degree of "person-person" interaction with their students were also rated high as instructors by their students ($r = .639$). However, five years later he reported finding that the pupil ratings of teaching ability had almost no

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[60]G. E. Bird, "Pupils Estimates of Teachers," Journal of Educational Psychology, VIII (1917), 35-40.

[61]R. L. Butseh, "Teacher Rating," Review of Educational Research, I (1931), 99.

[62]W. B. Brookover, "Person-Person Interaction Between Teachers and Pupils and Teaching Efficiency," Journal of Edcational Research, XXXIV (December, 1940), 272-87.

relationship with teacher effectiveness as measured by pupil gains in a cognitive area.[63]

Symonds[64] created a seven point scale on which he asked 453 junior high school children to rank their teachers as being effective or ineffective. He found that the pupil rankings agreed with each other with co-efficients of correlation ranging from the low .70s to the low .90s.[65]

In the second phase of his study, Symonds systematically observed the teachers who were ranked highest and lowest by the students and found three factors which seemed to differentiate between the two extreme groups. Superior teachers liked children, were personally secure and self-assured and were well integrated and possessed good personality organization. Inferior teachers showed strong negative qualities in all three areas.

Beck[66] did an item analysis of the responses of 2,008 sixth grade youngsters on the perceived effectiveness of their seventy-five teachers. He concluded that sixth grade students perceived the effective teacher as a warm, friendly, and supportive person who communicates clearly,

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[63]Brookover, "Social Factors to Teaching Ability," p. 205.

[64]P. M. Symonds, "Characteristics of the Effective Teacher Based on Pupil Evaluations," Journal of Experimental Education, XXIII (June, 1955), 309.

[65]Ibid., p. 310.

[66]W. R. Beck, "Pupil's Perceptions of Teacher Merit," Journal of Educational Research, LXI (November, 1967), 127-28.

motivates and disciplines pupils effectively and is flexible in methodology.

In separate studies, Remmers,[67] Flinn,[68] and Tiedmann[69] reported that they found that student judgments in reference to their teachers were reliable and valid.

Teacher Effectiveness and Pupil Gain

The ultimate purpose behind the search for the effective, competent teacher is to find, prepare, and certify persons who can consistently and efficiently induce positive and identifiable changes in their students.

Kent[70] and Courtis,[71] in the early 1920s, and Davidson[72] in 1930, argued that student gain should be

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[67]H. H. Remmers, "Reliability and Halo Effect of High School and College Student's Judgments of Their Teachers," Journal of Applied Psychology, XVIII (October, 1934), 619-30.

[68]V. F. Flinn, "Teacher Rating by Pupils," Educational Methods, XI (February, 1932), 290-99.

[69]S. C. Tiedmann, "A Study of Pupil Teacher Relationships," Journal of Educational Research, XXV (May, 1942), 657-64.

[70]R. A. Kent, "What Should Teacher Rating Systems Seek to Measure," Journal of Educational Research, II (December, 1920), 802-03.

[71]S. A. Courtis, "Standard of Teaching Ability," Educational Review, LXII (1921), 183-86.

[72]H. R. Taylor, "Teacher Influence on Class Achievement," Genetic Psychology Monographs, VII (February, 1930), 92.

paramount in rating teacher effectiveness. Saadeh[73] in 1970 reiterated their plea by saying that teacher effectiveness should be measured in some forms of pupil outcomes. To support his contention, Saadeh quotes such authorities as Skinner, Bruner, Biddle and Ellena, Gage, Tyler and Green.[74]

Numerous studies have been conducted which use student gain as a criterion for measuring teacher effectiveness. The majority of studies conducted prior to the 1940s used raw student gain data as the measure of growth. These studies gave little, if any, recognition to any outside factors that could contaminate the results. More recent studies have tended to use some form of residual gain procedures to measure student growth.

Residual gain is the process whereby regression equations are used to compare the expected student gain with actual progress. This procedure is known as the analysis of covariance, which provides for some equating among the factors that potentially influence the results.[75]

Boyce[76] in a 1912 study found that raw high school pupil gain correlated best with the instructional skill of

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[73]Saadeh, "Teacher Effectiveness on Classroom Efficiency," p. 73.

[74]Ibid., p. 76.

[75]Who's A Good Teacher, p. 16.

[76]Boyce, "Qualities of Merit in Secondary School Teachers," p. 159.

the teacher (r = .86), effective discipline (r = .74), intellectual capacity (r = .69), adaptability (r = .55), and sympathy (r = .51).

In an early attempt, using residual gain scores to measure teacher effectiveness, Mass[77] computed expected scores based on the intelligence, and past experience of 6,657 students in college chemistry classes. He also used factors which accounted for the degree, past teaching experience and the faculty ranks of the professors. His findings report that the correlation between the grades given the students and their scores on the chemistry achievement examination is r = .60.

Investigating differences in class achievement in math and reading, Taylor[78] asked supervisors to rate the general teaching ability of 105 teachers. He then compared these ratings with the raw gain achievement scores of 1,968 elementary and junior high school children. His assumption that "estimates of teaching ability are measures of the merit of a teacher because they are indirectly measures of the proficiency of pupils traceable to differences in teacher influence on achievement is justified to a considerable extent with reference to reading achievement,

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[77]F. A. Mass, "Impersonal Measurement of Teaching," Educational Record, X (January, 1929), 41-42.

[78]Taylor, "Teacher Influence on Class Achievement," p. 114.

but only slightly with respect to achievement in arithmetic computation."[79]

Coy,[80] in a study designed to measure the achievement quotient of 461 children and to compare it with the teaching efficiency of twenty-eight teachers, found statistically significant pupil changes in only two of the teachers' classrooms. His conslusion urges caution in the use of pupil change as a measure of teaching competence, and he sights several factors that investigators must be most aware of when attempting to measure student gain. These factors are: the I.Q. level of the students, the number of students in each class who had not been passed on the preceeding year, and the grade level of the students studied. Again the raw gain data failed to account for the many variables which affect student achievement.

Attempting to determine the factors discernable in the pre-service education of individual teachers which are significantly related to success in the field, Jones[81] studied sixty-five teachers working in fifteen different subject areas. Supervisory ratings and pupil residual gain scores were used as criteria for correlating with the

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[79] Ibid., p. 163.

[80] G. L. Coy, "A Study of Various Factors Which Influence the Use of the A.Q. as a Measure of Teaching Efficiency," Journal of Educational Research, XXI (January, 1930), 29-42.

[81] R. D. Jones, "The Prediction of Teaching Efficiency from Objective Measures," Journal of Experimental Education, XV (September, 1946), 85-99.

measures used in predicting teaching efficiency. No relationship was found between the two criteria used. The best single predictive measure of a teacher's ability to increase residual student gains was found to be the teacher's rank in his high school class (r = .482).

Lins[82] supported Jones' findings when his study of teacher effectiveness showed high school rank to be the best single predictor of residual student gain (r = .688), followed closely by the teachers' college G.P.A. (r = .53).

In other studies of teacher effectiveness measured by student gain, Brookover[83] found that the friendlier and closer teachers were to their students, the less history they were able to teach them. The study also determined that student gain was not related to teaching ability as measured by the teacher traits commonly found in teacher rating scales.

Justiz[84] found that Minnesota Teacher Attitude Inventory scores correlated from .600 to .690 at the .05 level of significant, with the teacher's ability to produce residual student gains.

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[82]L. J. Lins, "The Prediction of Teaching Efficiency," Journal of Experimental Education, XV (September, 1946), 2-60.

[83]Brookover, "Relation of Social Factors to Teaching Ability," p. 204.

[84]Thomas B. Justiz, "A Reliable Measure of Teacher Effectiveness," Educational Leadership, III (October, 1969), 54.

Research which also used pupil gain as a criteria in measuring teacher effectiveness can be found in the other categories of this review, and in Ackermann's review of forty-four studies on pupil change.

Pellinger,[86] Fritz,[87] Smith,[88] Ryans,[89] and Flanders[90] all agree that the danger in using pupil gain to measure teacher competence lies in the fact that an enormous, and possibly unwieldy, number of variables affect student outcomes. Saadeh[91] agrees that the teaching-learning process is a complex of behaviors, but he maintains that product criterion must be measureable because it is the only factor which will accurately measure teacher effectiveness.

Teaching Efficiency and Teacher Intelligence

In many of the studies which attempted to identify the variables of teaching efficiency, the intelligence of the teacher has been taken under consideration.

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[85] Ackermann, "Teacher Competence and Pupil Change," pp. 278-89.

[86] B. F. Pellinger, "Problems of Teacher Measurement," Journal of Educational Psychology, VIII (1917), 109.

[87] Ralph A. Fritz, "The Prediction of Probable Teaching Efficiency in High School," Educational Administration and Supervision, XX (1934), 140.

[88] Saadeh, "Teacher Effectiveness on Classroom Efficiency," p. 77.

[89] Ibid.

[90] Ibid.

[91] Ibid., p. 79.

Bliss,[92] in 1922, used the National Intelligence Test, the Otis Intelligence Test, the Stanford-Binet Test, and the Tuman Test to measure the intelligence levels of 1,305 teachers. He then had the teachers rated on a success scale by their superintendents. The results showed that the chances are twice as good to have superior or excellent teachers if individuals of superior intelligence are retained by school systems, and four and one-half times as good over teachers of low ability. Bliss summarized by commenting that other teaching qualities could never overcome a lack of mental ability.

Pyle[93] found the correlation between rated teaching efficiency and intelligence to be only r = .01. He stated that his findings show that intelligence is a factor of success but tempers his view by saying that individuals with median or above average intelligence can be successful.

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[92]W. B. Bliss, "How Much Mental Ability Does a Teacher Need?" Journal of Educational Research, VI (June, 1922), 33-41.

[93]W. H. Pyle, "Intelligence and Teaching: An Experimental Study," XIII (October, 1927), 433-48.

Rostker,[94] Lins,[95] LaDuke,[96] and Hellfritzsch[97] found that average or better intelligence is positively and significantly correlated with teaching efficiency.

Rolfe,[98] Gotham,[99] Barr,[100] and Walberg[101] found that there is little, if any, correlation between teacher aptitude and teaching efficiency.

Miscellaneous Studies

In the introduction to this review of the literature, it was noted that thousands of research studies have been conducted in the hope of discovering the criteria of teaching efficiency. This section will include a selection

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[94]Rostker, "Measurement of Teaching Ability," p. 51.

[95]Lins, "Prediction of Teaching Efficiency," p. 58.

[96]C. V. LaDuke, "The Measurement of Teaching Ability: Study No. 3," Journal of Experimental Education, XIV (September, 1945), 99.

[97]Hellfritzsch, "Factor Analysis of Teaching Abilities," p. 184.

[98]Rolfe, "Study No. 2," p. 74.

[99]Gotham, "Personality and Teaching Efficiency," p. 164.

[100]A. S. Barr, "The Validity of Certain Instruments Employed in the Measurement of Teaching Ability," in Helen M. Walker, ed., The Measurement of Teaching Efficiency (New York: Macmillan Co., 1935), p. 101.

[101]Herbert J. Walberg, "Scholastic Aptitude, the National Teacher Examinations, and Teaching Success," Journal of Educational Research, LXI (November, 1967), 130.

research findings which do not fall in the previous categories.

Several early researchers believed that an investigation of teacher failure might be productive, because the identification of the causes of failure could single out criteria which could be used to measure teacher success. Littler,[102] Nanninga,[103] Simon,[104] and Buellesfield,[105] in separate studies, all found that the primary cause of teacher failure was due to the teacher's inability to properly discipline students. Madsen[106] found that a poor knowledge of subject matter and a lack of instructional skill were factors mentioned more often than poor discipline. In 1957, Goodenough[107] investigated discipline

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[102]Sherman Littler, "Why Teachers Fail," Home and School Education, XXXIII (March, 1914), 256.

[103]S. P. Nanninga, "Teacher Failure In High School," School and Society, XIX (January 19, 1924), 82.

[104]D. L. Simon, "Personal Reasons for the Dismissal of Teachers in Smaller Schools," Journal of Educational Research, XXIX (April, 1936), 586.

[105]Henry Buellesfield, "Causes of Failure Among Teachers," Educational Administration and Supervision, I (September, 1915), 42.

[106]I. N. Madsen, "The Prediction of Teaching Success," Educational Administration and Supervision, XIII (January, 1927), 44.

[107]Eva Goodenough, "The Forced Choice Technique as a Method for Discovering Effective Teacher Personality," Journal of Educational Research, LI (September, 1957), 25-31.

in relation to teacher personality. She found, in analyzing 858 rating scores, that teachers who were identified by their colleagues as being successful disciplinarians, exhibited the personal traits of kindness, patience, cooperation, sympathy, and tact.

Medely and Mitzel,[108] in their 1959 review of research related to teacher effectiveness, demonstrated that separate studies performed by Hellfritszch, Anderson, LaDuke, Joyne, Gotham, Lins, Jones, Brookover, and themselves all found that the supervisory ratings of teacher effectiveness and measures of how much pupils are learning from the teacher have little in common.

The inconsistency of rating devices in relation to other variables when used by supervisors or colleagues of the persons being rated could be due, in part, to the halo effect. In separate studies, Thorndike[109] and Knight[110] found that persons tend to judge their acquaintances in terms of a general mental attitude which biases all of their estimates of the acquaintances' particular qualities. Both studies found this to be a constant error. There seems

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[108]D. M. Medely and H. E. Mitzel, "Some Behavioral Correlates of Teacher Effectiveness," Journal of Educational Psychology, L (December, 1959), 239-46.

[109]E. L. Thorndike, "A Constant Error in Psychological Ratings," Journal of Applied Psychology, IV (1920), 25-29.

[110]F. B. Knight and R. Franzen, "Pitfalls in Rating Schemes," Journal of Applied Psychology, XIII (1922), 204-15.

to be a tendency for raters to suffuse estimates of an individual's separate qualities with a halo belonging to the individual as a whole.

Bryon[111] found an example of the "halo effect" at work when he discovered, in a survey of seventy-nine administrators, that supervisors' judgments of teachers are based "to a very great extent on student reactions to teachers."[112]

In a 1961 analysis of research in the area of teaching efficiency, the American Association of School Administrators[113] stated that there is a direct relationship between professional knowledge and the performance of a teacher. This statement is supported by findings reported in the research of Rostker,[114] Young,[115]

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[111]Roy C. Bryon, Reactions to Teachers by Students, Parents and Administrators (Kalamazoo: Western Michigan University, 1963, HSOE-HEW Cooperative Research Project 668), p. 18.

[112]Ibid., p. 43.

[113]Who's A Good Teacher, p. 25.

[114]Rostker, "Measurement of Teaching Ability," p. 50.

[115]Frank Young, "Some Factors Affecting Teacher Efficiency," Journal of Educational Research, XXXII (May, 1939), 650.

Hellfritzsch,[116] and Turner and Fatta.[117] Davis,[118] however, reported findings that the students of teachers who had not had specialized training in the area in which they were teaching, scored higher on achievement tests than students whose teachers had received specialized training. This held true in all subject areas except chemistry where the teachers' knowledge of the subject matter did account for significant pupil gain.

In 1941, Shannon[119] interviewed 164 school administrators and had them analyze the 430 best and 352 worst teachers who had ever worked under their supervision. He found that general instructional skill was the most frequently mentioned item which contributed most to teacher effectiveness. This conclusion had been reached by other investigators, however the reliability of the measures were often questionable. In 1969 Justiz[120] designed a study in

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[116]Hellfritzsch, "Factor Analysis of Teaching Abilities," p. 184.

[117]Who's A Good Teacher, p. 25.

[118]H. M. Davis, "The Use of State High School Examinations as an Instrument for Judging the Work of Teachers," Teachers College Contributions to Education, No. 611 (New York: Columbia University, 1934).

[119]J. R. Shannon, "Elements of Excellence in Teaching," Educational Administration and Supervision, XXVII (March, 1941), 168-76.

[120]T. B. Justiz, "A Reliable Measure of Teacher Effectiveness," Educational Leadership, III (October, 1969), 53.

which the contaminating variables were almost totally removed from the teaching-learning process. Each teacher in the study taught two classes in two different subject matter areas with which both the teachers and the students were unfamiliar. The results showed that when mean pupil gain was measured, the correlations between the two samples of effective teaching ranged from .600 to .900 at the .05 level of significance.

Biographical factors and how they related to teaching efficiency were studied by Williamson.[121] He asked 3,000 high school students to rate their teachers as effective or ineffective defined in terms of the three major clusters of classroom teacher behavior identified by Ryans. The teachers rated most effective were given a biographical questionnaire to complete. The results showed significant correlations at the .05 level between effective teaching (as measured in this study) and the mother's level of education ($r = .18$), reading for pleasure ($r = .22$), and the lack of geographical mobility ($r = .18$). Teacher effectiveness correlated $r = .15$ at the .01 level of significance for teachers who owned their own homes.

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[121] J. A. Williamson, "Biographical Factors and Teacher Effectiveness," Journal of Experimental Education, XXXVII (Spring, 1969), 85.

Singer[122] studied in depth the social competence of teachers. He correlated success with social competency by using certain scales of the Minnesota Multiphasic Personality Inventory and social distance scales. He found that there was some relationship between teaching success and social competency.

Both Brookover[123] and Young[124] found in separate studies that the age and experience of the teacher was related to teaching efficiency. Brookover[125] reported finding that pupil achievement increased with the age of the teacher until that teacher reached the age of thirty-eight. Beyond that age, he found that teacher effectiveness declinded. Young[126] found that each additional year of experience, up to five years, helps teachers to be more efficient. He then found no marked improvement from the fifth year to the twentieth year, at which time a decline

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[122]Arthur Singer, "Social Competence and Success in Teaching," Journal of Experimental Education, XXIII (December, 1954), 91-131.

[123]Brookover, "Relation of Social Factors to Teaching Ability," p. 205.

[124]Young, "Factors Affecting Teacher Efficiency," p. 650.

[125]Brookover, "Relation of Social Factors to Teaching Ability," p. 205.

[126]Young, "Factors Affecting Teacher Efficiency," p. 650.

in the teacher's effectiveness began to appear. Rolfe[127] found that experience contributes little to teacher effectiveness when measured by the pupil gain criteria.

Boyce,[128] Herda,[129] and Brookover[130] report that no significant relationships exist between sex and teaching competency.

Speech, as a variable in effective teaching, was studied by McCoard.[131] Teachers' speech patterns were recorded and then evaluated by twenty-two speech teachers. Ratings were given for effectiveness, communication of ideas, communication of emotion, pitch, phrasing and volume. The author reported that a significant relationship existed between teacher's speech qualities and pupil gain.

Summary

In the introduction to this review of the literature, it was stated that approximately a thousand research studies have been conducted in an attempt to identify the criteria of effective teaching. It was also noted that such

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[127]Rolfe, "Measurement of Teaching Ability," p. 74.

[128]Boyce, "Qualities of Merit," p. 149.

[129]F. J. Herda, "Some Aspects of the Relative Instructional Efficiency of Men and Women Teachers," Journal of Educational Research, XXIX (November, 1935), 203.

[130]Brookover, "Relation of Social Factors to Teaching Ability."

[131]W. B. McCoard, "Speech Factors as Related to Teaching Efficiency," Speech Monograph, XI (1944), 53-64.

authorities as Gage,[132] Ryans,[133] and Smith[134] support the conclusion that the majority of findings have been inconclusive, and often contradictory.

An illustrative selection of studies was reviewed in this chapter and reported under categories entitled: (1) The Prediction of Teacher Effectiveness, (2) Characteristics of Teachers, (3) Pupil Ratings and Teacher Effectiveness, (4) Teacher Effectiveness and Pupil Gain, (5) Teacher Effectiveness and Teacher Intelligence, and (6) Miscellaneous studies. The research studies which were reviewed support the view that the criteria for measuring teacher effectiveness have not been identified and universally accepted. The review also raises the possibility that there is no one set of operations, personal qualities, or skills that all instances of good teaching have in common.

Brown[135] has suggested that the difficulty of identifying the variables of effective teaching could be related to the possibility that there is no way to differentiate between effective and ineffective teachers without making a value judgment.

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[132]Gage, Handbook of Research on Teaching, p. 1149.

[133]Ryans, Characteristics of Teachers, p. 2.

[134]Smith, Research on Teacher Education, p. 1.

[135]B. B. Brown, "Bringing Philosophy Into the Study of Teacher Effectiveness," Journal of Teacher Education, XVII (Spring, 1966), 39.

Barr[136] has stated that more attention needs to be given to the critical factors in teacher effectiveness. Due to the complexity of the teaching-learning situation he felt that there have been identified a great many things which teachers can do to enhance their effectiveness. He does not believe that the majority of these factors are essential or critical, and he recommends that research be undertaken to separate the moderately useful from the essential variables. He, therefore, lends support to the basic objectives in the design of this study which will be explained in Chapter III.

Barr and the literature thus provide support for the basic objectives of this study. The design of the study will be described in Chapter III.

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[136]Barr, Wisconsin Studies, p. 149.

CHAPTER III

PROCEDURES UTILIZED IN THE STUDY

The purpose of Chapter III is to describe the procedures utilized in this study. The data gathering instrument with an examination of its usefulness, the sources of data, the design of the study and the collection and tabulation of the data will be illustrated.

The purpose of this investigation was to determine, through the use of expert judgment, the profile of essential teaching competencies of a coping first-year teacher.

The objectives of the study were (1) to determine the profile of essential teaching competencies of a coping first-year teacher; and (2) to utilize a research model which will promote cooperative decision making on behalf of college and public school professional personnel.

The Delphi Technique

A modified form of the Delphi technique was used as the data gathering instrument in this study.

As a research fellow at Syracuse University's Educational Policy Research Center, W. Timothy Weaver

studied several popular forecasting methods and described the original Delphi Technique in this way.

> The Delphi Technique is an intuitive methodology for organizing and sharing "expert" forecasts about the future. Its original use was to establish a chronology of scientific and technological events and to judge when the events might occur through the speculations of several experts. Delphi has been justified primarily on the grounds that it prevents professional status and high position from forcing judgments in certain directions as frequently occurs when panels of experts meet. The intention was to assure that changes in estimates reflected rational judgment, not the influence of certain opinion leaders.
>
> Typically, the procedure includes a questionnaire, mailed to respondents who remain anonymous to one another. Respondents first generate several rather concise statements of events, and in the second round give estimates as to the probability of each event occurring at a given date in the future. Once the respondents have given their answers, the responses are collated and returned to each respondent who then is invited to revise his estimates. The third-round response are made with the knowledge of how others felt regarding the occurrence of each event. Again, the responses are assembled and reported back to the participants. If a respondent's estimate does not fall within the interquartile range of all conjectures, he is asked to justify his position, whether or not he wishes to change his position.[1]

Educators have also used the Delphi Technique as a normative forecasting device. The normative Delphi focuses on establishing what is desirable in the way of goals, values, and priorities.

The studies reported in the literature indicate that whether the Delphi Technique is used as a forecasting

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[1]W. Timothy Weaver, "The Delphi Forecasting Method," Phi Delta Kappan, L (January, 1971), 267.

method or an exploratory tool, the data gathering process remains essentially the same.[2]

The results and the interpretation of the data gathered by the two forms of the technique do tend to differ. While the exploratory Delphi established a chronology of scientific or technological events and attempts to measure when these events might occur, the normative Delphi reports goals and priorities based on what the study participants believe should occur.

> Thus, in principle, the normative Delphi differs from the exploratory Delphi in two ways. First, the substance has to do with what one thinks is desirable, rather than what one thinks is probable. Second, the normative Delphi may be thought of as not strictly temporal. Whereas the exploratory Delphi is always concerned with rather specific future dates, the normative Delphi is not. That is, the panelists (respondents) usually are not asked to assign a specific date of occurrence to goals, although in some studies rather general time frames are implied, such as "over the next decade and one half."[3]

The majority of Delphi studies reviewed in educational research journals have been of the normative rather than of the original exploratory type, and the technique has usually been used with fifty or fewer respondents.[4]

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[2] Ibid., p. 268.

[3] W. Thimothy Weaver, Delphi, a Critical Review (Syrocuse, N.Y.: Educational Policy Research Corporation, 1972), p. 3.

[4] F. R. Cyphert and W. L. Gant, "The Delphi Technique: A Case Study," Phi Delta Kappan, L (January, 1971), 273.

A normative and modified form of the Delphi Technique was used successfully by Fox and Brookshire[5] to define effective college teaching. The population used in the study was the School of Education faculty at the University of Northern Colorado.

In summarization, Fox and Brookshire stated that the study demonstrated the usability of the Delphi Technique "in areas that heretofore have been difficult to study due to problems of definition."[6] The application of the Delphi Technique permitted the respondents to state personal opinion, to exchange information and to attain consensus on the factors which were then used to formulate a definition of effective college teaching.

Educators have most often used the normative Delphi as a planning tool,[7,8] The Fox and Brookshire study was the only research found in the literature which used the Delphi Technique to examine the components of effective teaching.

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[5]A. M. Fox and W. K. Brookshire, "Defining Effective College Teaching," Journal of Experimental Education, XXXX (Winter, 1971), 37.

[6]Ibid., p. 40.

[7]R. D. Shepardson, "A Survey (Utilizing the Delphi Method) to Assess and Objectively Display the Arguments For and Against Developing a Performance-Based Teacher Education Program," Journal of Teacher Education, XXIII (Spring, 1972), 166-68.

[8]Weaver, "Delphi Forecasting Method," p. 268.

In the original applications of the Delphi Technique a series of four rounds was used to reach consensus.[9] Cyphert and Grant[10] followed this four round method in their study of opinions about teacher education. They found that 99 percent of the participants changed in opinion between the second and the third round of the study, and that the changes of opinion which occurred between the third and the fourth rounds were negligible. The two researchers believed that these findings were significant and stated that they seriously questioned "the need for going beyond questionnaire III."[11]

Design of the Study

Following a review of all available reports on the normative implementation of the Delphi, and a lengthy consultation with Dr. Andrew C. Porter of Research Consultation Services in the College of Education, a modified Delphi procedure was constructed for use in this study.

It was determined that this modified Delphi procedure would require a sample population of sixty persons and would consist of three phases.

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[9] Ibid., p. 273.

[10] Cypert and Gant, "Delphi Technique," p. 273.

[11] Ibid.

Sources of Data

The population of this study, from which samples were drawn, consisted of: the Michigan State University assistant, associate, and full professors who were involved in undergraduate teacher education courses during the 1973-1974 academic year; the elementary and secondary school principals who were employed, during the same year, by the public school districts of the State of Michigan; and all certified Michigan public school teachers who had graduated with bachelor degrees from Michigan State University between July 1, 1971 and June 30, 1972, and had completed one year of teaching by June 30, 1973.

The names of the professors selected to participate in the study were found in the College of Education Building Directory For 1972-73.[12] This directory was obtained from Dr. Leland Dean, Associate Dean for Teacher Education. The report listed all professional personnel who belonged to the staff of the College of Education, their phone number, office designation (home address if off campus), department, and faculty rank.

The directory contained eighty-six professors of sufficient rank to qualify for participation. The professors identified were the total number eligible for the study and not a sampling.

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[12] College of Education Building Director For 1972-73 (East Lansing: Michigan State University, 1972). (Mimeographed.)

Each of the eighty-six faculty names were alphabitically arranged and assigned a consecutive number from 1 to 86. A table of random numbers[13] was used to select the twenty professors who represented the sample population. Appendix A lists the names, faculty rank and department assignments of those staff members.

The teacher population was identified through the Michigan State University Placement Bureau Follow-Up Report of 1971-1972.[14] A copy of the entire report was obtained from Dr. L. Patrick Scheetz, Assistant Director for Elementary and Secondary Education, of the Michigan State University Placement Bureau. The report listed 610 persons who had received bachelor's degrees from the university between July 1, 1971 and June 30, 1972 and who held public teaching positions throughout Michigan during the 1972-1973 school year. The school districts, the cities of employment, and the job titles were also listed in the report.

Each of the 610 teachers were assigned a consecutive number (beginning with the number one) in the order that they were listed in the placement bureau report. The table of random numbers was used again to select the twenty

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[13]Malcolm J. Slakter, Statistical Inference for Educational Researchers (Reading, Mass.: Addison-Wesley Publishing Co., 1972), Table D.12, p. 466.

[14]Michigan State University Placement Bureau Follow-Up Report of 1971-1972 (East Lansing: Michigan State University, 1972), pp. 158-218.

persons who would represent the teacher sample for this study.[15]

The residential addresses of the teacher sample were obtained through the office of John R. Kinney, Executive Director of the Michigan State University Alumni Association.

Appendix B lists the names, school districts of employment, and the job classifications for the members of the teacher sample.

The final one-third of the population used in this study consisted of all elementary and secondary public school principals in the State of Michigan.

The Michigan Department of Education, in its report entitled Levels of Educational Performance in Michigan, categorized the 646 public school districts in the State of Michigan according to five community types.[16] The community types were:

Type I--Metropolitan Core: One or more adjacent cities with a population of 50,000 or more which serve as the economic focal point of their environs.

II--City: Community of 10,000 to 50,000 that serves as the economic focal point of its environs.

III--Town: Community of 2,500 to 10,000 that serves as the economic focal point of its environs.

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[15] Ibid., p. 467.

[16] Levels of Educational Performance in Michigan: Assessment Report No. 4 (Lansing: Michigan Department of Education, 1970), pp. 19-26.

IV--Urban Fringe: A community of any population size that has as its economic focal point a metropolitan core or a city.

V--Rural Community: A community of less than 2,500.[17]

To select a principal sample representing a cross section of these five community types, the districts in each category were assigned a consecutive number. The random number tables were used to select four school districts from each category.[18] Appendix C lists each of the twenty districts selected.

The names and positions of the elementary and secondary principals, who were employed by these twenty school districts, were obtained from the Michigan Education Directory and Buyer's Guide.[19] An alphabetical listing of the principals' last names was made for the two groups. The names were assigned a consecutive number and the table of random numbers[20] was used to select ten elementary and ten secondary school administrators. The names, positions, and the employing school districts for the twenty members of the principal sample are listed in Appendix D.

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[17] Ibid., p. 13.

[18] Slakter, Statistical Inference, p. 468.

[19] Michigan Education and Buyer's Guide (Lansing: Michigan Education Directory, 1972).

[20] Slakter, Statistical Inference, p. 469.

Phase I Questionnaire

The first round of the Delphi study asked the sample population to define the most essential teaching competencies which a public school teacher must possess to be successful in on initial teaching assignment.

A questionnaire was constructed to elicit these responses. It included a cover letter which defined the goals and purposes of the study, and described the process to be followed. A brief summary of background information was used to introduce the questionnaire and to help clarify the purposes of the study.

In the instructions for completing the questionnaire, the respondents were requested to describe in writing the essential competencies which they believed should be included under the categories of knowledge, skills, and behaviors. They were encouraged to be as free and as complete in their responses as they cared to be and to attempt to list only one competency in each statement. Examples of the types of statements desired were included; however, to prevent undue bias, the competencies did not relate to the study of teacher effectiveness. The Phase I cover letter and questionnaire can be found in Appendix E.

Pilot Study

The responses to the first round of this study were essential to the continuation of the research; therefore, a pilot study of the Phase I questionnaire was conducted.

Reactions were sought from two faculty members of the Michigan State University Student Teaching Office, from two elementary school teachers, and from two secondary school administrators. They were requested to complete the questionnaire and to examine it for clarity and effectiveness of format. The six respondents reported that they had encountered no difficulty in using the instrument. Their written responses were found to be clear and compatible with the goals of Phase I. The responses to the pilot study were not included in this research.

Phase I Collection of Data

Following the completion of the pilot study, a copy of the Phase I questionnaire was mailed to the sample population. The name of the person who was to receive each questionnaire was written at the top right hand corner of the first page of the instrument. The participants were informed that their names were included for clerical purposes only and that the tabulation of the responses throughout the study would not be done in a manner that would identify individual inputs.

Of the sixty questionnaires mailed, none were returned as non-deliverable. Two weeks following the original mailing, twenty-nine responses had been returned. A follow-up letter was prepared and mailed to those persons who had not responded to the questionnaire. Sixteen responses were received from the thirty-one persons who

received a follow-up letter. One high school principal declined to participate due to the current burdens of his job. Three of the university professors, one high school, and one elementary principal returned letters indicating their desire to participate in the study, however, they were unable, at that time, to provide responses for the first questionnaire. One teacher response listed essential competencies for a specific content area rather than general competencies which all teachers would need to be successful at any level or in any content area. A second questionnaire, with an explanation of why the original response was not usable, was mailed to the teacher. The teacher declined to respond a second time and requested to be dropped from the study.

The total number of usable questionnaires returned in Phase I was thirty-eight or a percentage of 63.3. Table 3.1 illustrates the responses received from each of the three groups in the sample population.

Tabulation of Phase I Data

The competency statements generated by the Phase I questionnaire were combined in a three part master list which protected the integrity of the knowledge, skill, and behavior categories. Statements that clearly identified two or more individual competencies were separated.

The responses in round one produced 44 competency statements in the knowledge category, 22 statements in the

Table 3-1.--Summary and Distribution of Phase I Responses.

	School Principals	University Professors	Teachers	Totals
Number of Phase I Questionnaires Mailed	20	20	20	60
Number of Questionnaires Returned	14	10	15	39
Percentage of Questionnaires Returned	70	50	75	65
Percentage of Usable Questionnaires Returned	70	50	70[a]	63.3
Number of Persons Requesting to Participate Without Responding to Questionnaire	2	3		5

[a]One teacher response was not usable as returned. A second questionnaire was mailed and the problem explained, however the respondent declined further participation.

skill category, and 61 statements in the behavior category. A total of 127 statements of essential competencies were produced in round one, and are listed in Appendix F.

Phase II Questionnaire

The purposes of the second round of the Delphi study were (1) to begin the process of consensus decision making, and (2) to identify any additional competencies which the respondents believed should be included in the study.

A cover letter was prepared to accompany the second questionnaire. It briefly reviewed the purposes and the objectives of the study and thanked the participants for their first round responses.

In preparation for the second round of the Delphi study the three master lists of essential teaching competencies were reviewed. As anticipated, it was found that a number of the statements in each category were similar in nature. Other studies using the Delphi Technique have, at this point, sorted and combined the similar statements.[21] Fox and Brookshire,[22] in their study of effective college teaching, eliminated duplicate responses when preparing their round two master lists. They then asked their

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[21]Cyphert and Gant, "Delphi Technique," p. 273.

[22]Fox and Brookshire, "Defining Effective College Teaching," p. 37.

respondents to check only the most preferred of similar statements and to leave the others unchecked.

In preparing the questionnaire for round two of this study, all of the items on the master lists were rechecked. No duplicate statements were found.

Cyphert and Gant[23] determined that the Delphi Technique can be used to mold opinion by introducing a bogus item in their collated responses. As the bogus item continued to survive throughout the different rounds it gained in priority.

To guard against the possibility of such external bias and contamination, the original 127 elements, including those of similar intent, were listed as received in the second questionnaire prepared for this study.

A five point scale was included in the directions for completing the instrument. Each participant was asked to rate every item according to the priority continuum which established a rating of "1" as being of the lowest priority, and a rating of "5" as the highest priority. The tabulation of the Phase II responses would then indicate the relative value placed on each item by the entire group of respondents. This procedure eliminated the necessity of asking each respondent to read and re-read the elements of similar intent to find the one best suited to his thinking.

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[23]Cyphert and Gant, "Delphi Technique," p. 273.

Space was provided at the end of each category on the second questionnaire for the participants to list any items which they felt had not been included in the first round. The Phase II cover letter and questionnaire are included in Appendix G.

Phase II Collection of Data

The Phase II questionnaire was mailed to the forty-three persons who had agreed to participate in the second round. The fifteen Phase I non-respondents were also invited to participate even though they had not done so in round one.

Two weeks after the fifth-eight Phase II questionnaires had been mailed, thirty-one had been completed and returned. A follow-up letter was mailed to encourage the twenty-seven non-respondents to complete and return the second questionnaire. Six additional responses were received.

A total of thirty-seven responses were returned in Phase II for a percentage of 63.7. Table 3.2 provides a summary of the number of responses received in Phase II.

There were no Phase II questionnaires returned by the fifteen persons who were non-respondents in the Phase I study. Two high school principals and four teachers who had responded in Phase I did not return responses in the second round.

Table 3-2.--Summary and Distribution of Phase II Responses.

	School Principals	University Professors	Teachers	Totals
Number of Phase II Questionnaires Mailed	19	20	19	58
Number of Questionnaires Returned	13	13	11	37
Percent of Questionnaires Returned	68.4	65	57.8	63.7
Percent of Responses From Original Sample	65	65	55	61.7

Tabulation of Phase II Data

A matrix was developed and used to collate the data collected by the Phase II questionnaire. Each line item on the matrix represented each competency statement used in the second questionnaire. The numeration of the matrix line items corresponded directly to the numeration found in the Phase II instrument. The first five columns of the matrix were used to tabulate the frequency of the different priority ratings given to each competency statement. The sixth column was used to report the total number of responses received for each item. The arithmetic mean of the priority ratings was computed for each of the 127 items and recorded in the seventh column.

The mean priority rating for the total sample (N = 127) was found to be 3.759 or rounded to the nearest tenth, 3.8. Appendix H contains the matrix which illustrates the data received in Phase II and the results of the tabulation of that data.

Phase III Questionnaire

The third and final round of the Delphi study was conducted for the purpose of having the participants select the statements which they believed should be included in a profile of essential teaching competencies.

The cover letter which accompanied the third round questionnaire reviewed the preceding two phases of the study and identified the purpose of the final round. It also thanked the respondents for their participation in the study.

The statements of essential teaching competencies that were to be included in the Phase III questionnaire were selected in two ways. First, the results of the Phase II questionnaire, as illustrated in Appendix H, were reviewed with a consultant from Research Consultation Services. It was decided that individual items would be included in Phase II if they had received a mean priority rating equal to or greater than the mean priority rating of 3.8 for the entire sample. Of the 127 statements presented in Phase II, 61 had included means of 3.8 or greater.

During Phase II the respondents had been asked to list any additional competency statements which they believed should be included in the study. Four additional statements were returned at the end of round two and were included in the Phase III questionnaire.

A total of sixty-five statements made up the body of the third questionnaire. In round two the respondents offered numerous suggestions for increasing the clarity of the original 127 statements. The recommended changes were made before the statements were included in the third questionnaire.

In the directions for completing the questionnaire, the participants were asked to read each of the sixty-five statements to determine if it should be retained as a competency that would be essential to the success of a first year teacher in any public school classroom. The respondents were again asked to recommend changes that would add to the clarity of the statements. The Phase III cover letter and questionnaire are included in Appendix I.

Phase III Collection of Data

The responses received in Phase II directly determined the statements for third round inclusion; therefore, the Phase III questionnaire was only mailed to the thirty-seven persons who had participated in the second round.

Of the thirty-seven questionnaires mailed, twenty-five had been returned by the end of two weeks. A follow-up

letter was mailed to elicit further returns. A total of thirty-five Phase III questionnaires were returned for a percentage of 94.6. Table 3.3 summarizes the number of responses returned in the third round.

Table 3-3.--Summary and Distribution of Phase III Responses.

	School Principals	University Professors	Teachers	Totals
Number of Phase III Questionnaires Mailed	13	13	11	37
Number of Questionnaires Returned	13	11	11	35
Percent of Questionnaires Returned	100	84.6	100	94.6
Percent of Responses from Original Sample	65	55	55	58.3

The non-responding university professors were on leave from their campus duties. One was carrying out university work overseas and the other was on medical leave and unable to participate in the third round.

Tabulation of Phase III Data

The responses to the third round questionnaire were tabulated by first determining the total number of times each statement was marked for inclusion in the final profile of a coping first-year teacher. The percentage of

responses indicating inclusion for each item were then calculated.

It was determined that a consensus of opinion would have been attained for a third round item if 94.3 percent of the respondents marked it for inclusion in the final profile.[24]

The competency statements from the Phase III questionnaire and the number and percentage of times each was marked for inclusion in the final profile are listed in Appendix J.

Summary

Chapter III was written to illustrate the procedures used in this investigation of the coping first-year teacher. The Delphi Technique, an intuitive methodology for organizing sharing and determining the consensus of "expert" opinions, was described, modified, and used as the research tool in the design of this study. The sample population consisted of sixty randomly selected teachers, professors, and school principals (20 each) who remained anonymous to one another throughout the three phases of the research.

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[24]A response level of 95 percent was originally selected to define consensus. A perfect 95 percent was not attainable due to the number of items on the questionnaire; therefore, a response level of 94.3 percent was selected as the nearest approximation.

In Phase I the questionnaire asked the respondents to generate statements of competencies essential to the success of a first-year teacher in any public school classroom. These statements were then collated and returned to the respondents who were asked to rate how essential they believed each competency to be. The mean priority rating given each competency statement and the overall mean priority rating were computed from the responses to the second questionnaire.

The Phase III questionnaire contained each competency statement which was given a mean priority rating equal to or greater than the overall mean priority rating in round two. The respondents in round three were asked to select the competency statements which they believed should be included in the profile of a coping first-year teacher. The data were then quantified by determining the total number and percentage of times each item was marked for inclusion on the final questionnaire. Group consensus was attained for a third round item if 94.3 percent of the respondents believed it should be retained as an essential competency in the profile of an effectively coping first-year teacher.

Chapter IV will present an analysis of the data collected by this study.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This chapter contains an analysis of the data collected to fulfill the objectives of this study which were:

1. To determine the profile of the essential teaching competencies of a coping first-year teacher, and
2. To determine if a modified form of the Delphi Technique could be used to promote cooperative decision making on behalf of college and public school professional personnel.

The Delphi Technique, an intuitive methodology for organizing, sharing, and determining the consensus of "expert" opinion, was modified and used as the research instrument in the design of this study. Sixty randomly selected teachers, professors, and school principals, who remained anonymous to each other, were selected as a sample population.

In the first phase of the three part data gathering process, a questionnaire was developed which asked the

participants to generate statements of competencies essential to the success of a first-year teacher in any public school classroom. These statements were then collated and returned to the respondents who were asked to rate how essential they believed each competency to be. The third phase questionnaire contained each competency statement which was given a mean priority rating equal to or greater than the sample mean priority rating for round two. The third phase questionnaire asked the respondents to select the competency statements which they believed should be included in the final profile of an effectively coping first-year teacher.

The data reported for the third phase of this study was based upon the responses of thirty-five participants who represented 58.3 percent of the original sample population.[1]

Objective One

The first objective of this study was to determine the profile of the essential teaching competencies of a coping first-year teacher.

Three questionnaires were designed and used to collect this data. The first questionnaire asked the respondents to identify what they believed to be the

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[1]Response levels and percentages for Phase I are illustrated on page 59. Phase II response levels are illustrated on page 63.

teaching competencies most essential to the success of a first-year teacher. The participants were asked to organize the statements under the categories of essential knowledge, essential skills, and essential behaviors. The first round questionnaire generated 44 competency statements in the knowledge category, 22 statements in the skills category, and 61 statements in the behaviors category. The 127 essential competency statements produced in Phase I are listed in Appendix F.

The 127 competency statements, listed under the three original categories, made up the body of the second questionnaire. The participants were asked to determine a priority rating for each item,[2] to include any additional competency statements which had not been identified in round one, and to recommend any changes which would make the 127 items more specific.

The responses to the second questionnaire were collated and a mean priority rating was computed for each of the original 127 competency statements. The mean priority rating for the total sample (N = 127) was computed and found to be 3.8. Appendix H contains a matrix which illustrates the data received in Phase II and the results of the tabulation of that data. It was found that 61 of the 127 Phase II statements received mean priority rating

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[2]A 5 point scale was used. The priority continuum established a rating of "1" as being of the lowest priority, and a rating of "5" as the highest priority.

equal to or greater than the sample mean. These 61 items and 4 additional competency statements, identified by the second questionnaire, were selected for use in the third questionnaire which is included in Appendix I.

The third questionnaire was developed to select the teaching competencies which the respondents believed were most critical. It was determined that a consensus of opinion would have been reached for any item that a minimum of 94.3[3] percent of the participants voted to have included in the final profile. The competency statements from the Phase III questionnaire, and the number and percentage of times each was marked for inclusion in the final profile are listed in Appendix J.

The data in Appendix J show that 23 of the 65 items (35.4%) met or exceeded the 94.3 percent criterion level established to determine group consensus. The participants reached consensus on 8 competency statements in the knowledge category, 6 in the skill category, and 9 in the behavior category. The 23 items selected for the profile of essential teaching competencies of an effectively coping first-year teacher are listed in Appendix K.

A summary of the competency statements in the knowledge, skill, and behavior categories of the profile

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[3]The rational for selecting the 94.3 percent level is discussed on page 67.

of a coping first-year teacher, are illustrated in Tables 4-0, 4-1, and 4-2.

Table 4-0.--Summary of Essential Competencies--Knowledge Category.

A coping first-year teacher must have a demonstrable knowledge of:
1. instructional materials
2. instructional methods
3. classroom (environmental) management techniques
4. human learning processes
5. child growth and development
6. school building policy
7. motivational techniques
8. positive disciplinary techniques

Table 4-1.--Summary of Essential Competencies--Skill Category.

A coping first-year teacher must be able to:
1. assess student achievement levels
2. provide for individualized learning
3. organize for instruction
4. be flexible in use of plans
5. relate well with others
6. think of students as individuals

Table 4-2.--Summary of Essential Competencies--Behavior Category.

A coping first-year teacher must:
1. set reasonable behavior standards
2. effectively enforce behavior standards
3. maintain personal health and vitality
4. be truthful when communicating with parents
5. be considerate of individual learning rates and styles
6. be self-confident
7. demonstrate courteous and moral behavior
8. demonstrate interest in pupils and their progress
9. be enthusiastic when working with children

Objective Two

The second objective of this study was to determine if a modified form of the Delphi Technique could be used to promote cooperative decision making on behalf of professional college and public school personnel. As described in Chapter III[4] the Delphi Technique was originally developed as an intuitive methodology for organizing and sharing "expert" forecasts about the chronology of future scientific and technological events. It has since been modified and used as a planning and a goal setting technique. The Delphi Technique has been useful as a research method, because it enabled a group of persons to make

[4]See "The Delphi Technique" page 47.

consensus decisions without bringing the participants together in one place and by not reporting individual opinions. The anonymity of the respondents protected the decision making process from being unduly influenced by the power, position, vociferousness or mere persistence of any one person in the group.

A modified form of the Delphi Technique was chosen as the research method for this study because:

1. The purpose of this investigation called for the use of an intuitive methodology for organizing, sharing, and determining consensus of opinion on expert judgments;
2. The anonymity of individual response was required because the population of the study consisted of three sub-groups at three different levels in the educational spectrum; and
3. The sample population was geographically widespread.

The data collected in fulfillment of the first objective of this study shows that the Delphi Technique, as modified, did promote cooperative decision making on behalf of the college and public school professional personnel who participated in the investigation.

Additional Analyses of Data

The questionnaire used in the first phase of this study generated 127 statements of essential teaching

competencies in the areas of knowledge, skill, and behavior. The Phase II questionnaire asked the respondents to rate the priority of each item on a five point scale.[5] The responses to the second questionnaire were tabulated on a matrix which is illustrated in Appendix H. The mean priority rating given each individual item was computed. The mean rating for the items ranged from a low of 2.5 to a high of 4.9. The mean priority rating for the sample was found to be 3.8. Sixty-one (48.0%) of the 127 items in the second questionnaire had been given a mean rating equal to or greater than the sample mean of 3.8. Sixty-six (52%) of the items received a mean priority rating of less than 3.8. Table 4.3 illustrates the number and percentage of the items in the knowledge, skill, and behavior categories which received priority ratings equal to or greater than the over-all sample mean.

A similar examination of Phase III data was done. It showed that the percentage of times an item was selected to remain in the final profile ranged from 51.4 to 100.0. Twenty-three (35.4%) of the 65 third round competency statements were included in the final profile. The number and percentage of the items in the knowledge, skill, and behavior categories which met the criterion for final selection are shown in Table 4-4.

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[5]A 5 point scale was used. The priority continuum established a rating of "1" as being of the lowest priority, and a rating of "5" as the highest priority.

Table 4-3.--Summary of Mean Priority Ratings for Phase II Items.

	Category			Total
	Knowledge	Skill	Behavior	
1. Number of items in Phase II Questionnaire	44	22	61	127
2. Number of items with mean rating = or > sample mean	17	12	32	61
3. Percent of items with mean rating = or > sample mean	38.6	54.5	52.5	48.0

Table 4-4.--Summary, by Category, of Items Selected for Final Profile.

	Category			Total
	Knowledge	Skill	Behavior	
1. Number of items on Phase III Questionnaire	17	14	34	65
2. Number of items selected for final profile	8	6	9	23
3. Percent of items selected	47.1	42.8	26.5	35.4

The data in Tables 4-3 and 4-4 indicate that 18.1 percent of the 44 knowledge competency statements identified in the study survived the final round, along with 25 percent of the 24 skill items and 14.3 percent of the behavior items.

The Phase II responses were then examined to determine the level of individual and sub-group agreement with the 61 items whose means met or exceeded the sample mean in Phase II. A summary of the findings is shown in Table 4-5.

Table 4-5.--Summary of Individual and Sub-Group Agreement With Phase II Items Which Received Mean Priority Rating = or > Sample Mean of 3.8.

	Professors	Principals	Teachers
1. Range in percent of individual agreement with items receiving mean priority ratings = or > sample mean	29.5-98.4	36.1-100.0	36.1-100.0
2. Percentage of sub-group agreement with items receiving mean priority ratings = or > sample mean	83.6	73.6	83.2

The Phase II level of individual and sub-group agreement with the 23 items selected to remain in the profile of a coping first-year teacher was also determined. The results of the Phase III inquiry are summarized in Table 4-6.

Table 4-6.--Summary of Individual and Sub-Group Agreement With Twenty-Three Phase III Items Selected for the Final Profile.

	Professors	Principals	Teachers
1. Range in percent of individual agreement with twenty-three items selected for profile	82.6-100.0	82.6-100.0	87.0-100.0
2. Percentage of sub-group agreement with twenty-three selected items	94.1	95.0	98.4

The widest range of individual agreement with the final outcomes on both the Phase II and Phase III questionnaires was found to exist within the professorial sub-group. The Phase II ranges in agreement for the principal and teacher sub-groups were identical and slightly smaller. The summarization of Phase III data indicated that the teacher sub-group had a slightly smaller internal range in agreement than did the principal or professorial sub-groups which had identical internal ranges.

It is interesting to note that, while the professorial sub-group had the largest internal range of individual agreement on both instruments, it had the largest percentage of sub-group agreement with the Phase II outcomes and the smallest percentage of agreement with the Phase III outcomes. The complete set of data, from which

Tables 4-5 and 4-6 were constructed, can be found in Appendix L.

The consistency of response attained throughout the Phase II and Phase III questionnaires was then measured by dividing the items, on each instrument, into four relatively equal sections. The mean response levels for the four sections were then computed and compared to the sample mean of each respective instrument.

Table 4-7 shows that minimal differences existed between the sectional means and the sample mean of the Phase II questionnaire. The mean response levels were then computed for the categories of knowledge, skill, and behavior and are compared to the sample mean in Table 4-8. These summaries show that the respondents maintained a relatively consistent level of response throughout the Phase II instrument.

A comparison of the Phase III sectional and categorical means with the sample mean was also prepared. The sample mean was computed by summing the number of times each Phase III item was marked for inclusion in the final profile, and dividing by the number items (65). The data, illustrated in Table 4-9, indicate that the difference between the first sectional mean and the sample mean was negligible. The difference between the second, third, and fourth sectional means and the sample mean were found to be somewhat larger. The categorical means were then compared to the Phase III sample mean. As shown in

Table 4-7.--Difference Between Phase II Sectional Means and Sample Mean.

Section	No. of Items	Sectional $\bar{X}$	Sample $\bar{X}$	Difference Between Sectional and Sample $\bar{X}$
One	32	3.8	3.8	.0
Two	32	3.6	3.8	-.2
Three	32	3.9	3.8	+.1
Four	31	3.7	3.8	-.1

Table 4-8.--Difference Between Phase II Categorical Means and Sample Mean.

Category	No. of Items	Categorical $\bar{X}$	Sample $\bar{X}$	Difference Between Categorical and Sample $\bar{X}$
Knowledge	44	3.7	3.8	-.1
Skill	22	3.9	3.8	+.1
Behavior	61	3.8	3.8	.0

Table 4-9.--Difference Between Phase III Sectional Means and Sample Mean.

Section	No. of Items	Sectional $\bar{X}$	Sample $\bar{X}$	Difference Between Sectional $\bar{X}$ and Sample $\bar{X}$
One	16	29.8	30.0	-.12
Two	16	31.1	30.0	+1.1
Three	16	32.6	30.0	+2.6
Four	17	28.8	30.0	-1.2

Table 4.10 the difference between the categorical and the sample means were found to be minimal. The summary statistics in Tables 4-9 and 4-10 indicate that the respondents maintained a relatively consistent level of response throughout the Phase III questionnaire.

Table 4-10.--Differences Between Phase III Categorical Means and Sample Mean.

Category	No. of Items	Categorical $\bar{X}$	Sample $\bar{X}$	Difference Between Categorical $\bar{X}$ and Sample $\bar{X}$
Knowledge	17	30.1	30.0	+.1
Skill	14	30.7	30.0	+.7
Behavior	34	29.7	30.0	-.3

While preparing the design of this study, it was decided that groups of similar statements generated in Phase I would not be condensed into single items for use in Phase II. This was done to allow the sample population to determine which of the similar items should be retained, and to guard against external bias and contamination.

An examination of the responses received in Phase II and Phase III showed that the sample population did eliminate many of the similar items. Eight of the original 127 statements suggested that a knowledge of a variety of teaching techniques was essential to the success of a first-year teacher. In the second phase of the study the respondents rated 5 of these 8 statements high enough to have them included in the third questionnaire. Two of the five remaining items were selected in round three to be included in the final profile of essential teaching competencies. Two of six skill items, pertaining to the assessment of student achievement levels, survived the third round. The original listing under the behavior category contained eight statements related to discipline; seven were eventually removed by the sample population.

On the second and third questionnaires several participants wrote comments which suggested that they were troubled by the fact that the similar statements had not been combined. Aside from these few comments, the data clearly shows the feasibility of allowing the respondents

in a Delphi study to select, from among a group of similar items, those they wish to agree upon.

A final comparison of the Phase III responses was done to analyze the effects of the decision to set the consensus of agreement level at 94.3 percent. In the original design of the study a consensus of opinion would have been attained for a third round item if 95 percent of the respondents marked it for inclusion in the final profile. A consensus level of 94.3 percent was chosen to determine consensus because a perfect 95 percent was not attainable. The results of the Phase III questionnaire (see Appendix J) show that 23 of the 65 items listed, or 35.4 percent, were selected for inclusion in the final profile by at least 94.3 percent of the respondents. The inclusion of one of the 23 items was agreed upon by 100 percent of the respondents, 8 items by 97.1 percent, and 14 items by 94.3 percent. The 14 items marked for inclusion by 94.3 percent of the respondents represented the modal response in Phase III. A natural break in the frequency of response occurred at the next lower percentage level (91.4). These findings support the decision to set the consensus level at 94.3 percent.

Summary

An analysis of the data collected and the findings of this study were presented in Chapter IV. A three phase Delphi procedure was used to collect these data from a

sample population of public school teachers, principals, and university professors of teacher education.

The findings related to the two objectives of the study can be summarized as follows:

Objective I

Twenty-three statements were identified and selected by the respondents to represent the profile of essential teaching competencies of a coping first-year teacher. The statements are summarized in Tables 4-11, 4-12, and 4-13.

Table 4-11.--Summary of Essential Competencies--Knowledge Category.

A coping first-year teacher must have a demonstrable knowledge of:
1. instructional materials
2. instructional methods
3. classroom (environmental) management techniques
4. human learning processes
5. child growth and development
6. school building policy
7. motivational techniques
8. positive disciplinary techniques

Table 4-12.--Summary of Essential Competencies--Behavior Category.

A coping first-year teacher must:
1. set reasonable behavior standards
2. effectively enforce behavior standards
3. maintain personal health and vitality
4. be truthful when communicating with parents
5. be considerate of individual learning rates and styles
6. be self-confident
7. demonstrate courteous and moral behavior
8. demonstrate interest in pupils and their progress
9. be enthusiastic when working with children

Table 4-13.--Summary of Essential Competencies--Skill Category.

A coping first-year teacher must be able to:
1. assess student achievement levels
2. provide for individualized learning
3. organize for instruction
4. be flexible in use of plans
5. relate well with others
6. think of students as individuals

Objective II

The data collected in fulfillment of Objective I show that a modified form of the Delphi Technique can be used to promote cooperative decision making on behalf of college and public school professional personnel.

Additional analyses of the data were done to indicate the number and percentage of the Phase I items which were selected to remain in the knowledge, skill, and behavior categories in Phases II and III; to determine the level and internal range of sub-group agreement with the Phase II and III outcomes; to judge the consistency of the response throughout the Phase II and III questionnaires; to determine the effect of not combining similar statements when preparing the second and third questionnaires; and to gauge the effect of setting an arbitrary level of response to define the consensus of group opinion in Phase III.

Chapter V will present a summary of this study along with a discussion of the conclusions and recommendations for further research.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The objectives of this study were:

1. To determine a profile of the essential teaching competencies of a coping first-year teacher; and
2. To determine if a modified form of the Delphi Technique could be used to promote cooperative decision making on behalf of college and public school professional personnel.

The purpose of this investigation was to determine, through the use of expert judgment, the profile of essential teaching competencies of a coping first-year teacher.

The assumptions upon which this study was based were:

1. That improvements or innovations in teacher education programs are best carried out through the cooperative efforts of teacher preparation institutions and the public schools.
2. That college based professors of teacher education, certified public school teachers, and public school

administrators are knowledgeable in the field of public school education.

3. That essential teaching competencies exist in the areas of knowledge, skill, and behavior.
4. That university professors of teacher education play a significant role in determining the goals and objectives of undergraduate teacher education programs.
5. That the ultimate objective of undergraduate teacher education is to produce effective teachers.
6. That school administrators play a significant role in determining the success of first year teachers.
7. That second year teachers are able to identify the specific competencies which helped determine their success or failure in an initial teaching position.
8. That professors of teacher education, certified public school teachers and public school administrators will be able to define, in writing, essential teaching competencies.
9. That public school administrators, certified public school teachers and professors of teacher education will be able to agree upon the teaching competencies which are most essential to a first year teacher.
10. That the essential teaching competencies to be defined in this study will apply to any public school classroom teaching situation.

The Delphi Technique, an intuitive methodology for organizing, sharing, and determining the consensus of expert opinion, was modified and used as the research tool in this study. The sample population consisted of university professors, public school teachers, and principals who remained anonymous to each other throughout the three phases of the investigation.

In Phase I the respondents were asked to list the knowledge, skill, and behavior competencies which they believe were essential to the success of a first year teacher in any public school classroom. These statements were then collated and returned to the respondents who were asked to rate how essential they believed each competency to be. The Phase III questionnaire contained each competency statement which received a mean priority rating equal to or greater than the sample mean in Phase II. The participants were asked to select the competency statements which they believed should be included in the profile of a coping first-year teacher. The final questionnaire was returned by 58 percent of the original sample population. The data gathered were then tabulated to determine the number and percentage of times each item was marked for final inclusion. Group consensus was attained for a third round item if 94.3 percent of the respondents believed it should be retained as an essential competency in the profile of a coping first-year teacher.

Additional analyses of the data were done to determine the percentage of the original items which were retained in the three categories; to ascertain the level and internal range of sub-group agreement with the Phase II and Phase III outcomes; to judge the consistency of response throughout the questionnaires; to determine the effects of not combining similar statements when preparing the second and third questionnaire; and to gauge the effect of setting an arbitrary level to determine final consensus.

Summary of the Conclusions

Objective I

A profile of the essential teaching competencies of a coping first-year teaching was determined by this investigation. The profile consists of twenty-three statements sub-divided into the areas of critical knowledge, skill, and behavior. Following is a summary of the twenty-three competency statements identified in the areas of knowledge, skill, and behavior, which are listed in Appendix K.

Knowledge.--A coping first-year teacher must have a demonstrable knowledge of:

1. instructional materials
2. instructional methods
3. classroom (environmental) management techniques
4. human learning processes
5. child growth and development

6. school building policy
7. motivational techniques
8. positive disciplinary techniques

Skill.--A coping first-year teacher must:

1. set reasonable behavior standards
2. effectively enforce behavior standards
3. maintain personal health and vitality
4. be truthful when communicating with parents
5. be considerate of individual learning rates and styles
6. be self-confident
7. demonstrate courteous and moral behavior
8. demonstrate interest in pupils and their progress
9. be enthusiastic when working with children

Behavior.--A coping first-year teacher must be able to:

1. assess student achievement levels
2. provide for individual learning
3. organize for instruction
4. be flexible in use of lesson plans
5. relate well with others
6. think of students as individuals

Objective II

The data collected in fulfillment of Objective I show that a modified form of the Delphi Technique can be

used to promote cooperative decision making on behalf of professional college and public school personnel.

Discussion

The competency statements generated throughout this study support the belief that effective teaching results from the interaction of a large number of variables. The findings seem to indicate that, in the informed judgment of professors of teacher education, public school teachers, and principals, a set of competencies does exist, which is essential to the success of a first year teacher in any public school classroom. The data summarized in Table 4-5 shows that the members of the three sub-groups, which represented the sample population, were in close agreement with the twenty-three competencies selected to remain in the final profile of a coping first-year teacher. This finding seems to be especially significant when compared to the fact that no widely accepted criteria for measuring teacher effectiveness have been identified or universally accepted; that the indicators of effective teaching are often considered to be "situationally specific"; and that there seems to be no reliable way to differentiate between effective and ineffective teaching without making a value judgment.

For decades professional educators at the local, state, and national levels have insisted that, to be more effective and relevant, teacher education programs should

be designed through the cooperative efforts of teacher training personnel and practioners in the field. The increasing public demand for accountability at all levels of the educational spectrum reinforces the need for such cooperation.

The success of the Delphi Technique, as modified for this research, demonstrated that important decisions about teacher education can be made by professionals at both the college and public school levels without being unduly influenced by the status or position of the individuals involved. The findings of this study show that there is scant reason for cooperative efforts to be either non-existent or highly superficial in nature.

The sample populations for this study were geographically widespread. This prohibited the use of personal contact with the respondents, and undoubtedly contributed to the lower than preferred percentage of returns.

A response level of less than 100 percent was expected from each of the three sample populations, however the low percentage of participation by the College of Education staff members was disappointing. Of the three groups asked to respond in this study, it was anticipated that the tenured Michigan State University professors would exhibit the highest, rather than the lowest, level of participation.

It is also interesting to note that, of the items chosen to remain in the final profile of a coping first-year

teacher, not one is directly related to gains in student achievement. It is surprising that the results of this study seem to indicate that student academic growth has little relationship to the success of a first year teacher.

It was also anticipated that the three sample population groups would not agree upon the competency statements to be included in the profile of a coping first-year teacher. The data in Tables 4-5 and 4-6, however, clearly demonstrates that there was a high level of agreement between the subgroups.

Recommendations for Further Research

The normative study reported in this dissertation attempted to define a working list of the teaching competencies which are critical to the success of a first year teacher in a public school classroom. A review of the data indicates some recommendations and need for further research related to the study of a coping first-year teacher, and the future implementation of the Delphi Technique. These are:

1. It is recommended that this study be replicated, using different sample populations, and that the data obtained in the additional investigations be compared with the results of this study.
2. Research should be conducted to determine if competencies exist, in addition to those identified, which are critical to first year teacher success

in specific curricular areas or at specific grade levels within the public schools.

3. It is recommended that a study be conducted to establish the relative level of importance of the twenty-three essential teaching competencies herein identified.
4. The competency statements included in the final profile of this study are general in nature. Further research is necessary to identify the specific variables which make up each competency statement.
5. The School of Education should seriously consider implementation of the Delphi Technique in future planning and decision making when off-campus input is deemed desirable.
6. A study should be made to evaluate whether the categorical placement of the competencies is best or correct.
7. This study limited the identification of essential competencies to three categories. It is recommended that a similar Delphi study be implemented without restricting the responses to specific categories. The study participants could be asked to recommend, and eventually to select, the categories under which the competencies should be organized.

8. It is proposed that a study be conducted to determine the competencies which students and their parents believe are critical to teacher effectiveness.
9. An investigation should be conducted to assess the relationships which exist between the findings of this study and the objectives of the College of Education's teacher education program.

These recommendations, if carried out, would greatly increase the value of this work. Until the variables of effective teaching are clearly defined, empirically supported and universally accepted, every effort must be made to clarify the assumptions and conceptual systems which educators currently use to identify the competent teacher.

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APPENDICES

APPENDIX A

SAMPLE POPULATION SUB-GROUP--MICHIGAN STATE UNIVERSITY PROFESSORS OF TEACHER EDUCATION

APPENDIX A

SAMPLE POPULATION SUB-GROUP--MICHIGAN STATE UNIVERSITY PROFESSORS OF TEACHER EDUCATION

Name	Rank	Department
James Anderson	Associate Professor	Elementary Intern Program
Bill Bowman	Assistant Professor	Elementary Education
Bruce Cheney	Associate Professor	Elementary Education
Glenn Cooper	Full Professor	Elementary Education
Samuel Corl	Associate Professor	Curriculum
John Cragen	Assistant Professor	Student Teaching
Hugo David	Assistant Professor	Student Teaching
James Fleming	Assistant Professor	Special Education
William Force	Assistant Professor	Student Teaching
Helen Green	Full Professor	Secondary Vocational

Name	Rank	Department
Robert Hatfield	Associate Professor	Student Teaching
William Hicks	Full Professor	Elementary Education
James Keller	Full Professor	Special Education
Blair Maclean	Full Professor	Secondary Vocational
Gale Mickles	Chairman	Health, Physical Education and Recreation
John Phillips	Associate Professor	Student Teaching
James Snoddy	Chairman	Elementary Education
Vivian Stevenson	Assistant Professor	Special Education
William Walsh	Full Professor	Elementary Education
Yvonne Waskin	Assistant Professor	Elementary Education

Note: Staff ranks are those which were in effect during the 1972-1973 academic year.

APPENDIX B

SAMPLE POPULATION SUB-GROUP--

SECOND YEAR MICHIGAN TEACHERS

APPENDIX B

SAMPLE POPULATION SUB-GROUP--

SECOND YEAR MICHIGAN TEACHERS

Name	School District	Position
William Balser	Genessee	Elementary
William Bell	Walled Lake	Elementary
Sandra Billingslea	Okemos	Secondary Music
David Brancheau	Woodhaven	Vocational Education
P. L. Cummiford	Rockford	Elementary
Opal Davis	Kalamazoo	Biology
Judy Garland	Lake Shore	Secondary Art
Mary Giacchina	Pennfield	Elementary
Susan Glynn	Eaton Rapids	Elementary
Patricia Harris	East Lansing	Elementary
Gordon Jamiason	Port Huron	Secondary Math
C. P. Larocque	Clio	Secondary Science
Deborah Maloney	East Detroit	Elementary
Norma Mattila	Fraser	Secondary Home Economics

Name	School District	Position
Thomas Muksimchak	Dollar Bay	Secondary English
John Seelhoff	Hart	Elementary
Charles Smith	Lainsberg	Secondary Math
Norma Tanner	Lansing	Secondary Math
Geralyn Thelen	Owosso	Elementary
Lois Walker	Ionia	Elementary

APPENDIX C

SAMPLE OF MICHIGAN PUBLIC SCHOOL DISTRICTS FROM WHICH SAMPLE POPULATION OF SCHOOL PRINCIPALS WERE SELECTED

APPENDIX C

SAMPLE OF MICHIGAN PUBLIC SCHOOL DISTRICTS FROM WHICH SAMPLE POPULATION OF SCHOOL PRINCIPALS WERE SELECTED

Metropolitan Districts

Muskegon City School District
Battle Creek School District
Lansing Public Schools
Ann Arbor City School District
Jackson Union School District
Muskegon Heights School District

City Districts

Midland Public Schools
Niles Community Schools
Marquette City School District
Escanaba Area Public Schools
Plymouth Community School District
Monroe City Public Schools

Town Districts

Twin Valley Public School District
Lake Orion Community School District
Sparta Area Schools
East China Township Schools
Vicksberg Community Schools
Huron School District

Urban Fringe Districts

Forest Hills Public Schools
Southfield Public School District
L'Anse Creuse Public Schools
Allen Park Public Schools
Kearsley Community Schools
Willow Run Public Schools

Rural Districts

Caledonia Community Schools
Posen Consolidated School District
Ishpeming Public School District
River Valley School District
Big Bay De Noc School District
Almont Community Schools

APPENDIX D

SAMPLE POPULATION SUB-GROUP--MICHIGAN PUBLIC SCHOOL PRINCIPALS

APPENDIX D

SAMPLE POPULATION SUB-GROUP--MICHIGAN

PUBLIC SCHOOL PRINCIPALS

Name	School	School District
James Agee	Muskegon High	Muskegon Heights
George Babladelis	Big Bag De Noc High	Big Bay De Noc
Garold Brophy	Sparta Jr. High	Sparta
Bill Brown	Salem High	Plymouth
Stanford Burton	Kurtz Elementary	Huron Valley
Karl Buttermiller	Thompson Jr. High	Southfield
Robert Evans	Kettle Elementary	Caledonia
Ruth Gibson	Eddy Elementary	St. Clair
Edwin Kuski	Grammer Elementary	Ishpeming
Michael LaManga	Lake Orion Jr. High	Lake Orion
Mary Nims	Howard Elementary	Niles
Leo Perelman	Monroe High	Monroe
James Quigley	Ford Elementary	Willow Run
Richard Rust	Northwestern High	Battle Creek
Edward Smith	L'Anse Creuse High	Mt. Clemens
Howard Walker	Mitchel Elementary	Ann Arbor

Name	School	School District
Joseph Ward	King Elementary	Muskegon City Schools
Robert Ward	Tobey Elementary	Vicksberg
Gary Wegenke	Hill High	Lansing

APPENDIX E

PHASE I QUESTIONNAIRE

APPENDIX E

PHASE I QUESTIONNAIRE

Dear Fellow Educator;

As a professional in the field of education, you have been selected to participate in a research project which will attempt to identify the essential teaching competencies (crucial knowledge, skills and behaviors) which an individual must possess in order to overcome problems and difficulties and to succeed in his initial K-12 teaching assignment.

This research project will be carried out utilizing a modification of the Delphi Forcasting Method. The procedure will include the use of a series of open-ended questionnaires, mailed to a group of respondents who shall remain anonymous to each other during the data gathering process.

Data generated from your responses to each questionnaire in the series will be compiled and used as the basis for formulating the next questionnaire to be mailed to you and the other participants in the study.

The ultimate goal of the study will be an attempt to discover the essential competencies upon which there is a concensus of opinion among the professional respondents.

It is my hope that this study can be completed in the next six to eight weeks. If you are willing to give of your time and expertise to participate in this project please complete the attached personal data request along with the first questionnaire and return them to me as soon as you can. Your name will be requested on each of the questionnaires for clerical purposes only. Tabulation of the responses for the study will not be done in a manner that will identify individual inputs.

Your efforts over the weeks to come will be greatly appreciated, and I will be more than happy to make the final results of this study available to you upon request.

Sincerely yours,

Warren W. Starr
Doctoral Candidate
College of Education
Michigan State University

ESSENTIAL TEACHING COMPETENCIES

Background Information:

It has only been since the 1920's that empirical studies of teacher education and teacher training have been conducted in large numbers.

Looking carefully at the results of this mountain of research, B. O. Smith of the University of South Florida concludes that there are few, if any, skills of teaching whose superiority can be counted as empirically established.

Correlational studies have given us some rough approximations of efficacious teaching behavior, however such things as enthusiasm and clarity are highly abstract and have yielded little content or specific skills which could be used to upgrade teacher training programs and classroom teaching in the public schools.

The research to define a competent teacher has not been completed in vain. As a result of such studies we know what has been unproductive and which blind alleys we need not enter again.

Stanley Elam, Editor of Phi Delta Kappa Publications, suggests that until the relationships between teacher behavior and pupil learning can be more firmly established through research and improved measurement, judgments will have to be made on a priori grounds. Therefore it seems reasonable to use whatever assumptions we currently have to develop a working list of competencies, continuously acknowledging that our assumptions are tentative and represent only our best professional reasoning to date.

The study which you are about to participate in will be an attempt to identify the generic teaching competencies inclusive in <u>all</u> K-12 teaching situations. Of course, the assumption being made here is that such generic competencies do in fact exist.

Although we will not deal with them in this study, it can also be assumed that specific competencies are required in every teaching situation which may not exist in a similar classroom under different conditions (i.e.; different grade levels, different student characteristics resulting from varying socio-economic and demographic conditions).

Questionnaire I:

Here is your first and probably most difficult task.

List below what you consider to be the <u>most essential</u> teaching competencies which public school teachers must possess in order to be successful in their <u>initial</u> teaching assignment. Essential competencies can be defined as the crucial knowledge, skills, and behaviors a teacher must possess to enable him to perform reasonably well and to succeed in any K-12 classroom with personal and professional satisfaction.

Please feel free to be as complete in your response as you care to be. It will be helpful if you would attempt to list only one competency in each statement.

For Example: Essential Competencies--First Year Public Safety Officer

Knowledge; Officer must know proper arrest procedures.

Skills; Officer must have proven ability to handle automobile in normal driving situations.

Same as above but in high speed situations.

Behavior; Officer must be reasonably courteous in all areas of public contact.

Please remember! The ultimate goal of this study is to discover what YOU personally believe to be essential.

* * *

Response to Questionnaire I: (Please use additional pages if desired.)

APPENDIX F

RESPONSES TO PHASE I QUESTIONNAIRE

APPENDIX F

RESPONSES TO PHASE I QUESTIONNAIRE

Competency Statements Generated by
Phase I Questionnaire

Essential Knowledge*

1. Teacher must know how to evaluate achievement levels of each student.

2. Teacher must know how to diagnose specific learning difficulties of each student.

3. Teacher must have knowledge of methods and materials to provide for student intellectual growth and mastery of basic skills.

4. Teacher has the knowledge of technique for managing the classroom environment to provide for large group, small group, individual and independent study and instruction.

5. Teacher has knowledge of state school law, school district policy and building procedures which provide constraint on his behavior.

6. The teacher has knowledge of effective ways to communicate with parents.

7. Teacher knows of sources of instruction and activities.

8. Teacher has knowledge of various subject areas.

9. Teacher has knowledge of group process.

10. General knowledge of his field of study will knowledge of location and uses of related resources.

11. Teacher must have basic knowledge of English language-linguistics and grammar.

12. Working/conceptual math ability.

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*Competency statements reported here are identical to those received. No editing was undertaken to make them grammatically correct.

13. A knowledge of reading processes involved in learning to read/ decode.

14. A knowledge of general history to date and social structure of major world powers including legal rudiments.

15. A general understanding of the learning process as best identified to date.

16. A general knowledge of human physical, social, intellectual development and emotional growth.

17. A teacher should be well grounded in subject matter areas taught.

18. In depth Background in human growth and development and considerable background in psychology.

19. Thorough understanding of causal factors in social and emotional behaviors.

20. Teacher must possess demonstrated competency in his field.

21. A teacher must know an overall approach for teaching in his major subject.

22. The teacher must know the major content and the sequence for teaching the content to be included in his major subject.

23. Knowledge of the overall structural organization of major subject area.

24. Teacher must have a thorough knowledge of the hardware necessary to use in area of instruction.

25. Teacher must be aware of existing school policies concerning such things as discipline and absenteeism.

26. Teacher must have a knowledge of a variety of teaching techniques.

27. Teacher must know how to establish short and long term course objectives.

28. Teacher must know the general physical development for students being taught.

29. Teacher must know the general psychological development for students being taught.

30. Teacher must know the general development of intelligence for students being taught.

31. Teacher must know the basis for motivation for students being taught.

32. The teacher should know the overall dimensions of teaching and how they relate together to fulfill the responsibility of teachers. This should include educational goals and objectives, pre-assessment of student achievement and learning variables, developing instructional strategies, managing instruction and student evaluation.

33. Extensive knowledge of subject matter specialization including, not only basic pertinent information, but interesting sidelights that can be used to embellish presentations.

34. Knowledge of how the teacher must manipulate his own behavior.

35. Teacher must know how to plan a specific course of learning and method of teaching for each child.

36. A teacher must know about the different textbooks written in his area so that if he is given a choice of a basic text he can easily know which he prefers, or if he isn't given a choice he will know where to begin and how to use and suppliment it.

37. A teacher must know some specific "handle" or techniques of teaching, such as, several ways to teach reading, math, spelling, etc.

38. The best knowledge a teacher can bring into a classroom are her experiences with life and her association with people.

39. A knowledge that children are life and little people.

40. A teacher must know how to do research.

41. A teacher must know district curriculum objectives at the levels he is teaching.

42. Teacher must know control techniques that lead students to self-control, positive self-image, and positive group images.

43. Teacher must know professional organizations which serve him.

44. Must be aware of community expectations concerning moral, religious, dress, recreational, ethics and behavior in general.

Essential Skills

1. The teacher must be able to determine individual achievement by using interviews, standardized and teacher made tests.

2. The teacher will follow accepted procedures to determine why a student is not progressing according to expectations. This will include using supportive services available to him.

3. The teacher will use a variety of learning strategies through which each child grows, corrects his own errors and experiences success rather than failure.

4. To obtain and maintain student attention to purposeful activity in a learning activity.

5. To function within legal procedures, and school policies and procedures.

6. Teacher must have the skill to approach and to involve parents in a coordinated, home and school, effort.

7. Teacher must have skill to provide direction to the student activities necessary to accomplish instructional objectives, which includes a study place, proper rest, nutritional and health care.

8. A teacher must be able to state his objecties clearly.

9. Teacher must be able to organize for instruction.

10. Teacher must have the skill and imagination to make a subject interesting and be able to keep it that way.

11. Ability to keep lesson plans flexible and yet effective.

12. Skill in communication: to get the message across.

13. Teacher must be able to relate well with his students and others.

14. Teacher must like to solve problems.

15. Teacher must have the skill which he can use to tell him where he stands in relation to his students.

16. Teacher must use techniques which tells the students that the teacher is interested in him.

17. Teacher must have technique which tells the student that the class has something to offer everyone.

18. Can write daily, unit and yearly objectives for the group and its members.

19. Be able to diagnose a student's functional level, and prescribe appropriate learning activities for each learner.

20. Be able to set up large group instructional units of major concepts.

21. Must be able to set up learning centers for meeting individual needs and for extending group and individual learning activities.

22. Must be able to effectively use consultant services, interpret accumulative records, interview the parents and observe the child as an individual within the group structure.

Essential Behaviors

1. Must possess realistic personal goals.
2. Must be aware of, join and actively participate to promote the welfare of the profession.
3. Must try to meet goals by both formal and informal professional preparation.
4. Must set classroom behavior standards and be firm, fair and consistent in use of control techniques.
5. Must be able to think through all stressful situations and be able to use good finesse at all times.
6. Must maintain good health and a high level of vitality.
7. A teacher must be friendly and courteous with all parents.
8. A teacher should never mislead parents when discussing their child.
9. A teacher should hold personal conferences with each child's parents.
10. A teacher must be creative.
11. A teacher must be inventive.
12. A teacher must be able to deal with large groups of children.
13. The teacher must be able to handle his subject(s) and area(s) skillfully and not always rely on the teacher's editions.
14. The teacher must be flexible and able to adjust his plans accordingly.
15. A teacher must be reasonably patient as different children learn at different speeds.
16. A teacher must possess a certain amount of "cool" as the children constantly test him to see if he will lose this "cool."
17. A teacher must be self-confident enough to admit when he is wrong or to admit when he does not know an answer.
18. A teacher must be organized enough to be prepared for the children at the opening of school.

19. A teacher should have several lesson options available at all times.

20. A teacher must possess enough insight to know when things are amiss in his classroom.

21. When things are amiss in a classroom the teacher must evaluate the room environment, the children and himself in order to seek solutions to the problem.

22. A teacher must know how to work with parents, how to guide them, how to listen to them and what to do when they are very upset.

23. A person must have a lot of backbone and good old fashioned "guts" to enter teaching.

24. A teacher teaches by example largely so he should uphold common behaviors of courtesy and morality, the latter as exemplied in the areas of honesty and truthfulness.

25. A teacher must demonstrate positive attitudes in relating to students by interacting with them, helping them identify problems and arrive at solutions, and encouraging them to seek help and information.

26. A teacher must demonstrate use of non-verbal communication designed to increase student interaction through head and body movement, facial expressions, and physical presence.

27. The teacher must be friendly and courteous, but distinguishable from the students.

28. Teacher must be fair and consistent in his actions and policies.

29. Teacher must be sensitive to students' physical, emotional, and intellectual handicaps, and make provisions for their problems without sacrificing the trait previously mentioned.

30. The teacher must be friendly with administrators and peers while avoiding, as much as possible, clique affiliations.

31. Teacher must show they are interested in the pupils and their progress.

32. A calm disposition is extremely helpful on many days and especially in a trying situation.

33. Enthusiasm is important if the teacher wants to interest students in what she is doing.

34. The first year teacher must try to develop as meaningful a relationship as possible with children, parents, and staff.

35. The teacher must be able to communicate with people, no matter what level (intellectual or social) they are in.

36. Teacher must exhibit polite and courteous behavior.

37. Teacher's plans must reflect the individual abilities of the students.

38. Teacher must reflect a concern for a child's well being in all aspects of her contact with him.

39. Teacher's behavior should be conducive to good rapport with all persons she comes into contact with.

40. Teacher must be reasonably receptive/sympathetic to human variance.

41. Teacher must manifest personal satisfaction from serving others in the educational process.

42. Teacher must manifest empathy for personal, human needs of learners and work toward solutions.

43. Teacher must manifest wide personal interests in the real world.

44. The teacher must actively maintain recreational activities in areas different from work.

45. Teacher must manifest an expectation set that is reasonable for the time-space-learner context of the moment.

46. Teacher must maintain a realistic relationship on an adult level with other adults.

47. Teacher must be able to maintain a realistic child-adult relationship.

48. The teacher must have realistic viewpoints and participate in large community/political activities throughout training and career work.

49. The teacher administers and interprets evaluative instruments.

50. The teacher will analyze student responses and other information to identify specific learning problems.

51. The teacher will encourage student growth and student capability by arranging to have necessary materials and equipment available.

52. The teacher will organize materials, furniture, equipment, etc., to enhance purposeful student activity.

53. The teacher must study policy and procedural handbooks, communicate questions to peers or supervisors, and to obtain supervisor's approval for innovative activities and introduction of questionable concepts or materials.

54. The teacher telephones, writes or visits with parents as required by student needs.

55. Teacher must behave as children expect a teacher to behave.

56. A teacher should be able to demonstrate that he has a warm personality and a genuine interest in children.

57. Teacher's educational objectives should show adequate planning and preparation at all times.

58. Teacher should maintain an adequate learning environment at all times.

59. Teacher should be friendly to everyone.

60. A teacher must be ambitious.

61. Teacher must exhibit a willingness to accept defeat and grief in teaching because of the few tangible rewards.

APPENDIX G

PHASE II QUESTIONNAIRE

APPENDIX G

PHASE II QUESTIONNAIRE

Dear Educator;

Thank you for responding to the first phase of this study. I had originally planned to complete this series of short opinion questionnaires in the early Fall, but I felt that the ominous task of beginning a new school year would lend too much competition to this research. I trust that you can now find time to respond to this second stage.

As you may remember this research, which is being conducted in cooperation with the Michigan State University Department of Student Teaching, is an attempt to identify the <u>essential</u> knowledge, skills, and behaviors which a first year teacher must possess to be successful in <u>any</u> public school teaching situation. The statements of competency listed on this questionnaire were generated in phase one. During the next two phases of the study an attempt will be made to discover which of these, and any additional statements the majority of the respondents agree with.

Your professional opinions and the participation of each of you are invaluable to the success of this research. I would greatly appreciate it if all of you could now take only fifteen minutes of your valuable time to register your opinions on the enclosed questionnaire.

Thank you for your time and effort.

Cordially,

Warren W. Starr

ESSENTIAL COMPETENCIES PHASE II

Statements received in Phase I of this study are grouped below under the headings of knowledge, skills, and behaviors. To complete this questionnaire carefully read each statement and determine if you would consider it to be absolutely essential to the success of any first year teacher in the public school classroom. Then, in the space provided, register the value of each statement according to the following scale.

1 2 3 4 5

Least Essential — Most Essential

Following each category there is space for your to add additional competency statements which you believe should be considered in this study.

Essential Knowledge

1. ___ Teacher must know how to evaluate achievement levels of each student.

2. ___ Teacher must know how to diagnose specific learning difficulties of each student.

3. ___ Teacher must have knowledge of methods and materials to provide for student intellectual growth and mastery of basic skills.

4. ___ Teacher has the knowledge of technique for managing the classroom environment to provide for large group, small group, individual and independent study and instruction.

5. ___ Teacher has knowledge of state school law, school district policy and building procedures which provide constraint on his behavior.

6. ___ The teacher has knowledge of effective ways to communicate with parents.

7. ___ Teacher knows of sources of instruction and activities.

8. ___ Teacher has knowledge of various subject areas.

9. ___ Teacher has knowledge of group process.

10. ___ General knowledge of his field of study with knowledge of location and uses of related resources.

11. ___ Teacher must have basic knowledge of English language-linguistics and grammar.

12. ___ Working/conceptual math ability.

13. ___ A knowledge of reading processes involved in learning to read/decode.

14. ___ A knowledge of general history to date and social structure of major world powers including legal rudiments.

15. ___ A general understanding of the learning process at best identified to date.

16. ___ A general knowledge of human physical, social, intellectual development and emotional growth.

17. ___ A teacher should be well grounded in subject matter areas taught.

18. ___ In depth background in human growth and development and considerable background in psychology.

19. ___ Thorough understanding of causal factors in social and emotional behaviors.

20. ___ Teacher must possess demonstrated competency in his field.

21. ___ A teacher must know an overall approach for teaching in his major subject.

22. ___ The teacher must know the major content and the sequence for teaching the content to be included in his major subject.

23. ___ Knowledge of the overall structural organization of major subject area.

24. ___ Teacher must have a thorough knowledge of the hardware necessary to use in area of instruction.

25. ___ Teacher must be aware of existing school policies concerning such things as discipline and absenteeism.

26. ___ Teacher must have a knowledge of a variety of teaching techniques.

27. ___ Teacher must know how to establish short and long term course objective.

28. ___ Teacher must know the general physical development for students being taught.

29. ___ Teacher must know the general psychological development for students being taught.

30. ___ Teacher must know the general development of intelligence for students being taught.

31. ___ Teacher must know the basis for motivation for students being taught.

32. ___ The teacher should know the overall dimensions of teaching and how they relate together to fulfill the responsibility of teachers. This should include educational goals and objectives, pre-assessment of student achievement and learning variables, developing instructional strategies, managing instruction and student evaluation.

33. ___ Extensive knowledge of subject matter specialization including, not only basic pertinent information, but interesting side-lights that can be used to embellish presentations.

34. ___ Knowledge of how the teacher must manipulate his own behavior.

35. ___ Teacher must know how to plan a specific course of learning and method of teaching for each child.

36. ___ A teacher must know about the different textbooks written in his area so that if he is given a choice of a basic text he can easily know which he prefers, or if he isn't given a choice he will know where to begin and how to use and suppliment it.

37. ___ A teacher must know some specific "handle" or techniques of teaching, such as, several ways to teach reading, math, spelling, etc.

38. ___ The best knowledge a teacher can bring into a classroom are her experiences with life and her association with people.

39. ___ A knowledge that children are life and little people.

40. ___ A teacher must know how to do research.

41. ___ A teacher must know district curriculum objectives at the levels he is teaching.

42. ___ Teacher must know control techniques that lead students to self-control, positive self-image, and positive group images.

43. ___ Teacher must know professional organizations which serve him.

44. ___ Must be aware of community expectations concerning moral, religious, dress, recreational, ethics and behavior in general.

Additional Knowledge Statements--Please list below.

Essential Skills

1. ___ The teacher must be able to determine individual achievement by using interviews, standardized and teacher made tests.

2. ___ The teacher will follow accepted procedures to determine why a student is not progressing according to expectations. This will include using supportive services available to him.

3. ___ The teacher will use a variety of learning strategies through which each child grows, corrects his own errors and experiences success rather than failure.

4. ___ To obtain and maintain student attention to purposeful activity in a learning activity.

5. ___ To function within legal procedures, and school policies and procedures.

6. ___ Teacher must have the skill to approach and to involve parents in a coordinated, home and school, effort.

7. ___ Teacher must have skill to provide direction to the student activities necessary to accomplish instructional objectives, which includes a study place, proper rest, nutritional and health care.

8. ___ A teacher must be able to state his objectives clearly.

9. ___ Teacher must be able to organize for instruction.

10. ___ Teacher must have the skill and imagination to make a subject interesting and be able to keep it that way.

11. ___ Ability to keep lesson plans flexible and yet effective.

12. ___ Skill in communication: to get the message across.

13. ___ Teacher must be able to relate well with his students and others.

14. ___ Teacher must like to solve problems.

15. ___ Teacher must have the skill which he can use to tell him where he stands in relation to this students.

16. ___ Teacher must use techniques which tells the students that the teacher is interested in him.

17. ___ Teacher must have technique which tells the student that the class has something to offer everyone.

18. ___ Can write daily, unit and yearly objectives for the group and its members.

19. ___ Be able to diagnose a student's functional level, and prescribe appropriate learning activities for each learner.

20. ___ Be able to set up large group instructional units of major concepts.

21. ___ Must be able to set up learning centers for meeting individual needs and for extending group and individual learning activities.

22. ___ Must be able to effectively use consultant services, interpret accumulative records, interview the parents and observe the child as an individual within the group structure.

Additional Skill Statements--Please list below or on reverse side.

Essential Behaviors

1. ___ Must possess realistic personal goals.

2. ___ Must be aware of, join and actively participate to promote the welfare of the profession.

3. ___ Must try to meet goals by both formal and informal professional preparation.

4. ___ Must set classroom behavior standards and be firm, fair and consistent in use of control techniques.

5. ___ Must be able to think through all stressful situations and be able to use good finesse at all times.

6. ___ Must maintain good health and a high level of vitality.

7. ___ A teacher must be friendly and courteous with all parents.

8. ___ A teacher should never mislead parents when discussing their child.

9. ___ A teacher should hold personal conferences with each child's parents.

10. ___ A teacher must be creative.

11. ___ A teacher must be inventive.

12. ___ A teacher must be able to deal with large groups of children.

13. ___ The teacher must be able to handle his subject(s) area(s) skillfully and not always rely on the teacher's editions.

14. ___ The teacher must be flexible and able to adjust his plans accordingly.

15. ___ A teacher must be reasonably patient as different children learn at different speeds.

16. ___ A teacher must possess a certain amount of "cool" as the children constantly test him to see if he will lose this "cool."

17. ___ A teacher must be self-confident enough to admit when he is wrong or to admit when he does nto know an answer.

18. ___ A teacher must be organized enough to be prepared for the children at the opening of school.

19. ___ A teacher should have several lesson options available at all times.

20. ___ A teacher must possess enough insight to know when things are amiss in his classroom.

21. ___ When things are amiss in a classroom the teacher must evaluate the room environment, the children and himself in order to seek solutions to the problem.

22. ___ A teacher must know how to work with parents, how to guide them, how to listen to them and what to do when they are very upset.

23. ___ A person must have a lot of backbone and good old fashioned "guts" to enter teaching.

24. ___ A teacher teaches by example largely, ss he should uphold common behaviors of courtesy and morality, the latter as exemplified in the areas of honesty and truthfulness.

25. ___ A teacher must demonstrate positive attitudes in relating to students by interacting with them, helping them identify problems and arrive at solutions, and encouraging them to seek help and information.

26. ___ A teacher must demonstrate use of non-verbal communication designed to increase student interaction through head and body movement, facial expressions, and physical presence.

27. ___ The teacher must be friendly and courteous, but distinguishable from the students.

28. ___ Teacher must be fair and consistent in his actions and policies.

29. ___ Teacher must be sensitive to students' physical, emotional, and intellectual handicaps, and make provisions for their problems without sacrificing the trait previously mentioned.

30. ___ The teacher must be friendly with administrators and peers while avoiding, as much as possible, clique affiliations.

31. ___ Teacher must show they are interested in the pupils and their progress.

32. ___ A calm disposition is extremely helpful on many days and especially in a trying situation.

33. ___ Enthusiasm is important if the teacher wants to interest students in what she is doing.

34. ___ The first year teacher must try to develop as meaningful a relationship as possible with children, parents, and staff.

35. ___ The teacher must be able to communicate with people, no matter what level (intellectual or social) they are in.

36. ___ Teacher must exhibit polite and courteous behavior.

37. ___ Teacher's plans must reflect the individual abilitues of the students.

38. ___ Teacher must reflect a concern for a child's well being in all aspects of her contact with him.

39. ___ Teacher's behavior should be conducive to good rapport with all persons she comes into contact with.

40. ___ Teacher must be reasonably receptive/sympathetic to human variance.

41. ___ Teacher must manifest personal satisfaction from serving others in the educational process.

42. ___ Teacher must manifest empathy for the personal, human needs of learners and work toward solutions.

43. ___ Teacher must manifest wide personal interests in the real world.

44. ___ The teacher must actively maintain recreational activities in areas different from work.

45. ___ Teacher must manifest an expectation set that is reasonable for the time-space-learner context of the moment.

46. ___ Teacher must maintain a realistic relationship on an adult level with other adults.

47. ___ Teacher must be able to maintain a realistic child-adult relationship.

48. ___ The teacher must have realistic viewpoints and participate in large community/political activities throughout training and career work.

49. ___ The teacher administers and interprets evaluative instruments.

50. ___ The teacher will analyze student responses and other information to identify specific learning problems.

51. ___ The teacher will encourage student growth and student capability by arranging to have necessary materials and equipment available.

52. ___ The teacher will organize materials, furniture, equipment, etc., to enhance purposeful student activity.

53. ___ The teacher must study policy and procedural handbooks, communicate questions to peers or supervisors, and to obtain supervisor's approval for innovative activities and introduction of questionable concepts or materials.

54. ___ The teacher telephones, writes or visits with parents as required by student needs.

55. ___ Teacher must behave as children expect a teacher to behave.

56. ___ A teacher should be able to demonstrate that he has a warm personality and a genuine interest in children.

57. ___ Teacher's educational objectives should show adequate planning and preparation at all times.

58. ___ Teacher should maintain an adequate learning environment at all times.

59. ___ Teacher should be friendly to everyone.

60. ___ A teacher must be ambitious.

61. ___ Teacher must exhibit a willingness to accept defeat and grief in teaching because of the few tangible rewards.

Additional Behavioral Statements--Please list below or on reverse side.

THANK YOU FOR YOUR EFFORT!

APPENDIX H

SUMMATION--PHASE II DATA

Table H-1.--Summation--Phase II Data.

Category Item	Frequency of Priority Ratings					Total Frequency/Item	$\bar{X}$ Rating Per Item*
	1	2	3	4	5		
Knowledge							
1	0	1	5	17	14	N = 37	4.9
2	0	1	11	11	14		4.0
3	0	1	5	9	22		4.4
4	0	1	3	12	21		4.4
5	3	12	10	5	7		3.0
6	1	4	12	11	9		3.6
7	1	4	8	16	8		3.7
8	1	7	14	10	5		3.3
9	1	1	17	14	4		3.5
10	0	0	7	17	13		4.2
11	1	4	10	14	8		3.7
12	1	6	19	9	3		3.3
13	0	0	9	11	17		4.2
14	7	8	19	3	0		2.5
15	0	0	8	17	12		4.1
16	0	1	8	16	12		4.1
17	0	2	3	18	14		4.2
18	0	2	14	19	2		3.6
19	0	2	13	15	7		3.7
20	2	3	7	8	17		4.0
21	4	2	8	8	15		3.8
22	1	1	14	14	7		3.6
23	1	1	12	16	7		3.7
24	0	9	17	9	2		3.1
25	3	2	9	9	14		3.8
26	0	4	8	12	15		4.1
27	2	2	12	12	9		3.6
28	2	6	9	12	8		3.5
29	2	3	10	14	8		3.6
30	4	5	14	9	5		3.2
31	0	1	6	16	14		4.0
32	0	2	8	15	7		4.1
33	3	2	13	11	8		3.5
34	1	3	9	10	14		3.9
35	1	1	12	16	7		3.7
36	6	6	16	8	1		2.8
37	1	3	7	20	6		3.7
38	5	6	9	12	5		3.2
39	6	5	7	9	10		3.3

Table H-1.--Continued.

Category Item	Frequency of Priority Ratings 1	2	3	4	5	Total Frequency/Item	$\bar{X}$ Rating Per Item*
40	8	7	13	9	0		2.6
41	1	9	10	12	5		3.3
42	0	0	3	15	19		4.4
43	4	13	14	6	0		2.6
44	1	4	16	12	4		3.4
Skills							
1	0	1	6	20	10	N = 37	4.1
2	0	0	8	19	10		4.1
3	0	0	3	12	22		4.5
4	2	2	6	16	11		3.3
5	1	5	15	11	5		3.4
6	1	3	12	16	5		3.6
7	4	3	13	13	4		3.3
8	0	2	8	12	15		4.1
99	0	2	2	18	15		4.2
10	1	1	4	13	18		4.3
11	1	0	3	20	15		4.3
12	0	1	0	13	23		4.6
13	0	0	1	6	30		4.8
14	2	4	5	18	8		3.7
15	4	1	10	16	6		3.5
16	0	0	4	13	20		4.4
17	2	4	7	10	14		3.8
18	1	5	15	8	8		3.5
19	0	1	6	12	19		4.4
20	2	6	14	12	4		3.3
21	0	5	10	17	5		3.6
22	2	3	11	16	5		3.6
Behavior							
1	2	2	10	13	9	N = 36	3.7
2	2	10	16	6	2		2.9
3	0	3	15	13	5		3.6
4	0	2	0	11	23		4.5
5	2	3	11	13	17		3.6
6	0	2	7	11	16		4.1
7	0	2	10	14	10		3.9
8	0	1	4	11	20		4.4
9	2	3	8	16	7		3.6
10	2	3	9	16	6		3.6
11	1	6	6	16	7		3.6

Table H-1.--Continued.

Category Item	Frequency of Priority Ratings					Total Frequency/Item	$\bar{X}$ Rating Per Item*
	1	2	3	4	5		
12	2	6	7	11	10		3.6
13	1	2	14	10	14		3.9
14	0	1	5	14	21		4.4
15	0	0	3	9	24		4.6
16	1	3	13	11	8		3.6
17	0	1	3	8	24		4.5
18	0	2	7	7	20		4.3
19	2	7	11	8	9		3.5
20	1	1	4	13	17		4.2
21	0	1	5	9	21		4.4
22	1	4	10	11	10		3.7
23	5	7	15	5	4		2.9
24	0	1	11	9	15		4.1
25	0	1	4	10	21		4.4
26	3	3	9	14	7		3.5
27	2	3	5	11	14		3.9
28	0	1	3	6	26		4.6
29	1	1	5	12	17		4.2
30	3	4	12	14	3		3.3
31	0	0	4	8	24		4.6
32	1	2	7	10	16		4.1
33	0	0	3	13	20		4.5
34	2	1	6	11	16		4.6
35	1	1	7	14	13		4.0
36	0	1	8	14	13		4.1
37	0	0	6	17	13		4.2
38	1	1	5	13	16		4.2
39	3	3	10	11	9		3.6
40	0	0	5	14	17		4.3
41	0	7	6	12	11		3.8
42	2	4	8	12	10		3.7
43	4	5	15	10	1		2.9
44	3	11	13	8	0	N = 36	2.7
45	5	2	15	10	3		3.3
46	3	6	10	13	3		3.2
47	0	2	4	17	12		4.1
48	7	10	15	2	1		2.4
49	2	4	12	14	3		3.1
50	2	2	9	15	7		3.7
51	2	0	8	13	12		3.9
52	0	2	13	13	7		3.7
53	2	10	10	9	4		3.1

Table H-1.--Continued.

Category Item	Frequency of Priority Ratings					F Total Frequency/Item	$\bar{X}$ Rating Per Item*
	1	2	3	4	5		
54	0	1	8	13	13		4.1
55	11	7	5	10	2		2.6
56	1	0	3	9	22		4.5
57	1	2	4	15	13		3.8
58	1	1	6	11	16		4.1
59	5	6	15	5	4		2.9
60	4	5	10	8	8		3.3
61	8	12	8	5	3		2.6

APPENDIX I

PHASE III QUESTIONNAIRE

APPENDIX I

PHASE III QUESTIONNAIRE

Dear Participants,

Your reactions to the second phase of my study were fantastically comprehensive and well done. Thank you for your effort.

Attached is the third and final phase of your participation in this study. In the first phase you were asked to identify and list those statements which each of you believed were essential teaching competencies. For the second phase you were requested to prioritize those statements.

The competency statements that were given the highest priority ratings are listed on the following pages. For this final phase you are asked to choose the statements which you think should be retained in the profile of essential teaching competencies.

Please keep in mind that this study is seeking to identify those essential competencies which a first year teacher must possess to be successful in any public classroom teaching situation.

Before you complete this questionnaire, please accept my sincere gratitude for the time you have expended on my behalf. Your help is deeply appreciated and I thank you all for being of service to a fellow colleague. Success be with you.

Cordially,
Warren W. Starr

ESSENTIAL COMPETENCIES PHASE III

The competency statements which received the highest priority ratings in Phase II are listed below. Please read each statement to determine if it should be retained as a competency which you think would be essential to the success of a first year teacher in any public school classroom.

If you believe a statement should remain in the profile please mark an "X" in the blank preceeding it. If you feel a statement should not be included in the profile please indicate so by marking a dash "-" in the space provided.

EXAMPLE: A, ___ A teacher must be a miracle worker. (INCLUDE)

B, _-_ A teacher must be a competent artist. (EXCLUDE)

Please feel free to comment on any statement or to change any wording to make the statement more acceptable to your way of thinking.

ESSENTIAL KNOWLEDGE

1, ___ A teacher must know how to ascertain the achievement levels of each student.

2, ___ The teacher must know how to diagnose specific learning difficulties of each student.

3, ___ The teacher must have a knowledge of methods and materials to provide for student intellectual growth and mastery of basic skills.

4, ___ Teacher has the knowledge of technique for managing the classroom environment to provide for large group, small group, individual and independent study and instruction.

5, ___ A teacher must have a general knowledge of his field of study with a knowledge of location and uses of related resources.

6, ___ The teacher must have a basic knowledge of reading processes involved in learning to read/decode.

7, ___ The teacher should have a general understanding of the learning processes as best identified to date.

8, ___ A general knowledge of human physical, social, intellectual development and emotional growth.

9, ___ A teacher must be well grounded in the subject matter areas taught.

10, ___ The teacher must possess demonstrated competency in his field.

11, ___ A teacher must know an over-all approach for teaching in his major subject.

12, ___ The teacher must be aware of existing school policies concerning such things as discipline and absenteeism.

13, ___ A teacher must have a knowledge of a variety of teaching techniques.

14, ___ The teacher must know basic motivational techniques for the students being taught.

15, ___ The teacher should know the over-all dimensions of teaching and how they relate to fulfill the responsibility of teaching. This should include educational goals and objectives, pre-assessment of student achievement and learning variables, developing instructional strategies, managing instructional and student evaluation.

16, ___ Knowledge of how the teacher must manipulate his own behavior.

17, ___ The teacher must know control techniques that lead students to self-control, postive self-image, and positive group image.

ESSENTIAL SKILLS

1, ___ The teacher must be able to determine individual achievement by using interviews, standardized and teacher made tests.

2, ___ The teacher will follow accepted procedures to determine why a student is not progressing according to expectations. This will include using supportive services available to him.

3, ___ The teacher will use a variety of learning strategies to enable each child to grow, to correct his own errors and to experience success rather than failure.

4, ___ A teacher must be able to state his objectives clearly.

5, ___ A teacher must be able to organize for instruction.

6, ___ The teacher must have the skill and imagination to make a subject interesting and be able ti keep it that way.

7, ___ A teacher must possess the ability to keep lesson plans flexible and yet effective.

8, ___ A demonstrated skill in communicating ___ ability to get the message across.

9, ___ The teacher must be able to relate well with his students and others.

10, ___ The teacher must use techniques which tells the students that the class has something to offer everyone.

11, ___ The teacher must use techniques which tells the students that the teacher is interested in them.

12, ___ A teacher must be able to diagnose a students functional level, and prescribe appropriate learning activities for each learner.

13, ___ A teacher must be able to use consultant services to support his work with children who have identifiable learning problems.

14, ___ A teacher must be able to observe the child as an individual within the group structure.

ESSENTIAL BEHAVIORS

1, ___ The teacher must set classroom behavior standards and be firm, fair, and consistent in the use of control techniques.

2, ___ A teacher must maintain good health and a high level of vitality.

3, ___ A teacher must be tactful with all parents.

4, ___ The teacher should never mislead parents when discussing their child.

5, ___ The teacher should be able to develop his subject area skillfully without always blindly following the teacher's editions.

6, ___ A teacher must be extremely patient with the fact that different children learn at different speeds.

7, ___ The teacher must be self-confident enough to admit when he is wrong or to admit when he does not know an answer.

8, ___ A teacher must be organized enough to be prepared for children on the opening day of school.

9, ___ A teacher must possess enough insight to know when things are amiss in his classroom.

10, ___ When things are amiss in a classroom the teacher must evaluate the room environment, the children, the children's environment and himself in order to seek solutions to the problem.

11, ___ A teacher teaches by example so he should uphold common behaviors of courtesy and morality, the latter is exemplified in the areas of honesty and truthfulness.

12, ___ A teacher must demonstrate positive attitudes in relating to students by interacting with them, helping them identify problems and arrive at solutions, and encouraging them to seek help and information.

13, ___ The teacher must be friendly and courteous, but distinguishable in behavior from the students.

14, ___ The teacher must be fair and consistent in his actions and policies.

15, ___ A teacher must be sensitive to the student's physical, emotional, and intellectual handicaps, and make provisions for their problems without sacrificing his fairness or consistency.

16, ___ The teacher must demonstrate that he is interested in the pupils and in their progress.

17, ___ A teacher must demonstrate a calm and collected disposition, even in the most trying situations.

18, ___ Enthusiasm is important if the teacher wants to interest students in what he is doing.

19, ___ The first year teacher must try to develop as cooperative a relationship as possible with children, parents, and staff.

20, ___ The teacher must sincerely attempt to communicate with people, no matter what their social or intellectual level.

21, ___ The teacher must exhibit polite and courteous behavior.

22, ___ The teacher's plans must reflect the individual abilities of the students as soon as he can distinguish them.

23, ___ The teacher must reflect a concern for a child's well being in all aspects of her contact with him.

24, ___ The teacher must be reasonably receptive to human variance.

25, ___ Teacher must manifest personal satisfaction from serving others in the educational process.

26, ___ The teacher must be able to maintain a realistic child-adult relationship.

27, ___ The teacher will encourage student growth and capability by arranging to have necessary materials and equipment available.

28, ___ The teacher must maintain an adequate learning environment at all times.

29, ___ The teacher must telephone, write or visit with parents as required by student needs.

30, ___ A teacher should be able to demonstrate that he has a genuine interest in children.

31, ___ The teacher must reflect a warm and loving personality.

32, ___ The teacher's educational objectives should show adequate planning and preparation at all times.

33, ___ Teachers must act and react naturally in the classroom and never attempt to play a role which is not themselves.

34, ___ A teacher must be industrious.

Thank you again for your help!

APPENDIX J

ACTUAL NUMBER AND PERCENTAGE OF TIMES PHASE III ITEMS WERE SELECTED TO REMAIN IN THE FINAL PROFILE

APPENDIX J

ACTUAL NUMBER AND PERCENTAGE OF TIMES
PHASE III ITEMS WERE SELECTED TO
REMAIN IN THE FINAL PROFILE

N = 35

Percent of Response for Inclusion	Actual Number of Responses for Inclusion	
		Essential Knowledge
88.6	31	1. A teacher must know how to ascertain the achievement levels of each student.
51.4	18	2. The teacher must know how to diagnose specific learning difficulties of each student.
94.3	33	3. The teacher must have a knowledge of methods and materials to provide for student intellectual growth and mastery of basic skills.
94.3	33	4. Teacher has the knowledge of technique for managing the classroom environment to provide for large group, small group, individual and independent study and instruction.
91.4	32	5. A teacher must have a general knowledge of his field of study with a knowledge of location and uses of related resources.
88.6	31	6. The teacher must have a basic knowledge of reading processes involved in learning to read/decode.

Percent of Response for Inclusion	Actual Number of Responses for Inclusion		
94.3	33	7.	The teacher should have a general understanding of the learning process as best identified to date.
94.3	33	8.	A general knowledge of human physical, social, intellectual development and emotional growth.
80.0	28	9.	A teacher must be well grounded in the subject matter areas taught.
71.4	25	10.	The teacher must possess demonstrated competency in his field.
85.7	30	11.	A teacher must know an over-all approach for teaching in his major subject.
94.3	33	12.	The teacher must be aware of existing school policies concerning such things as discipline and absenteeism.
94.3	33	13.	A teacher must have a knowledge of a variety of teaching techniques.
94.3	33	14.	The teacher must know basic motivational techniques for the students being taught.
71.4	25	15.	The teacher should know the over-all dimensions of teaching and how they relate to fulfill the responsibility of teaching. This should include educational goals and objectives, pre-assessment of student achievement and learning variables, developing instructional strategies, managing instructional and student evaluation.
74.3	26	16.	Knowledge of how the teacher must manipulate his own behavior.
97.1	34	17.	The teacher must know control techniques that lead students to self-control, positive self-image, and positive group image.

Percent of Response for Inclusion	Actual Number of Responses for Inclusion	
		Essential Skills
97.1	34	1. The teacher must be able to determine individual achievement by using interviews, standardized and teacher made tests.
82.9	29	2. The teacher will follow accepted procedures to determine why a student is not progressing according to expectations. This will include using supportive services available to him.
97.1	34	3. The teacher will use a variety of learning strategies to enable each child to grow, to correct his own errors and to experience success rather than failure.
80.0	28	4. A teacher must be able to state his objectives clearly.
97.1	34	5. A teacher must be able to organize for instruction.
80.0	28	6. The teacher must have the skill and imagination to make a subject interesting and be able to keep it that way.
94.3	33	7. A teacher must possess the ability to keep lesson plans flexible and yet effective.
91.4	32	8. A demonstrated skill in communicating--ability to get the message across.
97.1	34	9. The teacher must be able to relate well with his students and others.
74.3	26	10. The teacher must use techniques which tells the students that the class has something to offer everyone.
88.6	31	11. The teacher must use techniques which tells the students that the teacher is interested in them.
71.4	25	12. A teacher must be able to diagnose a students' functional level, and prescribe appropriate learning activities for each learner.

Percent of Response for Inclusion	Actual Number of Responses for Inclusion		
82.9	29	13.	A teacher must be able to use consultant services to support his work with children who have identifiable learning problems.
94.3	33	14.	A teacher must be able to observe the child as an individual within the group structure.
			Essential Behaviors
97.1	34	1.	The teacher must set classroom behavior standards and be firm, fair, and consistent in the use of control techniques.
94.3	33	2.	A teacher must maintain good health and a high level of vitality.
74.3	26	3.	A teacher must be tactful with all parents.
94.3	33	4.	The teacher should never mislead parents when discussing their child.
80.0	28	5.	The teacher should be able to develop his subject area skillfully without always blindly following the teacher's editions.
97.1	34	6.	A teacher must be extremely patient with the fact that different children learn at different speeds.
94.3	33	7.	The teacher must be self-confident enough to admit when he is wrong or to admit when he does not know an answer.
88.6	31	8.	A teacher must be organized enough to be prepared for children on the opening day of school.
88.6	31	9.	A teacher must possess enough insight to know when things are amiss in his classroom.

Percent of Response for Inclusion	Actual Number of Responses for Inclusion		
85.7	30	10.	When things are amiss in a classroom the teacher must evaluate the room environment, the children, the children's environment and himself in order to seek solutions to the problem.
100.0	35	11.	A teacher teaches by example so he should uphold common behaviors of courtesy and morality, the latter as examplified in the areas of honesty and truthfulness.
88.6	31	12.	A teacher must demonstrate positive attitudes in relating to students by interacting with them, helping them identify problems and arrive at solutions, and encouraging them to seek help and information.
77.1	27	13.	The teacher must be friendly and courteous, but distinguishable in behavior from the students.
94.3	33	14.	The teacher must be fair and consistent in his actions and policies.
88.6	31	15.	A teacher must be sensitive to the student's physical, emotional, and intellectual handicaps, and make provisions for their problems without sacrificing his fairness or consistency.
94.3	33	16.	The teacher must demonstrate that he is interested in the pupils and in their progress.
51.4	18	17.	A teacher must demonstrate a clam and collected disposition, even in the most trying situations.
97.1	34	18.	Enthusiasm is important if the teacher wants to interest students in what he is doing.
88.6	31	19.	The first year teacher must try to develop as cooperative a relationship as possible with children, parents, and staff.
88.6	31	20.	The teacher must sincerely attempt to communicate with people, no matter what their social or intellectual level.

Percent of Response for Inclusion	Actual Number of Responses for Inclusion	
88.6	31	21. The teacher must exhibit polite and courteous behavior.
85.7	30	22. The teacher's plans must reflect the individual abilities of the students as soon as he can distinguish them.
91.4	32	23. The teacher must reflect a concern for a child's well being in all aspects of her contact with him.
88.6	31	24. The teacher must be reasonably receptive to human variance.
65.7	23	25. Teacher must manifest personal satisfaction from serving others in the educational process.
85.7	30	26. The teacher must be able to maintain a realistic child-adult relationship.
88.6	31	27. The teacher will encourage student growth and capability by arranging to have necessary materials and equipment available.
77.1	27	28. The teacher must maintain an adequate learning environment at all times.
85.7	30	29. The teacher must telephone, write or visit with parents as required by student needs.
88.6	31	30. A teacher should be able to demonstrate that he has a genuine interest in children.
62.9	22	31. The teacher must reflect a warm and loving personality.
74.3	26	32. The teacher's educational objectives should show adequate planning and preparation at all times.
60.0	21	33. Teachers must act and react naturally in the classroom and never attempt to play a role which is not themselves.
82.9	29	34. A teacher must be industrious.

Thank you again for your help!

APPENDIX K

THE PROFILE OF ESSENTIAL TEACHING COMPETENCIES OF A COPING FIRST-YEAR TEACHER

APPENDIX K

THE PROFILE OF ESSENTIAL TEACHING COMPETENCIES
OF A COPING FIRST-YEAR TEACHER*

Knowledge

94.3	1.	The teacher must have a knowledge of methods and materials to provide for student intellectual growth and mastery of basic skills.
94.3	2.	Teacher must be able to demonstrate his techniques for managing the classroom environment to provide for large group, small group, individual and independent study and instruction.
94.3	3.	The teacher should have a general understanding of the learning processes as best identified to date.
94.3	4.	A general knowledge of human physical, social, intellectual development and emotional growth.
94.3	5.	A teacher must know existing school policies concerning such things as discipline and absenteeism.
94.3	6.	A teacher must know of a variety of teaching techniques.
94.3	7.	The teacher must know basic motivational techniques for the students being taught.
97.1	8.	The teacher must know control techniques that lead students to self-control, positive self-image and positive group image.

*Competency statements reported here are identical to those received. No editing was undertaken to make them grammatically correct.

Skills

97.1	1.	The teacher must be able to assess the level of individual achievement by using interviews, standardized and teacher made tests.
97.1	2.	The teacher can use a variety of learning strategies to enable each child to grow, to correct his own errors and to experience success rather than failure.
97.1	3.	A teacher must be able to organize for instruction.
94.3	4.	A teacher must be able to keep lesson plans flexible and yet effective.
97.1	5.	The teacher must be able to relate well with his students and others.
94.3	6.	A teacher must be constantly aware of the child as an individual apart from the group.

Behavior

97.1	1.	The teacher sets classroom behavior standards and is firm, fair, humane, and consistent in the use of control techniques.
94.3	2.	A teacher must maintain good health and exhibit a high level of vitality.
94.3	3.	The teacher should never mislead parents when discussing their child.
97.1	4.	A teacher must be extremely patient with the fact that different children learn at different speeds, and in different ways.
94.3	5.	The teacher must be self-confident enough to admit when he is wrong or to admit when he does not know an answer.
100.0	6.	A teacher teaches by example so he should exhibit the common behaviors of courtesy and morality (the later as exemplified in the areas of honesty and truthfulness).
94.3	7.	The teacher must attempt to be fair and consistent in his actions and policies.

94.3 8. The teacher must demonstrate that he has a genuine interest in the pupils and in their progress.

97.1 9. The teacher must demonstrate enthusiasm when working with children.

APPENDIX L

PERCENTAGE OF INDIVIDUAL AGREEMENT WITH PHASE II AND PHASE III OUTCOMES

Table L-1.--Percentage of Individual Agreement With Phase II and Phase III Outcomes.

Principal	No. Items Rated Above Sample $\bar{X}$ N = 61	Percentage of Agreement	Principal	No. Items Marked For Inclusion N = 23	Percentage of Agreement
#1	39	63.9	1	21	91.3
2	55	90.2	2	23	100
3	27	44.3	3	22	95.7
4	57	93.4	4	22	95.7
5	59	96.7	5	20	87.0
6	47	77.1	6	23	100
7	60	98.4	7	23	100
8	24	39.3	8	20	87.0
9	61	100	9	23	100
10	61	100	10	23	100
11	32	52.5	11	22	95.7
12	22	36.1	12	19	82.6
13	40	65.6	13	23	100
Averages for Sub-Group		73.6			95
Teacher			**Teacher**		
#1	55	90.2	1	23	100
2	41	67.2	2	23	100
3	61	100	3	23	100
4	52	85.3	4	22	95.7
5	48	78.7	5	23	100
6	56	91.8	6	23	100
7	60	98.4	7	23	100
8	22	36.1	8	20	87.0
9	56	91.8	9	23	100
10	55	90.2	10	23	100
11	46	75.4	11	23	100
Averages for Sub-Group		83.2			98.4
Professor			**Professor**		
#1	46	75.4	1	23	100
2	45	73.8	2	21	91.3
3	55	90.2	3	23	100
4	60	98.4	4	23	100
5	59	96.7	5	22	95.7
6	60	98.4	6	19	82.6
7	18	29.5	7	20	87.0
8	59	96.7	8	20	87.0
9	47	77.1	9	23	100
10	47	77.1	10	21	91.3

Table L-1.--Continued

Professor	No. Items Rated Above Sample $\bar{X}$ N = 61	Percentage of Agreement	Professor	No. Items Marked For Inclusion N = 23	Percentage of Agreement
11	59	96.7	11	23	100
12	55	90.2	12*		
13	53	86.9	13*		
Averages for Sub-Group		83.6			94.1

*Non-respondents Phase III.