A STUDY OF THE RELATIONSHIPS BETWEEN THE CRITICAL BEHAVIOR OF TEACHERS, RESULTS OF THE NATIONAL TEACHERS EXAMINATION AND SELECTED SOCIO-ECONOMIC DATA

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This is to certify that the

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ABSTRACT

A STUDY OF THE RELATIONSHIPS BETWEEN THE CRITICAL BEHAVIOR OF TEACHERS, RESULTS OF THE NATIONAL TEACHERS EXAMINATION AND SELECTED SOCIO-ECONOMIC DATA

By

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Purpose of the Study:

The purpose of this study was to discover the relationships that exist between success in student teaching, certain socio-economic factors and the results of the National Teachers Examination.

Population and Testing Instruments:

The population involved in this study consisted of one hundred ten education majors who had completed their professional education courses and their student teaching at Kansas State Teachers College in Emporia, Kansas.

The study sample in this investigation completed the Kansas State Teachers College Personal Data Sheet, the National Teachers Examination and were observed during their student teaching experience by three independent observers who completed the Ryans Classroom Observation Record for each member of the sample.

Statement of Hypotheses:

This study was designed to test the following hypotheses:

Hypothesis I-A	There is a significant relationship between age and the results of the National Teacher Examination.
Hypothesis I-B	There is a significant relationship between age and the degree of success or failure in student teaching.
Hypothesis II-A	There is a significant relationship between the sex of the student teacher and the results of the National Teacher Examination.
Hypothesis II-B	There is a significant relationship between the sex of the student teacher and the degree of success or failure in student teaching.
Hypothesis III-A	There is a significant relationship between the size of high school from which the student teacher graduated and the results of the National Teacher Examination.
Hypothesis III-B	There is a significant relationship between the size of high school from which the student teacher graduated and the degree of success or failure in student teaching.
Hypothesis IV-A	There is a significant relationship between the high school grade point average of the student teacher and the results of the National Teacher Examination.
Hypothesis IV-B	There is a significant relationship between the high school grade point average of the student teacher and the degree of success or failure in student teaching.
Hypothesis V-A	There is a significant relationship between the educational level of the father of the student teacher and the results of the National Teacher Examination.
Hypothesis V-B	There is a significant relationship between the educational level of the father of the student teacher and the degree of success or failure in student teaching.
Hypothesis VI-A	There is a significant relationship between the educational level of the mother of the student teacher and the results of the National Teacher Examination.
Hypothesis VI-B	There is a significant relationship between the educational level of the mother of the student teacher and the degree of success or failure in student teaching.

Hypothesis VII-A	There is a significant relationship between the college grade point average of the student teacher and the results of the National Teacher Examination.
Hypothesis VII-B	There is a significant relationship between the college grade point average of the student teacher and the degree of success or failure in student teaching.
Hypothesis VIII-A	There is a significant relationship between the grade point average on professional teaching courses of the student teacher and the results of the National Teacher Examination.
Hypothesis VIII-B	There is a significant relationship between the grade point average on professional teaching courses of the student teacher and the degree of success or failure in student teaching.
Hypothesis IX-A	There is a significant relationship between the family income level of the student teacher and the results of the National Teacher Examination.
Hypothesis IX-B	There is a significant relationship between the family income level of the student teacher and degree of success or failure in student teaching.

Findings:

Two of the areas that this study encompassed have been identified as being statistically significant. They were as follows:

1. There is a significant relationship between the high school grade point average and the results of the National Teachers Examination.
2. There is a significant relationship between the grade point average achieved in the professional education courses by the student teacher and the results of the National Teachers Examination.

All other hypotheses were rejected on the basis of the data from the study.

Implications for further study included the testing of a wide range of variables including personality and behavioral factors. Additional implications included the development and testing of instruments to accumulate and evaluate data regarding the degree of success or failure in student teaching.

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Edward L Frickey

A DISSERTATION

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To Dr. George Myers, Dr. Clyde Campbell, Dr. C. C. Collier, and Dr. John Wagner who gave me the encouragement to succeed and the guidance to pursue.

To my wife, my family and my friends who never lost faith nor failed to help.

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CHAPTER I

THE PROBLEM

STATEMENT OF PURPOSE

This study seeks to discover the relationship, if any, between student teacher behavior and certain socio-economic factors and results of the National Teachers Examination. A study of these relationships will provide more objective data for the design of teacher preparation programs. This data will enable college and university staff to better screen, counsel, and place education majors prior to their student teaching experience. Faculty members, charged with the supervision of student teachers, are searching for more effective ways to identify strengths and weaknesses of the potential teacher. If the data identified in this study prove to have predictive significance, then it will be possible to counsel prospective teaching candidates so that their experiences will enhance their professional competencies. The study can also serve as a model for future research with the clinical experience used in the training of other professionals.

The current emphasis on accountability, in all fields of endeavor, requires more valid predictors of success. The need for teacher preparation programs to maintain a high degree of accountability has never been greater. Public education must take a more sensitive attitude toward the attitudes represented by the tax-payer. It must also communicate

this sensitivity to laymen. It is within this motivational framework that this study was developed.

BACKGROUND FOR THE STUDY

The student teacher experience, like most other clinical experiences, has been perceived to be a most important part of the professional sequence. This experience differs greatly between institutions and yet the basic objectives remain much the same. The objectives of student teaching have been identified by Errington as:

1. Provision of an opportunity to develop and refine teaching skills.
2. Provision of an opportunity to learn the role expectations of teaching.
3. Provision of an experience to cushion against the "reality-shock" of teaching.
4. Provision of an opportunity to relate theory to practice.
5. Privision of an opportunity to eliminate the unfit.
6. Provision of an opportunity to identify those factors that lead to the development of excellence in student teaching.[1]

Each of these objectives will be considered and receive some emphasis in this study.

There is an increasing emphasis in teacher education upon the laboratory experience as a vital, perhaps the single most important part of teacher education. Student teachers, neophyte teachers, and experienced teachers endorse this judgment. The National Council of Independent Schools in 1969 indicated that "practice teaching is the part of professional training most widely and vigorously approved by the independent

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[1]Garth Errington, "An Analysis of Certain Factors Leading To The Predictability of Success and Failure in Elementary Student Teachers," Unpublished Ed.D. Dissertation, Michigan State University, 1970, p. 7.

school teachers who have experienced it, even those who reported that they received little value from the rest of their training at schools of education."[2]

This study will view student teaching as an opportunity for students to examine their attitudes, expectations and practices with regard to the many roles of the teacher. This functional description of student teaching has relevance to most of the clinical experiences presently available for student teachers.

In summary, the student teaching experience will be defined in this study as an opportunity to develop the life skills in the teaching role. These skills as described by the American Society of Curriculum Development follow:

1. Inquiry
2. Relating to Others
3. Relating to Change
4. Using Science and Technology
5. Mental and Physical Health
6. Communications Art
7. Making Vocational Decisions
8. Using Time[3]

These life skills, practiced in the classroom by the student teacher, will lead to the teaching behavior considered to be essential for the successful teacher.

Students need and deserve proper guidance, placement, and evaluation of their endeavors. "The right of institutions and the profession to

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[2]National Council of Independent Schools. Teacher Education Survey (1969), pp. 31.

[3]Louis J. Rubin, "New Skills for a New Day," American Society of Curriculum Development Yearbook, Life Skills In School and Society (1969), pp. 14-16.

identify, select, or retain persons for teacher preparation and for its practice is seldom questioned today."[4] In 1967 the dimensions of student teaching was used in a different way when the Joint Committee on State Responsibility for Student Teaching developed the rationale for their existence.

1. Student teaching is almost universally accepted as the most important segment of teacher preparation.
2. Student teaching is the one part of professional preparation which is shared by the public schools and institutions of higher education without clear-cut lines of responsibility.
3. The new concept of student teaching is much more dynamic and inclusive than the old one. It includes not only practice, but diagnosis, analysis, and synthesis in new, complex clinical situations.[5]

It is still evident that guidance, placement and evaluation in teacher preparation programs have been based largely on untested assumptions.

The lack of quality guidance and placement of student teachers coupled with a desire for personal, individualized programs has led to an anomaly. The need for assistance in predicting potential success or failure in teacher preparation programs is very much in demand today. The "mass production" of teachers is no longer acceptable. The trend toward zero population growth will dictate that only quality teachers will be placed in the profession. Factors such as academic ability, socio-economic status, and training need careful research if they are to

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[4]Margaret Lindsey, Editor, "Report of the Task Force on New Horizons in Teacher Education," New Horizons for the Teaching Profession, Washington, D. C. (1961), p. 162.

[5]Joint Committee on State Responsibility for Student Teaching, A New Order in Student Teaching, National Commission on Teacher Education and Professional Standards, National Education Association (1967), p. 1.

serve as evidence for the selection, guidance, placement, and evaluation of the student teacher.

Educators, legislators and laymen are asking for and even demanding a higher degree of accountability. This involvement will invariably lead to greater need for improved practice in the guidance, placement, and evaluation of the student teacher. Many recommendations have been made that teacher education institutions accept more responsibility in all phases of their preparation programs. As early as 1946, several committees of the Council on Education considered the following:

1. Each institution engaged in teacher education has therefore the responsibility of selecting from among students who wish to prepare for the profession only those who show reasonable promise of developing into satisfactory teachers.
2. Selective judgements need to be guided by a clear and broad concept of the characteristics of good teacher with due allowance for individual differences and the advantages of variety by a careful consideration of what college is capable of contributing to the development of such characteristics, and by a wide spread of information regarding each candidate, his history, his present status and his promise.
3. In judging a candidate, various factors need to be taken into account, including physical and mental health, vitality, intelligence, academic accomplishments, other abilities, breadth and character of interest, human qualities....
4. The selective process should be a continuous one, with a wide range of reliable evidence available when the candidate is first admitted to teacher education. However, cases should be reconsidered periodically in the light of accumulated facts and insights.[6]

These considerations have been the concerns of many groups since then. The National Commission on Teacher Education and Professional Standards during their national meeting at Bowling Green (1958), at Kansas (1959) and again at San Diego (1960) expressed similar concerns.

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[6]American Council on Education, The Improvement of Teacher Education, Washington, D. C. (1946), p. 74.

Dr. James B. Conant in The Education of American Teachers directs the following remarks to existing teacher training programs:

> There are certain basic procedures and policies in all types of institutions that could be improved and it is in this area that colleges and universities should be attempting to raise their standards. For example, I should like to register my dissatisfaction with the way I have seen subjects studied in both colleges that train few teachers and those exclusively concerned with Teacher training.[7]

Another outspoken critic of the education of teachers is James D. Koerner. A succinct statement which typifies the Koerner point of view towards teacher education can be excerpted from his book:

> Professional education suffers very greatly from a lack of congruence between the actual performance of its graduates and the training programs through which they are put. There is what can only be called an appalling lack of evidence to support the wisdom of this or that kind of professional training for teachers.[8]

G. K. Holdenfield and T. M. Stinnett emphasized this need in 1963 when they wrote:

> There must be early identification of prospective teachers, selective recruitment and admission standards, and effective guidance policies--this means weeding out the incompetent as well as attracting the most able.[9]

We find these concerns voiced by Arthur Combs who suggests that:

> Some of the improvements we seek in education can be brought about by spending more money, by building better schools, by introducing new courses of study, new standards, or new equipment. But the really important changes will only come about as teachers change. Institutions are made up of people, and it is the behavior of

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[7]James B. Conant, The Education of American Teachers (New York: McGraw-Hill Book Company, Inc., 1960), pp. 77-78.

[8]James D. Koerner, The Miseducation of American Teachers (Boston: Houghton-Mifflin Company, 1963), p. 16.

[9]G. K. Holdenfield and T. M. Stinnett, The Education of Teachers, Conflict and Consensus (Englewood Cliffs, N. J.: Prentice-Hall Inc., 1963), p. 43.

> teachers in classrooms that will finally determine whether or not our schools meet or fail to meet the challenges of our time. It is at the source of supply--in our teacher education programs--that review and innovation are most critically called for if we are to bring about improvements we need in education.[10]

This brings us then to the present desire to develop more and better techniques for the guidance, placement and evaluation of student teachers. This study will be devoted to that purpose.

PROCEDURES USED IN THE STUDY

This study will compare some available, factual, socio-economic data about a given population with their observed behavior during the student teacher experience. One hundred ten college seniors, engaged in their student teaching experience at Kansas State Teacher College, Emporia, Kansas, will constitute the population. These students were enrolled in student teaching during 1966-67 or 1967-68.

Members of the study sample in this investigation were given the National Teacher Examination,[11] and the independent observers used the Ryans Classroom Observation Record[12] to evaluate the performance of the student teachers in the sample. The results were then compared to the following socio-economic data:

1. Age.
2. Sex.
3. Size of High School
4. Grade Point Average--High School.

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[10]Arthur W. Combs, The Professional Education of Teachers (Boston: Allyn and Bacon, Inc., 1965).

[11]National Teacher Examination (Princeton, New Jersey: Educational Testing Service, 1964).

[12]David G. Ryans, Ryans Classroom Observation Record, Teachers Characteristic Study, The American Council on Education, 1955, p. 18.

5. Education of Father.
6. Education of Mother.
7. Grade Point Average--College.
8. Grade Point Average--Professional Teaching Courses.
9. Family Income Level.

The significance of these comparisons were then analyzed and reported.

The methods of analysis used in this study are described in Chapter III.

STATEMENT OF HYPOTHESES

Hypothesis I-A	There is a significant relationship between age and the results of the National Teacher Examination.
Hypothesis I-B	There is a significant relationship between age and the degree of success or failure in student teaching.
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Hypothesis V-B — There is a significant relationship between the educational level of the father of the student teacher and the degree of success or failure in student teaching.

Hypothesis VI-A — There is a significant relationship between the educational level of the mother of the student teacher and the results of the National Teacher Examination.

Hypothesis VI-B — There is a significant relationship between the educational level of the mother of the student teacher and the degree of success or failure in student teaching.

Hypothesis VII-A — There is a significant relationship between the college grade point average of the student teacher and the results of the National Teacher Examination.

Hypothesis VII-B — There is a significant relationship between the college grade point average of the student teacher and the degree of success or failure in student teaching.

Hypothesis VIII-A — There is a significant relationship between the grade point average on professional teaching courses of the student teacher and the results of the National Teacher Examination.

Hypothesis VIII-B — There is a significant relationship between the grade point average on professional teaching courses of the student teacher and the degree of success or failure in student teaching.

Hypothesis IX-A — There is a significant relationship between the family income level of the student teacher and the results of the National Teacher Examination.

Hypothesis IX-B — There is a significant relationship between the family income level of the student teacher and degree of success or failure in student teaching.

ORGANIZATION OF THE STUDY

This study will be organized and reported in five chapters. The chapter headings and a brief description are listed below.

Chapter one includes a description of the need for the study with a statement of the purpose, the hypotheses, and an overview of the thesis.

Chapter two focuses on a review of related studies. A more general review is given to studies not directly related to this problem. A third section in this chapter discusses the implications of previous studies.

Chapter three contains a detailed description of the operational phase of the research. Descriptions of the sample, the instrumentation used, the statistical hypothesis, the experimental design and analysis, are presented.

Findings from the research are identified and analyzed in Chapter four. This is achieved by re-stating the hypotheses and analyzing each one in the light of the data.

Chapter five is devoted to a summary of the findings and a discussion of the conclusions growing out of these outcomes. This chapter closes with some considerations of the implications of these findings for further research and action.

CHAPTER II

REVIEW OF LITERATURE

This chapter represents a recent review of the literature relating to the process of predicting the degree of success attained by the student teachers involved in the research sample. This review includes several studies using socio-economic factors as the basis for the prediction. Related studies are also cited in this review in order to develop background information. The implications of these studies are varied and demand a clear analysis by the reader.

Several investigators have identified the difficulty of predicting effective teacher behavior. Medley,[1] Cheong,[2] and others describe the importance of searching for those desirable characteristics that seem to produce good teaching-learning relationships. Arnold Henjum further indicates the importance of defining, measuring, and evaluating teacher traits and teacher effectiveness:

> Burgeoning school enrollments and demands for an ever-increasing level of educational achievement have precipitated an unprecedented need for effective teachers in American secondary schools. However we are still uncertain how to select, educate, and assign the constant flow of personnel entering the teaching profession. One reason

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[1]Donald M. Medley, "The Language of Teacher Behavior: Communicating the Results of Structured Observations to Teachers," Journal of Teacher Education, Vol. 22 (1971), 157-165.

[2]George S. C. Cheong, "Can Successful Teaching Be Empirically Determined?" Journal of Teacher Education, Vol. 20 (1970), 185-188.

> for this uncertainty is the difficulty in defining, measuring, and evaluating teacher traits and teacher effectiveness. This difficulty has limited the establishment of objective predictive criteria in an area considered to be of paramount importance for providing quality education for the pupils of our schools.[3]

Student teachers, prior to their first professional course, are identified and recruited in a number of different ways. These range from an expressed desire by the individual to some very complex programs designed to eliminate the incompetent. Some schools use very formal inflexible entrance level criteria followed by individualized courses. Other schools utilize informal and flexible criteria followed by intensive, formal experiences. Criteria for predicting student teaching success and ultimate success in the classroom, tend to complicate the process. The very nature of man tends to negate predictability. The individual, according to Combs: ". . . behaves as he thinks and feels. This can be described as meaning, and meaning affects how a person behaves."[4] This concept provides for predictability in the student teacher process.

GENERAL FACTORS AS PREDICTORS OF SUCCESS IN STUDENT TEACHING

The role of clinical experience in teacher education has changed considerably over the years. Based on European antecedents, as is much of our educational heritage, learning to teach by working with a teacher

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[3]Arnold Henjum, "A Study of the Significance of Student Teachers' Personality Traits," Journal of Teacher Education, Vol. 20 (1969), pp. 143-147.

[4]Arthur Combs, "Seeing Is Behaving," Educational Leadership, Vol. 16 (1958), pp. 21-26.

in an apprenticeship capacity was quite generally accepted in the early days of this country. This concept was known as practice teaching. Practice teaching was based on the premise that the prospective teacher was taught theory in the college classroom, then introduced to the school classroom to try the theory in practice.

This philosophy persisted until the middle of the twentieth century when the practice teaching concept gave way to that of student teaching. The Joint Committee on State Responsibility for Student Teaching describes this changing concept:

> The new student teaching should be a creative, fulfilling experience and at the same time provide for critical analysis in order to make student teacher and their supervisors scholars of teaching. It should not be confined to a block of time at the end of the senior college year. It should range from simple observation, to brief exposures with learners, to the development of skills in discrete elements of the teaching act . . . to analysis of personal skills and insights, all the way to the teaching of regular classes under the analytical eye of a professional mentor.[5]

This changing concept concerning the classroom assignment of the prospective teacher implies several things. In order for the student teaching experiences to be successful, much more information and knowledge about the student teacher was needed. The student teaching assignment involved proper placement of the individual so his interests and abilities could best be served.

Several studies by H. C. Hunt[6] in 1935 indicated that the personal qualities of the employee led to 90 percent of the job separations.

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[5]Joint Committee on State Responsibility for Student Teaching, A New Order in Student Teaching (Washington, D. C.: National Education Association, 1967), p. 2.

[6]H. C. Hunt, "Why People Lose Their Jobs or Aren't Promoted," Personnel Journal, Vol. 14 (1935-1936), p. 230.

George Watson,[7] in summarizing some educational implications reported by Roethlisberger and Dickson in 1939, concluded that improved interpersonal relations would result in marked improvement in the teacher-learner relationship. A. S. Barr,[8] reporting on research done in predicting teacher efficiency, found that personal characteristics affected almost all criteria for teacher efficiency.

Judson Shaplin, writing in the Harvard Educational Review, alluded to the student teacher and his need for effective guidance when he reported:

> It is inefficient and unrealistic to expect the student teacher to achieve his own synthesis of the many disciplines contributing to teaching, and to analyze and improve his own teaching behavior.[9]

Shaplin further supports the need for additional information available to the college or university supervisor as he attempts to guide the student teacher.

The newer concepts of student teaching which stressed increased visibility and accountability, promoted full-time student teacher experiences. In 1968, Johnson[10] reported that 65 percent of the institutions having elementary student teaching programs offer full-time teaching experience,

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[7]George Watson, "The Surprising Discovery of Morale," Progressive Education, XIX (1942), p. 39.

[8]A. S. Barr, "The Measurement and Prediction of Teaching Efficiency: A Summary of Investigations," Journal of Experimental Education, XVI (1948), pp. 203-283.

[9]Judson T. Shaplin, "Practice in Teaching," Harvard Educational Review, 31 (1961), p. 46.

[10]James A. Johnson, A National Survey of Student Teaching Programs (Washington, D. C.: U. S. Office of Education, research report, 1968).

while 60 percent of the secondary programs were reported as having full-time assignments available. These data, based on a nationwide study, also call attention to another need for effective prediction of student teacher behavior. One can easily see the dilemma of the public schools when several colleges place students in the same district. The several patterns of student teaching vary greatly with resultant frustration and confusion in the minds of those public school personnel who try to cope with a variety of programs from the colleges.

The shift toward a more analytical approach to student teaching has resulted in a corresponding change in objectives. Student teaching is no longer a "black box" approach to teaching. The newer objectives are more sophisticated and rely on the various characteristics of the student teacher. Hilliard and Durrance listed the purposes of student teachers in this way:

> The student teaching experience, if it occurs in a clinical climate, does provide valuable means for guiding the student teacher's growth through a carefully planned sequence of activities which enable him to--
>
> Clarify his understandings of the purposes, development, programs and administrative organization of the American system of public education.
>
> Broaden his understanding of curricular practices.
>
> Deepen his understandings of the principles of human growth and development and the learning process.
>
> Become sensitive to the social patterns of a school community and discover through firsthand experiences ways of improving curriculum for pupils by effective use of community resources.
>
> Develop wholesome professional attitudes toward members of the teaching profession.
>
> Identify his strengths and weaknesses in the wide spectrum of competencies associated with effective teaching.

Become increasingly resourceful and creative in planning, developing and evaluating effective learning experiences for and with the pupils.[11]

Another statement of objectives that points a need toward more and better guidance, placement and evaluation is that used by Indiana University. This statement is illustrative of purposes listed by many teacher preparation institutions in their handbooks prepared for cooperating teachers. The Indiana University statement suggests that the student teaching experience should attempt:

1. To provide for professional development of young teachers through integration of theory and practice.

2. To help students achieve a realistic understanding of the individual child as a developing human being.

3. To help the student see more clearly the relationship of the school to the community it serves.

4. To promote the growth of student teachers by encouraging them to read and to become familiar with professional books, magazines, resource units, audio visual aids, and other materials related to their teaching experiences.

5. To guide the beginning teacher in understanding the total organization of the modern school.

6. To develop certain important abilities involved in planning teacher-learning activities; in organizing materials of instruction to provide for the individual needs, interests, and capacities of youth; in handling routine elements of classroom management; and in evaluating pupil growth.

7. To continue the development of essential personality characteristics of teaching such as breadth of interest, curiosity, dependability, and cooperation.[12]

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[11]Pauline Hilliard and Charles L. Durrance, "Guiding Student Teaching Experiences," Association for Student Teaching, Bulletin No. 1 (1968), p. 2.

[12]A Guide for Student Teaching." (Bloomington: Indiana University School of Education, 1964).

One could conclude that the most important outcome for student teachers is the development of one's self image. Self-confidence and a sense of security should be developed to the point where the student teacher can enter his first classroom with a feeling of competence. This self-confidence is the result of the many and varied activities in which the student teacher participates in the well-planned and well-developed program.

Another significant outcome of student teaching is the development of an awareness to the concepts of good teaching. This should enhance the desire to develop good teaching habits. The attainment of this objective is further complicated by the fact that good teaching has been difficult to define and yet we can all recognize it when we are exposed by the good teacher. Current research concerning the nature of teaching and the efforts being made to analyze teaching behavior are beginning to shed much light on the teaching role.

In 1954, A. B. Carlile reported the results of a study relating academic and intellectual achievements to success in student teaching. Carlile's study led him to conclude:

> The frequencies of high grades in student teaching reveals a tendency toward high intelligence scores as measured by the Detroit Intelligence Test. The co-efficients of correlation are positive; statistically significant but low with its forecasting efficiency at four percent. The correlation with scores of the Hinman-Nelson Test of Mental Ability is too low to be significant. Whereas, relationships between grades in student teaching and the measures of scholastic achievement as represented by the college grade-point a fairly high positive relationship with a forecasting efficiency of twelve percent.[13]

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[13]A. B. Carlile, "Predicting Performance in the Teaching Profession," Journal of Teacher Education, XLVII (1954), pp. 642-652.

Brothers supported this research,

> A correlation of .42 exists between the grade-point in the major field and success in student teaching, and a correlation of .30 exists between grade-point and all university work prior to student teaching and student teaching effectiveness.[14]

Several other research studies support similar theses. Perry[15] found that the cumulative college grade-point average was the single most significant item out of forty-three predictor variables. Additional support comes from Lycia Martin.[16] Ms. Martin studied 124 college seniors at Columbia University. She found that the single, most predictable criterion of success in student teaching was the college grade-point average.

Other researchers have found dissimilar results. Darrow was very definitive when she said:

> Point hour ratio for all college work, up until student teaching, shows a correlation of .28 with the criterion of student teacher effectiveness as determined by the supervising teacher's rating. Thus, student teaching effectiveness cannot be predicted for single cases with any degree of accuracy when based only on college grade-point.[17]

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[14]W. L. Brothers, "The Relationship of Certain Factors of Effectiveness in Student Teaching in the Secondary Schools" (Unpublished Ph.D. Dissertation, Indiana University, 1950),

[15]James O. Perry, "A Study of a Selective Set of Criteria for Determining Success in Secondary Student Teachers at Texas Southern University" (Unpublished Ed.D. Dissertation, University of Texas, 1962).

[16]Lycia Martin, "The Prediction of Success for Students in Teacher Education" (Unpublished Ph.D. Dissertation, Teachers College, Columbia University, 1966).

[17]Harriet D. Darrow, "The Relationships of Certain Factors to Performance of Elementary Student Teachers with Contrasting Success Records in Student Teaching" (Unpublished Ph.D. Dissertation, Indiana University, 1961).

Shaw[18] examined the effectiveness of certain criteria as predictors of success in student teaching. He concluded that high school percentile rank was not statistically significant as a predictor. C. L. Major[19] supported this position in his research with two hundred secondary teaching majors in ten different fields. He also discovered that academic ratings above a certain critical point have no significance when used as criteria for predicting the success of student teachers.

Several other studies are available that tend to support this point of view in the use of achievement and academic ability as predictors of success in student teaching. Magee,[20] Lins,[21] Bach,[22] and Dove,[23] all found moderate significance as they related college grade-point averages to success in student teaching. These researchers did not agree on the same level of significance but each conducted their research in just a little different way. In order to clarify and organize the conclusions,

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[18]Jack Shaw, "Functions of Interview in Determining Fitness for Teacher Training" Journal of Educational Research, VL (May, 1952), pp. 667-681.

[19]C. L. Major, "The Influence of Academic Standing Upon Success in Student Teaching," Educational Research Bulletin, XXXII (March, 1953), p. 66.

[20]Robert M. Magee, "Admission-Retention in Teacher Education," Journal of Teacher Education, XII (March, 1961), p. 85.

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

[22]Jacob O. Bach, "Practice Teaching Success in Relation to Other Measures of Teaching Ability," Journal of Experimental Education, XXI (September, 1952), pp. 57-78.

[23]Pearlie C. Dove, "A Study of the Relationships of Certain Selected Criteria and Success in Student Teaching Program at Clark College, Atlanta, Georgia" (Unpublished Ph.D. Dissertation, University of Colorado, 1959).

it may be said that college grade-point averages that are not extreme can be used as predictors of success in student teaching. This general agreement does not exist for most other factors related to achievement and academic ability.

SOCIO-ECONOMIC FACTORS AS PREDICTORS OF SUCCESS IN STUDENT TEACHING

Little attention has been given by researchers to the relationship of socio-economic factors to success in student teaching. This has occurred for a number of reasons. The most prominent seems to be the inability of the investigator to acquire the information. The few studies that have been conducted in this area seem to indicate some relevance between these factors and the success of the student teacher.

Some of the earliest work in this area was done by Florence Greenhoe.[24] She used a national sample of nine thousand public school teachers. Among other things, her sample showed that 38 percent of the public school teachers' fathers were farmers, 26 percent were engaged in small business, 18 percent were day-laborers and only 4 percent were professional men. She found no significant relationship between occupation of the father and success of the student teacher. Two other studies, prior to Greenhoe, attempted to correlate first year teacher's success as determined by their supervisors rating and several other variables. Ullman[25] presented these data:

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[24]Florence Greenhoe, Community Contacts and Participation of Teachers (Washington, D.C.: American Council on Public Affairs, 1941), pp. 1-54.

[25]R. R. Ulman, "The Prediction of Teaching Success," Educational Administration and Supervision, XVI (November, 1930), pp. 608-612.

FACTORS CORRELATED	CORRELATION
Intelligence and Supervisors rating	.15
Socio-economic status and supervisors rating	.19
Academic scholastic average and supervisors rating	.30
Professional education scholastic average and supervisors rating	.30[26]

Earlier, Madsen,[27] in trying to develop a set of criteria for the prediction of successful teaching behavior, found that out of 223, thirty-one teachers were observed as failures. Thirty of these thirty-one were among the lowest 10 percent in intelligence and achievement as measured by tests given on their entrance to teacher education institutions.

Then, ten years after the research by Greenhoe, Sims,[28] working with 726 public school teachers who were attending summer school at the University of Alabama, asked these teachers to classify themselves into "various social classes and socio-economic strata that they best represent." It is interesting to note that none of the individuals in the study classified themselves in the "upper-upper class" nor in the "lower-class". Two percent indicated "upper class," thirteen percent affiliated themselves in the "upper-lower" (working class) and eighty-five percent divided themselves between the middle and upper-middle classes in a ratio of two to one. The classification was not significant when related to success in teaching.

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[26]Ibid., p. 609.

[27]I. N. Madsen, "The Predicting of Teacher Success," Educational Administration and Supervision, XIII (January, 1928), pp. 39-47.

[28]Verner M. Sims, "The Social Class Affiliations of a Group of Public School Teachers," School Review, CIX (September, 1951), pp. 331-338.

John Best, in a study conducted in 1948, questioned 261 college seniors who were planning to teach. He found that:

1. Both men and women who had chosen teaching as a career tend to come from the cities rather than the farm.

2. Both men and women came from homes that are above average in economic status, as judged by the occupations of their fathers.

3. A large percentage of the group has had a rather close association with teaching and the life of a teacher. Seventy-eight percent state that close friends or relatives have been or are teachers.[29]

Only item 3 was significant when related to success in student teaching.

Warner, Havighurst and Loeb[30] found that in some parts of the country, teachers are from upper-middle social origins. In other parts of the country teachers from the lower-middle class predominated the sample. The class origin of the teacher was not significant when related to success.

In a later study, Havighurst and Neugarten[31] indicated that it is important to know something of the social origin of any teacher in being able to understand, guide and evaluate his performance in the classroom. This however does not seem to affect success as a teacher. They added that educators must look at the socio-economic origin in relationship to the personality of the teacher. The authors further state that

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[29]John Wesley Best, "A Study of Certain Selected Factors Underlying the Choice of Teaching," Journal of Experimental Education, XVII (March, 1948), pp. 201-259.

[30]Lloyd W. Warner, Robert J. Havighurst, and Martin B. Loeb, Who Shall Be Educated (New York: Harper Bros., 1944), pp. 1-232.

[31]Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, Inc., 1957), pp. 355-375.

"although a given teacher's social origin may have an important influence upon his or her personality, it is virtually impossible to cite generalized effects that would be true for all teachers of any single origin."[32]

THE NATIONAL TEACHER EXAMINATION AS A PREDICTOR OF SUCCESS IN STUDENT TEACHING

A great number of research studies have been conducted using the National Teacher examination. These studies have ranged from simple reports like "The 1948 National Teacher Examination" done by David G. Ryans[33] to very complex research studies done by the Education Testing Service.[34] Few studies have been generated to study the relationships of proficiency tests in predicting success of student teachers.

One such study led to a conference on proficiency testing for teachers. This conference was sponsored by the American Council on Education in 1959. The conference report indicates that:

> Proficiency examinations are least useful in the most important part of teacher training: the skills and insights that a future teacher needs as a teacher. They come only from a combination of theory and practice and cannot be tested by paper and pencil. . . . Many educators favoring proficiency examinations may wish to use them only for certification or for improvement of college programs. But there are other forces in society that will use them to support pet schemes of their own. . . . It would not be the first time in the history of American education that the road to bad policy was paved with good intention.[35]

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[32] Ibid., p. 364.

[33] David G. Ryans, "The 1948 National Teachers Examination," Journal of Experimental Education, XVII (March, 1948), pp. 169-178.

[34] Educational Testing Service, Princeton, New Jersey, 1964.

[35] Newsletter of the Council on Cooperation in Teacher Education. American Council on Education (July, 1959).

In favor of such examinations were certain other arguments:

> Present arrangements make it hard for able college graduates to enter teaching in the public schools without going through programs ill-adapted to their age or ability. The use of examinations in lieu of courses would go a long way toward opening a new source of supply of teachers. Furthermore, the existence of this route to teaching would meet the wide-spread criticism of "certification requirements that keep Einsteins out of teaching." It might even show that such a group of frustrated teachers is more imaginary than real. . . . The use of proficiency examinations by colleges and universities will lead to more flexible programs and to the encouragement of student initiative and self-directed work. Program for teachers especially need this development.[36]

John S. Diekhoff, in the Saturday Review, described the situation in the following manner.

> While there are valid arguments against external examinations as predictors of competence, they are not so persuasive as are those in favor of the intelligent use of such examinations. Educational decisions rely on a body of evidence that is the sum of many independent parts. External teacher examinations, intelligently interpreted, provide a perspective otherwise unavailable.[37]

More specific research has been conducted relating the results of the National Teacher Examination with success of the student teacher. Lewis[38] found that there was a positive correlation of .40 between successful teaching, as rated by the supervising teacher, and knowledge related to teaching (National Teacher Examination). Spalding[39] and Booze[40]

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[36]Ibid.

[37]John S. Diekhoff, "The Last Encyclopedists," Saturday Review (September, 1962), pp. 62-63.

[38]J. N. Lewis, "Test for Teachers," Journal of Teacher Education, XX (March, 1970), pp. 103-107.

[39]H. G. Spalding, "National Teachers Examination: Why You Should Take The Test," Scholastic Magazine, Vol. 67 (January, 1956), pp. 16-23.

[40]H. R. Booze, "External Examinations as Predictors of Competence," Journal of Teacher Education, XVI (June, 1965), pp. 210-214.

tended to support these conclusions, but with a much lower correlation of significance. Shea,[41] on the other hand, found that scores on the National Teacher Examinations were not related to the success of student teachers as determined by their grade in student teaching. Morsh and Wilder[42] found that correlations between intelligence test scores and teacher effectiveness measures were both positive, negative and nonsignificant without any apparent pattern. From these studies it seems unlikely that there is a strong, consistent association between general measures of cognitive ability and achievement on one hand and ratings of teacher success by the supervising teacher.

The literature on the predictability of National Teacher Examination scores, on the basis of scholastic aptitude and grades in high school and college, is limited. Pitcher[43] found a mean correlation of .57 between the National Teacher Examination scores and cumulative, four year grade-point averages in eleven teacher training institutions. The correlations had a range across institutions from .38 to .74. Another study by Walberg[44]

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[41]Joan A. Shea, "The Predictive Value of Various Combinations of Standardized Tests and Subtests for Prognosis of Teaching Efficiency," Educational Research Monograph, Washington, D.C., Catholic University of America, Vol. 6 (1955), pp. 19-21.

[42]John E. Morsh and Eleanor W. Wilder, "Identifying the Effective Instructor: A Review of the Quantitative Studies, 1900-1952," Research Bulletin (1954), No AFPTRC-TR-54-44, USAT Personal Training and Research Center.

[43]Barbara Pitcher, "The Relationship of Academic Success in Teacher Preparatory Curricula to Scores on the National Teachers Examinations," Educational Testing Service, Princeton, New Jersey (1962).

[44]Herbert J. Walberg, "Scholastic Aptitude, the National Teacher Examinations, and Teaching Success," The Journal of Educational Research, Vol. 61 (November, 1967), pp. 129-131.

indicated that grades in high school and college as well as scores on nationally standardized tests of scholastic aptitude and professional knowledge (National Teacher Examination) do not predict rated success in teaching, but that scholastic aptitude and achievement do predict scores on the National Teacher Examination. Many of these researchers are quite pessimistic regarding the possibility of establishing reliable criteria by which to judge teaching effectiveness.

Don Hamachek,[45] reporting on "Characteristics of Good Teachers and Implications for Teacher Education" is much more optimistic. In his review of the recent literature regarding the effectiveness of teachers he found that the good teacher tended to reflect some of the following behaviors:

1. Willingness to be flexible, to be direct or indirect as the situation demands.
2. Ability to perceive the world from the students point of view.
3. Ability to "personalize" their teaching.
4. Willingness to experiment, to try out new things.
5. Skill in asking questions (as opposed to seeing self as a kind of answering service).
6. Knowledge of subject matter and related areas.
7. Provision of well-established examination procedures.
8. Provision of definite study helps.
9. Reflection of an appreciative attitude (evidenced by nods, comments, smiles, etc.).
10. Use of conversational manner in teaching--informal, easy style.

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[45]Don Hamachek, "Characteristics of Good Teacher and Implications for Teacher Education," Phi Delta Kappan, 50 (February, 1969), pp. 341-345.

In conclusion, Dr. Hamachek cites four implications for teacher education:

1. If it is true that good teachers are good because they view their teaching as primarily a human process involving human relationships and human meanings, then this may imply that we should spend at least as much time exposing and sensitizing teacher candidates to the subtle complexities of personality structure as we do to introducing them to the structure of knowledge itself. . . .

2. If it is true that good teachers have a positive view of themselves and others, then this may suggest that we provide more opportunities for teacher candidates to acquire more positive self-other perceptions. . . .

3. If it is true that good teachers are well informed, then it is clear that we must neither negate nor relax our efforts to provide them with as rich an intellectual background as is possible. . . .

4. If it is true that good teachers are able to communicate what they know in a manner that makes sense to their students, then we must assist our teacher candidates both through example and appropriate experiences to the most effective ways of doing this. . . .[46]

One can conclude from these studies that no conclusive evidence is available to clearly predict student teacher success. It seems clear that more research is needed.

VARIOUS INSTRUMENTS FOR THE OBSERVATION OF STUDENT TEACHER BEHAVIOR

Several research studies have been conducted where the observation of student teachers was required to complete the study. Most of these studies utilized observation records unique to that particular study. Two observation records were used more extensively than the others, they

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[46] Ibid., p. 344.

were the Ryans Classroom Observation Record[47] and the Flanders Interaction Analysis.[48]

The Ryans Classroom Observation Record was developed by Dr. David G. Ryans from the Teacher Characteristics Study sponsored by the American Council on Education.[49] The Classroom Observation Record was designed to assess four dimensions of pupil behavior and eighteen dimensions of teacher behavior. The assessment ranged over a seven dimension scale. Specific behaviors can be described on each of the twenty-two behavior measurements (see Appendix B).

The Flanders Interaction Analysis Form[50] has been utilized in many studies to discover the relationship of verbal interaction between teacher and pupil. All teacher-pupil interaction is divided into ten categories; seven of teacher talk, two of student talk, and one of silence or confusion. Amidon and Hough describes the analysis as follows:

> Teacher talk is recorded under one of two major headings: (a) indirect influence, and (b) direct influence. Indirect influence contains four, and direct influence three categories. Included under the classification of indirect teacher influence are those types of teacher statements which increase student freedom to respond. Direct teacher influence refers to statements which restrict response by students.

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[47]David G. Ryans, Characteristics of Teachers: Their Description, Comparison, and Appraisal (Washington, D.C.: American Council on Education, 1960), p. 4.

[48]Ned A. Flanders, Interaction Analysis in the Classroom: A Manual for Observers (Ann Arbor: University of Michigan, 1960), pp. 16-34.

[49]Ryans, op. cit., p. 36.

[50]Flanders, op. cit., p. 78.

Student talk is divided into only two categories. The first is student talk in response to the teacher and the second is student talk initiated by the student.[51] (See Appendix C.)

SUMMARY

This chapter has dealt with a presentation and review of studies that relate various factors to the degree of success and failure in student teaching. The initial group of studies dealt with such general factors as predictors of success in teacher education. The next group of studies focused on socio-economic factors as predictors of success in teacher education. The third section dealt with the National Teachers Examination as a predictor of success in teacher education. The fourth group of studies reviewed the development of classroom observation records for identifying student teaching behavior.

One can conclude from this survey of the related literature that considerable research has taken place concerning nearly all factors of the hypotheses of this study. Little has been done in utilizing the specific data available from such studies.

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[51]Edmond J. Amidon, John B. Hough, Interaction Analysis: Theory, Research and Application (Palo Alto, Calif.: Addison-Wesley, Company (1967), pp. 291-294.

CHAPTER III

PROCEDURES USED IN THE STUDY

The need for concrete evidence as a basis for planning teacher preparation programs has motivated this analysis of factors affecting the degree of success and failure in student teaching.

Presently there are few commonly accepted techniques to identify, recruit, and place teacher education candidates prior to their assignment as a student teacher. The college grade-point average has had the widest usage. There seems to be little general acceptance of other objective or subjective data. Aptitude tests such as the National Teachers Examination have received limited acceptance in connection with the placement of the student in his student teaching experience. The lack of general acceptance of predictive criteria points up the need for additional research.

IDENTIFICATION OF POPULATION

The students constituting the population of this study were selected during the second semester of their sophomore year. The initial list was compiled from those students whose college record indicated: (1) that they would enter the teacher education curriculum the following September, and (2) that they had taken no professional education courses previous to their entry into the research program.

Approximately two hundred students met the criteria and letters were sent asking them to schedule an interview with the investigator. In the interview, the student was briefed on the nature of the research project and asked to indicate his willingness to serve in the program. One hundred and seventy-eight students agreed to participate in the program. The names of these students were written on slips of paper and drawn at random from a basket. The first one hundred and twenty names were assigned to the project.

During the twelve months of the project, 6 students either withdrew from college or asked to be withdrawn from the project. Four additional students were withdrawn from the project by the investigator because of their failure to take the National Teacher Examination. This was necessary because the test was administered on a National Testing date and no other opportunity was available for testing. One hundred and ten students with complete sets of data remained in the project until its completion.

INSTRUMENTATION

The design of the investigation was to collect factual data from the described population and compare these data with the individual results of the National Teacher Examination and success in student teaching as measured by the Ryans Classroom Observation Record. The data were derived from: (1) The Personal Data Sheet, (2) The National Teachers Examination - Report of Scores, and (3) The Ryans Classroom Observation Record. Both the instruments and the procedures used to collect the data are described in the following sections.

The Personal Data Sheet.[1] Each student entering Kansas State Teachers College is required to complete a Personal Data Sheet. The information becomes a part of the record of the student while enrolled in the College. The data is organized into three general classifications:

1. Specific data regarding residence, place and date of birth, and educational choices.
2. General data on individual interests and experience.
3. Specific data on family and educational attainment.

Data from the Personal Data Sheet is on file in the Professional Education Research Office and receives confidential status.

The Ryans Classroom Observation Record. The Ryans Classroom Observation Record was developed by Dr. David G. Ryans during the Teacher Characteristics Study sponsored by the American Council on Education.[2] The Classroom Observation Record attempted to assess four dimensions of pupil behavior and eighteen dimensions of teacher behavior. This assessment employs a seven point scale. Specific behavior is identified and described in the glossary of the Record.

Three Classroom Observation Records were completed for each member of the sample during his student teaching experience. The Records were completed for each student at approximately three week intervals. The independent observers were instructed to enter the classroom when the student was instructing, to observe the entire class period, to hold minimum conversation with either the student teacher or the supervising

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[1]Kansas State Teachers College, Personal Data Sheet. Professional Education Research Office, 1968. (Mimeographed.)

[2]Ibid., p. 48.

teacher. They were further instructed to complete the Observation Record immediately upon leaving the classroom.

The observers were selected on the basis of the following criteria:

1. No association with the project.
2. No association with the college or cooperating public school.
3. Holders of advanced degrees.
4. Demonstrated competence in instruction.

The independent observers were selected and brought to the campus of Kansas State Teacher College for three training sessions. The initial training session was of two days duration. The observers were acquainted with the Record and the Glossary. They were instructed in the proper usage of the Record and they were given several opportunities to practice on video tapes of teaching situations after which they compared their observations. The observers were instructed never to use the record without having the Glossary before them and to limit their observations to those descriptions contained in the Glossary.

At the conclusion of the three training sessions, the observers were shown four video tapes which they had not seen before. They were asked to complete an Observation Record for each teaching situation. Each video tape had a duration of twenty to fifty minutes. Correlations were computed between the observers on the four observations--the results are reported in Table I.

A high degree of correlation was found between the observers on the four video tapes. The high correlation between observers 1 and 5 (.94) and the lower correlation between observers 3 and 6 (.79) were considered in computing the average correlation between all observers at .90.

Table I. The average coefficients of correlation between six observers over the 22 items of the Ryans Classroom Observation Record.

Observer	1	2	3	4	5	6
1	1.00	.93	.86	.93	.94	.91
2		1.00	.88	.92	.92	.93
3			1.00	.89	.82	.79
4				1.00	.90	.90
5					1.00	.89
6						1.00

The bipolar rating scales used by the observers ranged a continuum from one to seven. A rating from one to three represented a description of the behavioral dimension listed at the left of the Classroom Observation Record. A rating of five to seven represented the behavioral dimension at the right of the record. A rating of four represented a neutral assessment of the dimension. The Classroom Observation Record was administered three times for each subject. The average of the twenty-two items was then computed for each subject. This average rating for each subject was the unit of analysis.

The National Teachers Examination. The National Teachers Examination has been administered by the Educational Testing Service[3] since 1950.

[3]Ibid., p. 2.

Since the question to be examined in this study concerned the achievement of the student teacher, only the Common Examination portion was given. The Common Examinations are divided into Professional and General Education tests. The three Professional Education tests in the Common Examinations are the Psychological Foundations of Education, Societal Foundations of Education and Teaching Principles and Practices. The Professional tests are designed to assess knowledge of basic professional matters.

The General Education tests of the Common Examinations are in Social Studies, Literature and Fine Arts, Science and Mathematics, and Written English Expression. The General Education tests are directed toward measuring the general education background of college students.

The scores for the Common Examinations are reported as scaled scores having a mean score of sixty based on the standardizing population of all nationwide candidates who took the battery of tests when the program was initiated. The standardized score for each subject in the study was the unit of analysis on the National Teachers Examination.

HYPOTHESES

The hypotheses for this study were developed after a careful study of selected education majors at Kansas State Teachers College. The data were gathered during the fall and spring semesters of the 1967-68 school year. The reader should consider this as conclusions are formulated.

Hypotheses I-A and I-B state that a significant relationship exists between the age of the subject and the results of the National Teachers Examination. They further state that success in student teaching as

measured by the Ryans Classroom Observation Record is a function of the age of the student teacher.[4]

Hypotheses II-A and II-B state that a significant relationship exists between the sex of the subject and the results of the National Teachers Examination. They further state that success in student teaching as measured by the Ryans Classroom Observation Record is a function of the sex of the student teacher.

Hypotheses III-A and III-B state that a significant relationship exists between the size (enrollment) of the high school from which the student teacher graduated and the results of the National Teachers Examination. The hypotheses also state that the size (enrollment) of the high school from which the student teacher graduated is related to the success of the student teacher as measured by the Ryans Classroom Observation Record. The exact size (enrollment) of the high school from which the student teacher graduated is a matter of record. The schools were grouped into four categories according to the enrollment of that school. Size A schools had an enrollment of less than one hundred. Size B schools had an enrollment of one hundred to four hundred ninety-nine. Size C schools had an enrollment of five hundred to nine hundred ninety-nine. Size D schools had an enrollment of over one thousand students. The grouping described was designed for computing purposes.

Hypotheses IV-A and IV-B state that a significant relationship exists between the high school grade point average and the results of the National Teachers Examinations. They also state that a significant

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[4]The hypotheses are stated specifically on pages 8 and 9, they are grouped here for clarity.

relationship exists between the high school grade point average and success in student teaching as measured by the Ryans Classroom Observation Record. The high school grade point average is a matter of record in the permanent file of the student. The scale of grades is weighed in such a manner that an "A" is equated to four, "B" is equated to three, "C" is equated to two, "D" is equated to one and an "F" is equated to zero.

Hypotheses V-A and V-B state that the educational level of attainment by the father of the student teacher determines the result of the National Teachers Examination of that student. They further state that the educational level of attainment by the father is significant in predicting the success of the student teacher as measured by the Ryans Classroom Observation Record. The educational level of attainment by the father of the student teacher was taken from the Personal Data Sheet. This information is part of the permanent file of the student teacher.

Hypotheses VI-A and VI-B state that a significant relationship exists between the educational level of attainment by the mother of the student teacher and the results of the National Teachers Examination. They also state that this relationship exists between the educational level of attainment by the mother and success in student teaching as measured by the Ryans Classroom Observation Record. The educational level of attainment by the mother was taken from the Personal Data Sheet of the student.

Hypotheses VII-A and VII-B state that there is a significant relationship between the college grade point average and the results of the National Teachers Examinations. They also state that there is a significant relationship between the college grade point average and the success

of the student teacher as measured by the Ryans Classroom Observation Record. The college grade point average is a matter of record in the permanent file of the student. The scale of grades is weighed in such a manner that an "A" is equated to four, "B" is equated to three, "C" is equated to two, "D" is equated to one and an "F" is equated to zero.

Hypotheses VIII-A and VIII-B state that there is a significant relationship between the grade point average on professional teaching courses of the student teacher and the results of the National Teachers Examinations. They further state that there is a significant relationship between the grade point average on professional teaching courses of the student teacher and the success of the student teacher as measured by the Ryans Classroom Observation Record. The grade point average is a matter of record in the permanent file of the student teacher. The scale of grades is weighted in such a manner that an "A" is equated to four, "B" is equated to three, "C" is equated to two, "D" is equated to one and "F" is equated to zero.

Hypotheses IX-A and IX-B state that there is a significant relationship between the family income level of the student teachers family and the results of the National Teachers Examination. They also state that there is a significant relationship between the family income level and the success of the student teacher as measured by the Ryans Classroom Observation Record. The income level of the family was gathered from the Personal Data Sheet. In gathering the family income information, the student was asked to record the family income level by using one of the following categories of income: Group "A" was income less than $3000, group "B" was identified as income of $3000 to $9999, group "C" included

income of $10,000 to $18,000, and group "D" included income above $18,000. This classification was established after a survey of incomes in various communities in Kansas.

In identifying the source of the data, the various hypotheses were paired. This pairing was done to simplify and clarify the treatment of data. In the analysis of results each hypothesis will be handled separately.

ANALYSIS

Simple correlations were utilized in analyzing the data for this study. Each item has been defined so that both a correlation and interpretation can be presented. The eleven items are as follows:

1. Age
2. Sex
3. Size of High School
4. Grade Point Average--High School
5. Education of Father
6. Education of Mother
7. Grade Point Average--College
8. Grade Point Average--Professional Teaching Courses
9. Family Income Level
10. National Teachers Examination
11. Ryans Classroom Observation Record

The Pearson produce moment formula for deriving the correlation coefficient was used in this study. This correlation was derived for each of the variables listed above. The method of calculating the correlation was obtained from the following formula:

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[(N\Sigma X)^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

The correlations were derived using automatic data processing with an electronic computor.

SUMMARY

This chapter has provided the description of the procedures which were utilized in the study. The population of students used and the method of selection were described. Instruments and methods used to gather the data were described and identified. Concluding this chapter were a listing of the specific hypotheses to be tested and the statistical method which was employed in the analysis of the data. This analysis is presented in Chapter IV.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this chapter is to present the results of the analysis of the data obtained for each of the hypotheses listed in Chapter I. A simple correlation was computed to show the relationship between the matched pairs defined in the hypotheses. This correlation was used to determine the explained variance and the statistical significance of the correlation.

In this study a statistically significant figure at the .05 level is .238 and will be indicated by a single S in the tables. A statistically significant figure at the .01 level is .311 and will be indicated by a double SS. Data that is not statistically significant will be indicated by the figure N.S.

Hypothesis I-A

Hypothesis I-A postulates that there is a significant relationship between the age of the student teacher and the results of the National Teachers Examination.

Table 1

Simple Correlation Between the Age of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Age	- .0702	1/2	N.S.

Table 1 indicates that there is no statistically significant relationship between the age of the student teacher in the sample and the results of the National Teachers Examination. The correlation is so near zero that only 1/2 percent of the relationship between age and the results of the National Teachers Examination can be explained.

Hypothesis I-B

Hypothesis I-B postulates that there is a significant relationship between the age of the student teacher and the degree of success in student teaching.

Table 2

Simple Correlation Between the Age of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Age	- .1553	1/2	N.S.

Table 2 indicates that there is no statistically significant relationship between the age of the student teacher and the degree of success or failure in student teaching.

Hypothesis II-A

Hypothesis II-A postulates that there is a significant relationship between the sex of the student teacher and the results of the National Teachers Examination.

Table 3

Simple Correlation Between the Sex of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Sex	- .1145	1/2	N.S.

Table 3 indicates that there is no statistical significant relationship between the sex of the student teacher and the results of the National Teachers Examination.

Hypothesis II-B

Hypothesis II-B postulates that there is a significant relationship between the sex of the student teacher and the degree of success in student teaching.

Table 4

Simple Correlation Between the Sex of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Sex	.0479	1/4	N.S.

Table 4 indicates that there is no statistical significant relationship between the sex of the student teacher and the degree of success or failure in student teaching. The very low correlation and explainable percent of variance supports the equality of sexes in teaching.

Hypothesis III-A

Hypothesis III-A postulates that there is a significant relationship between the size of the high school from which the student teacher graduated and the results of the National Teachers Examination.

Table 5

Simple Correlation Between the Size of High School from Which the Student Teacher Graduated and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
High School Size (Enrollment)	- .1559	1/2	N.S.

Table 5 indicates that there is no statistically significant relationship between the size of the high school from which the student teacher graduated and the results of the National Teachers Examination.

Hypothesis III-B

Hypothesis III-B postulates that there is a significant relationship between the size of the high school from which the student teacher graduated and the degree of success in student teaching.

Table 6

Simple Correlation Between the Size of High School from Which the Student Teacher Graduated and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
High School Size (Enrollment)	- .0507	1/2	N.S.

Table 6 indicates that there is no statistically significant relationship between the size of the high school from which the student teacher graduated and the degree of success in student teaching.

Hypothesis IV-A

Hypothesis IV-A postulates that there is a significant relationship between the high school grade point average of the student teacher and the results of the National Teachers Examination.

Table 7

Simple Correlation Between the High School Grade Point Average of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
High School Grade Point Average	.3580	11	SS

The computed analysis of the data in Table 7 supports Hypothesis IV-A. The level of explained variance, while not extremely high, gives additional support to Hypothesis IV-A.

Hypothesis IV-B

Hypothesis IV-B postulates that there is a significant relationship between the high school grade point average of the student teacher and the degree of success in student teaching.

Table 8

Simple Correlation Between the High School Grade Point Average of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Explained Variance	Significance
High School Grade Point Average	.1150	1/2	N.S.

The computed analysis of the data in Table 8 does not support Hypothesis IV-B. A correlation this close to zero leaves too many unexplained factors to be significant.

Hypothesis V-A

Hypothesis V-A postulates that there is a significant relationship between the educational level of attainment by the father of the student teacher and the results of the National Teachers Examination.

Table 9

Simple Correlation Between the Educational Level of Attainment by the Father of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Educational Level of Father	- .1049	1/2	N.S.

The computed analysis of the data in Table 9 indicates that there is no statistically significant relationship between the educational level of attainment by the father of the student teacher and the results of the National Teachers Examination.

Hypothesis V-B

Hypothesis V-B postulates that there is a significant relationship between the educational level of attainment by the father of the student teacher and the degree of success in student teaching.

Table 10

Simple Correlation Between the Educational Level of Attainment by the Father of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Educational Level of Father	.0893	1/2	N.S.

The computed analysis of the data in Table 10 indicates that there is no statistically significant relationship between the educational level of attainment by the father of the student teacher and the degree of success in student teaching.

Hypothesis VI-A

Hypothesis VI-A postulates that there is a significant relationship between the educational level of attainment by the mother of the student teacher and the results of the National Teachers Examination.

Table 11

Simple Correlation Between the Educational Level of Attainment by the Mother of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Educational Level of Mother	- .0487	1/4	N.S.

The computed analysis of the data in Table 11 indicates that there is no statistically significant relationship between the educational level of attainment by the mother of the student teacher and the results of the National Teachers Examination.

Hypothesis VI-B

Hypothesis VI-B postulates that there is a significant relationship between the educational level of attainment by the mother of the student teacher and the degree of success in student teaching.

Table 12

Simple Correlation Between the Educational Level of Attainment by the Mother of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Educational Level of Mother	.1773	1/2	N.S.

The computed analysis of the data in Table 12 indicates that there is no statistically significant relationship between the educational level of attainment by the mother of the student teacher and the degree of success in student teaching.

Hypothesis VII-A

Hypothesis VII-A postulates that there is a significant relationship between the college grade point average of the student teacher and the results of the National Teachers Examination.

Table 13

Simple Correlation Between the College Grade Point Average of the Student Teacher and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
College Grade Point Average	.1751	1/2	N.S.

The computed analysis of the data in Table 13 indicates that there is no statistically significant relationship between the college grade point average of the student teacher and the results of the National Teachers Examination.

Hypothesis VII-B

Hypothesis VII-B postulates that there is a significant relationship between the college grade point average of the student teacher and the degree of success in student teaching.

Table 14

Simple Correlation Between the College Grade Point Average of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
College Grade Point Average	- .0524	1/4	N.S.

The computed analysis of the data in Table 14 indicates that there is no statistically significant relationship between the college grade point average of the student teacher and the degree of success in student teaching.

Hypothesis VIII-A

Hypothesis VIII-A postulates that there is a significant relationship between the grade point average achieved in the professional teaching courses by the student teachers and the results of the National Teachers Examination.

Table 15

Simple Correlation Between the Grade Point Average Achieved in the Professional Teaching Courses and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Grade Point Average in Professional Teaching Courses	.3234	13	SS

The computed analysis of the data in Table 15 supports Hypothesis VIII-A. While not extremely high, this correlation does give some insight into the value of using the grades achieved by the student teacher in professional teaching courses in determining the results of the National Teachers Examination.

Hypothesis VIII-B

Hypothesis VIII-B postulates that there is a significant relationship between the grade point average achieved by the student teacher in the professional education courses and the degree of success in student teaching.

Table 16

Simple Correlation Between the Professional Teaching Grade Point Average of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Grade Point Average in Professional Teaching Courses	.0686	1/2	N.S.

The computed analysis of the data in Table 16 indicates that there is no statistically significant relationship between the professional teaching grade point average achieved by the student teacher and the degree of success in student teaching.

Hypothesis IX-A

Hypothesis IX-A postulates that there is a significant relationship between the family income level of the student teacher and the results of the National Teachers Examination.

Table 17

Simple Correlation Between the Family Income Level and the Results of the National Teachers Examination

Variable	Correlation	Percent of Variance Explained	Significance
Family Income Level	.0089	.0	N.S.

The computed analysis of the data in Table 17 indicates that there is no statistically significant relationship between the family income level of the student teacher and the results of the National Teachers Examination.

Hypothesis IX-B

Hypothesis IX-B postulates that there is a significant relationship between the family income level of the student teacher and the degree of success in student teaching.

Table 18

Simple Correlation Between the Family Income Level of the Student Teacher and the Degree of Success or Failure in Student Teaching

Variable	Correlation	Percent of Variance Explained	Significance
Family Income Level	- .0157	.0	N.S.

The computed analysis of the data in Table 18 indicates that there is no statistically significant relationship between the family income level of the student teacher and the degree of success in student teaching.

SUMMARY

The tables in this chapter have presented the data of the study. Table 19 summarizes the data used to test each of the hypotheses.

Table 19

Simple Correlation of Each Hypothesis Tested

Hypothesis	Correlation	Accept or Reject
I-A	- .0702	Reject
I-B	- .1553	Reject
II-A	- .1145	Reject
II-B	.0479	Reject
III-A	- .1559	Reject
III-B	- .0507	Reject
IV-A	.3580	Accept
IV-B	.1150	Reject
V-A	- .1049	Reject
V-B	.0893	Reject
VI-A	- .0487	Reject
VI-B	.1773	Reject
VII-A	.1751	Reject
VII-B	- .0524	Reject
VIII-A	.3234	Accept
VIII-B	.0686	Reject
IX-A	.0089	Reject
IX-B	- .0157	Reject

In Chapter five a full discussion will be presented regarding the data, its meaning and implications.

CHAPTER V

SUMMARY, DISCUSSION, AND IMPLICATIONS

SUMMARY

This study sought to discover the relationships between student teacher success and certain socio-economic factors and the results of the National Teachers Examination. It is hoped that a study of these relationships will provide more objective data for the design of teacher preparation programs. The data will enable college and university staff to better screen, counsel, and place education majors prior to and including their student teaching experience. The study will also serve as a model for future investigators as they research the clinical experience in teacher preparation programs.

The sample for the study consisted of one hundred and ten education majors who were beginning their professional education courses. The respondents were given the National Teachers Examination, and three independent observers evaluated the success of the students during their student teaching experience. The results of these two instruments were compared with selected socio-economic factors to determine if any relationship existed between the items.

Specifically the following hypotheses were tested:

Hypothesis I-A	There is a significant relationship between age and the results of the National Teacher Examination.
Hypothesis I-B	There is a significant relationship between age and the degree of success or failure in student teaching.
Hypothesis II-A	There is a significant relationship between the sex of the student teacher and the results of the National Teacher Examination.
Hypothesis II-B	There is a significant relationship between the sex of the student teacher and the degree of success or failure in student teaching.
Hypothesis III-A	There is a significant relationship between the size of high school from which the student teacher graduated and the results of the National Teacher Examination.
Hypothesis III-B	There is a significant relationship between the size of high school from which the student teacher graduated and the degree of success or failure in student teaching.
Hypothesis IV-A	There is a significant relationship between the high school grade point average of the student teacher and the results of the National Teacher Examination.
Hypothesis IV-B	There is a significant relationship between the high school grade point average of the student teacher and the degree of success or failure in student teaching.
Hypothesis V-A	There is a significant relationship between the educational level of the father of the student teacher and the results of the National Teacher Examination.
Hypothesis V-B	There is a significant relationship between the educational level of the father of the student teacher and the degree of success or failure in student teaching.
Hypothesis VI-A	There is a significant relationship between the educational level of the mother of the student teacher and the results of the National Teacher Examination.
Hypothesis VI-B	There is a significant relationship between the educational level of the mother of the student teacher and the degree of success or failure in student teaching.

Hypothesis VII-A There is a significant relationship between the college grade point average of the student teacher and the results of the National Teacher Examination.

Hypothesis VII-B There is a significant relationship between the college grade point average of the student teacher and the degree of success or failure in student teaching.

Hypothesis VIII-A There is a signififant relationship between the grade point average on professional teaching courses of the student teacher and the results of the National Teacher Examination.

Hypothesis VIII-B There is a significant relationship between the grade point average on professional teaching courses of the student teacher and the degree of success or failure in student teaching.

Hypothesis IX-A There is a significant relationship between the family income level of the student teacher and the results of the National Teacher Examination.

Hypothesis IX-B There is a significant relationship between the family income level of the student teacher and degree of success or failure in student teaching.

Each of these hypotheses was written in the positive sense indicating that a significant relationship did exist between the factors described. The data, except for two cases, did not support the hypotheses. Only two relationships proved to be significant. One was between the results of the National Teachers Examination and the high school grade point average. The other was between the results of the National Teachers Examination and the grade point average achieved by the student teacher in the professional education courses. Of these two factors the high school grade point average proved the most significant.

The very small differences between most of the correlations can be attributed to the homogeneity of the sample. This is particularly true with the various grade point averages.

DISCUSSION

Hypothesis I-A postulated that there is a significant relationship between the age of the student teacher and the results of the National Teachers Examination. The data did not support the hypothesis. The correlation was negative .0702 and the explained variance was less than one percent. The sample consisted of 50 males and 60 females. The mean age of the males was 20.56 and a standard deviation of 1.72 years. The mean age of the females was 20.45 with a standard deviation of 2.19 years. Conclusions, based upon the data from this study, can be formulated to indicate that there is no statistically significant relationship between the age of the student teacher and how well he will score on the National Teachers Examination. This conclusion is acceptable when we consider the small standard deviation of ages of sample.

Hypothesis I-B postulated that there was a significant relationship between the age of the student teacher and the degree of success or failure in the student teaching experience. The data fails to support this hypothesis. A correlation of negative .1553 between these factors indicates that age cannot be used to predict success in the clinical experience of the student. The negative correlation would lead one to believe that the younger student would find more success than the older student. This cannot be a considered conclusion because of the small correlation.

Hypothesis II-A postulated that there is a significant relationship between the sex of the student teacher and the results on the National Teachers Examination. The data does not support this hypothesis. The correlation between these factors was negative .1145 with an explained variance

of less than one percent. The sample contained 50 males and 60 females. The available data did not indicate any great variation between the males and the females. The females had a slightly higher high school grade point average but all other factors were quite similar.

Hypothesis II-B postulated that there was a significant relationship between the sex of the student teacher and the degree of success or failure in student teaching. The correlation of these two factors was extremely low at .0479. The hypothesis was rejected. With a correlation this low one can conclude that the relationship between sex and success in student teaching is a random relationship and no prediction of success can be made based upon the sex of the teacher candidate.

Hypothesis III-A postulated that there was a significant relationship between the size of the high school from which the student teacher graduated and the results of the National Teachers Examination. This hypothesis was rejected because the correlation was negative .1559 with less than one percent of the variance explained. The sample contained students from high schools with enrollments ranging from less than 50 students to more than two thousand students. The mean size of the high schools of the students in the sample was six hundred and fifty eight students. The analysis of this data corresponds favorably with the current data on the National Teachers Examination.

Hypothesis III-B postulates that a significant relationship exists between the size of the high school from which the student teacher graduated and the degree of success or failure in student teaching. The correlation between these two factors was negative .0507. Hypothesis III-B is

rejected because of this low correlation and an explained variance of less than one percent. Success in student teaching is not a function of the size of the high school from which the student teacher graduated. Additional research should be made on this topic because of the recent consolidation of school districts.

Hypothesis IV-A postulates that there is a significant relationship between the high school grade point average and the results of the National Teachers Examination. This hypothesis is supported by the data with a correlation of .3580 and an explained variance of 11 percent. There is additional data available that supports this conclusion. The high school grade point average seems to be highly representative of the ability of the student to perform written tasks. The predictive value of the high school grade point average is enhanced because it represents four years of observation and is personalized in present high school curricular experiences. This high correlation supports the selection and placement of students based upon the high school record.

Hypothesis IV-B postulates that there is a significant relationship between the high school grade point average and the degree of success or failure in student teaching. The correlation of these two factors is .1150. Hypothesis IV-B is rejected on the basis of this low correlation. The high school grade point average is a record of the students success in learning. Very little relationship seems to exist between the ability to learn about a subject and teaching about that subject. This conclusion tends to support the concept that teaching is a unique skill dependent upon the "feeling" characteristics of the individual teacher. More data is becoming available each day to support this concept.

Hypothesis V-A postulates that there is a significant relationship between the level of educational attainment by the father of the student teacher and the results of the National Teachers Examination. The data does not support this hypothesis. The correlation of these two factors is negative .1049 with less than one percent of the variance explained. This low correlation leads to several conclusions regarding the general improvement of educational attainment in this country. The desire to improve ones position in the educational hierarchy seems to be the result of social influence.

Hypothesis V-B postulates that there is a significant relationship between the level of educational attainment by the father of the student teacher and the degree of success or failure in student teaching. The data reports a positive correlation, but extremely low at .0893. This relationship so near zero implies a random relationship and one not suitable for predictive use.

Hypothesis VI-A postulates that there is a significant relationship between the level of educational attainment by the mother of the student teacher and the results of the National Teachers Examination. This hypothesis is rejected on the basis of a low, negative correlation of negative .0487. The data indicate a low, negative correlation for both hypothesis V-A and VI-A. In further analysis of the sample, it was found that the educational level of the mothers of the student teachers exceeded that of the fathers of the student teachers. Correlations, describing the relationships between these factors were both low and negative. The rejection of these two hypotheses is strengthened by the similar data.

Hypothesis VI-B postulates that there is a significant relationship between the level of educational attainment by the mother of the student teacher and the degree of success or failure in student teaching. The hypothesis is rejected as being significant with a correlation of .1773 and with less than one percent of the variance explained. The data indicate a correlation of factors in hypothesis VI-B twice that in hypothesis V-B. Consideration of the relationship between these two hypotheses indicates that while both sets of data are not statistically significant one can conclude that the mothers influence is the strongest in predicting the degree of success or failure in student teaching.

Hypothesis VII-A postulates that there is a significant relationship between the college grade point average of the student teacher and the results of the National Teachers Examination. An analysis of the data indicates a correlation between these two factors of .1751 with less than one percent of the variance explained. Hypothesis VII-A is rejected on this basis. The college grade point average used in the analysis of the data was taken at the end of the student teachers sophomore year. Additional research could be accomplished using the four year college grade point average of the student. This might show a marked change in the correlations and be closely related to the correlation using the high school grade point average. The college grade point average of the student teacher, taken at the end of the sophomore year, is not significant in relation to the results on the National Teachers Examination.

Hypothesis VII-B postulates that there is a significant relationship between the college grade point average and the degree of success or

failure in student teaching. Data from the study indicate a correlation of these two factors at negative .0524. This very low correlation with less than one percent of the variance explained does not support the hypothesis. The college grade point average was a two year average. Expanding this to a four year average would have been more descriptive of the student teacher.

Hypothesis VIII-A postulates that there is a significant relationship between the grade point average in the professional teaching courses of the student teacher and the results of the National Teachers Examination. The data supports this hypothesis as being statistically significant at both the five percent level (.05) and the one percent level (.01). Table 15 displays the correlation to be .3234. The significance of these two factors, supported by the data, indicate that the grade point average achieved by the student teacher in the professional education courses is a factor that can be used to predict how the student teacher will achieve on the National Teachers Examination. The close relationship between the content of the professional education courses and the National Teachers Examination help in describing the high correlation between the two factors described in hypothesis VIII-A.

Hypothesis VIII-B postulates that there is a significant relationship between the grade point average in the professional teaching courses of the student teacher and the degree of success or failure in student teaching. Hypothesis VIII-B is rejected on the basis of the data acquired in the study. The correlation between these factors is .0686. The data represented a grade point average in those courses of study that were considered professional education courses. Each member of the sample

enrolled in 18 semester hours of credit in professional education courses. The mean grade of the sample was 2.99 with a standard deviation of only .35 on a four point scale.

Hypothesis IX-A postulates that there is a significant relationship between the family income level of the student teachers family and the results of the National Teachers Examination. The data reflects a correlation of .0089 with less than one percent of the variance explained. The hypothesis was rejected on the basis of this data. The mean family income level of the sample was $8409 with a standard deviation of $4025.

Hypothesis IX-B postulates that there is a significant relationship between the family income level of student teacher's family and the degree of success or failure in student teaching. The display in Table 18 indicates a correlation of negative .0157 and zero percent of explained variance. This correlation is extremely low and does not support hypothesis IX-B. The parameters described by hypothesis IX-B are quite broad and do not limit the variable sufficiently to conclude any other alternative except rejection.

Two of the areas that this study has encompassed have been identified as being statistically significant. They are as follows:

1. There is a significant relationship between the high school grade point average and the results of the National Teachers Examination.

2. There is a significant relationship between the grade point average achieved in the professional education courses by the student teacher and the results of the National Teachers Examination.

All other hypotheses have been rejected on the basis of the data from the study. The responsibility of the profession to search for better means

to screen, counsel, and place teacher candidates is becoming more important each day.

IMPLICATIONS FOR RESEARCH

The implications of this study are many. The total lack of significant relationships between the many factors of this study indicates that much research is needed in order to improve the skills of counselling student teachers. Some implications of this study on future research are listed below:

1. Those personnel assigned the task of selecting, counselling, and placing student teachers must realize the limitations of using the factors of this study in predicting the success of student teachers.

2. Additional instruments should be designed and researched to enable more efficient management in student teaching.

3. Expand the study of the behavioral performance of students in order to improve current counselling of student teachers.

4. Basic research is needed regarding the personality of the potential teacher candidate and the degree of expected success in teaching.

5. A much wider range of variables, than those included in this study, need to be researched. This could involve both the formal and informal experiences of the student.

6. Research should be conducted regarding the perceptions of success and failure in the teaching process.

7. Study the relationships between the supervising teacher's evaluation of the student teacher and the results of the Ryans Classroom Observation Record and other evaluative documents.

Teacher education today is in a period of transition. The future of education process will be determined by our willingness to study the past and present in order to learn more about the future. It is hoped that this study will help move us one small step toward this goal.

APPENDICES

APPENDIX A

KANSAS STATE TEACHERS COLLEGE
PERSONAL DATA SHEET

APPENDIX A

KANSAS STATE TEACHERS COLLEGE
PERSONAL DATA SHEET

KANSAS STATE TEACHERS COLLEGE, EMPORIA
PERSONAL DATA SHEET
PROFESSIONAL EDUCATION RESEARCH

Name_____ Place of birth_____
Last First Middle Maiden

Address_____ Phone_____ Date of birth_____
Street City State

Marital status ___S ___M ___D ___W Number of children_____

Grade point _____ Advisor_____ Classification_____

First teaching field_____ Second teaching field_____

Expected date of graduation at KSTC _____ _____
month year

Are you planning on attending summer school?_____

Will you be a first semester junior in the fall of 1965?_____

Will you be enrolled in this school for the next three semesters?_____

Are you planning to teach on the secondary or college level?_____

Have you attended any college or university other than KSTC?_____

Have you taken any courses in education? _____ If so, specify_____

Do you plan immediate graduate work after completing your degree?_____

Do you plan to make a career of teaching?_____

Have you had any previous teaching experience?_____

Have you had any work experience with children (Girl Scouts, Boy Scouts, etc.)?_____ If so, specify_____

APPENDIX A--Continued

List any organization in which you are a member or have been a member. _____

Social _____

Service _____

Honorary _____

Civic _____

Father's occupation_____ Mother's occupation_____

Has anyone in your family ever been a teacher (parents, uncles, aunts, siblings)? _____

Education attainment of parents: check highest

Father: Grade School __ High School __ College __ Graduate Degree __

Mother: Grade School __ High School __ College __ Graduate Degree __

Size of home town

1. City over 25,000 ___
2. City over 2,500 ___
3. Town under 2,500 ___
4. Farm ___

Date of high school graduation _____
Month Year

Size of high school (grades) _____

Name and address of high school _____

_____

Average annual income of family _____
(Father or father and mother if mother works.)

APPENDIX B

RYANS CLASSROOM OBSERVATION RECORD
TEACHERS CHARACTERISTIC STUDY

APPENDIX B

RYANS CLASSROOM OBSERVATION RECORD
TEACHERS CHARACTERISTIC STUDY

Classroom Observation Record

Teacher Characteristics Study

Teacher_____ No.___ Sex___ Class or Subject_____ Date_____

City_____ School_____ Time_____ Observer_____

PUPIL BEHAVIOR									REMARKS
1. Apathetic	1	2	3	4	5	6	7	N	Alert
2. Obstructive	1	2	3	4	5	6	7	N	Responsible
3. Uncertain	1	2	3	4	5	6	7	N	Confident
4. Dependent	1	2	3	4	5	6	7	N	Initiating
TEACHER BEHAVIOR									
5. Partial	1	2	3	4	5	6	7	N	Fair
6. Autocratic	1	2	3	4	5	6	7	N	Democratic
7. Aloof	1	2	3	4	5	6	7	N	Responsive
8. Restricted	1	2	3	4	5	6	7	N	Understanding
9. Harsh	1	2	3	4	5	6	7	N	Kindly
10. Dull	1	2	3	4	5	6	7	N	Stimulating
11. Stereotyped	1	2	3	4	5	6	7	N	Original
12. Apathetic	1	2	3	4	5	6	7	N	Alert
13. Unimpressive	1	2	3	4	5	6	7	N	Attractive
14. Evading	1	2	3	4	5	6	7	N	Responsible
15. Erratic	1	2	3	4	5	6	7	N	Steady
16. Excitable	1	2	3	4	5	6	7	N	Poised
17. Uncertain	1	2	3	4	5	6	7	N	Confident
18. Disorganized	1	2	3	4	5	6	7	N	Systematic
19. Inflexible	1	2	3	4	5	6	7	N	Adaptable
20. Pessimistic	1	2	3	4	5	6	7	N	Optimistic
21. Immature	1	2	3	4	5	6	7	N	Integrated
22. Narrow	1	2	3	4	5	6	7	N	Broad

GLOSSARY

(To be used with classroom observation record.)

Pupil Behaviors

1. Apathetic-Alert Pupil Behavior

Apathetic	Alert
1. Listless	1. Appear anxious to recite and participate.
2. Bored-acting	2. Watch teacher attentively.
3. Enter into activities half-heartedly.	3. Work concentratedly.
4. Restless	4. Seem to respond eagerly.
5. Attention wanders.	5. Prompt and ready to take part in activities when they begin.
6. Slow in getting under way.	

2. Obstructive-Responsible Pupil Behavior

Obstructive	Responsible
1. Rude to one another and/or to teacher.	1. Courteous, co-operative, friendly with each other and with teacher.
2. Interrupting; demanding attention; disturbing.	2. Complete assignments without complaining or unhappiness.
3. Obstinate; sullen.	3. Controlled voices.
4. Refusal to participate.	4. Received help and criticism attentively.
5. Quarrelsome; irritable.	5. Asked for help when needed.
6. Engaged in name-calling and/or tattling.	6. Orderly without specific directions from teacher.
7. Unprepared.	7. Prepared.

3. Uncertain-Confident Pupil Behavior

Uncertain	Confident
1. Seem afraid to try; unsure.	1. Seem anxious to try new problems or activities.
2. Hesitant; restrained.	2. Undisturbed by mistakes.
3. Appear embarrassed.	3. Volunteer to recite.
4. Frequent display of nervous habits, nail-biting, etc.	4. Enter freely into activities.
5. Appear shy and timid.	5. Appear relaxed.
6. Hesitant and/or stammering speech.	6. Speak with assurance.

4. Dependent-Initiating Pupil Behavior

Dependent	Initiating
1. Rely on teacher for explicit directions.	1. Volunteer ideas and suggestions.
2. Show little ability to work things out for selves.	2. Showed resourcefulness.
3. Unable to proceed when initiative called for.	3. Take lead willingly.
4. Appear reluctant to take lead or to accept responsibility.	4. Assume responsibilities without evasion.

Teacher Behaviors

5. Partial-Fair Teacher Behavior

Partial	Fair
1. Repeatedly slighted a pupil.	1. Treated all pupils approximately equally.
2. Corrected or criticized certain pupils repeatedly.	2. In case of controversy pupil allowed to explain his side.
3. Repeatedly gave a pupil special advantages.	3. Distributed attention to many pupils.
4. Gave most attention to one or a few pupils.	4. Rotated leadership impartially.
5. Showed prejudice (favorable or unfavorable) towards some social, racial, or religious groups.	5. Based criticism or praise on factual evidence, not hearsay.
6. Expressed suspicion of motives of a pupil.	

6. Autocratic-Democratic Teacher Behavior

Autocratic	Democratic
1. Tells pupils each step to take.	1. Guided pupils without being mandatory.
2. Intolerant of pupils' ideas.	2. Exchanged ideas with pupils.
3. Mandatory in giving directions; orders to be obeyed at once.	3. Encouraged (asked for) pupil opinion.
4. Interrupted pupils although their discussion was relevant.	4. Encouraged pupils to make own decisions.
5. Always directed rather than participated.	5. Entered into activities without domination.

7. Aloof-Responsive Teacher Behavior

Aloof	Responsive
1. Stiff and formal in relations with pupils.	1. Approachable to all pupils.
2. Apart; removed from class activity.	2. Participates in class activity.
3. Condescending to pupils.	3. Responded to reasonable requests and/or questions.
4. Routine and subject matter only concern; pupils as persons ignored.	4. Speaks to pupils as equals.
5. Referred to pupil as "this child" or "that child."	5. Commends effort.
	6. Gives encouragement.
	7. Recognized individual differences.

8. Restricted-Understanding Teacher Behavior

Restricted	Understanding
1. Recognized only academic accomplishments of pupils; no concern for personal problems.	1. Showed awareness of a pupil's personal emotional problems and needs.
2. Completely unsympathetic with a pupil's failure at a task.	2. Was tolerant of error on part of pupil.
3. Called attention only to very good or very poor work.	3. Patient with a pupil beyond ordinary limits of patience.
4. Was impatient with a pupil.	4. Showed what appeared to be sincere sympathy with a pupils' viewpoint.

9. Harsh-Kindly Teacher Behavior

Harsh	Kindly
1. Hypercritical; fault-finding.	1. Goes out of way to be pleasant and/or to help pupils; friendly.
2. Cross; curt.	2. Give a pupil a deserved compliment.
3. Depreciated pupil's efforts; was sarcastic.	3. Found good things in pupils to call attention to.
4. Scolds a great deal.	4. Seemed to show sincere concern for a pupil's personal problem.
5. Lost temper.	5. Showed affection without being demonstrative.
6. Used threats.	6. Disengaged self from a pupil without bluntness.
7. Permitted pupils to laugh at mistakes of others.	

10. Dull-Stimulating Teacher Behavior

Dull	Stimulating
1. Uninteresting, monotonous explanations.	1. Highly interesting presentation; gets and holds attention without being flashy.
2. Assignments provide little or no motivation.	2. Clever and witty, though not smart-alecky or wise-cracking.
3. Fails to provide challenge.	3. Enthusiastic; animated.
4. Lack of animation.	4. Assignments challenging.
5. Failed to capitalize on pupil interests.	5. Took advantage of pupil interests.
6. Pedantic, boring.	6. Brought lesson successfully to a climax.
7. Lacks enthusiasm; bored acting.	7. Seemed to provoke thinking.

11. Stereotyped-Original Teacher Behavior

Stereotyped	Original
1. Used routine procedures without variation.	1. Used what seemed to be original and relatively unique devices to aid instruction.
2. Would not depart from procedure to take advantage of a relevant question or situation.	2. Tried new materials or methods.
3. Presentation seemed unimaginative.	3. Seemed imaginative and able to develop presentation around a question or situation.
4. Not resourceful in answering questions or providing explanations.	4. Resourceful in answering question; had many pertinent illustrations available.

12. Apathetic-Alert Teacher Behavior

Apathetic	Alert
1. Seemed listless; languid; lacked enthusiasm.	1. Appeared buoyant; wide-awake; enthusiastic about activity of the moment.
2. Seemed bored by pupils.	2. Kept constructively busy.
3. Passive in response to pupils.	3. Gave attention to, and seemed interested in, what was going on in class.
4. Seemed preoccupied.	4. Prompt to "pick up" class when pupils' attention showed signs of lagging.
5. Attention seemed to wander.	
6. Sat in chair most of time; took no active part in class activities.	

13. Unimpressive-Attractive Teacher Behavior

Unimpressive	Attractive
1. Untidy or sloppily dressed.	1. Clean and neat.
2. Inappropriately dressed.	2. Well-groomed; dress showed good taste.
3. Drab, colorless.	
4. Posture and bearing unattractive.	3. Posture and bearing attractive.
5. Possessed distracting personal habits.	4. Free from distracting personal habits.
6. Mumbled; inaudible speech; limited expression; disagreeable voice tone; poor inflection.	5. Plainly audible speech; good expression; agreeable voice tone; good inflection.

14. Evading-Responsible Teacher Behavior

Evading	Responsible
1. Avoided responsibility; disinclined to make decisions.	1. Assumed responsibility; makes decisions as required.
2. "Passed the buck" to class, to other teachers, etc.	2. Conscientious.
3. Left learning to pupil, failing to give adequate help.	3. Punctual.
4. Let a difficult situation get out of control.	4. Painstaking; careful.
5. Assignments and directions indefinite.	5. Suggested aids to learning.
6. No insistence on either individual or group standards.	6. Controlled a difficult situation.
7. Inattentive with pupils.	7. Gave definite directions.
8. Cursory.	8. Called attention to standards
	9. Attentive to class.
	10. Thorough.

15. Erratic-Steady Teacher Behavior

Erratic	Steady
1. Impulsive; uncontrolled; temperamental; unsteady.	1. Calm; controlled.
2. Course of action easily swayed by circumstances of the moment.	2. Maintained progress toward objective.
3. Inconsistent.	3. Stable, consistent, predictable.

16. Excitable-Poised Teacher Behavior

Excitable	Poised
1. Easily disturbed and upset; flustered by classroom situation.	1. Seemed at ease at all times.
2. Hurried in class activities; spoke rapidly using many words and gestures.	2. Unruffled by situation that developed in classroom; dignified without being stiff or formal.
3. Was "jumpy"; nervous.	3. Unhurried in class activities; spoke quietly and slowly.
	4. Successfully diverted attention from a stress situation in classroom.

17. Uncertain-Confident Teacher Behavior

Uncertain	Confident
1. Seemed unsure of self; faltering hesitant.	1. Seemed sure of self; self-confident in relations with pupils.
2. Appeared timid and shy.	2. Undisturbed and unembarrassed by mistakes and/or criticism.
3. Appeared artificial.	
4. Disturbed and embarrassed by mistakes and/or criticism.	

18. Disorganized-Systematic Teacher Behavior

Disorganized	Systematic
1. No plan for class work.	1. Evidence of a planned though flexible procedure.
2. Unprepared.	2. Well prepared.
3. Objectives not apparent; undecided as to next step.	3. Careful in planning with pupils.
4. Wasted time.	4. Systematic about procedure of class.
5. Explanations not to the point.	5. Had anticipated needs.
6. Easily distracted from matter at hand.	6. Provided reasonable explanations.
	7. Held discussion together; objectives apparent.

19. Inflexible-Adaptable Teacher Behavior

Inflexible	Adaptable
1. Rigid in conforming to routine.	1. Flexible in adapting explanations.
2. Made no attempt to adapt materials to individual pupils.	2. Individualized materials for pupils as required; adapted activities to pupils.
3. Appeared incapable of modifying explanation or activities to meet particular classroom situations.	3. Took advantage of pupils' questions to further clarify ideas.
4. Impatient with interruptions and digressions.	4. Met an unusual classroom situation competently.

20. Pessimistic-Optimistic Teacher Behavior

Pessimistic	Optimistic
1. Depressed; unhappy.	1. Cheerful; good-natured.
2. Skeptical.	2. Genial.
3. Called attention to potential "bad."	3. Joked with pupils on occasion.
4. Expressed hopelessness of "education today," the school system, or fellow educators.	4. Emphasized potential "good."
5. Noted mistakes; ignored good points.	5. Looked on bright side; spoke optimistically of the future.
6. Frowned a great deal; had unpleasant facial expression.	6. Called attention to good points; emphasized the positive.

21. Immature-Integrated Teacher Behavior

Immature	Integrated
1. Appeared naive in approach to classroom situations.	1. Maintained class as center of activity; kept self out of spotlight; referred to class's activities, not own.
2. Self-pitying; complaining; demanding.	2. Emotionally well controlled.
3. Boastful; conceited.	

22. Narrow-Broad Teacher Behavior

Narrow	Broad
1. Presentation strongly suggested limited background in subject or material; lack of scholarship.	1. Presentation suggested good background in subject; good scholarship suggested.
2. Did not depart from text.	2. Drew examples and explanations from various sources and related fields.
3. Failed to enrich discussions with illustrations from related areas.	3. Showed evidence of broad cultural background in science, art, literature, history, etc.
4. Showed little evidence of breadth of cultural background in such areas as science, arts, literature, and history.	4. Gave satisfying, complete, and accurate answers to questions.
5. Answers to pupils' questions incomplete or inaccurate.	5. Was constructively critical in approach to subject matter.
6. Noncritical approach to subject.	

APPENDIX C

FLANDERS INTERACTION ANALYSIS

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FLANDERS INTERACTION ANALYSIS

Category Number		Description of Verbal Behavior
1	TEACHER TALK	ACCEPTS FEELING: accepts and clarifies the feeling and tone of students in a nonthreatening manner. Feelings may be positive or negative. Predicting and recalling feelings are also included.
2		PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension not at the expense of another individual, nodding head or saying "uh-huh" or "go on" are included.
3		ACCEPTS OR USES IDEAS OF STUDENT: clarifying, building on, developing and accepting ideas of students.
4		ASKS QUESTIONS: asking a question about content or procedure with the intent that the student should answer.
5		ANSWERS STUDENT QUESTIONS: direct answers to questions regarding content or procedure asked by students.
6		LECTURES: giving facts or opinions about content or procedures; expressing his own ideas; asking rhetorical questions.
7		CORRECTIVE FEEDBACK: telling a student that his answer is wrong when the incorrectness of the answer can be established by other than opinion, i.e., empirical validation, definition or custom.
8		GIVES DIRECTIONS: directions, commands or orders to which a student is expected to comply.
9		CRITICIZES OR JUSTIFIES AUTHORITY: statements intended to change student behavior from a nonacceptable to an acceptable pattern; bawling out someone, stating why the teacher is doing what he is doing so as to achieve or maintain control; rejecting or criticizing a student's opinion or judgment.

continued

Category Number		Description of Verbal Behavior
10	STUDENT TALK	STUDENT TALK-RESPONSE: talk by students in response to requests or narrow teacher questions. The teacher initiates the contact or solicits student's statement.
11		STUDENT TALK-EMITTED: talk by students in response to broad teacher questions which require judgment or opinion. Student declarative statements emitted but not called for by teacher questions.
12		STUDENT QUESTIONS: questions concerning content or procedure that are directed to the teacher.
13	SILENCE	DIRECTED PRACTICE OR ACTIVITY: non-verbal behavior requested or suggested by the teacher. This category is also used to separate student to student response.
14		SILENCE AND CONTEMPLATION: silence following questions, periods of silence interspersed with teacher talk or student talk and periods of silence intended for the purpose of thinking.
15		DEMONSTRATION: silence during periods when visual materials are being shown or when non-verbal demonstration is being conducted by the teacher.
16	NON-FUNCTIONAL	CONFUSION AND IRRELEVANT BEHAVIOR: periods when the noise level is such that the person speaking cannot be understood or periods of silence that have no relation to the purposes of the classroom.

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