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VIOLET SCHULER THOMAS

1969

THE SECONDARY TEACHER EDUCATION PROGRAM AS PERCEIVED BY SELECTED GRADUATES OF THE UNIVERSITY OF ARIZONA

by
Violet Schuler Thomas

A Dissertation Submitted to the Faculty of the DEPARTMENT OF SECONDARY EDUCATION

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF EDUCATION

In the Graduate College
THE UNIVERSITY OF ARIZONA

THE UNIVERSITY OF ARIZONA

GRADUATE COLLEGE

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direction	by	Violet Sc	huler Th	omas	
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After inspection of the final copy of the dissertation, the following members of the Final Examination Committee concur in its approval and recommend its acceptance:*

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2-3-69

This approval and acceptance is contingent on the candidate's adequate performance and defense of this dissertation at the final oral examination. The inclusion of this sheet bound into the library copy of the dissertation is evidence of satisfactory performance at the final examination.

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SIGNED: Violet Schuler Thomas

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ABSTRACT

Introduction

This study was designed to evaluate the secondary teacher-preparation programs at The University of Arizona. The specific purposes of the study were to determine the perceptions of teachers pertaining to strengths and limitations of the teacher-education program and to obtain their recommendations for developing a more effective preparation program.

Four hypotheses were formulated to determine if any differences would be observed in teacher perception of the quality of the program and type of teacher preparation, subject area taught, size of community, and type of school organization.

Procedures

A questionnaire, based on the objectives of the secondary teacher-preparation programs and the competencies emphasized in related literature, was used to obtain the graduates' appraisal of the teacher-preparation programs.

Two hundred fifty-two graduates from the period June 1962 through September 1966, who had teaching experience, responded to the mailed questionnaires. The chisquare test was used to determine if a significant difference could be found between types of preparation programs and problem areas as perceived by these teachers. Percentages were computed also for analyzing appropriate data.

Findings

- 1. The regular group rated their understanding of the history of education significantly higher than did the experimental group (.05 level).
- 2. Teachers who graduated from the experimental program rated the development of a personal philosophy of education significantly higher than teachers from the regular program (.02 level).
- 3. The experimental group rated their understanding of the cultural and social influences on education significantly higher than did the regular group (.01 level).
- 4. "The development of a commitment to and enthusiasm for teaching and a genuine belief in its worth" was rated significantly higher by graduates in the experimental program (.05 level).
- 5. Subject area taught, size of community, and type of school organization had very little effect on teacher perception as to the adequacy of their preparation program.

- 6. The greatest weakness as viewed by respondents was the need for more emphasis on handling student behavior in the school situation.
- 7. Respondents, in the experimental program, recommended more emphasis be placed on measurement and evaluation in the classroom.
- 8. Respondents recommended more emphasis be placed on student teaching, including a greater length of time such as a full day, and a wider range of experience working with low-ability students and those from lower socioeconomic areas. Class activities and experiences should include field trips with more observation of adolescents prior to student teaching.
- 9. Modifications recommended for the teacherpreparation program include (a) special course
 offerings for the preparation of junior high school
 teachers, (b) special methods courses for all
 teaching areas, and (c) more preparation in the
 use of audio-visual equipment and materials.
- 10. English teachers recommended more American literature, and language teachers felt that linguistics should be required.
- 11. Respondents felt that admission to the College of Education should be based on criteria in addition to the minimum grade average.

Conclusions and Recommendations

Results of this study generally favored the experimental program over the regular program. Three of the four items showing significant differences favored the experimental program. In addition, percentage comparisons on eighteen of the thirty-four items favored the experimental program and only four favored the regular program.

Community size, subject area, and type of school organization had little effect on the respondents' perceptions of the adequacy of the preparation programs.

The teacher-education program must be continuously studied and revised to meet changing needs in the schools. Objectives should reflect the needs of graduates as determined by the types of schools and communities in which they will teach. Criteria for selection and retention of prospective students in teacher-preparation programs should be strengthened.

A more flexible program should be developed which will provide electives to students with varying interests in such areas as adolescent psychology, the junior high school, psychology of discipline, and history of education. Special methods courses should be provided in each major subject area. Prospective junior high school teachers should be provided with offerings which prepare them specifically for teaching at the junior high school level. The course content of teaching majors should be revised to

more effectively prepare teachers for the secondary course content.

The student teaching experience should be broadened to include pre-student teaching observation, full-time college supervisors, and working with adolescents of varying abilities and socioeconomic and ethnic backgrounds.

CHAPTER I

INTRODUCTION

In the past three centuries this nation has advanced from a simple, agricultural society to a complex and highly-industrialized society. During this period the technological advancement of this nation has been unexcelled by any other nation in the world. With an increase in technology and industrialization, however, attendant problems have appeared. One of the urgent problems for consideration in education is the seemingly dulled sense of values, goals, and concern for human welfare which has accompanied the nation's material prosperity. Success of the nation, so far as technological progress is concerned, has been plagued by the realization that many people need a greater understanding of, and compassion for, their fellow man. This aspect of education in the past seems to have been lacking. Objectives may need re-evaluating in view of this need. Counts (1966) recognized the need in education for more than a thorough understanding of the disciplines. He stated:

. . . the first task of the school is to give to the young an understanding of the nature of the age and the world in which they will pass their lives. . . . We should . . . teach science as a humanistic discipline to all of our people. It should be studied as a powerful ingredient of the culture, changing our ways of life, our outlook on the universe, and our very conception of man and his destiny . . . perhaps the most fundamental question of education in all societies and a question which has received relatively little attention in this age of science and technology [is] the question of values (p. 405).

Educators today are aware that forces in society have a great influence upon American education. As a result of these forces, changes are constantly occurring in public schools which affect teacher preparation. Sorenson (1966:324-325) stated that scientific, technological, and social changes in our society are resulting in changes in public schools. He stressed the importance of changing the professional curriculum in teacher education in order to be more effective in influencing what and how he teaches.

Significant changes in school curricula the past ten years indicate that educators are conscious of their responsibility to American education. In fact, Shaw (1966:343) stated that there have been more changes in the school curricula in the past ten years than in any other decade of our national history.

Changing school curricula necessitates a vital, dynamic teacher-preparation program designed to meet the professional needs of its graduates as well as the needs of students which they will teach. In order to determine the effectiveness of teacher preparation, an evaluation of the program should be made. If educators were to view

evaluation as a continuous process, they would be enabled to determine which areas of preparation need to be strengthened or modified. Fisher (1953:459-461) stated that teacher-education programs must be continuously evaluated to meet the demands of our times. He especially stressed evaluation of the undergraduate program in terms of how well it fulfills its function.

An important source of evaluation is the teacher himself. After completing the teacher-preparation program, the teacher has an awareness of how well his training has prepared him to cope with everyday situations in the class-room. McGrath (1949:25) felt that such evaluation by teachers would be effective in revealing areas of weakness in the training program. In his opinion, graduates in the field should be encouraged to share with educators their problems, inadequacies, and conflicts.

The Problem

Statement of the Problem

The specific purposes of the study were to survey the appraisals of experienced teachers who were graduated from The University of Arizona College of Education during a period when two types of programs were offered in the preparation of secondary teachers, and to determine:

- The strengths and the limitations of The University
 of Arizona teacher-education program as perceived
 by teachers.
- What improvements, if any, as perceived by the teachers in the field are necessary to meet their professional needs as beginning teachers.
- 3. What recommendations should be made as based upon information supplied by teachers.

Hypotheses of the Study

The hypotheses derived from the statement of the problem were:

- 1. There will be a significant difference between the two approaches to the teachers' education as to quality of the program as perceived by the graduates of The University of Arizona College of Education.
- 2. There will be a significant difference in quality
 of the program as perceived by teachers in selected
 subject areas of the teacher-preparation program.
- 3. Teacher perception of the quality of the program is affected by size of community in which they teach.
- 4. Teacher perception of the quality of the teachereducation program is affected by type of school organization in which they teach.

Importance of the Study

Social, economic, and cultural changes in the world bring new problems for education. It is more important now than ever before to continuously evaluate the teachereducation program in order to determine the adequacy of preparation as perceived by experienced teachers. Atkinson and Maleska (1965:492) stated that the future of the nation depends on the kind of education today's children receive. It is not enough that our children today are getting more and more education—it must be a better education, as well, if we would survive as a nation. The American schools have a serious charge to promulgate learning relevant to the contemporary needs of society.

Ebel (1966:18) pointed out that some research shows that teachers, in general, are well prepared in their areas, but many of them fail in the human aspects of their job, such as ability to gain rapport with, to motivate, and to discipline children. Kolker (1967:24) stated that over ten per cent of more than 45,000,000 youngsters in the United States between the ages of five and seventeen are sufficiently disturbed to need treatment ranging from counseling to psychotherapy. There is some question that education, then, has met the needs of students in the twentieth century.

Before 1962, no major changes in terms of undergraduate secondary teacher-education curriculum at The

University of Arizona were made for a period of twenty-six years. During that time, certification requirements were established by the State Board of Education. However, the State Board of Education changed certification regulations to become effective on July 1, 1963, allowing degreegranting institutions to devise their own teacher-preparation programs. As a result, in September 1962, the College of Education of The University of Arizona modified its teacher-education program by offering selected seniors a block-of-time approach for their coursework and student teaching.

Brown (1966) conducted a study to compare two approaches to the preparation of secondary teachers at The University of Arizona College of Education. Attitudinal changes of two groups of student teachers were measured to determine in what ways they would be more effective teachers. Results of the responses were compared for the block-of-time program and for the regular program.

Brown's study included only student teachers. This study is: (1) an evaluation of secondary teacher-education programs at The University of Arizona, (2) based upon research on the responses of graduates of the College of Education of The University of Arizona who have had actual experience in teaching, and (3) a survey of teachers' perceptions of the adequacy of the teacher-preparation program in terms of their needs in the classroom.

Guidelines may then be established as a basis for planning future programs of teacher preparation.

Limitations of the Study

This study was limited to The University of Arizona College of Education graduates for the period June 1962 through September 1966.

A limitation pertains to emotional bias or prejudices. Since the population included five graduating classes with teaching experience of one to five years, it is believed that this is not a crucial factor.

Another limitation refers to the small number (28) of students enrolled in the 230 program. Two of these questionnaires were returned by the Post Office due to incorrect addresses. The responses for the 230 program were combined with those of the block program for purposes of comparison with the regular program to offset this limitation. The 230 program was quite similar in content to the block program, the primary difference being that it was a part-time program over the period of two semesters rather than a one-semester, full-time program.

An additional limitation was the absence of data regarding differences existing between groups prior to entering the programs. It might be that differences obtained through the questionnaires resulted from the

individual decisions to enter one or the other of the two programs.

<u>Definitions</u>

Block Program

The block program was the 14-unit program for one semester, including eight weeks of full-time student teaching.

Experimental Group

The experimental group was composed of all the teachers who had enrolled in the 230 program or the block program.

Experimental Program

The experimental program was the combination of the 230 program and the block program.

General Methods

General methods was a course in which the student learned the techniques of teaching based on principles of educational psychology and not limited to a specific discipline.

Special Methods

Special methods was a course which integrated the application of educational theory with methods, evaluation,

teaching procedures, and lesson plans pertinent to a specific discipline.

Major

The major was the principal subject which the student desired to teach. It required 24 or more units in the subject selected to constitute a major.

Minor

The minor was a secondary subject-field which the student planned to teach. It consisted of 18 or more units in the subject or field selected.

Regular Group

The regular group was composed of all teachers who had enrolled in the regular program.

Regular Program

The regular program was one semester of student teaching for three hours per day, preceded by separate courses in general methods and in tests and measurements.

Student Teaching

The level of experience at which students are permitted to assume classroom responsibilities for planning and directing classroom work in the public schools.

Teacher

The teacher was a University of Arizona College of Education graduate who had actual teaching experience.

The 230 Program

The 230 program was a one-year program, including a six-hour course in general methods and evaluation which preceded student teaching.

The University

The University was used to designate The University of Arizona.

The University of Arizona Teacher-Education Program

Three different teacher-education programs were available to students who graduated between June 1962 and September 1966. They were: (1) the professional semester (block) program, (2) the 230 program, and (3) the regular program.

Organization of the Study

This study is organized in five chapters. Chapter I includes a statement of the problem, the hypotheses, importance and limitations of the study, and definitions of the terms used in the study. In Chapter II the literature pertaining to the purposes and to the problems of senior high school teacher preparation is surveyed.

Chapter III states the locale and the population of the study as well as the procedure for collection and treatment of the data.

Chapter IV contains an analysis of the data. The final chapter, Chapter V, is a summary with conclusions, recommendations based upon the findings of the study, and recommendations for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

The research and literature concerning teacher preparation programs is voluminous. Therefore, only selected studies are reviewed in this chapter. The purpose was to determine the problem areas of teacher-preparation programs as delineated by research, and to present evidence of specific problems as determined by studies reported in the literature. Since it would be impossible to report all of the studies, this researcher considered only those selected studies conducted within the past two decades which supplied findings relevant to this study.

Teacher-Preparation Program Studies

Brown (1966) conducted a study to determine attitude differentials between student teachers enrolled in either the regular program or the experimental program at The University of Arizona during the spring semester of 1965-1966. Brown developed a Q sort based upon the objectives of the College of Education Secondary Education Department.

Brown's question was, "What attitude differentials resulted between the student teacher group in the

experimental program and the group in the regular (traditional) program" (p. 1).

The null hypotheses in Brown's study were:

- 1. There will be no significant shift in specific attitudes in either the experimental or regular group as a result of the student teaching experience.
- 2. There will be no correlation between measurement of certain attitudes of the student teachers and the assessment of those attitudes by the college supervisors of the student teachers.
- 3. There will be no significant changes in attitudes of the experimental group between measurements: at the commencement of class work, immediately prior to student teaching, and at the end of student teaching.
- 4. There will be no significant difference in specific attitudes between the experimental and regular groups when corresponding measurements are considered (pp. 1-2).

According to the findings of Brown's study,

There was a general shift of attitudes of the experimental group towards the secondary education objectives during the class period. For some factors the shifts were significant. The downward trend was away from the objectives during the student teaching period for the experimental group, although the final scores were very close to the final scores for the regular group.

The experimental group attitude of worthiness as a teacher was contrary to the general trends for both periods. During the class period the student's perception of himself as a teacher fell significantly but during student teaching the perception rose again, nearly to the originally high level.

The regular group showed a slight overall increase during student teaching. The regular

group total mean score at the beginning of student teaching was well below the corresponding score of the experimental group but at the end of the student teaching interval the total scores means were very close (p. ix).

Brown concluded that the results "seemed to indicate a greater flexibility in attitude for the experimental group, indicating a greater openness to the experience."

Similarly, Kise (1964:3421-3422) compared the effects upon teacher candidates of two types of professional education preparatory programs. Subjects for the research project, 100 pairs of freshman elementary education majors at Cortland, State University of New York, were matched on the basis of sex, intelligence, and attitudes toward pupils. The subjects were assigned to either the "Experimental" or "Traditional" preparation program for the two-year study. The "Traditional" program included all methods courses prior to student teaching which was undertaken during the last semester of the junior year. "Experimental I" program student teaching preceded methods courses so that in each semester of the junior year student teaching was followed by a quarter of methods work. "Experimental II" program, methods courses preceded the quarter of student teaching each semester of the junior year. Kise measured change in knowledges, change in attitudes toward pupils, teaching effectiveness, and attitudes toward the professional preparation at the end of the twoyear study. The findings revealed no significant

difference in change of academic knowledge, teaching effectiveness, or attitudes toward the professional preparation. However, Kise did find a significant difference in change of attitude toward pupils as measured by MTAI. According to his findings, respondents who had the "Experimental I" preparation program "showed significant positive change in attitudes toward pupils when compared with 'Experimental II' or 'Traditional' members."

Problems Identified by Student Teachers

Pre-student Teaching Experience

Teacher education institutions are becoming more aware of the need for students to experience working with children prior to student teaching. Pre-student teaching experiences with children appear to be one way to strengthen the teacher education programs in the professional education phase. Some educators consider that learning is more meaningful when theory is linked with practice by prior classroom experiences. Tressler (1967: 2130-A) found in an appraisal of pre-student teaching experiences that more than half of the colleges and universities with approved teacher education programs in Maryland offered pre-student teaching experience for undergraduate students who were interested in teaching. Also, he found that the college students and professional teachers agreed that there should be more time devoted to

pre-student teaching experiences with children. Tressler concluded that this pre-student teaching experience "allowed the college student to assume the leadership role of the teacher, helping the college student to overcome the initial fear of teaching."

Hollis (1964:1028) recommended that "demonstrated proficiency in oral and written communication should be prerequisite to student teaching." In his study he found that one of the areas of weakness reported most frequently by teachers and their supervisors was a deficiency in oral and written expression.

In a study of student teachers and first-year teachers who were graduated from Central Michigan University, Trautmann (1965:5146) found that 74 per cent stated they could not have achieved success without having had student teaching. Respondents were asked to recommend experiences which should be included as part of the student teaching program. Experiences most frequently mentioned were:

- 1. Handling discipline problems successfully.
- 2. Organizing daily lesson plans.
- 3. Using available teaching aids effectively.
- 4. Motivating students.

Current research on programs for the preparation of teachers indicates changes soon to be initiated by various

colleges in the student teaching phase. Hancko (1968: 2581-A) found in his research that student teaching will be subdivided into smaller units. He stated,

Each unit will consist of a study of teaching followed by a practice in teaching. The study will introduce principles and hypotheses to be tested in actual classroom situations and the practice will generate inductions from observations to be checked against the doctrines of scholars in the field of education.

Hancko also found that video tapes will be increasingly used at teacher preparation institutions enabling students to study classroom behaviors and to compare styles of teaching. Video tapes of students' teaching will provide resource materials in seminars and will be used by students for self-evaluation.

An area of weakness identified in a majority of studies of student teachers as well as beginning teachers at the elementary, junior high school, and senior high school levels, is that of discipline. Ackerman (1967: 3332-A) conducted a study of elementary teachers in which the most frequently mentioned problem was discipline of children.

Harris (1964:1770) compared three types of evaluations of teaching done by student teachers in elementary education. Two evaluations were self evaluations; one by the student teachers near the completion of their student teaching experience, and the other after they had been teaching from four to seven months. The third evaluation

was made by the supervisors of the student teachers. Dr. Harris concluded that "more concern was expressed by all three groups over ability to succeed in classroom management and discipline than in any other area. There was less agreement concerning weaknesses than there was concerning strengths. Supervising teachers frequently mentioned personal qualities as factors in success or lack of success."

Miller (1955:47) conducted a study to determine teaching problems of student teachers and graduate teachers. He found that,

... student teachers and graduate teachers encountered approximately the same teaching problems... Student teachers and graduate teachers reported that most of the problems handled with little success could be classified in the general area of teaching method and classroom management.

Bond (1951:11-22) conducted a study to determine strengths and weaknesses of student teachers. Respondents were 263 student teachers in secondary schools and 266 student teachers in grades one through six. He reported that the "mean score of 'achievement of discipline' placed this item of teacher competence lowest on the list of 32 for all elementary and secondary student teachers" (p. 17).

Brennfleck (1968:4929-A), in determining the critical job requirements of the cooperating English teachers in New Jersey schools, reported that "student teachers attached great importance to effective discipline."

The preparation of teachers of the various subject areas has problems unique in the particular subject area, as well as common problems found in all subject areas.

Much research has been undertaken to analyze the preparation programs of English teachers.

Robinson (1955:641-647) found that preparation of secondary English teachers in New England colleges and universities met the National Council of Teachers of English recommendations in two areas only, namely, the inclusion of Shakespeare and Poetry. Furthermore, she found that New England universities and colleges did not meet fully the recommendations of the National Council of Teachers of English in world literature, contemporary literature, essay, oral reading composition, history of the language, grammar, speech improvement, and in the teaching of English, reading, writing, and speech.

Student teachers in Brennfleck's (1968:4929-A) study rated the cooperating English teacher's most important functions as (1) the observance and supervision of the student teacher, and (2) holding constructive and evaluative conferences with the student teacher. The student teachers rated the cooperating English teacher's knowledge of his subject and his performance in the classroom of lesser importance. The student teachers rated the cooperating English teacher's employment of "variety and originality in methods, devices, assignments, and classroom

routine" as the most important aspect of the cooperating English teacher's performance in teaching. Next in importance, they ranked the teacher's "use of literature, writing assignments, and discussions to present ideas, attitudes, and moral values."

Gage (1963:989) reported on a survey summary prepared in 1961 by the National Council of Teachers of English. The report stated:

. . . only 41 per cent of all colleges require candidates for secondary school teaching to complete a course in advanced composition, only one-fourth of them require a course in the history of the English language, and only 17 per cent of them require a course in modern English grammar.

In another nationwide study, Boze (1967:137-A) sought to identify a common core of concepts and competencies which prospective English teachers should attain through the college methods of teaching English courses. Authorities in the fields of English and professional education almost unanimously indicated that present English and professional education courses were not meeting the needs of the teacher. Boze found that a majority of the respondents

. . . believed that teachers fail more because of lack of methodology and classroom control than from lack of academic preparation. Three principal areas recommended by respondents for additional emphasis in English teacher preparation were approaches to teaching composition, history and study of the English language, and methods of teaching reading at all levels.

Dumas (1966:19-27) was interested in the strengths and weaknesses of student teachers in English. Subjects for the research project were twenty-one prospective English teachers. In reporting his findings, Dumas stated that nine traits belonged consistently to the category of "weaknesses." He observed that these nine traits define three factors: "(1) Knowledge; (2) Empathy; and (3) Voice" (p. 23). The nine traits of weakness were listed as follows: "(1) sympathy with pupil difficulties; (2) breadth of general information; (3) understanding of unit organization; (4) knowledge of modern teaching materials; (5) quality of questions; (6) recognition of pupil needs; (7) use of pupil experience; (8) fixation of important learnings; and (9) quality of voice" (p. 23).

Fehr (1961:456-464) stressed the importance of thoroughly trained mathematics teachers "who not only know what they must teach, but who know some of the depths and extensions of their subject" (p. 462). He proposed a final course to be taken prior to student teaching, or concurrently with student teaching, which would concentrate on professionalized subject matter in secondary school mathematics. Fehr pointed out that while studying college mathematics, students are gradually working on more complex and more abstract problems of mathematics; and, therefore, students need to be reoriented to mathematics at the high school level.

In a study of the preparation of art teachers at Wayne State University, Barclay (1964:2304) concluded that there should be "a more meaningful relationship between the professional education sequence and student teaching."

Prospective teachers, regardless of subject matter to be taught, need excellent educational experiences to attain an adequate level of competence. The importance of an adequate preparation of science teachers, according to Schlessinger (1962:271-276), is "an extremely significant element in the development of a sound science-education program in the schools" (p. 271). Schlessinger stated that curriculums need to be updated. He pointed out that in evaluating teacher-preparation programs educators need to consider both the increasing content of science as well as new theories of learning.

Ackerman (1967:3332-A) found that the most prevalent of the respondents' suggestions for modification in teacher-preparation programs were for more student teaching and more direct observation and working with children prior to student teaching.

In a study conducted by Jamrich (1954:62) of teacher-preparation institutions' general methods and related courses, it was concluded:

There is an apparent lack of coordination and continuity in many of the programs investigated in this study. . . . A number of the respondents indicated that they preferred to have the general methods course offered concurrently

with student teaching, despite the fact that this had not been done in their particular institution.

Problems Identified by Beginning Teachers

In a study completed at the University of Denver, Stone (1964:1037) sought to determine the personal and professional problems of beginning junior and senior high school teachers. The relationship of the number of these problems to new teachers' personal characteristics was also considered. Subjects for the research were 168 inexperienced teachers in the Denver Public Junior and Senior High Schools. The most important problems as perceived by the respondents in descending order of frequency were:

- Motivating adolescents to achieve to their capacity.
- Handling discipline problems in the classroom.
- 3. Teaching retarded or slower classes.
- 4. Establishing rapport with pupils while still maintaining authority.
- 5. Accepting the erratic behavior and unpredictable emotional reactions peculiar to the adolescent.
- 6. Finding time to do everything expected.
- 7. Understanding what should be taught.
- 8. Evaluating and reporting pupil achievement on report cards.
- 9. Finding time for clerical activities.

- 10. Finding time for planning and preparation.
- 11. Being aware of the usual patterns of classroom management used in the school.

In addition, Stone also found that new junior high school teachers reported with significantly greater frequency four problems than did the senior high school respondents. These problems were:

- 1. Accepting the erratic behavior and unpredictable emotional reactions peculiar to the adolescent.
- 2. Accepting the adolescent's intense loyalty to peers and his drive for emancipation from adults.
- 3. Establishing rapport with pupils while still maintaining authority.
- 4. Handling discipline problems in the class-room (p. 1037).

With the exception of these four problems, Stone found no significant difference between new junior high school teachers' and new senior high school teachers' perceptions of their problems.

Stone also found that new teachers in non-academic subject areas reported significantly fewer problems. He concluded:

Marital status, subject methods courses completed, student teaching experience in an urban rather than a suburban or rural setting, grades in student teaching, assignment to minor rather than major subject area, and plans to return to the same school the following year were unrelated to the number of problems perceived by the beginning teachers (p. 1037).

In a study to evaluate the Appalachian State
Teachers College teacher preparation program, Wey (1951:
105) found that discipline of children was the problem
encountered most frequently by both student teachers and
beginning teachers. He concluded that discipline is also
"the difficulty that has the greatest tendency to persist
throughout student teaching and the first year of
teaching." Similarly, Taylor (1961:221-222) conducted a
study at San Francisco State College of graduates of the
Secondary Education Department in 1957-1958. The group
included junior high school, secondary, special secondary,
and junior college majors. The 218 respondents who
answered the questionnaire identified the problem most
frequently encountered in their teaching as classroom
control and motivation of students.

Kessler (1964:2803) studied the needs of 100 beginning teachers in four junior high schools in Brooklyn, New York, in order to develop a teacher's guidebook to meet these needs. Kessler found that "The greatest number of beginning teachers (84 out of 100) indicated a need for help in 'Taking care of chronic disputers.'" Hemenway (1963:2377) proposed that future junior high school teachers' preparation program should include student teaching at the junior high school level.

Problems Identified by Experienced Teachers

In a study by Bentley (1968:161-162-A), administrators and teachers with experience in directing or administering independent study were asked their opinions of the pre-service experiences needed by teachers of independent study. The 229 teachers and 34 administrators represented a nationwide sample involving 36 secondary schools with independent study programs. Among the helpful preservice experiences identified by respondents were:

(1) visiting other independent study programs, and (2) being adequately prepared in one's subject area. Bentley concluded, "the realm identified as independent study is not generally included in traditional pre-service programs."

Zeitlin (1962:116-125) studied disciplinary problems in seven Phoenix High Schools using a unique source of data. He used disciplinary reports written by teachers who were not aware that their reports were data for a study. The findings revealed that schools in the Country Club area had about the same type of problems as the schools in the slum area. Also, four out of five teachers turned in disciplinary reports on their students during one semester. Zeitlin concluded that "there is a need for improving the training of teachers in handling teenagers. A college course in maintaining classroom discipline might be helpful" (p. 119).

In a study to determine the reactions of secondary school teachers to current criticism of teacher education, Goldstein (1964:4566) found those criticisms considered most valid by the respondents to be those "primarily concerned with courses in professional education and the need for greater attention to work in subject matter areas."

Subjects for Goldstein's project were 441 junior and senior high school teachers in the Connecticut public secondary schools. Goldstein reported:

... the teachers indicated that the need existed for greater emphasis in the subject matter areas and less emphasis on courses in professional education. On the other hand, the emphasis which was given certain specific areas of professional education, such as student teaching and psychology of learning, are given favorable support by teachers included in this study.

Sullivan (1964:2874) found in a study to identify instructional problems as perceived by Texas secondary English teachers that providing for individual differences, testing and evaluating, and classroom control were the three areas of greatest weakness. Furthermore, he found that problems related directly to the teaching of English in descending order of severity were spelling, expository writing, grammar, reading skills, punctuation, creative writing, vocabulary development, critical thinking, broadening outside reading, usage, speaking, and listening.

In a national study by O'Neill (1967:2925-A), teachers of English in Catholic Secondary Schools were

asked to identify their instructional problems. It was found that participants were more commonly dissatisfied with organizing content, providing for individual differences, handling instructional materials, determining student progress, and presenting English content. Composition was rated more frequently as a problem area than any other problem in the content area.

In a study by Franklin (1968:2580-A) it was found that foreign language teachers favor a practice teaching period of one year under a master teacher slightly more than they did a period of one semester of two hours daily. Franklin recommended that educational and foreign language departments cooperate in planning coordinated programs for foreign language majors. He found that the general education courses which French and Spanish teachers rated as essential in their preparation were general teaching methods, psychology, history, English language, and educational psychology. Furthermore, they considered a thorough preparation in language and literature essential.

Greenberg (1962:243-247) expressed his belief that foreign language teachers whom he visited across the nation did the best work where "they had good command of the language and where they had been trained in the use of the Audio-Visual method" (p. 245).

Taylor (1961:221-222) noted that the teachers involved in his study rated subject matter as their first

need for additional training; and yet, in identifying their problem areas, the teachers named classroom control and motivation among the most severe while lack of subject matter ranked well down on their list of problems.

In a study to measure the effectiveness of the teacher education program of Long Island University, Harmon (1967:2084-A) found that teachers with no more than ten years of experience gave the total program significantly higher ratings than did those with more than ten years of teaching.

Moffit (1967:1719-A) found in his study concerning opinions of elementary teachers who graduated from Central Michigan University that experienced teachers rated their training lower than did graduating seniors and first-year teachers. However, the experienced teachers rated some of the theory courses higher than did graduating seniors and first-year teachers.

Junior High School Teachers

Irvin (1967:2916-2917-A) surveyed the problems of social studies teachers in selected junior high schools of the North Central Association Region. Instructors teaching social studies in three-year junior high schools, who had no more than five years of teaching experience, comprised the sample for the study. Irvin found that the teachers involved were least prepared in the course most often

taught at the seventh grade level, namely, geography. His respondents listed preparation and teaching time, discipline and motivation as the major teaching problems in order of importance. They agreed that separate certification requirements should be established for junior high high school teachers. Two-thirds of the teachers agreed that there should be a specific curriculum for junior high school teacher preparation. All but ten per cent agreed that methods courses for junior high school social studies teachers should be more precise and well defined.

Miller (1964:1034) found in a study of junior high school teachers that their most favorable appraisal of their preparation was in the area of subject specialization and language arts. Areas of weakness indicated by the same teachers were in the teaching use of audio-visual aids and the supervision of student activities. The in-service help the teachers wanted most was: (1) how to provide for the slow and rapid learners, (2) how to develop better student attitudes toward learning, (3) how to exchange effective teaching techniques with other teachers, and (4) how to make better educational use of the homeroom.

Teacher Attitude and Personality Research

A number of factors might account for a teacher's inability to cope with classroom situations. For instance, personal characteristics and attitudes could impair

teaching and an individual's perception of his own effectiveness in a classroom.

Teacher Attitude

Teacher attitude, personality, and perception of self are considered by educators as important traits of the effective teacher. Many educators agree that teachers' attitudes have an influence on their teaching, and administrators attach importance to attitudes in the selection of teachers.

Hines (1964:312) concluded from her study that no change in attitude was apparent as the student progressed through the four years of the college in which her study was made. The seven-group sample of the study included freshmen enrolled in a core class in general psychology, juniors admitted to advanced teacher education, prospective student teachers, student teachers, post student teachers, graduate students, and liberal arts majors.

Wolaver (1964:2866) studied the nature and types of changes in attitudes during teacher education and actual teaching experience. The conclusion of Dr. Wolaver was, "Teachers' attitudes and personality . . . remain relatively stable throughout preparation for and following one year's teaching experience."

However, Sandgren and Schmidt (1956:673-679) conducted a study using 393 seniors at a midwestern state

teachers college as the sample. They concluded, "Attitudes of student teachers improve during the period of time in which practice teaching is taken" (p. 679).

Teacher Characteristics and Personality

Teacher characteristics and personality are recognized as important factors in determining teacher effectiveness, or lack of effectiveness, in the classroom.

Haberman (1965:94) wrote about differences between interns and first-year teachers. He suggested that "greater weight be placed on the characteristics and attributes of the individuals selected to be interns than on the likelihood that better preparation for planning was offered in the intern program." This might justify a conclusion that perhaps teacher preparation institutions need to be more selective in admitting students.

Wey (1951:105) concluded in his study, "Student teachers and beginning teachers are not likely to recognize that their teaching difficulties are often a direct outgrowth of their own personal deficiencies."

Ryans (1960:1486-1491) generalized from reports in the literature regarding the relationship between teacher characteristics, as predictors, and teacher effectiveness, as a criterion that characteristics of the teacher which are likely to be positively correlated or associated with teacher effectiveness in the abstract include: Measured intellectual abilities, achievement in college courses, general cultural and subject-matter knowledge, professional information, student teaching marks, emotional adjustment, attitudes favorable to students, generosity in appraisals of the behavior and motives of other persons, strong interest in reading and literary matters, interest in music and painting, participation in social and community affairs, early experiences in caring for children and teaching (such as reading to children, taking a class for the teacher), history of teaching in family, size of school and size of community in which teaching, cultural level of community, and participation in avocational activities (p. 1490).

Teachers who scored significantly higher on scales measuring friendly and stimulating classrooms were from larger schools in communities of 500,000 to 1,000,000 population.

Teachers from the largest communities (one million and over) scored about as low as teachers from the very small communities.

Liu (1964:1032) studied the personal characteristics of secondary school social studies teachers and their relation to potential teaching behavior. The subjects of this study were 60 secondary school social studies student teachers from North Texas State University at Denton during the 1962-1963 school year. Liu concluded:

The less rigid, dominating, dogmatic, and/or autocratic a student teacher was, the more alert, responsible, confident and/or self-initiating his pupils were . . . the more friendly, flexible, sympathetic, and/or understanding a student teacher's behavioral traits were, the more positively his pupils reacted.

Similarly, Trow (1960:611) agreed that a teacher cannot be "over-bearingly authoritarian" if group processes are to be effectively handled. The teacher, according to Trow, "must be a democratic strategist. Primarily his role is instructional--an enlargement of that of the resource person."

Lipham (1960) and Del Popolo (1965) concur regarding the relationship between the teacher's personality and his effective performance as a teacher. Lipham stated that there is a meaningful relationship between personality and effective performance in the classroom. Del Popolo stated:

. . . one of the most important characteristics of an effective teacher is the ability to establish harmonious pupil-teacher relationships in the classroom; and this in itself depends partly on the personality adjustment and orientation he has established in relation to himself and others (p. 50).

Flanders (1960:33) observed that the "greatest single influence on classroom teaching is the behavior of the teacher." Bowman (1968:162-A) hypothesized that "The behavior a teacher exhibits in directing and controlling activities of the students in the classroom is related to the behavior the teacher exhibits toward people and life in general." Bowman's study included 454 teachers of seven selected senior high schools—three in urban areas in Northern California, and four in suburban areas on the fringes of the same urban area. Bowman considered age, sex, subject taught by the teacher, and the type of

community in which the school was located. Bowman concluded:

. . . the hypothesis is confirmed in a most convincing manner. . . . The relationship between the degree of dominance that the teacher exhibits in the classroom and the interpersonal behavior of the teacher is independent of the age and sex of the teacher, the subject matter taught and type of community in which the school is located.

Jones (1968:3056-A) attempted to establish norms for the determination of the teacher-candidate's personality potential—for work in the field of education—and to establish other procedures for the development of that teacher—candidate personality into the acceptable teacher—personality. He concluded, "The student can be no better, in general, than his teacher. The teacher is a product of the educational processes and his own life educating experiences. The student's personality is based upon the development of the teacher's personality."

Joyce, Lamb, and Sibol (1966:219-222) wrote about the ineffectiveness of child psychology, human development, and educational psychology courses in assisting teachers in their understanding of children. They suggested that "the more concrete teacher is less able to absorb and utilize information about children and that he may be less responsive to instruction in this area, even as he appears less able to help children explore problems than his abstract counterpart" (p. 222).

Teaching ineffectiveness is not entirely the fault, or the lack, of preparation. In fact, Gage (1963:989) wrote that Scofield

... studied younger teachers to determine the extent to which they employed methods in the classroom which they had been taught in methods courses. She found not only that the teachers did not use many of the procedures which they had been taught, but after being in the classroom, they tended to adopt routine procedures often contrary to those they had been taught during their training.

Teacher Concept of Self

Educators agree to a large extent that the teacher must have a positive concept of self. Kelley (1962:9-20) wrote of the importance of "the fully functioning self." He stated, "The self is . . . the accumulated experiential background of the individual built . . . in relationship to others. The self has to be achieved. The crucial matter is not so much what you are, but what you think you are" (pp. 9-10). He continued,

The psychological self continues to grow throughout life. . . . We feed the psychological self
through the perceptive process. This is what
comes into consciousness when stimuli from the
environment impinge on the organism. Perception
is selective. . . . A person becomes less fearful and more open through good experiences. He
needs people who respect him as a person from
the very beginning. Perhaps there is no one
quality more important for the developing self
than this feeling of involvement in what is
taking place (pp. 13-17).

Combs (1962:53) also stressed the importance of self concepts. He wrote,

People discover their self concepts from the kinds of experiences they have had with life; not from telling but from experience. . . The best guarantee we have that a person will be able to deal with the future effectively is that he has been essentially successful in the past.

It is important that teachers, then, as well as students, have a positive view of self. Combs (1962:60) wrote that "people get their perceptions . . . as a consequence of their experience. Rich and extensive perceptual fields are a product of the kinds of opportunities an individual has been exposed to." The student teacher, then, as well as the experienced teacher, needs a perceptual field in which he sees himself as an effective teacher of students with a desire to learn. An effective teacher, according to Combs (1964:369-377) may be defined "as a unique human being who has learned to use his self effectively and efficiently for carrying out his own and society's purposes" (p. 373). He further delineates six general areas in which a good teacher "is characterized by typical perceptual organizations" (p. 374):

- His knowledge of his subject.
- 2. His frame of reference for approaching his problems.
- 3. His perceptions of others.
- 4. His perception of self.

- 5. His perceptions of the purpose and process of learning.
- 6. His perceptions of appropriate methods.

Combs (1964:376) stated that the "behavior of the individual at any moment is a function of how he sees his situation and himself. . . . The behavior of a teacher . . . is a function of his concepts of self."

The teacher-education program has the responsibility of producing effective teachers with extensive perceptual fields. Combs (1962:61-62) stated,

Since all of these ways of perceiving are learned, they can also be taught if we can but find ways to provide the necessary kinds of experiences. No other agency in our society is in a more crucial position to bring about these necessary conditions than are the public schools. Indeed, the production of such people must be the primary goal of education.

The lack of an extensive perceptual field may have a far-reaching effect. For instance, Pryor (1964:4088) conducted a study on 241 public school teachers to determine how teachers viewed the educational process which involved their status, rewards, and feeling of accomplishment. Pryor found that the respondents did not perceive themselves as taking any positive action toward curriculum or cultural change; nor did teachers view their work as inspiring or challenging; and, furthermore, teachers felt they had no part in the development of educational policy.

Summary

The teacher-preparation program at the University has been updated during the present decade to give its graduates greater competence in meeting the problems faced by beginning teachers and reviewed in this chapter.

Today it is a constant challenge to bring into focus the goals of teacher-preparation programs with the goals of the students which graduates will teach. The present trend in education away from what to think on how to think is reflected in the objectives of the University's teacher-preparation programs.

Considerable research has been undertaken to analyze areas of "strength" and "weakness" in teacher-preparation programs. From the findings of studies reported in this chapter, one might conclude that (1) frequently discipline is the problem of greatest concern to teachers regardless of subject area of teaching, type of preparation program, type of community, or grade level; (2) type of preparation program was not a significant determinant of types of problems as perceived by teachers; and (3) attitude and personality of the teacher is a significant factor in determining teacher effectiveness.

According to the literature reviewed here, personal qualities may prevent the prospective teacher from assimilating specific practices and teaching techniques and thereby contribute to the teacher's lack of success. Also,

it may be concluded that the teacher's feeling of success or lack of success may have had a direct bearing on his responses.

CHAPTER III

BACKGROUND OF THE STUDY

At the turn of this century, the learner's development in most areas of this country was, for the most part, the concern of the home and the community. Since that time, however, many changes have occurred in the social, economic, and institutional structure of American society. Problems, such as increased migration, slums, race riots, and unemployment, have had a great impact upon education. As a result of technological advance, new types of workers with intellectual and technical skills and fewer unskilled workers are needed now than half a century ago.

The University of Arizona has been accredited since 1917 by the North Central Association of Colleges and Secondary Schools as a degree-granting institution, and in 1924 the Association of American Universities gave recognition to the University as an approved institution. In July, 1963, the National Council for Accreditation of Teacher Education approved the University's teachereducation program.

The College of Education prepares teachers, counselors, school librarians, supervisors, and administrative school officers, in accordance with state certification

requirements. All undergraduate students selecting teaching as a vocation, with the exception of vocational agriculture, home economics, and certain fine arts majors, are registered in the College of Education and must complete the minimum education requirements for graduation. In order to be admitted to the College of Education, students must have completed 56 units of work applicable to a degree with a grade average of 3.0000 or better in all courses appearing on their official records. In addition, "candidates will be required to take certain physical and psychological examinations and meet other criteria for admission" (The University of Arizona, 1963a: 205).

Teacher Education Objectives

In The University of Arizona (1963b:9), the major objectives in teacher education at The University are given as follows:

The selection, preparation, and improvement of teachers and school personnel in a manner consistent with the philosophy of a free and democratic society.

The selection and preparation of graduate scholars in education who through their study and research will extend the boundaries of knowledge in this most important field.

The provision of assistance to community schools through in-service programs, research, studies and surveys, converences, and consultation.

College of Education Basic Requirements

The College of Education outlines three basic requirements in the adequate preparation of teachers and school officers:

(1) a broad and liberal educational background

(2) thorough and substantial scholarship in the fields to be taught

(3) adequate professional preparation and study

designed to give a knowledge of the pupils to be taught, an understanding of the fundamental concepts of educational procedure, familiarity with the problems to be met in the art of teaching, and proficiency in actual classroom practice (The University of Arizona, 1963a:207).

In addition, junior high school and senior high school teachers' preparation emphasizes special subjects to be taught. Graduates of the College of Education must have a grade average of 3.0000.

College of Education Objectives

In 1961, the Educational Specifications Committee was one of several committees appointed by the Dean of the College of Education for the purposes of planning and designing a new building. This committee compiled a report stating the objectives of the College of Education as follows:

Instruction

1. To prepare teachers, administrators, supervisors and other specialists for the schools of Arizona and surrounding states, through a high quality program

- on campus, including clinical experiences.
- 2. To carry on in-service education of school personnel and boards of education through such means as workshops, institutes, and the continuing education program.
- 3. To provide a program for the preparation of school personnel which is flexible enough, particularly at the graduate level, to meet the particular needs of individual students.
- 4. To provide highly qualified instructors within the college who will, by example, aid students in discovering and using successful teaching techniques.
- 5. To provide prospective teachers, as a part of the regular program, opportunity to observe excellent learning situations within elementary and secondary school classrooms.

Research

- 1. To conduct continuous research in such areas as: the improvement of classroom instruction at both the public school and university levels; the improvement of administrative techniques and practices; the training of school personnel through such means as internships; the discovery of ways in which pupils learn most effectively; and the improvement of school district organization.
- 2. To provide for adequate publication of research findings in #1.
- 3. To provide a setting for experimentation in instructional procedures and curriculum development, and to work cooperatively with nearby school systems to validate experimental findings.

4. To provide opportunities for independent research investigations on the part of both students and faculty.

Service

- 1. To provide leadership in the improvement of educational opportunities through consultant services to school systems and professional organizations, both within the state and at the national levels.
- 2. To participate in, to organize, and to conduct institutes, workshops, and conferences for teachers, administrators, board members, and the lay public which will contribute to the improvement of educational opportunities.
 - 3. To encourage individual faculty members to publish articles and reports of educational value.
 - 4. To provide professional testing, guidance, and diagnostic services to school systems within the state.
 - 5. To provide professional services through school surveys which aid local communities in offering increased educational opportunities to children.
 - 6. To carry on activities which will aid in interpreting educational problems, procedures, and research findings to lay and professional groups.
 - 7. To provide information to high school and college students in an attempt to recruit high quality personnel for the teaching profession (The University of Arizona, 1961).

Teacher-Preparation Programs

During the period of time covered by this study, June 1962 through September 1966, there were three teacher-preparation programs offered in the College of Education. The programs were referred to as the Regular Program, The 230 Program, and The Block Program. The freshman and sophomore years for the three programs were the same, including the usual English, Mathematics, Science, Humanities, Social Sciences, Physical Education, and Foreign Language courses where required.

The first semester of the junior year, students enrolled in the three programs took identical coursework. Human Growth and Learning, a 6-unit course, was taken at this time in addition to 9-12 units of major subjects, minor subjects, and electives. It was during the second semester of the junior year that an appreciable difference was designated. Students who received teacher preparation in the regular program selected one of the following courses: Principles and Curricula of Secondary Education, History of Education in the United States, or Social Foundations of Education. Students in the experimental programs (the 230 program and the block program) all took the course Social Foundations of Education. A senior student enrolled in the regular program took Tests and Measurements, General Methods and Special Methods if offered in his field, and Student Teaching three hours per day for a full semester. The senior student enrolled in the 230 program took Special Methods (if offered);

Education 230 (Teaching in Secondary School), which replaced Educational Tests and Measurements; and General Methods.

The block program was a full semester of professional educational course work which included: six weeks of daily instruction in methods, both general and specific, evaluation of learning, and observation; eight weeks of all-day student teaching; and three weeks in philosophy of education and a general seminar in which students had opportunity to discuss problems and to individually identify strengths and weaknesses.

The 230 Program Objectives

Objectives of the 230 program were as follows:

- A. The development of future teachers who perceive that:
 - The task of learning, of becoming "educated," is a highly personal thing: one which is unique and different for each person.
 - The task of learning involves cultural and sub-cultural considerations, including matters of values, attitudes, perceptions, motivation, behavior, and communication.
 - 3. Any calculations regarding the selection of experiences designed to be "instructive" must be viewed in terms of: (1) the uniqueness, the idiosyncratic nature of learning; (2) the impress of social-cultural and sub-cultural variables upon the individual who will be exposed to the experiences; and (3) the values and

- objectives to be served by the experiences.
- 4. Any determinations concerning the amount of learning which has taken place must be accomplished against a back-drop of the conditions specified in #3 above that regulated the choice of learning experiences.
- 5. The task of learning is a process which has multiple levels of cognition, understanding, analyzing, synthesizing, and evaluating.
- 6. The task of learning is a process which may serve a multiplex of values and objectives, including: mastery of specific content, apprehending organizing theory, shaping attitude, stimulating investigation, motivating behavior, inducing critical analysis, affecting synthesis.
- 7. The process of learning has both objective and subjective referents, i.e., the learning may be about others, external objects, and symbols therefore, or it may be about self and symbolism regarding self.
- B. The development of future teachers who perceive themselves as persons who:
 - 1. Are identified with, rather than apart from, people.
 - 2. Are capable of coping with the problems with which they are confronted (flexibility).
 - 3. Have dignity and integrity and are worthy of respect.
 - 4. Are likable and are capable of bringing forth warm responses from others.

- 5. Are dependable and reliable.
- 6. Are accepted by others.
- C. The development of future teachers who perceive others as persons who:
 - 1. Same as B, 1-6.
 - Are non-threatening to self.
- D. The development of future teachers who perceive the <u>purposes</u> and <u>processes</u> of teaching as:
 - One of freeing, assisting, releasing, and facilitating the efforts of students to learn.
 - 2. One of furthering processes of search and discovery.
 - One of self-revealment.
 - 4. One of self-involvement.
 - One of considering multiple alternatives.
 - 6. One of stimulating and exciting (The University of Arizona, 1965).

Evaluation must be carried on within the framework of the objectives. Therefore, the objectives of the College of Education as well as the Secondary teacher-preparation programs have been set forth as the framework of this evaluation. Preparation of teachers today involves much more than a present knowledge in a specific subject area. In addition to being well prepared in a specific subject area, the teacher must be a diagnostician who is able to help students identify their individual needs, and

then is able to help the students plan and set up experiences to meet their needs. In order to evaluate the College's teacher-preparation program, the evaluation, in the final analysis, must be in terms of the effect the program has on the individuals who took their preparation work in particular programs.

The Instrument

A questionnaire was used to obtain the graduates' appraisal of the teacher-preparation program. The instrument was based on the objectives of the secondary teacher-preparation programs and competencies emphasized in the literature as essential for teaching proficiency. Before the questionnaire was mailed out, a pilot study was conducted in two graduate classes in the College of Education to determine ways in which to improve and clarify the questions. The graduate students' recommendations were carefully considered, and, as a result, the questionnaire was modified accordingly.

Procedure and Treatment of the Data

On December 1, 1967, the revised questionnaires were mailed to 667 graduates of the University's College of Education for the period June 1962 through September 1966. During this period, 757 students were graduated from the University with a major in secondary education;

however, addresses were obtainable from the Alumni office for only 667 of these graduates.

Three hundred twenty-six questionnaires, or fortynine per cent, were returned. Of this number, twenty-eight
were returned by the Post Office because of incorrect
mailing addresses; and 298 were returned by individuals.
All responses were carefully noted, and only those which
indicated teaching experience were used since this study
was based upon responses of individuals who had actual
teaching experience. There were 252 usable questionnaires
since forty-two respondents had not taught and four failed
to identify the type of program followed.

In a further attempt to increase the response, a follow-up letter was mailed on February 1, 1968, to the graduates of the 230 program for whom addresses were available, 26 in number. In addition, those graduates of the 230 program who resided in the local community were telephoned two weeks after the follow-up letter was mailed to encourage them to return the questionnaire. Several who had not returned the questionnaire stated they had never taught. In the final analysis, there were nine respondents from graduates of the 230 program; forty-four of the block program; and 199 of the regular program. For the purposes of this study, the 230 program and the block program responses have been combined and referred to herein as the "experimental program."

Information from each usable questionnaire was coded on an IBM sheet by the researcher. Cards were punched and numerical information was obtained by sorting and processing the IBM cards.

For the purpose of determining the significance of the responses in Part II of the questionnaire, the chisquare test was used. Responses to the seventeen questions pertaining to characteristics considered essential to good teaching were analyzed. There were five choices for respondents, ranging from number one, indicating low, through five, indicating very high. The number three responses, representing the middle group (average) answers, were eliminated for chi square only in the analysis of the data. Numbers one and two answers were combined for the low group, and numbers four and five were combined for the high group. Thus, the responses on the five-point scale were reduced to two categories, namely, low and high.

A programmer wrote in FORTRAN IV language the instructions for computing chi square values, and the program was processed on a Conttol Data Corporation Model 6400 computer system.

Percentages were computed using three groups to show comparisons. In addition to the low and high groups used in the chi-square test, the average group was retained to show comparisons.

Statistical analysis of the data is given in Chapter IV of this study.

CHAPTER IV

ANALYSIS OF THE DATA

In analyzing the data, the chi-square test of independence was used to test the hypotheses to determine if a significant relationship would be found between types of preparation programs and the answers to the questionnaire (see Appendix). Percentages also were used for the purpose of further analyzing appropriate data included on the questionnaire.

Personal Information of the Respondents

As shown in Table I, fifty-seven per cent of the respondents were female and sixty-three per cent were under twenty-five years of age. Seventy-nine per cent of the respondents were under age thirty, while only one individual, or less than one-half per cent, indicated age fifty or over. Eighty per cent had at least one full year of teaching experience, and eleven per cent indicated it was their first year of teaching. Sixty per cent had been in their present teaching assignment for no more than two years, and five per cent for five years or more. Respondents to the questionnaire, therefore, were mainly young teachers with at least one year of teaching experience.

TABLE I

AGE, SEX, AND TEACHING EXPERIENCE OF RESPONDENTS

	Number of Responses	Percentages
Sex		
Male	100	39.68
Female	144	57.14
Not Indicated	, 8,	3.18
•	(252)	(100.00)
Age		
Under 25	159	63.10
25-29	.40	15.87
30-39	14	5.55
40-49	15	5.95
50 or over	1	0.40
Not Indicated	23	9.13
Number of Years of Teaching		
One year	27	10.71
Two years	65	25.79
Three years	58	23.02
Four years	47	18.65
Five years or more	30	11.91
Not Indicated	25	9.92
Number of Years in Present		
Assignment		
One year	72	28.57
Two years	80	31.75
Three years	. 36	14.28
Four years	29	11.51
Five or more years	. 13	5.16
Not Indicated	22	8.73

As shown in Table II, sixty-one per cent of the respondents were from cities or metropolitan areas of at least 50,000 inhabitants, and five per cent were from rural areas. Three and one-half per cent of the respondents indicated they were teaching in a government-type of community.

According to Table III, eighty per cent of the teachers were teaching in public schools and five per cent were in private or parochial schools. Twenty-one per cent of the respondents were teaching in junior high schools; twelve per cent in two-year junior high schools, and nine per cent in three-year junior high schools. Forty-four per cent of the respondents were four-year senior high school teachers, and nearly six per cent were teachers in three-year senior high schools. Thus, a majority of the respondents were teaching in public senior high schools. Fifty-nine per cent of the respondents taught in schools of 1,000 or more students, whereas fifteen per cent taught in schools with fewer than 500 students. Less than three per cent taught in schools with fewer than 100 students.

According to Table IV, the respondents' teaching fields were distributed as follows: English, seventeen per cent; Physical Education and Health, twelve per cent; Business Education, ten per cent; Social Science, eight per cent; Mathematics, seven per cent; Science, seven per cent;

TABLE II

COMMUNITY SIZE AND TYPE IN WHICH RESPONDENTS WERE TEACHING

	Number of Responses	Percentages
Size of Community in which		
Teaching		
50,000 inhabitants or more	115	45.63
Metropolitan area of two		•
or more cities having		
contiguous boundaries,		
constituting a single		
community with a combined		
population of at least	• •	1 00
50,000	38	15.08
A city of 10,000 to 50,000		10 26
inhabitants	46	18.26
A small town of less than	25	9.92
10,000 inhabitants Rural	25 13	5.16
Not Indicated	15	5.95
Not indicated	1.5	3.93
Type of Community in which		
Teaching		
Agriculture	44	17.46
Urban	134	53.18
Mining	13	5.16
Government	9	3.57
Other	19	7.54
Not Indicated	33	13.09

TABLE III

SIZE AND TYPE OF SCHOOL IN WHICH RESPONDENTS WERE TEACHING

	····	
	Number of Responses	Percentages
Type of School in which Teaching Public School Private School Parochial School Not teaching at present Not Indicated Type of School Organization in	202 9 3 30 8	80.16 3.57 1.19 11.90 3.18
which Teaching 2-Year Junior High 3-Year Junior High 4-Year Senior High 3-Year Senior High 6-Year Junior-Senior High Other Not Indicated	29 22 112 15 7 45 22	11.51 8.73 44.44 5.95 2.78 17.86 8.73
Less than 100 students 100 to 500 students 500 to 1,000 students 1,000 to 2,500 students 2,500 students or more Not Indicated	7 31 52 82 67 13	2.78 12.30 20.63 32.54 26.59 5.16

TABLE IV

TEACHING MAJORS AND TEACHING ASSIGNMENTS
OF THE RESPONDENTS

Subject Area	Number of Responses	Percentages
EnglishSpeech	42	16.67
Physical EducationHealth	30	11.91
Business Education	25	9.92
Social Science	. 19	7.54
Mathematics	18	7.14
Science	18	7.14
Foreign Languages	14	5.55
Music, Art, Fine Arts	1	0.40
Other, or Combination of two		
or more of the above	52	20.63
Not Indicated	33	13.10
Teaching in Major Field		•
Yes	202	80.16
No	38	15.08
Not Indicated	12	4.76
Teaching in Minor Field		
Yes	50	19.84
No	155	61.51
Not Indicated	47	18.65

Foreign Language, five and one-half per cent; and Music or Fine Arts, less than one per cent. Nearly twenty-one per cent of the respondents were teaching two or more subjects.

Eighty per cent of the respondents indicated they were teaching in their major area, fifteen per cent indicated they were not teaching in their major area, and five per cent did not indicate whether or not they were teaching in the major area. Twenty per cent of the respondents were teaching in the minor field.

Responses to questions concerning the professional organizations' membership, activity in extra-curricular activities, and participation in professional activities are summarized in Table V.

Respondents were asked to check the professional organizations to which they belonged. Included in the list of organizations were: (1) Local Education Association, (2) State Education Association, (3) National Education Association, (4) American Federation of Teachers, and (5) Subject Area Organizations (such as National Council of Teachers of English). Nearly forty per cent of each group indicated that they belonged to at least one of these organizations. Twice the percentage of the regular group reported that they belonged to at least four organizations as did the experimental group. The respondents were asked to check professional activities in which they were participating. Included in the list were the activities in

TABLE V
PROFESSIONAL ORGANIZATIONS AND ACTIVITIES OF RESPONDENTS

				· · · · · · · · · · · · · · · · · · ·	
	Number of Responses		Percentages		
	Regular	Experi- mental	Regular	Experi- mental	
Membership in Professional Organizations					
Belong to one organization	35	11	22.44	20.75	
' Belong to two organizations	27	10	17.31	18.87	
Belong to three organizations	42	23	26.92	43.40	
Belong to four organizations	50	9	32.05	16.98	
Belong to five organizations	2	0	1.28	0.00	
Participation in Professional Activities		,			
Participating in one activity	74	21	59.68	48.84	
Participating in two activities	32	18	25.81	41.86	
Participating in three activities	14	3	11.29	6.98	
Participating in four activities	4	0	16.98	0.00	
Participating in five activities	Ó	0 1	0.00	2.32	
Activity in Extra-Curricular Activities					
No activity	18	8	10.06	14.55	
A limited degree of activity	41	14	22.91	25.45	
A moderate degree of activity	56	19	31.28	34.55	
An extensive degree of activity	64	14	35.75	25.45	
	- ,	- ·		200	

the Education Associations, Research, Curriculum Development, activities in the subject area organizations, and other activities in which they may have been active.

Twenty-eight per cent of the regular group indicated participation in three or more activities, while nine per cent of the experimental group indicated three or more activities. Ten per cent more of the regular group indicated an extensive degree of extra-curricular activity than did the experimental group.

Analysis of Data Related to Areas of Undergraduate Teacher-Preparation Programs

The chi-square test was used to test the hypotheses as stated in Chapter I. As explained in Chapter III, the middle group of responses on the five-point scale was eliminated in the analysis of the data in computing chi square. The number one and number two responses were combined to form the "low" group, and the number four and number five responses were combined to form the "high" group.

The Yates' correction formula was applied on the two by two contingency tables to test the independence of type of teacher-preparation program enrolled in as undergraduates, subject area taught, size of community in which the respondents were teaching, and type of school organization in which the respondents were teaching. The following

is the correction formula as given by Young and Veldman (1965:334).

Chi Square =
$$\frac{N \left(|BC - AD| - \frac{N}{2} \right)^2}{(A + B) (C + D) (A + C) (B + D)}$$

Respondents were asked to rate on a five-point scale the degree to which each of several areas was developed through the teacher-preparation program. The scale was:

As shown in Table VI, item number two concerning an understanding of the history of education was significant at the .05 level of probability favoring the regular program. The reason for this difference may have been due to the acceptability of history of education as a course offering in the regular program, while the experimental program offered social foundations of education in lieu of history of education.

Responses to three items were significant favoring the experimental program. These were: (1) number three, the development of skills through your student teaching experience (.02 level); (2) number six, an understanding of the cultural and social influences on education (.01 level); and (3) number 17, the development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth (.05 level).

TABLE VI

CHI-SQUARE VALUES AND PERCENTAGE FIGURES APPLIED TO A

TEACHER-PREPARATION PROGRAMS N =

				•	
				Percer	ıt
	. rate the degree to which each was		•		
	developed through your teacher-preparation program:		3	4 & 5	1
1.	An understanding and application of the psychology of learning and child growth and development.	24.24	48.49	27.27	2
2.	An understanding of the history of education.	41.71	34.17	24.12	6
3.	The development of a personal philosophy of education.	31.16	28.64	40.20	1
4.	The development of skills through your student teaching experience.	14.07	19.10	66.83	
5.	The ability to plan and conduct meaningful classroom experiences.	23.35	33.00	43.65	1
6.	An understanding of the cultural and social influences on education.	29.53	41.97	28.50	. 1
7.	A practical understanding of the purposes and processes of measurement and evaluation in the classroom.	25.13	29.14	45.73	2
8.	An understanding of the total school program and the part each unit plays including guidance role, other subject areas, administration, and materials center.	41.21	37.69	21.10	
9.	Use of audio-visual media.	50.76	20.31	28.93	۷
10.	Handling behavior problems.	61.81	24.62	13.57	
11.	Skill in developing self-discipline on the part of pupils.	58.59	29.29	12.12	

TABLE VI

GE FIGURES APPLIED TO AREAS OF UNDERGRADUATE REPARATION PROGRAMS N = 252

	·	Percen	t			Sign	nificant Val		Square	
	Regular		Exp	eriment	al	Regular E		Expe	Experimental	
1 & 2	3	4 & 5	1 & 2	3	4 & 5	Low	High	Low	High	
24.24	48.49	27.27	28.85	23.08	48.07					
41.71	34.17	24.12	67.31	19.23	13.46		4.97***			
31.16	28.64	40.20	17.31	17.31	65.38				6.28**	
14.07	19.10	66.83	9.62	19.23	71.15					
23.35	33.00	43.65	11.54	36.54	51.92				·	
29.53	41.97	28.50	14.29	36.73	48.98			,	6.77*	
25.13	29.14	45.73	29. 41 _.	39.22	31.37					
				•						
41.21	37.69	21.10	41.17	39.22	19.61			,		
50.76	20.31	28.93	45.10	23.53	31.37			. •		
61.81	24.62	13.57	50.98	37.25	11.77		•			
58.59	29.29	12.12	53.06	28.57	18.37					

TABLE VI--Continued

12. Developing of course materials.	25.51	37.76	36.73	21.57
13. Teaching skill in your particular subject, including varied teaching techniques, experimentation, etc.	27.27	24.24	48.49	21.15
14. Adequacy of preparation in your subject-matter area.	14.57	20.60	64.83	15.38
15. The ability to communicate with individuals and with groups.	16.67	41.92	41.41	11.77
16. The ability to analyze group develop- ment and interaction.	30.10	48.98	20.92	25.49
17. The development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth.	16.84	32.14	51.02	7.69

^{*}Significant at the .01 level of probability.

^{**}Significant at the .02 level of probability.

^{***}Significant at the .05 level of probability.

25.51	37.76	36.73	21.57	41.18	37.25			
27.27	24.24	48.49	21.15	17.31	61.54			
14.57	20.60	64.83	15.38	25.00	59.62			
16.67	41.92	41.41	11.77	37.25	50.98			
30.10	48.98	20.92	25.49	49.02	25.49	·		
16.84	32.14	51.02	7.69	9.62	82.69		4.70*	**

probability.

£

probability.

f probability.

Students in the experimental program had a threeweek end-of-semester seminar dealing with philosophy of education. This experience may have been a factor in the significant difference found in the development of a personal philosophy of education.

The difference found in item six may have been due to the fact that students in the experimental program most often took social foundations of education rather than history of education. More than one-half of the experimental group gave a "high" rating to this item, whereas one-fourth of the regular respondents rated the item "high."

Item number seventeen, "The development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth," was given special emphasis in the experimental program. The emphasis and the design of the program may have contributed to the difference found.

All other computed chi-square values had nonsignificant differences, so the findings are, therefore,
statistically inconclusive for the remaining items.
However, percentage comparisons on eighteen of the thirtyfour items tended to favor the experimental program with
only four items favoring the regular program.

Percentage differences noted on various items are shown in Table VI. For instance, forty-eight per cent of the experimental group rated item one concerning the

understanding and application of the psychology of learning "high," whereas only twenty-seven per cent of the regular group rated the same item "high." Both preparation programs had Human Growth and Learning; therefore, the increased understanding might be attributed to the structure of the methods courses.

Item number four, the development of skills through your student teaching experience, was given a high rating by seventy-one per cent of the experimental group and by sixty-seven per cent of the regular group. Item number eight, concerning an understanding of the total school program, was rated "low" by forty-one per cent of each group. Rating percentages concerning use of audio-visual media were low with fifty per cent of the respondents in the regular program and forty-five per cent of the respondents in the experimental program giving a "low" rating to this area.

Areas in which the experimental group favored their preparation over the regular group were:

- An understanding and application of the psychology
 of learning and child growth and development.
- 3. The development of a personal philosophy of educa-
- 5. The ability to plan and conduct meaningful classroom experiences.

- 6. An understanding of the cultural and social influences on education.
- 11. Skill in developing self-discipline on the part of pupils.
- 13. Teaching skill in your particular subject, including varied teaching techniques, experimentation, etc.
- 15. The ability to communicate with individuals and with groups.
- 16. The ability to analyze group development and interaction.
- 17. The development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth.

Areas in which the regular group favored their preparation over the experimental group were:

- 2. An understanding of the history of education.
- 7. A practical understanding of the purposes and processes of measurement and evaluation in the classroom.

Analysis of Data Related to Areas of Emphasis in Teacher Preparation

Respondents were requested to indicate their perception of the degree of emphasis placed in seventeen areas in their teacher-preparation program. Table VII contains the number of responses and percentage figures.

TABLE VII

DEGREE OF EMPHASIS IN TEACHER PREPARATION IN THE TWO PROGRAMS
AS PERCEIVED BY RESPONDENTS

Please indicate your perception of the degree of emphasis placed on each of the following areas in your teacher-preparation program.		-	er of onses	Percentages		
		Regular	Experi- mental	Regular	Experi- mental	
1.	Understanding the reality of the school	situation	1.			
	Too much emphasis	4	2	2.25	3.46	
	Too little emphasis	109	$2\overline{8}$	61.23	48.27	
	Adequate emphasis	65	28	36.52	48.27	
2.	Understanding of the various social and	cultural	values of	students.		
	Too much emphasis	4	0	2.21	0.00	
	Too little emphasis	7 8	22	43.09	33.33	
	Adequate emphasis	99	44	54.70	66.67	
3.	The student teaching experience.					
	Too much emphasis	7	4	3.98	7.84	
	Too little emphasis	56	7	31.82	13.73	
	Adequate emphasis	113	40	64.20	78.43	
4.	Supervision during your student teaching	Z .		,		
	Very helpful	81	24	43.78	35.29	
	Adequate	55	21	29.73	30.88	
	Inadequate	49	23	26.49	33.83	

TABLE VII--Continued

DEGREE OF EMPHASIS IN TEACHER PREPARATION IN THE TWO PROGRAMS
AS PERCEIVED BY RESPONDENTS

	se indicate your perception of the ee of emphasis placed on each of the	Numbe Respo		Percen	tagès
foll	owing areas in your teacher-preparation ram.	Regular	Experi- mental	Regular	Experi- mental
5.	Adequate insights into innovations, such schools.	as indep	endent st	ıdy, now in	the
	Too much emphasis	1	1	0.56	1.85
	Too little emphasis	127	30	71.35	55.55
	Adequate emphasis	50	23	28.09	42.60
6.	Theory of learning and child growth and	developme	nt.		
	Too much emphasis	32	14	17.58	20.90
	Too little emphasis	40	13	21.98	19.40
	Adequate emphasis	110	40	60.44	59.70
7.	Subject-matter emphasis and its relevance	e to vour	teaching	assignment	•
	Too much emphasis	ž	3	1.67	5.35
	Too little emphasis	64	20	35.56	35.72
	Adequate emphasis	113	33	62.77	58.93
8.	General methods courses.				
	Too much emphasis	50	16	27.78	24.62
	Too little emphasis	42	11	23.33	16.92
	Adequate emphasis	88	38	48.89	58.46

TABLE VII--Continued

DEGREE OF EMPHASIS IN TEACHER PREPARATION IN THE TWO PROGRAMS
AS PERCEIVED BY RESPONDENTS

9. Special methods courses in your specific field of teaching. Too much emphasis Too little emphasis Adequate emphasis Too much emphasis Adequate emphasis Too much emphasis Too much emphasis Too much emphasis Too much emphasis Too little emphasis Too much emphasis Too little emphasis Too much emphasis Too little emphasis Too much emphasis Too little emphasis	Please indicate your perception of the		Numbe Respo		Percentages	
Too much emphasis Too little emphasis Adequate emphasis Adequate emphasis Adequate emphasis Too much emphasis Too much emphasis Too much emphasis Too little emphasis Too much emphasis Too little emphasis	foll	owing areas in your teacher-preparation	Regular		Regular	Experi- mental
Too little emphasis Adequate emphasis Adequate emphasis 73 29 41.24 51.7 10. An understanding of the development of well-planned lessons which fit the needs of your students. Too much emphasis 14 5 7.57 7.55 Too little emphasis 60 13 32.43 19.7 Adequate emphasis 111 48 60.00 72.7 11. Discipline and control in the classroom. Too much emphasis 4 1 2.22 1.8 Too little emphasis 106 28 58.89 50.9 Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 7 9 26 42.93 40.00	9.		field of	teaching.		_
Adequate emphasis 73 29 41.24 51.7 10. An understanding of the development of well-planned lessons which fit the needs of your students. Too much emphasis 14 5 7.57 7.5 Too little emphasis 60 13 32.43 19.7 Adequate emphasis 111 48 60.00 72.7 11. Discipline and control in the classroom. Too much emphasis 4 1 2.22 1.8 Too little emphasis 106 28 58.89 50.9 Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 7 3 3.80 4.6 Too little emphasis 7 26 42.93 40.00			5			3.57
10. An understanding of the development of well-planned lessons which fit the needs of your students. Too much emphasis 14 5 7.57 7.5 Too little emphasis 60 13 32.43 19.7 Adequate emphasis 111 48 60.00 72.7 11. Discipline and control in the classroom. Too much emphasis 4 1 2.22 1.8 Too little emphasis 106 28 58.89 50.9 Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.00						44.64
needs of your students. Too much emphasis 14 5 7.57 7.5 Too little emphasis 60 13 32.43 19.7 Adequate emphasis 111 48 60.00 72.7 11. Discipline and control in the classroom. Too much emphasis 4 1 2.22 1.8 Too little emphasis 106 28 58.89 50.9 Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.06		Adequate emphasis	73	29	41.24	51.79
Too much emphasis Too little emphasis Adequate emphasis Adequate emphasis Adequate emphasis Too much emphasis Too much emphasis Too little emphasis Adequate emphasis Too little emphasis Adequate emphasis Too little emphasis Too little emphasis Too little emphasis Too little emphasis Too much emphasis Too little emphasis	10.		ell-plann	ed lessons	which fit	the
Too little emphasis Adequate emphasis Adequate emphasis Adequate emphasis Too much emphasis Too little emphasis Adequate emphasis Too little emphasis Adequate emphasis Adequate emphasis Too little emphasis Too little emphasis Too little emphasis Too little emphasis Too much emphasis Too much emphasis Too much emphasis Too much emphasis Too little emphasis			14	5	7.57	7.58
Adequate emphasis 111 48 60.00 72.7 11. Discipline and control in the classroom. Too much emphasis 4 1 2.22 1.8 Too little emphasis 106 28 58.89 50.9 Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.06			60			19.70
Too much emphasis Too little emphasis Adequate emphasis Adequate emphasis Too much emphasis Too much emphasis Too much emphasis Too much emphasis Too little emphasis Too little emphasis Too much emphasis Too little emphasis Too little emphasis Too little emphasis Too much emphasis Too little emphasis						72.72
Too much emphasis Too little emphasis Adequate emphasis Adequate emphasis Too much emphasis Too much emphasis Too much emphasis Too much emphasis Too little emphasis Too little emphasis Too much emphasis Too little emphasis Too little emphasis Too little emphasis Too much emphasis Too little emphasis	11.	Discipline and control in the classroom.	• •			
Too little emphasis Adequate emphasis Too little emphasis Adequate emphasis Too little emphasis				. 1	2,22	1.82
Adequate emphasis 70 26 38.89 47.2 12. Development of an awareness of recent research in the many aspects of teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 7 26 42.93 40.00			106			50.91
teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.00			70			47.27
teaching, and the ability to use that knowledge in setting objectives and in selecting materials and methods. Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.00	12.	Development of an awareness of recent re	search in	the many	aspects of	
Too much emphasis 7 3 3.80 4.6 Too little emphasis 79 26 42.93 40.00		teaching, and the ability to use that kn				
Too little emphasis 79 26 42.93 40.00			7	3	3.80	4.62
			. 79			40.00
		Adequate emphasis	98	36	53.27	55.38

TABLE VII--Continued

DEGREE OF EMPHASIS IN TEACHER PREPARATION IN THE TWO PROGRAMS
AS PERCEIVED BY RESPONDENTS

	ase indicate your perception of the	Numbe Respo		Percer	tages
foll	ree of emphasis placed on each of the owing areas in your teacher-preparation ram.	Regular	Experi- mental	Regular	Experi- mental
13.	Ability and the interest in evaluating y of methodology, goals, and learning.	ourself a	s a teache	r in the $arepsilon$	reas
	Too much emphasis	2	1	1.14	1.75
	Too little emphasis	54	16	30.86	28.07
	Adequate emphasis	119	40	68.00	70.18
14.	An understanding of the precise kinds of classroom.	objectiv	es to be r	eached in	your
	Too much emphasis	12	3	6.63	4.55
	Too little emphasis	66	23	36.46	34.85
	Adequate emphasis	103	40	56.91	60.60
15.	Professionalism including attitude towar	d teachin	g and prof	essional e	thics.
	Too much emphasis	19	4	10.55	6.90
	Too little emphasis	34	13	18.89	
	Adequate emphasis	127	41	70.56	70.69
16.	Knowledge and use of appropriate evaluate observation of students, student interactions			h as tests	,
	Too much emphasis	5	3	2.78	4.48
	Too little emphasis	49	22	27.22	32.84
	Adequate emphasis	126	42	70.00	62.68

TABLE VII--Continued

DEGREE OF EMPHASIS IN TEACHER PREPARATION IN THE TWO PROGRAMS AS PERCEIVED BY RESPONDENTS

Please indicate your perception of the degree of emphasis placed on each of the	Number of Responses		Percentages	
following areas in your teacher-preparation program.	Regular	Experi- mental	Regular	Experi- mental
17. Communication with individuals, groups,	and paren	its.		
Too much emphasis	2	0	1.12	0.00
Too little emphasis	97	27	54.50	50.00
Adequate emphasis	79	27	44.38	50.00

These data were not treated for statistical significance, but percentage figures indicating perception of the degree of emphasis may afford guidelines for possible curriculum revisions.

As shown in Table VII, thirty-two per cent of the regular group indicated too little emphasis in teacher preparation in the student teaching experience. The experimental group felt more adequate emphasis had been given in the student teaching experience since less than fourteen per cent indicated too little emphasis in this area. More than fifty per cent of the respondents from the regular group and the experimental group indicated too little emphasis was placed in their teacher-preparation program on student discipline and control in the classroom.

Areas in which the experimental group favored their preparation over the regular group were:

- 1. Understanding the reality of the school situation.
- Understanding of the various social and cultural values of students.
- 3. The student teaching experience.
- Adequate insights into innovations, such as independent study, now in the schools.
- 8. General methods courses.
- Special methods courses in your specific field of teaching.

- 10. An understanding of the development of well-planned lessons which fit the needs of your students.
- 11. Discipline and control in the classroom.
- 17. Communication with individuals, groups, and parents.

Areas in which the regular group favored their teacher-preparation program were:

- 4. Supervision during student teaching.
- 16. Knowledge and use of appropriate evaluation procedures, such as tests, observation of students, and student interaction.

Application of the Data to the Hypotheses

Hypothesis Number One

The first hypothesis was: There will be a significant difference between the two approaches to the teachers' education as to quality of the program as perceived by the graduates of The University of Arizona College of Education.

The chi-square test revealed a significant difference between the types of teacher-preparation programs favoring the experimental program. Three specific areas in which statistically significant differences were obtained favoring the experimental program were an understanding of the cultural and social influences on

education, developing a personal philosophy of education, and the development of a commitment to and enthusiasm for teaching and a genuine belief in its worth. The regular group rated history of education significantly higher than did the experimental group. Percentage comparisons strongly supported the experimental program as evidenced by eighteen items of thirty-four favoring the experimental program and only four of thirty-four favoring the regular program.

Due to the small number of responses in some ratings noted in the tables in Appendices B, C, and D, the chi-square test could not be utilized on all items. In these instances, the hypothesis could neither be accepted nor rejected. However, this hypothesis is accepted on the basis of the significant differences found.

Hypothesis Number Two

The second hypothesis was: There will be a significant difference in quality of the program as perceived by teachers in selected subject areas of the teacher-preparation program.

This hypothesis is rejected since there were no statistically significant differences found on the basis of major subject areas of the respondents. Other recent research reported in the literature seems to be consistent with this finding.

Hypothesis Number Three

The third hypothesis was: Teacher perception of the quality of the program is affected by size of community in which they teach.

No differences were found between graduates of the two programs and size of the community in which they were teaching. Therefore, this hypothesis must be rejected. This appears to be consistent with the findings of other studies as reported in the literature.

Hypothesis Number Four

The fourth hypothesis was: Teacher perception of the quality of the teacher-education program is affected by type of school organization in which they teach.

The chi-square test was made to determine if teachers from two-year junior high, three-year junior high, four-year senior high, three-year senior high, six-year junior-senior high, or other type of school organizations would perceive their programs differently. The resulting chi-square values indicated nonsignificant differences. Therefore, the hypothesis is rejected.

Questionnaire Summary Response

Areas of Greatest Weakness

Part IV of the questionnaire was comprised of three open-ended questions. Responses to the question, "In your

first two years of teaching, where did you find the areas of greatest weakness?" were tabulated. The ten most important problems as perceived by the respondents are listed here in descending order of frequency:

- 1. Student discipline.
- 2. Subject-matter methods courses.
- 3. Adjusting to "real" school situation.
- 4. Knowledge of subject matter.
- 5. Lesson plans.
- 6. Grading and evaluation.
- 7. Communication.
- 8. Paper work and record keeping.
- 9. Motivating students.
- 10. Minor area deficiency.

Regular program respondents as well as the experimental group rated "Student discipline" as the number one problem; furthermore, fifty per cent of the experimental group rated "Student discipline" first, as compared to thirty-one per cent of the regular group.

Respondents' Recommendations

In answering "What courses or topic areas should be added or modified to enrich the teacher preparation program?," in most instances, the comments by the respondents paralleled the problems discussed in current literature as reviewed in Chapter II of this study. Recommendations from

the respondents included the addition of new courses as well as the modification of existing courses.

Student teaching. The most frequently mentioned topic was student teaching. Recommendations included:

(1) lengthening student teaching time, perhaps for a full day, or for part-time for the whole school year; (2) a more gradual program of class visitations be offered, beginning as early as the sophomore year; (3) a course of "Case Studies" be added portraying a variety of actual school situations and the way they were handled, right or wrong; (4) include student teaching in low-ability classes, as well as average, and higher-ability classes; and (5) observance in classrooms prior to practice teaching at several locations, and for a greater length of time.

Courses to be added. Respondents recommended the addition of several courses. English teachers, for instance, recommended a "How-to-teach-English course"; a broader background in literature, especially American literature; and linguistics for language teaching. Biology teachers recommended more emphasis on subject matter, as well as the addition of a course on the human anatomy, such as neurology. Recommendations included adding methods courses designed especially for prospective junior high school level of teaching. It was recommended that a course be added in the realistic approach to different levels of youngsters in the low-socioeconomic groups. Also, courses

to be added included psychology of discipline, curriculum development, a course in philosophy of education at the undergraduate level, the development of instructional materials for independent studies, and attendance procedures. Speech courses and audio-visual aids were recommended requirements.

Courses to be modified. Respondents recommended the modification of existing courses. It was recommended that tests and measurements stress more than the arithmetic approach to grades; human growth and learning include observation of secondary children as well as smaller children; and, include more specific rather than general goals, attitudes, and methods.

Methods courses. A common criticism of English teachers was the lack of adequate methods courses. English teachers also recommended a methods course for how to teach different types of literature, such as the short story, novel, and drama. Science teachers recommended special methods courses. There was a recommendation that methods courses include more opportunity for public speaking in the classroom. Several respondents recommended more meaningful methods courses. The art of counseling, as well as a humanistic approach to teaching, was another recommendation, to become part of the methods courses.

Additional suggestions. Respondents recommended admission to the College of Education be based upon a

criterion other than the existing grade average. Prior to the senior year, determine if the student is adaptable to teaching. It was suggested that too many teachers in the field do not belong there and should be weeded out before student teaching. Give student teachers an examination to determine their academic competence.

Respondents stressed the importance of a greater length of time for student teaching by getting students into classrooms in the junior, or, perhaps, even the sophomore year. The college junior should become an intern or aide in a school running dittoes, typing, keeping records, and helping in the classroom. Initiate a September field experience of two or more weeks at the beginning of an individual's sophomore year to be spent in a local school as a teacher's aide. Most respondents believed more emphasis should be placed on the student teaching experience. Several suggested that student teaching be a full day for a full semester; or, a full school year; or, even two semesters to include both the major and the minor fields. It was stressed by respondents that there is no substitution for experience in the classroom.

Respondents recommended that teacher interns have more experience with slow classes. Prepare student teachers for greater awareness of possible discipline problems and possible solutions to these problems. Master teachers should train student teachers and school

department chairmen should be consulted about where to place student teachers.

More careful supervision of student teachers was recommended. Student teachers should be visited by supervising professors at least once a week, rather than the usual three or four visits per semester. One of the visits should be for the entire day. More extensive observation should be done by students in the teaching of their subject area from primary to college level.

Respondents recommended placing more emphasis in teacher preparation in such areas as behavior, measurement, and evaluation. Education courses could be more effective if field trips were provided to public places where there are all types of people.

A four-year degree should be required before students enter a one-year teacher-preparation program, according to one respondent. Accordingly, this would lead to a much-improved subject matter preparation. This respondent stated that theory is valueless without a full knowledge of subject matter.

It was recommended that audio-visual courses be required. Students need more learning theory, basic curriculum theory, and increased participation in seminars. The histories of education should be electives.

English teachers were especially emphatic and included many recommendations, as follows:

- 1. Prepare all high school English teachers in the teaching of reading to the underachiever.
- Prepare English teachers in how to approach the teaching of grammar and literature to all achievement levels.
- 3. Offer linguistics and transformational grammar courses in lieu of the Latin grammar course.
- 4. Add contemporary literature, literature interpretation, and seminars in the subject matter.
- 5. Establish closer communication between the high school English departments and the college in preparing teachers in high school English to teach courses which are offered in high school.
- 6. Assign English majors as graders or readers for freshman English classes during the junior and senior years, and give some college credit for doing so.
- 7. Revise the subject matter content for English teachers to include grammar, composition, stories, novels, spelling, and oral communication.
- 8. Include a reading-improvement course.
- Offer specialized methods courses and training in reading, logical thinking, and oral work to develop student capabilities.

It was recommended by some of the respondents that junior high school trainees have more of the elementary type of methods classes, as well as more observation in junior high school classrooms before student teaching.

Summary

The chi-square test was used to determine if a significant relationship would be found between types of teacher preparation and perceptions of teachers in seventeen areas developed through the undergraduate program. The only statistically significant item supporting the regular program was an understanding of the history of education. Items which were statistically significant favoring the experimental program were: (1) development of a personal philosophy of education; (2) an understanding of the cultural and social influences on education; (3) the development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth. Therefore, the first hypothesis was supported by the chi-square test.

There were no statistically significant differences between type of school organization, subject area taught, and size of community and the teacher preparation program pursued. The second, third, and fourth hypotheses, therefore, were rejected.

Overall percentages indicated that eighteen out of thirty-four items favored the experimental program and

only four out of thirty-four tended to favor the regular program.

Respondents made a number of recommendations regarding course revision, including more attention to student teaching and handling discipline problems.

CHAPTER V

SUMMARY AND CONCLUSIONS

The twentieth century has brought the recognition that education has not completely fulfilled its mission to help youngsters adjust to their dynamic world. Teacher-preparation institutions are challenged to offer vital, relevant preparation enabling teachers to be effective in the classroom. Evaluation is necessary to determine if teachers are adequately prepared for the myriad types of classroom experiences. An important source for such evaluation is the experienced teacher who recognizes his effectiveness, or, perhaps, his lack of effectiveness, in daily classroom situations. This study, based on the opinions of experienced teachers, is an attempt to determine which areas of The University of Arizona College of Education teacher-preparation program need to be strengthened or modified.

Hypotheses of the Study

Four hypotheses were formulated as follows:

 There will be a significant difference between the two approaches to the teachers' education as to quality of the program as perceived by the

- graduates of The University of Arizona College of Education.
- 2. There will be a significant difference in quality of the program as perceived by teachers in selected subject areas of the teacher-preparation program.
- 3. Teacher perception of the quality of the program is affected by size of community in which they teach.
- 4. Teacher perception of the quality of the teachereducation program is affected by type of school organization in which they teach.

Review of Related Literature and Research

A review of the relevant literature disclosed common findings, in many instances, as follows:

- 1. Teachers rated student discipline as the problem area of greatest concern, regardless of subject area or grade level taught, type of teacher-preparation program, or type of community in which teaching.
- 2. Type of preparation program was not a significant determinant of types of problems perceived by teachers.
- 3. Attitude and personality of the teacher was a significant factor in determining teacher effectiveness.

The more recent studies especially stress personal qualities in determining teacher effectiveness. Combs (1962: 61-62) emphasized the importance of extensive perceptual fields since perceiving can be enlarged through effective teaching.

According to the problems reviewed in this study from the literature, the understanding or the lack of understanding of cultural and social influences on education could very well be an important point in the effectiveness or the ineffectiveness of teachers in the classroom. The lack of understanding of the cultural and social influences on education may result in teachers' inability to gain rapport, to diagnose the problems, and to motivate students.

Brown (1966:60) concluded in his study of The University of Arizona student teachers:

Overall the results seemed to indicate a greater flexibility in the attitudes of the experimental group students, indicating a greater openness to experience. If this was the case, these student teachers have been helped to better adapt to new situations.

The Instrument

A questionnaire was used to obtain the graduates' appraisal of the teacher-preparation program. The instrument was based on the objectives of the secondary teacher-preparation programs and competencies emphasized in the literature as essential for teaching proficiency.

Questionnaires were mailed to 667 graduates of The University of Arizona College of Education for the period June 1962 through September 1966. Three hundred twenty-six questionnaires, or forty-nine per cent, were returned. Only questionnaires indicating teaching experience were used since this study was based upon the appraisals of experienced teachers. Two hundred fifty-two usable questionnaires were returned.

Treatment of the Data

The questionnaire information was coded on IBM sheets and cards were punched for computer processing. The chi-square test was used to determine if a significant difference could be found between types of preparation programs as perceived by these teachers. There were five choices for respondents, number one being "low," and number five being "very high." The number three responses, "average," were eliminated for the chi-square test in the analysis of the data. Percentages were computed for analyzing appropriate data and respondents' suggestions for changes in the teacher-education program were summarized.

Analysis of the Data

Fifty-seven per cent of the respondents were female, sixty-three per cent were under twenty-five years of age, and eighty per cent had at least one full year of teaching experience. It was the first year of teaching for eleven

per cent of the respondents. Sixty-one per cent of the respondents were from cities or metropolitan areas of at least 50,000 inhabitants, and less than five per cent were from rural areas. Fifty-nine per cent of the respondents taught in schools of 1,000 or more students and fifteen per cent taught in schools with fewer than 500 students. Less than three per cent taught in schools with fewer than 100 students. Eighty per cent of the teachers were teaching in public schools and five per cent were in private or parochial schools. Twenty-one per cent of the respondents were teaching in junior high schools, and fifty per cent of the respondents were senior high school teachers.

Eighty per cent of the respondents were teaching in their major area and twenty per cent indicated they were teaching in their minor field. The respondents' teaching fields were: English, seventeen per cent; Physical Education and Health, twelve per cent; Business Education, ten per cent; Social Science, eight per cent; Mathematics, seven per cent; Science, seven per cent; Foreign Language, five and one-half per cent; and Music or Fine Arts, less than one per cent.

Principal Findings

Findings in which significant differences were noted on the chi-square test were:

- The regular group rated their understanding of the history of education significantly higher (.05) than did the experimental group.
- 2. The experimental group gave a significantly higher (.02) rating to the development of a personal philosophy of education than did the regular group.
- 3. The experimental group rated their understanding of the cultural and social influences on education significantly higher (.01) than did the regular group.
- 4. The experimental group rated "the development of a commitment to and an enthusiasm for teaching and a genuine belief in its worth" significantly higher (.05) than did the graduates in the regular program.

Percentage comparisons tended to favor the experimental program over the regular program. Eighteen of the
thirty-four items favored the experimental program, whereas,
only four favored the regular program.

The recommendations of the respondents in this study are briefly summarized as follows:

1. Respondents emphasized the need for more attention to handling of student behavior in the school situation. This was the number one weakness as viewed by the respondents.

- 2. Student teachers should have wider range of experience including working with students of low ability and those from lower socioeconomic areas. Also, student teachers should have more careful supervision. Additional experience with children could be attained through pre-student teaching experiences, working as a teacher aide, field trips observing actual classes, and student activities in the public school. Students in the experimental program were more satisfied with the student teaching experience than were the students in the regular program.
- 3. Special course offerings should be available for preparation of junior high school teachers.
- Special methods courses should be available in all teaching areas.
- 5. More emphasis in the experimental program is needed on developing a practical understanding of the purposes and processes of measurement and evaluation in the classroom.
- 6. English teachers made a greater number of recommendations for changing of their teaching major than did teachers in the other major fields. They recommended more American literature as well as a special methods course. Language teachers recommended linguistics be required.

- 7. Admission to the College of Education should be based on criteria in addition to the minimum grade average.
- 8. More preparation in the use of audio-visual equipment and materials was strongly recommended.

Recommendations Based on the Study

As a result of the findings and the recommendations of experienced teachers as reported in this study, it is recommended that The University of Arizona College of Education:

- 1. Re-evaluate the objectives of the teacherpreparation programs periodically to determine their adequacy in meeting the needs of the teachers in the types of schools and communities in which they teach upon graduation from the University's College of Education.
- 2. Be more selective in admission to the College of Education by giving psychological, personality, and attitude tests.
- 3. Broaden the variety of laboratory experiences prior to student teaching, including work as classroom aides, and field trips observing actual classes and student activities in a variety of school situations.

- 4. Employ full-time supervisors by the University who can devote more time to their work with student teachers and cooperating teachers.
- 5. Devise a more flexible program of teacher preparation to provide more electives, such as adolescent psychology, the junior high school, and psychology of discipline.
- 6. Offer methods courses in all subject areas.
- 7. Offer the junior high school teacher-to-be a program which will prepare him specifically for teaching at the junior high school level.
- 8. Revise course content of teaching majors to more effectively prepare teachers for the secondary course content.
- 9. Broaden student teaching experience to include prestudent teaching observation, full-time college supervisors, and working with adolescents of varying abilities and socioeconomic and ethnic backgrounds.

Recommendations for Further Research

This study might make a significant contribution to the objectives of improving the secondary teacher-education program at The University of Arizona. It also offers valid research for further evaluation of the secondary teacher-education program as perceived by future graduates of the University. It is recommended that:

- 1. A close follow-up study by the College of Education of beginning teachers be undertaken on a regular basis to determine strengths, weaknesses, and the ability to adjust to the assigned teaching situation.
- 2. Continuous evaluation of the teacher-preparation program be instituted by longitudinal studies of student teachers, controlling factors of types of preparation, and knowledge of subject matter, with a follow-up study of two or more years on the students' success as teachers.
- 3. Additional experimental programs be devised and studied as a means of providing more effective experiences for prospective teachers, especially for those planning to teach in one of the following: (a) junior high schools, (b) schools in lower socioeconomic areas, and (c) schools with minority-group children.

APPENDIX A

QUESTIONNAIRE

I. PERSONAL INFORMATION

(Ple	ease (70u.)	check () wit	th pen or	pencil	that which applies
Sex	:	Ma	ıle		Female
1.					sity of Arizona ary Education).
		Under 25			40-49
		25-29			50 or over
•		30-39			
2.	Size	of community	in which	you te	each:
		50,000 inhabi	tants or	more	•
		contiguous bo	oundaries,	const	more cities having cituting a single opulation of at least
		A city of 10,	,000 to 50	,000 i	inhabitants
	<u></u>	A small town	of less t	han 10	,000 inhabitants
		Rural			÷
3.	Туре	of community	in which	you te	each:
		Agriculture			Government
		Urban			Other (Please specify)
		Mining			

4.	Type of school in which you are teaching:
	Public School Parochial School
	Private School Not teaching at present
5.	Type of school organization in which you teach:
	2-Year Junior High 6-Year Junior-Senior High
	3-Year Junior High Other (Please specify):
	4-Year Senior High
	3-Year Senior High
6.	Size of school in which you teach:
	Less than 100 students 1,000 to 2,500 students
	100 to 500 students 2,500 students or more
	500 to 1,000 students
7.	Number of years you have been teaching (Count this academic year as one year):
	One year Four years
	Two years Five or more years
	Three years
8.	Number of years in your present assignment:
	One year Four years
	Two years Five or more years
	Three years
9.	What subjects are you teaching now?
10. 11.	Yes No Are you teaching in your major field? Are you teaching in your minor field?

12.	Reasons for choosing teaching:
	Interest in teaching
	Previous experience working with young people
	Inspired by an adult
	Availability of employment in teaching
	Other (Please explain):
13.	When did you first consider teaching as a career?
•	Before High School During last two years of College
	During High School Other (Please specify):
	During first two years of College
14.	Please check the professional organizations to which you belong:
	Local Education Association
	State Education Association
•	National Education Association
	American Federation of Teachers
	Subject Area Organizations (Such as National Council of Teachers of English)
15.	To what extent have you been active in student co-curricular (extra-curricular) activities?
	Not at all To a moderate degree
,	To a limited degree To an extensive degree

which you are participating:
Activities in the Education Associations
Research
Curriculum Development
Activities in your subject area organizations
Other (Please specify):
II. UNDERGRADUATE TEACHER PREPARATION
Type of teacher-preparation program you were enrolled in:
A one-year program, including a six-hour course in general methods and evaluation which preceded student teaching.
Block Program: The 14-unit program for one semester, including 8 weeks of full-time student teaching.
Regular Program: One semester of student teaching for three hours per day, preceded by separate courses in general methods (Education 234), and in tests and measurements (Education 257).
Each of the following are characteristics essential to good teaching. Using a 5-point scale please rate the degree to which each was developed through your teacher-preparation program.
1 2 3 4 5 Low Average Very High
An understanding and application of the psychology of learning and child growth and development.
An understanding of the history of education.
The development of a personal philosophy of education.

	The development of skills through your student teaching experience.
	The ability to plan and conduct meaningful classroom experiences.
<u> </u>	An understanding of the cultural and social influences on education.
	A practical understanding of the purposes and processes of measurement and evaluation in the class-room.
	An understanding of the total school program and the part each unit plays including guidance role, other subject areas, administration, and materials center.
	Use of audio-visual media.
	Handling behavior problems.
	Skill in developing self-discipline on the part of pupils.
	Developing of course materials.
	Teaching skill in your particular subject, including varied teaching techniques, experimentation, etc.
	Adequacy of preparation in your subject-matter area.
	The ability to communicate with individuals and with groups.
	The ability to analyze group development and interaction.
	The development of a commitment to and enthusiasm for teaching, and a genuine belief in its worth.

III. AREAS OF EMPHASIS IN TEACHER PREPARATION

Please indicate your perception of the degree of emphasis placed on each of the following areas in your teacher-preparation program. Comments and suggestions will be helpful.

1.	Understanding the reality of	the school situation.
	Too much emphasis	Comments:
	Too little emphasis	
	Adequate emphasis	
2.	Understanding of the various of students.	social and cultural values
	Too much emphasis	Comments:
	Too little emphasis	
	Adequate emphasis	
3.	The student teaching experie	nce.
	Too much emphasis	Comments:
	Too little emphasis	
	Adequate emphasis	
4.	Supervision during your stud	lent teaching.
	Very helpful	Comments:
	Adequate	
	Inadequate	
5.	Adequate insights into innoverstudy, now in the schools.	vations, such as independent
	Too much emphasis	Comments:
	Too little emphasis	•
	Adequate emphasis	

6.	Theory of learning and child growth and development
	Too much emphasis <u>Comments</u> :
	Too little emphasis
	Adequate emphasis
7.	Subject-matter emphasis and its relevance to your teaching assignment.
	Too much emphasis Comments:
	Too little emphasis
	Adequate emphasis
8.	General methods courses.
	Too much emphasis <u>Comments</u> :
	Too little emphasis
	Adequate emphasis
9.	Special methods courses in your specific field of teaching.
	Too much emphasis <u>Comments</u> :
	Too little emphasis
	Adequate emphasis
10.	An understanding of the development of well-planned lessons which fit the needs of your students.
	Too much emphasis <u>Comments</u> :
	Too little emphasis
•	Adequate emphasis
11.	Discipline and control in the classroom.
	Too much emphasis Comments:
	Too little emphasis
	Adequate emphasis

12.	many aspects of teaching, knowledge in setting object materials and methods.	s of recent research in the and the ability to use that tives and in selecting						
	Too much emphasis	Comments:						
	Too little emphasis							
	Adequate emphasis							
13.	Ability and the interest is teacher in the areas of me learning.							
	Too much emphasis	Comments:						
	Too little emphasis							
i	Adequate emphasis							
14.	An understanding of the pr be reached in your classro	ecise kinds of objectives to om.						
	Too much emphasis	Comments:						
	Too little emphasis							
	Adequate emphasis							
15.	Professionalism including professional ethics.	attitude toward teaching and						
	Too much emphasis	Comments:						
	Too little emphasis							
	Adequate emphasis	•						
16.	Knowledge and use of approsuch as tests, observation action, etc.	priate evaluation procedures, of students, student inter-						
	Too much emphasis	Comments:						
•	Too little emphasis							
	Adequate emphasis							

17.	Communication with individuals, groups, and parents.
•	Too much emphasis <u>Comments</u> :
	Too little emphasis
	Adequate emphasis
	IV. SUMMARY
1.	What courses or topic areas should be added or modified to enrich the teacher preparation program?
2.	In your first two years of teaching, where did you find the areas of greatest weakness?
3.	We would appreciate suggestions, general or specific, not included previously which you may have for improving this program:

APPENDIX B

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS--TOTAL

TABLE VIII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS--TOTAL

APPENDIX C

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE

TABLE IX

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE--50,000 OR MORE

	Regular Group						Experimental Group					
Item No.	l Low	2	3 Average	4	5 Very High	l Low	-2	3 Average	4	5 Very High		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	12 19 11 10 4 9 11 19 39 33 18 12 12 4 4 8	15 17 18 3 14 16 17 22 15 27 35 15 14 6 12 17 9	36 30 30 16 29 42 26 32 14 24 29 30 19 22 43 40 28	21 21 23 27 27 19 26 11 13 4 23 28 29 25 37 22	8 5 11 36 18 5 12 8 10 4 5 11 18 30 9 2 25	2 11 1 0 0 1 3 4 7 9 2 1 2 0 0 2	4 8 2 2 2 2 2 5 6 4 4 7 5 2 2 3 3 3	6 1 6 5 8 8 6 7 6 7 10 10 3 8 5 10 2	8 2 4 7 6 8 4 3 5 2 1 5 3 6 8 5 1	2 0 8 9 6 3 4 2 0 0 1 1 2 6 6 2		

TABLE X

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE--AT LEAST 50,000

	Regular Group					Experimental Group					
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	1 5 6 1 5 2 7 8 11 9 3 4 1 3 3	28524746445373362	15 10 6 6 9 9 8 10 5 8 10 10 6 5 10	9 4 7 11 6 9 5 4 9 2 3 10 5 9 9 2 8	1 0 3 7 3 0 8 0 1 2 0 1 5 9 2 2	0 4 0 0 0 0 1 0 0 1 1 0 0 0	2 3 1 0 0 2 2 2 3 4 3 2 1 2 0 1	2 2 3 3 4 2 5 6 3 3 2 4 3 1 4 5 1	4 0 3 3 4 3 1 0 3 1 3 4 4 3 2 2 2 2	2 1 4 5 3 2 1 2 1 0 0 3 5 4 1	

TABLE XI

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE--10,000 TO 50,000

		-	Regular	Group			E	xperimental	L Grou	ıp
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	2 5 6 1 2 8 1 6 10 11 9 3 2 3 2	6 11 4 6 7 6 8 4 8 12 5 3 1 10 2	21 14 7 5 14 12 9 16 11 11 9 14 11 5 18 18	7 6 18 15 11 9 15 6 8 5 4 11 13 13 13 14	1 2 4 13 5 3 5 2 4 3 3 4 9 16 4	1 2 3 1 0 1 0 1 3 3 3 1 2 1 0	4 3 0 0 1 0 2 3 0 1 3 1 0 0 0 0	1 2 1 1 4 4 4 2 1 3 2 2 1 1 5 6	2 1 3 2 1 2 2 0 3 1 1 2 3 3 2 0	0 0 1 4 2 1 0 2 1 0 0 1 2 3 1

TABLE XII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE--LESS THAN 10,000

			Regular (Group		Experimental Group					
Item No.	1 Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	3433233559924324	4 5 5 0 2 2 4 5 6 7 6 3 4 3 2 3 3	12 10 8 6 9 10 6 9 5 4 6 9 7 5 11 13 10	2 3 4 7 6 7 5 1 2 0 2 2 2 7 4 2	1 2 1 5 3 0 4 2 3 2 0 5 5 4 3 0	1 2 1 1 1 1 3 2 2 3 1 1 1	0 0 0 0 1 0 0 0 2 0 1 0 3 1 1	0 1 0 1 2 2 2 2 1 0 2 0 3 0 2 3	2 1 3 1 0 1 1 0 0 0 0 0 0	1 0 0 1 0 0 0 0 0 0 0 0	

TABLE XIII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY COMMUNITY SIZE--RURAL

			Regular G	Group			E	xperimental	Grou	ıp
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0 4 1 1 2 0 0 2 1 4 4 2 1 1 0	0 2 1 1 2 1 2 4 2 2 2 2 3	9 4 3 3 6 3 4 2 2 3 6 5 1 2	0 1 2 1 2 2 3 2 1 1 2 1 2 3 3	2 0 4 5 1 2 4 1 3 2 0 0 3 4 3	0 1 0 0 0 0 0 0 1 1 0 0 0	0 0 1 0 0 0 1 0 1 0 1	2 1 0 0 0 1 0 1 0 1 0	0 0 0 1 2 0 1 0 0 1 1 2 0 0	0 0 1 1 0 1 0 0 0 0 0 0

APPENDIX D

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER

TABLE XIV

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--MATHEMATICS

			Regular (Group			E	xperimental	l Grou	тb
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	2 3 0 0 1 1 0 3 5 3 2 2 0 0 0 3	2 4 1 0 1 1 1 2 4 6 8 2 2 0 0	6 5 2 5 9 7 1 8 4 5 3 5 5 6 6 7	3 2 9 5 1 4 7 1 1 0 0 4 4 3 7 2	2 0 2 4 2 1 5 0 1 0 0 1 2 4 1 1	1 1 2 0 0 0 1 0 1 0 3 1 0 0 0	1 0 0 1 0 0 1 3 0 3 1 2 0 1	1 2 1 1 5 2 1 3 1 3 2 5 0 3 2 4	1 2 2 3 0 3 3 0 2 0 0 0 3 2 3 1	2 0 1 2 0 0 2 1 0 0 0 0 0 0

TABLE XV

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--SCIENCE

			Regular G	Group			E	xperimental	l Grou	1Þ
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	2 3 0 0 1 0 0 5 2 2 2 2 0 0	2 3 3 3 5 3 1 2 5 4 5 3 4 0 3	4 5 4 1 2 10 4 6 2 4 9 8 5 3	6 4 5 7 6 2 6 2 4 1 0 2 3 6 6	2 1 4 5 2 1 5 1 3 2 0 1 2 7 3	0 0 0 0 0 0 0 0 0	1 1 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 0 1 0 1 0 0 0	0 0 1 0 1 0 1 0 1 0 1	0 0 0 1 0 0 0 0 0 0 0

TABLE XVI

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--SOCIAL SCIENCE

			Regular (Group			E	xperimental	l Grou	ıb
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1	2	3	7	2	1	1	2	1	3	1
2	2	3	8	2	0	3	4	0	0	1
3	3	4	5	2	1	2	1	2	1	2
4	0	0	4	5	6	2	0	2 ·	2	2
5	1	4	8	2	0	1	1	2	2	2
6	2	1	5	5	2	2	1	1	2	$\bar{1}$
7	ō	6	1	7	ī	$\overline{2}$	2	$\bar{1}$	ī	2
8	2	4	7	i	$\overline{1}$	$\overline{2}$	$\bar{0}$	4	ō	$\overline{2}$
9	6	3	4	ī	ī	$\overline{2}$	2	2	1	ĩ
10	4	5	į.	2	Ō	3	ī	3	ī	õ
11	Ä	5	5	ก	ĭ	2	ī	3	ī	1
12	3	2	6	4	Ō	2	2	2	ī	1
13	3	4	Š	2	i	2	ī	Õ	วั	2
14	2	2	2		5	2	2	2	1	1
15	1	7	2	5	0	1	Ó	2	3	1
16	2	3	7	3	0	7	7		7	1
	<u>د</u> 0	2	6		2	1 1	T.	4	Т	<u>.</u> /.
17	0	2	6	4	3	1	0	0	3	· ·

TABLE XVII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--ENGLISH, SPEECH AND DRAMA

	•		Regular (Group			E	xperimenta:	L Grou	тb
Item No.	1 Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	6 8 5 5 5 10 11 12 7 4 7 5	1985765547979646	14 10 8 3 8 12 8 8 6 7 10 10 8 9	6 4 8 7 8 4 7 5 7 2 3 7 3 9 6	4 0 2 10 3 1 6 3 3 3 1 3 4 2	1 8 1 0 0 0 2 2 7 4 2 0 1 0	3 2 1 1 0 1 5 5 2 5 8 4 3 2 1	4 5 3 1 5 7 5 5 1 4 2 6 3 3 6	5 0 8 5 7 2 2 1 4 6 7 2	1 0 2 7 2 4 0 1 0 0 0 0 0 2 2 2 5

TABLE XVIII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--FOREIGN LANGUAGE

			Regular (Group			E	xperimental	l Grou	ıp
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	0 3 1 0 1 0 0 1 4 4 4 3 1 0 0	3 1 2 2 0 1 2 4 1 4 4 1 0 1 1	5 3 4 1 3 4 4 3 1 0 1 3 1 0 4 7	1 2 2 3 5 4 2 1 3 1 1 3 6 3 1	0 0 0 3 0 0 1 0 0 0 0 1 5 2	0 1 0 0 0 0 0 0 0 1 1 1 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 1 1 1 2 2 2 1 1 1 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2 2 2 2 0 0 0 0 0 0 0 0 0 0 3 3 1

TABLE XIX

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--BUSINESS

			Regular	Group			E	xperimental	l Gro	тb
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14	0 4 4 0 1 1 2 4 9 5 3 1 2 0	1 3 2 0 1 5 4 6 1 4 10 2 0 0	14 9 8 4 11 10 10 7 8 12 7 10 3 2	7 3 7 10 7 5 3 4 3 1 1 6 10	1 2 1 8 2 1 3 1 1 0 1 2 7	0 1 0 0 0 0 0 1 0 1 1 0	1 1 0 0 0 0 0 1 1 0 0 0	1 0 0 1 1 1 1 0 0 1 1 1	0 0 1 1 1 1 0 0 0 0 0 1 2 0	0 0 0 0 0 0 1 0 1 0 0 0
11 12 13	5 3 1 2 0 1 1		12 7 10 3 2 11 10 8		1 2 7 10 1 0	1 1 0 0 0 0	0 0 0 0 0 1 0	1 1 1 0 0 1 1	0 0 1 2 0 0	0 0 0 0 2 1

TABLE XX

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--PHYSICAL EDUCATION-HEALTH

			Regular	Group			E	xperimental	l Grou	ıp
Item No.	l Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1	3	6	15	4	. 1	0	0	0	0	0
2	6	6	10	ნ ი	1	0	0	0	0	0
3 4	3	0	5	8	13	0	0	0	0	Ŏ
5	ĭ	4	· 6	8	9	ŏ	ŏ	ŏ	ŏ	Ŏ
6	$\overline{2}$	7.	11	6	2	Ö	Ö	Ö	Ö	Ö
7	4	6	9 .	7	3	0	0	. 0	0	0
. 8	5	10	11	3	0:	. 0	0	0	0	0
9	12	4	4	4	4	0	0	0	0	0
10	14	8	5	2	0	0	0	0	0	. 0
11	9	8	7	2	2	. 0	0	. 0	. 0	. 0
12	2	2	11	6	7	0	0	0	0	0
13	1	1	2	13	11	0	. 0	0	0	0
14	0	2	6	10	10	0	0	0	0	0
15	3	5	11	7	3	0	0	0	0	0
16	4	6	10	6	2	0	0	0	0	0
17	2	1	9	9	. 7	0	0	0	0	0

TABLE XXI

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--MUSIC, ART, FINE ARTS

			Regular C	Group			E	xperimenta.	l Gro	пb
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13	0 0 0 1 1 0 1 1 1 0	0 0 0 0 0 0 0 0 0	1 0 1 0 0 0 0 0 0	0 1 0 0 0 0 1 0 0 0 0	0 0 0 0 0 0 0 1 0 0	0 1 0 0 0 0 0 0 1 1 1 0	0 0 0 0 0 0 0 1 0 0 0	0 0 0 0 0 0 0	1 0 1 1 0 0 0 0 0	0 0 0 0 1 0 0 0 0
13 14 15 16 17	0 0 0 0	0 0 1 0	0 0 0 1	1 1 0 0	0 0 0 · 0	0 0 0 0	1 0 0 0	0 1 0 0	0 0 1 0	0 0 0 1

TABLE XXII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SUBJECT MATTER--TEACHING TWO OR MORE SUBJECTS

			Regular	Group			E	xperimental	l Grou	1p
Item No.	1 Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	3 5 6 5 4 7 3 7 12 18 14 6 5 4 3 4 4	9 12 8 1 3 9 8 9 7 9 3 5 11 5	20 11 10 9 13 12 14 15 8 6 9 14 14 14 8 16	7 9 9 12 15 12 10 5 6 4 6 14 9 11 12 8 12	2 4 8 14 7 1 6 5 6 6 3 4 7 15 5 2 13	1 5 0 0 0 0 1 1 1 2 2 0 0 0 0	2 3 1 1 2 2 3 2 3 1 0 0 1 2 1	2 1 3 4 5 3 7 4 5 4 5 7 5 4 2 5 3	63222522424463321	1 0 6 5 4 2 0 2 0 1 0 1 1 4 5

APPENDIX E

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION

TABLE XXIII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--2-YEAR JUNIOR HIGH

Item No.			Regular (Group		Experimental Group					
	1 Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	3 6 2 3 3 5 2 6 8 10 8 2 2 3	3 4 7 4 5 1 4 3 5 5 5 5 3 7 1 3	8 5 7 5 4 6 7 8 1 5 5 7 8 8	7 6 3 4 7 8 6 2 5 1 1 5 1 4 3	0 1 2 5 2 1 2 2 2 2 0 2 4 3 5	2 7 1 0 0 0 1 2 3 5 3 0 0	1 1 0 0 2 2 1 1 1 4 1 0 2 2	2 0 2 3 5 2 4 4 4 1 1 1 2 3	3 0 2 2 3 3 0 1 0 1 0 3 6 2	0 0 2 3 0 1 1 0 0 0 0	
11 12 13		5 5 7 1 3 6 4	5 5 7 8 8 11 8 4	1 1 5 1 4 3 3	0 2 4 3 5 3 1 5	5 3 0 0 0 0 3	1 4 1 0 2 2 2	1 1 4 1 2 3 2 2	1 0 3 6 2 1 0		

TABLE XXIV

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--3-YEAR JUNIOR HIGH

		Regular (Experimental Group						
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High
1 2 3 4 5 6 7 8 9 10 11 12	3 3 5 2 3 3 3 7 10 10	3 5 5 1 2 5 3 5 2 2 2 2	6 7 4 4 5 5 3 5 3 4 4	5 2 3 3 3 7 3 0 1	0 0 1 6 4 1 1 1 2 1 0	1 3 1 0 0 0 0 0 0	1 0 0 1 1 0 1 3 2 1	1 1 1 2 3 4 1 2 1 3	4 2 2 2 1 3 1 0 1 3 3	0 1 3 3 3 0 1 3 1
13 14 15 16 17	5 0 2 3 1	1 4 3 4 4	5 4 8 8 6	3 5 4 1	3 4 0 1 5	1 0 0 0	0 0 1 1 0	2 2 0 4 0	2 2 3 1	2 3 3 1 5

TABLE XXV

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--4-YEAR SENIOR HIGH

			Regular	Group		Experimental Group					
Item No.	l Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	8 20 11 3 5 9 7 15 37 27 15 7 10 4 3 6	11 23 13 5 11 15 16 24 15 32 39 15 17 8 9	50 38 31 16 34 46 28 42 18 22 32 31 14 15 42 49	19 15 27 32 29 22 31 10 18 9 8 28 29 35 31 21	9 5 14 42 18 6 16 7 10 8 5 12 30 36 12 3	0 7 2 1 0 1 1 4 4 3 2 1 0 0	5631215465934324	5 6 7 3 6 7 6 8 3 12 4 10 4 5 9	7 2 7 8 7 6 7 2 8 1 3 6 8 7 4 4	4 0 3 8 6 6 2 3 0 0 1 1 3 5 6 2	

TABLE XXVI

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--3-YEAR SENIOR HIGH

			Regular (Froup		Experimental Group					
Item No.	1 Low	2	3 Average	4	5 Very High	l Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	0 2 4 1 1 2 1 7 1 5 3 1	2 4 1 1 4 5 4 2 4 4 3 1 1	8 1 2 0 5 4 2 1 5 2 3 6 7	1 6 4 7 2 1 3 1 1 0 0 2 1 5	1 0 0 3 0 0 2 1 1 1 1 0 2 4	0 0 0 0 0 0 1 1 2 3 1 1	1 3 0 0 1 0 0 2 0 0 2 1 1	1 0 0 1 2 1 2 0 0 0 0	1 0 1 1 0 2 0 0 0 0 0	0 0 2 1 0 0 0 0 0 1 0 0	
	1 2 3 1	1 0 4 0	1 7 5 5	5 2 0 5	2 4 1 0 1	0 0 1 0	0 1 0 0	1 1 1 0	0 0 1 3	2 1 0 0	

TABLE XXVII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--6-YEAR JUNIOR-SENIOR HIGH

•			Regular (Group		Experimental Group					
Item No.	1 Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	1 1 2 2 2 1 2 3 2 2 2 2 1	3 2 1 0 1 1 1 1 1 3 0 0	2 1 2 1 1 3 1 1 1 2 0 1 1 2	0 1 1 2 2 0 1 0 1 1 1 2 4 2	0 1 0 1 0 1 1 1 1 0 0 0	0 1 0 0 0 0 0 1 1 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 1 1 0 0 1	1 0 1 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	
15 16 17	1 1 1	1 2 1	1 2 3	1 1 1	2 0 0	0 0 0	0 1 0	1 0 0	0 0 0	0 0 1	

TABLE XXVIII

TABULATION OF RESPONSES FOR THE REGULAR AND EXPERIMENTAL GROUPS BY SCHOOL ORGANIZATION--OTHER

			Regular	Group		Experimental Group					
Item No.	1 Low	2	3 Average	4	5 Very High	1 Low	2	3 Average	4	5 Very High	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	3 6 2 4 3 2 3 5 9 13 9 3 5 3 2 2 2 2 2 2 2	6 4 8 1 5 6 5 9 6 7 11 10 2 1 4 10 4	19 17 10 8 14 18 12 16 12 14 15 16 12 9 14 18 12	7 10 11 13 11 10 7 7 4 2 2 7 14 11 16 7	3 2 6 12 5 1 11 1 6 2 0 2 4 13 2	1 3 1 1 2 2 1 2 3 1 1 1 1	2 3 0 0 0 1 2 1 1 2 0 0 0	2 0 1 2 3 3 1 5 1 2 5 3 1 1 1 1	2 1 2 0 2 1 1 0 3 0 0 1 5 3 5 1	0 0 4 5 2 0 1 0 0 0 0 0 1 3 0	

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