AN ANALYSIS OF THREE PRE-STUDENT TEACHING EXPERIENCES IN THE PREPARATION OF ELEMENTARY SCHOOL TEACHERS

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ABSTRACT

AN ANALYSIS OF THREE PRE-STUDENT TEACHING EXPERIENCES IN THE PREPARATION OF ELEMENTARY SCHOOL TEACHERS

by William Ward Sinclair

This study is an attempt to determine which of three different pre-student teaching experiences best prepared the elementary student teacher for her full term of student teaching at Michigan State University.

During the Fall Term, 1959, a random selection was made of the applicants for Winter Term, 1960 elementary student teaching which placed thirty students in a reading group, thirty-two in an observation group, and sixty-seven in a control group.

Students in the reading group earned three term credits in the College of Education through independent reading in the field of education. Students in the observation group earned three term credits by observing three hours per week in an elementary classroom. Students in the control group were enrolled in normal classes in the College of Education.

The Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination: How I Teach were administered to all of the students on three different occasions. The first occasion was a pre-test administered in September, 1959 to determine whether or not there was a significant difference among the

three groups. The second was administered during the first week of student teaching in the Winter Term, 1960 to determine what changes, if any, occurred among the groups as a result of their different experiences during the previous term. The last testing session was held during the final week of student teaching to determine what influence, if any, student teaching had on the different groups.

Each student in the reading and observation groups was interviewed twice during the Fall Term, 1959. Each student in these two groups also submitted an evaluation of her experiences as a member of one of the groups.

The interviews, evaluations, and test results comprise the data used in this study.

An analysis of variance was computed for each administration of the tests to determine what differences existed among the mean scores of the groups on the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination. It was found that no significant difference existed in the mean scores on the three groups of the Minnesota Teacher Attitude Inventory at any of the occasions when the test was given during the two-term period of this study.

Using the data of the Purdue Teachers Examination, it was found that a significant difference at less than the five per cent level of probability existed among the groups at the first testing session. Multiple t tests showed there was a significant difference at the one per cent level of significance

between the observation and control groups where t = 2.87. There was no significant difference between the reading group and either of the other two groups. No significant difference in the mean scores of the three groups on the Purdue Teachers Examination existed on the two subsequent administrations of the test.

The interviews with the students in the reading and observation groups and the evaluations submitted by them indicate that, in the opinions of the students, there was a difference in their pre-student teaching experiences. All members of the observation group felt that they were better prepared for student teaching than were students in the other two groups. All students in the reading group felt they were better prepared for student teaching than students in the control group, but twenty-eight of the reading group expressed the opinion that they were not as well prepared as the students in the reading and observation group.

The opinions of the students in the reading and observation groups are not supported by their scores on the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination. If there were differences among the groups, the testing did not reveal that these differences existed.

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By

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CHAPTER I

THE PROBLEM

Statement of the Problem

This study is an attempt to determine which of three different pre-student teaching experiences best prepares the elementary student teacher for her full term of student teaching at Michigan State University.

Importance of the Problem

The world today exists only because men have refrained from launching the destructive capabilities which they possess. If mankind is ever going to know peace and serenity, all peoples must learn to understand, accept, and trust all others. Since no nation can, at the present time, forceably impose its doctrine on another without fear of swift and violent reprisal, each nation that wishes to change the behavior and attitudes of others must do so through precept and example.

It follows, then, that the nation which presents the finest ideal before the world will be more apt to attract others to its position than a nation whose ideals are found wanting.

The ideals, aims, and aspirations of any nation can be furthered only by preparing the children and youth to advance toward these goals in future years. This preparation of the children and youth to carry on the cultural heritage is an educative process. Thus, education becomes one of the most important functions of any government.

In each country formal institutions have evolved through the centuries charged with the primary responsibility of educating the nation's children. Our nation, like any other, must provide as strong an educational system as possible in order to give to children the opportunity to grow and develop under a system of government which we believe to be better than others. Strong educational systems do not just happen. They are based on an intelligent, well-qualified, dedicated teaching profession. Therefore, the training of teachers may well be considered the keystone in the development of a strong educational system.

The preparation of teachers is a complex task involving knowledge of many disciplines. In addition, understanding of the teaching-learning process must be mastered. Consequently, students in colleges and universities who are preparing to become teachers are faced with a very broad curriculum. However, one phase of this total program stands out in bold relief.

For many years student teaching has been considered the most important part of a student's preparation for the

teaching profession.[1] Any attempt which seeks to increase the readiness of students for such an important phase of their professional training should be encouraged. By being better prepared to enter the student teaching phase of their educational program, it is assumed that students will be able to gain more worthwhile experiences which, in turn, will make the student teaching experience itself an even more important and more valuable experience than it has been in the past.

Efforts to improve student teaching programs are not new. In recent years many significant changes have been wrought in student teaching programs as a result of the almost constant experimentation and evaluation which has been and is being conducted. One of the most comprehensive studies was started in 1934 by the faculty of Central Michigan University, Mt. Pleasant, Michigan in cooperation with the State Board of Education and the State Department of Public Instruction. The purpose of this project was to achieve three closely related objectives, one of which was

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[1]Kate L. Boyce, "What Is The Most Important Part of Teacher Training?" Ohio Schools, 30:162-163, April, 1952.

Chester W. Harris (ed.), Encyclopedia of Educational Research (New York: The Macmillan Company, 1960), p. 1473.

Clarence A. Newell and Richard H. Byrne, "Field Experiences in Education," The Journal of Teacher Education, 10:435-38, December, 1959.

Florence B. Stratemeyer and Margaret Lindsey, Working With Student Teachers (New York: Bureau of Publications, Teachers College, Columbia University, 1958), p. 4.

"the development of a program of teacher preparation more adequate to the present needs of Michigan."[2]

The project involving thirty-five students and seven faculty members centered around the needs of the individual student. The needs of each student were determined after a thorough self-appraisal with the assistance of a faculty member. Adjustments in the curriculum were made in an effort to provide each student with the experiences necessary to meet his pre-determined needs.

In the 1940's "Michigan State University made significant revisions in the professional preparation of teachers of agriculture and home economics."[3] Students in these areas originated the full-time off campus student teaching program at Michigan State University. Special methods courses were offered in the field which enabled the students to earn sufficient credits during the term to maintain their class standing.

Since that time the College of Education of Michigan State University has developed the full-time off campus student teaching program for all prospective teachers.

The State of Michigan, generally, and Michigan State University, in particular, have traditionally been alert to new ideas in teacher education. It is in keeping with this

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[2]Kenneth L. Heaton and G. Robert Koopman, A College Curriculum Based on Functional Needs of Students (Chicago: The University of Chicago Press, 1936), p. 1.

[3]Charles E. Prall, State Programs for the Improvement of Teacher Education (Washington: American Council on Education, 1946), p. 72.

tradition that the present study has attempted to evaluate and analyze different methods of better preparing the future teachers of the state and nation.

Assumptions on Which Study Is Based

The assumptions underlying this study are:

1. Different kinds of experiences prior to student teaching are related to success in student teaching.

2. The greater the success of students in student teaching, the better prepared they will be to enter the teaching profession.

Hypotheses to be Tested

1. Students in the reading, observation, and control groups will have different attitudes and knowledge about teaching before and after student teaching.

2. Students in the observation group will achieve the greatest gain of the three groups in attitudes and knowledge as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

3. Students in the reading group will achieve more gain than the control group and less gain than the observation group in attitudes and knowledge as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

4. Students in the control group will achieve the least gain of the three groups in attitudes and knowledge

as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

Scope of the Problem

This study has dealt with all elementary female student teachers at Michigan State University for the Winter Term, 1960 who were enrolled in the University during the previous term. These students were divided at random into a reading group, an observation group, and a control group. During the term prior to student teaching, the students in the reading group were placed in an experimental reading section in the College of Education, the students in the observation group were assigned to an experimental observation section, and the students in the control group continued in the normal courses.

A pre-test was administered at the beginning of the Fall Term, 1959; a second test was given at the beginning of student teaching in January, 1960; and a final test was administered at the conclusion of student teaching in March, 1960. An attempt was made by the use of these test scores to determine what differences, if any, occurred among the three groups as they prepared for and participated in student teaching.

Each student in the reading and observation groups was interviewed at least twice during the term prior to student teaching. In addition, each of the students in these two groups submitted an evaluation of her experiences as a member of one of the groups.

The selection factors, specific experiences, and evaluation procedures which were used are described in detail in Chapters III, IV, and V.

Definition of Terms

For the purpose of this study certain terminology is defined as follows:

1. Student teachers are the students from Michigan State University who have been assigned to spend full time for one term in a public school where they practice teach under the guidance of a supervising teacher.

2. Supervising teachers are full time teachers in public schools who supervise the student teaching activities of Michigan State University students who are attempting to earn a State Elementary Provisional Certificate.

3. College coordinators are faculty members in the College of Education, Michigan State University who act as liaison between the University and public school personnel and student teachers in the centers (or communities) where students do their student teaching.

4. The reading group consisted of those Winter Term, 1960 elementary student teachers who were in an experimental reading section of the Teacher Education Department course number 424 during the Fall Term, 1959.

5. The observation group consisted of those Winter Term, 1960 elementary student teachers who were in an experimental observation section of the Teacher Education Department course number 424 during the Fall Term, 1959.

6. The control group consisted of the remainder of the Winter Term, 1960 elementary student teachers.

Procedures Used in This Study

In the spring of 1959 a count of the applications for Winter Term, 1960 student teaching showed that 108 students in elementary education had completed their applications. A random division of these applications placed forty students in the reading group, forty students in the observation group, and the remaining twenty-eight in the control group. Subsequent applications were added to the control group which eventually totaled seventy-two students.

A memorandum[4] was sent to all students in the reading group requesting their presence at a meeting in the College of Education Building which was held before the students left the Campus for the summer. A similar memorandum was sent to the members of the observation group.[5]

Separate meetings were held for each group. In each of the meetings the students were asked to enroll in their respective sections of Teacher Education 424 during the Fall Term, 1959 after a brief outline of the proposed course was described.

In the Fall Term, 1959, thirty students, of the forty who had been chosen, enrolled in the reading section of

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[4]Appendix A.

[5]Appendix B.

Teacher Education 424, and thus became the reading group used in this study. In a like manner thirty-two students enrolled in the observation group used in this study. The remaining seventy-two students formed the control group as was mentioned above.

During the first week of the Fall Term, 1959, two tests were administered to the entire 134 students. These tests were the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination: How I Teach, Form A.

In the Winter Term, 1960, when these students were doing their student teaching, these two examinations were administered two additional times; once at the first seminar meeting, and again, at their last seminar meeting. Thus the Minnesota Teacher Attitude Inventory was administered three times, while Form A of the Purdue Teachers Examination: How I Teach was administered twice; the first time in September, 1959 and the second time in March, 1960. Form B of this examination was used in January, 1960.

An analysis of variance was computed from the mean scores of each group on both tests in order to determine: (1) the difference among the groups at each administration of the tests, (2) the differences within each group over the two-term experimental period.

The students who were enrolled in the reading section and those in the observation section were interviewed at least wice, and in addition, they were required to write an evaluation of their experiences in their respective classes.

The analysis of the test results, the interviews, the student evaluations, and the review of related literature form the basis for this study.

Limitations of the Study

Since the student teachers from Michigan State University are assigned to teaching centers throughout a large geographical area, it was impossible for one examiner to administer all of the tests in January and March, 1960. Although detailed instructions[6] were given to each college coordinator, there is little one can do to determine how closely these directions were followed. Thus the fact of different examiners for two of the three testing situations may limit the results of this study.

It must also be remembered that this study deals only with one group of students in one university. All of the students in this study were girls, all were seniors except six who were in the junior class, and all were working toward a bachelor's degree and a Michigan Elementary Provisional Certificate. The group of students in this study were selected only because they had applied for student teaching during the Winter Term, 1960. Since no other factors were involved in their selection, it can be assumed that they were a typical group of students enrolled in a college of education at a large mid-western university.

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[6]Appendix D.

Therefore, the findings here may or may not be applicable to other students in other situations. In any study of this nature, local conditions and regulations should be carefully considered before any far-reaching implications are drawn.

CHAPTER II

REVIEW OF RELATED LITERATURE

Since the early days of the Republic, many national leaders have been concerned not only with education in a broad sense, but also in the training of teachers specifically. At a convention of the Plymouth County Association for the Improvement of Common Schools in 1838, Daniel Webster expressed concern about teaching methods when he said, "We teach too much by manuals, too little by direct intercourse with the pupils' mind; we have too much of words, toolittle of things. For example, geology must be taught by excursions in the field . . . Teachers must teach things!"[1]

At this same convention, John Quincy Adams, who had only recently supported the normal school idea, stated that he was proud that Massachusetts should be the first state to consider public normal schools.[2]

The next year saw the opening of the first state supported normal school at Lexington, Massachusetts, quickly followed by two more; one at Barre, the other at Bridgewater.

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[1]Charles A. Harper, A Century of Public Teacher Education (Washington: National Education Association, 1939), p. 23.

[2]Ibid., pp. 23-24.

The State Board of Education adopted certain standing regulations for the three schools:

> To each Normal School, an Experimental or Model School is attached. This School is under the control of the Principal of the Normal School. The pupils of the Normal School assist in teaching it. Here, the knowledge which they acquire in the science of teaching, is practically applied. The art is made to grow out of the science, instead of being empirical. The Principal of the Normal School inspects the Model School more or less, daily. He observes the manner in which his own pupils exemplify, in practice, the principles he has taught them. Sometimes, all the pupils of the Normal School, together with the Principal, visit the Model School in a body, to observe the manner in which the teachers of the latter, for the time being, conduct the recitations or exercises. Then, returning to their own schoolroom, in company with the assistant teachers themselves, who have been the objects of inspection, each one is called upon to deliver his views, whether commendatory or otherwise, respecting the manner in which the work has merits and defects, the Principal of the Normal School presides. After all others have presented their views, he delivers his own; and thus his pupils, at the threshold of their practice, have an opportunity to acquire confidence in a good cause, of which they might otherwise entertain doubts, and to rectify errors which otherwise would fossilize into habit.[3]

From the modest beginning in teacher training in Massachusetts has evolved a complex, highly organized system of teacher education. Throughout this entire development there has been a constant awareness of the importance of the student teaching experience in the total preparation of teachers.

However, before 1948 relatively little had been written about professional laboratory experiences for

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[3]Henry Barnard, Normal Schools and Other Institutions, Agencies, and Means Designed for the Professional Education of Teachers (Hartford, Connecticut: Cape, Tiffany, and Company, 1851), p. 57.

prospective teachers prior to their student teaching assignments. In fact, this investigator was not able to find the phrase "professional laboratory experiences" used in the literature until it appeared in the report of the Sub-Committee of the Standards and Survey Committee of the American Association of Colleges for Teacher Education where it was published in the First Yearbook of that organization.[4] Since the issuance of this report, many articles have appeared which are related to this subject.

The report, referred to as Standard VI, formulated a number of basic principles pertaining to the development of professional laboratory experiences. Its importance has been summarized by Isabel Jones when she stated "the study made by the Sub-Committee of the American Association of Teachers Colleges constituted the most significant single contribution to the development of professional laboratory experiences in the pre-service education of teachers that has been made during the entire history of teacher education in the United States."[5]

The full text of Standard VI may be found in Appendix M of this study.

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[4]American Association of Colleges for Teacher Education, First Yearbook (Oneonta, New York: American Association of Colleges for Teacher Education, 1948), p. 88.

[5]Isabel Fleming Jones, "A Study of the Relationship of Various Types of Pre-Student Teaching Experiences to Success in Student Teaching" (unpublished Ph.D. dissertation, University of Virginia, 1955), p. 32.

A review of the literature before this time indicates that professional laboratory experiences other than student teaching were not typical procedures in the teacher training institutions across the country. The amount of time that is required of a student to prepare for teaching has been increased from eleven weeks in the earliest normal schools to our present four-and-five-year curricula in teacher training institutions, but there has not been a comparable increase in the amount of time devoted to professional laboratory experiences.

In Michigan a study was inaugurated by the State Association for Student Teaching in April, 1948, which, in part, attempted to identify the "working conditions and facilities for student teaching"[6] which existed in Michigan at that time. One conclusion reported in 1953 was that the elementary schools and, "especially the secondary, are limited in laboratory experiences prior to student teaching."[7]

Several attempts have been made in recent years to provide students with additional laboratory experiences of many types. One such effort was launched by Clark College,[8]

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[6]Mary Frances Gates and Donald M. Currie, "Survey of Supervision of Student Teaching in Michigan," Journal of Educational Research, 46:497-511, March, 1953.

[7]Ibid., p. 499.

[8]Pearlie Craft Dove, "An Exploration of Planned Observation-Participation Experiences Prior to Student Teaching in Conjunction With Children's Literature," Educational Administration and Supervision, 44:27-36, January, 1958.

Atlanta, Georgia in which thirty-five pupils enrolled in a Children's Literature course were given an opportunity for observation-participation experiences prior to student teaching.

The experiences were confined "to informal educational agencies since the seniors were engaged in student teaching at the majority of the available public schools."[9] Two nursery schools, the children's wards in two hospitals, a kindergarten, and a library were the centers which the students used. Although the students were not involved in classroom situations similar to those in which they would be expected to do their student teaching, the evaluations which were submitted by students, agency heads, and college coordinators were favorable enough that continued and increasing numbers of observation-participation experiences were being contemplated.[10]

Andrews[11] has stated that "the extreme variety and complexity of the demands made on beginning teachers today also serve to focus attention on the needs for extensive preservice experience of a broad and functional type."[12]

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[9] Ibid., p. 29.

[10] Ibid., p. 36.

[11] Leonard O. Andrews, "Experimental Programs of Laboratory Experiences in Teacher Education," The Journal of Teacher Education, 1:259-67, December, 1950.

[12] Ibid., p. 260.

Visiting classrooms and passively observing the proceedings are not adequate laboratory experiences, according to Andrews.

A report[13] from the State Teachers College at Geneseo, New York, emphasizes the need for careful preparation with students before they begin their observation. While, at first, the students may only be observing, their observations are carefully scheduled to coincide with the regular class sessions. Discussions of their observations with their instructor, the grade supervisor, and other students help to induct each student into the responsibility of working independently with children. This is the initial step in a four year program which not only provides, but requires, that students spend a portion of each year in professional laboratory experiences.

It should be pointed out, however, that even such a carefully designed program as the one described above could conceivably degenerate into a series of requirements to be hurdled for graduation and certification unless the faculty works closely together so that the needs of the individual students are met. Hunsicker is quite emphatic regarding this point. He stated that laboratory experiences "must be more than mere contacts with children. They must be carefully planned, each based on those that have gone before,

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[13]H. D. Behrens, "A Functional Program of Teacher Education," The Journal of Teacher Education, 2:185-88, September, 1951.

and keep in mind the readiness of the student for certain types of experience."[14]

Lindsey,[15] writing for the Committee on Student Teaching of the American Association of Colleges for Teacher Education, reported that admission to student teaching assignments was more or less automatic as long as the student had fulfilled certain prescribed courses. The findings of the Committee on Student Teaching show that the individual needs of students and their readiness to profit from student teaching are rarely considered when admitting students to the student teaching program.

Writing ten years later, Stratemeyer and Lindsey state that "some colleges are not yet ready to implement fully the principle of individual differences as it applies to the work of the student teacher."[16]

Hildreth has stressed the need for individual direct experiences for students who are preparing to teach in order for them "(1) to understand children through a wide age

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[14]Clarence L. Hunsicker, "Developing a Suggested Program of Professional Laboratory Experiences Prior to Student Teaching for Prospective Elementary Teachers at Mansfield State Teachers College" (unpublished Ph.D. dissertation, Pennsylvania State University, 1955), p. 25.

[15]Margaret Lindsey, "Major Findings and Recommendations in the Study of Professional Laboratory Experiences," First Yearbook (Oneonta, New York: The American Association of Colleges for Teacher Education, National Education Association, 1948), pp. 197-212.

[16]Florence B. Stratemeyer and Margaret Lindsey, Working With Student Teachers (New York: Bureau of Publications, Teachers College, Columbia University, 1958), p. 433.

range; (2) to know how learning takes place as a social, co-operative, interactive process; (3) to understand the culture of which the school is a part; (4) to recognize the teacher's own problems of living and how to deal with them."[17]

There is considerable evidence, however, that certain colleges and universities are attempting, and have been trying for many years, to provide the kinds of experiences which Lindsey, Stratemeyer, Hildreth, and others deem so essential. Such experiences have been required at Northwestern University for some years in the "100 hours" program.[18] All students in teacher education are required to spend 100 hours in field laboratory work with children and youth in schools, camps, religious education, or other pre-approved centers before they are allowed to enter student teaching.

The City College of New York has established a plan "to strengthen students' educational insights prior to student teaching."[19] This plan includes the following:

> 1. A systematic supervised school-visiting program in conjunction with the first course in professional Education sequence (Contemporary Educational Thought

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[17]Gertrude Hildreth, "The Role of Experiential Learning in the Education of Teachers," The Journal of Teacher Education, 2:180-84, September, 1951.

[18]Harold G. Shane, Mary Aline Collis, and Howard V. Meredith, "Improving Instruction in Elementary Education," Improving Instruction in Professional Education, Thirty-seventh Yearbook of The Association for Student Teaching in Cooperation with the National Society of College Teachers of Education (Cedar Falls, Iowa: The Association for Student Teaching, 1958), pp. 33-46.

[19]Ibid., p. 36.

2. A required supervised group-work field assignment in a community center or school in conjunction with the first course in psychological foundations in Education (Child and Adolescent Development).

3. Additional credited or voluntary assignments in schools, including assignments as non-teaching school aides.

4. Observation and participation in a full-blown child guidance clinic (The City College Educational Clinic).[20]

Andrews[21] has pointed out quite emphatically that colleges and universities can not provide the necessary experiences for prospective teachers within their own laboratory schools. Consequently, public schools, with their experienced members of the teaching profession, must provide the settings in which a major portion of professional laboratory experiences, prior to and including student teaching take place. The public school and the college or university with which it becomes associated must wholly understand and accept the fact that, great as the need is for these various experiences for prospective teachers, "the needs of the boys and girls in the school must come first in every instance."[22]

In a report of an experimental program at North Texas State Teachers College, Griffiths[23] has shown how quickly

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[20] Ibid., p. 37.

[21] L. O. Andrews, "Teacher Education and the Classroom Teacher," Ohio Schools, 29:392-93, December, 1951.

[22] Ibid., p. 393.

[23] Nellie L. Griffiths, "Some Pre-Student-Teaching Experiences," Educational Administration and Supervision, 35: 489-95, December, 1949.

sophomores will respond to an opportunity to work in a public school room even when no college credits are involved. Teachers were asked to permit the college sophomores an opportunity to come to the classroom and help by washing blackboards, telling stories, taking part of a class for a walk while the rest were being tested, indexing books, et cetera. The students' participation was on a voluntary basis, with no connection to any course or grade. Griffiths stated that "it could not be said that they quarrelled over who should have the jobs, but they did contend for them!"[24]

A few years later Toulouse[25] reported a study dealing with the students' attitudes toward teaching at North Texas State College. His findings revealed that before their laboratory experience many students are in education for insurance or because they have not thought of anything else. After their laboratory experience they are convinced they want to teach or they are just as positive that they are aiming toward the wrong profession. He also found that early contacts with children helped to erase the fear of student teaching that many students had.

A technique or plan which has successfully been used at Villa Maria College has been reported by Rowland.[26] At

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[24]Ibid., p. 490.

[25]Robert B. Toulouse, "Student Evaluation of Laboratory Experiences in Education," Educational Administration and Supervision, 39:155-60, March, 1953.

[26]Leo J. Rowland, "Co-operation in the Education of Teachers," Catholic School Journal, 58:23-24, June, 1958.

Villa Maria College the students are placed in many different situations where they can observe and work with children in both public and parochial schools. An annual conference is held between the college faculty and the school teachers and administrators (public and parochial) who have been co-operating with Villa Maria College during the year. At this annual meeting, methods of improving the professional laboratory experiences are explored, general topics of concern to specific groups are discussed in group meetings during the day, and, in general, better ways of working together are investigated.

The results of these meetings have been summarized by Rowland as follows:

> 1. The planning of more dynamic teacher-education courses at the college for pre-service teachers as well as summer courses for in-service teachers.
>
> 2. More stimulating experiences between master teacher and apprentice teacher in the elementary and secondary school classrooms where student teaching programs are carried out.
>
> 3. The incorporating into their membership beginning, elementary, and secondary teachers of the area school systems who have graduated from the Villa Maria College teacher-education programs.
>
> 4. The developing of professionally sound ways and means of supplying competent beginning teachers for the children of Pennsylvania and neighboring states.[27]

Another experimental program has been described by Levine[28] in which fifty freshman students were placed in school offices for one-half day per week where they gave

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[27] Ibid., p. 24.

[28] Madeline S. Levine, "Extending Laboratory Experiences," The Journal of Teacher Education, 9:379-82, December, 1958.

assistance in as many ways as possible. The schools which cooperated in the experiment agreed to provide a wide range of experiences, short of actual classroom participation; to supervise the students' work; and to evaluate the students in reports which were written at the end of the term. The students reported their experiences and raised questions during an accompanying college class on campus which afforded all students an opportunity to hear and compare their own personal observations and questions with those of the other members in the class. The wide distribution of the cooperating schools made this particularly valuable.

One of the reasons behind this experiment, according to Levine, was to provide the students with the opportunities for becoming acquainted with the large variety of problems which a teacher must face. Also, according to Levine:

> To increase both the scope and duration of preservice education is in line with the growing tendency to stress the value of diversified professional laboratory experience in teacher preparation. . . .Laboratory experience should therefore include first-hand acquaintance with as many of the facets of school and activities as possible as well as with the educational needs and resources of the community.[29]

She added that the program is in its developmental stage, but according to theorists and students, it is a worthwhile experiment. Levine concluded that many more students would have to become involved and longitudinal studies conducted before definite comparisons between students with and students without these laboratory experiences could be determinded.

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[29]Ibid., p. 380.

Another survey conducted by Rucker[30] pointed out certain trends in student teaching during the twenty year period 1932 to 1952. He found that there was a trend toward:

> (a) Student teaching as a full-time experience; (b) the use of more laboratory experiences in teacher education; (c) more off-campus experiences in student teaching including community experiences in the locale where the teaching is performed; (d) increasing the time allotment given to student teaching and to other laboratory activities of teacher education; (e) increasing the amount of academic credit awarded for student teaching; (f) the use of laboratory activities, including student teaching, as a reference point of the whole curriculum in teacher education; and (g) student teaching on more grade levels.[31]

In connection with the third point mentioned above which is concerned with non-school laboratory experiences, Harris[32] has described four advantages which may accrue to the student who participates in them. First, the student may develop a better understanding of the fact that the school is only one of many educational agencies which affect children; second, the student may gain a better understanding of the interaction among groups in a community; third, the student may learn how other agencies define their objectives and establish procedures to obtain them; and fourth, the student

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[30]W. Ray Rucker, "Trends in Student Teaching--1932 to 1952," The Journal of Teacher Education, 4:261-63, December, 1953.

[31]Ibid., p. 263.

[32]Fred Harris, "The Case for Student Experience With Non-School Agencies," Thirty-third Yearbook of the Association for Student Teaching (Lock Haven, Pennsylvania: The Association, 1954), pp. 46-53.

has an opportunity through his work assignment for individual growth.

Shortly after the turn of the century a report by Holmes, Seeley, and Keith[33] was published which describes the type of laboratory experiences that were prevalent during the first three or four decades of this century. During his time in the training school, the student was expected to grow "in tact, in judgment, in sympathetic understanding of children, in sense of the teacher's responsibility, and in all other personal qualities that make for success in teaching."[34] Nowhere in this report was it mentioned that students should have any other laboratory experiences than their practice teaching. No evidence is available which suggests that laboratory experiences were anything but the responsibility of the schools of education. It was not until the report of the Sub-Committee of the Standards and Survey Committee of the American Association of Colleges for Teacher Education[35] that professional laboratory experiences which were related to non-education or so-called academic courses have been mentioned with any regularity in the literature.

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[33]Manfred J. Holmes, Levi Seeley, and John A. Keith, "The Relation of Theory to Practice in Education," The Second Yearbook of the National Society for the Scientific Study of Education, Part II, Edited by Charles A. McMurry (Chicago: University of Chicago Press, 1903), pp. 9-39.

[34]Ibid., p. 29.

[35]Supra, p. 14.

Since that time, however, several writers[36] have strongly urged that professional experiences be integrated with subject matter classes as well as with the courses offered in the education departments. While not belittling the need for professional laboratory experiences related to academic courses, McAuley and Tanruther[37] found in a survey of fifty teacher training colleges that "all fifty colleges agree it is the responsibility of the education department to organize, direct, and fulfill the introduction of new professional laboratory experiences."[38]

McGill[39] surveyed 146 colleges of teacher education in forty-eight states in order to learn what kind of laboratory experiences they provided for their students. He found that about two-thirds of them provided both on-campus and off-campus laboratory experiences for their students.

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[36]LeRoy Bowman, "Community Experience in Teacher Training: Values and Limitations," The Education Forum, 21:453-60, May, 1957.

Donald P. Cothrell (ed.), Teacher Education for a Free People (Oneonta, New York: The American Association of Colleges for Teacher Education, 1956), p. 202.

L. L. Love and Others, Student Planning in College (Columbus: The Ohio State University, 1941), p. 141.

Florence B. Stratemeyer and Margaret Lindsey, op.cit., pp. 35-36.

[37]J. D. McAuley and E. M. Tanruther, "The Introduction of New Professional Laboratory Experiences," Thirty-third Yearbook of the Association for Student Teaching (Lock Haven, Pennsylvania: The Association, 1954), pp. 224-29.

[38]Ibid., p. 224.

[39]E. C. McGill, "Laboratory Experience in Programs of Teacher Education," The Educational Forum, 16:361-77, March, 1952.

The pattern these experiences usually followed was to have closely supervised observation periods on campus followed by a more complete experience off campus which eventually reached a full-time student teaching experience.

This same survey also showed that most of the laboratory experiences for students began in the junior year, but that about twenty-five per cent of the colleges started their programs during the freshman year.

Not all educators are as enthusiastic about the need for professional laboratory experiences as are others. However, even such a strong advocate of increased general education for prospective teachers as former President Maaske[40] of Eastern Oregon College of Education has conceded a point when he stated, "The first two years of the college program should consist of general education, but may include some acquaintanceship experiences with professional problems designed to maintain the interest of prospective teachers in their chosen profession."[41]

In a later article, Maaske[42] has explained what he means regarding a general education for all teachers. He stated that general education for prospective teachers should

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[40]Roben J. Maaske, "Theses for the General Education of Teachers," Educational Administration and Supervision, 35:19-24, January, 1949.

[41]Ibid., p. 20.

[42]Roben J. Maaske, "Some Basic Problems for Solution in Teacher Education," Education, 70:142-46, November, 1949.

"give to the teacher competence and confidence in the subject materials and resource backgrounds of his teaching area a broad social and humanitarian understanding of life and its attendant social, economic, political, and moral, problems; a functional knowledge of procedures in identifying community problems; and a sound psychological understanding of himself and of other individuals."[43]

While few people would disagree that a general education is not only good for teachers, but is highly desirable, there are some who would take exception to Maaske's position that general education should occupy a student's full time for two years allowing only for enough of an acquaintance with professional problems "to maintain the interest of prospective teachers in their chosen profession."[44]

One such person is Corey[45] who has identified as the central issue regarding teacher education the controversy between those who advocate that anyone who knows enough about what he is going to teach and can make children behave can be a successful teacher, and those who believe that to be a successful teacher one must be able to recognize the differences among children, to take into account their variable

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[43] Ibid., p. 144.

[44] Supra, p. 27.

[45] Stephen M. Corey, "Controversy in Teacher Education: The Central Issue," Eleventh Yearbook of the American Association of Colleges for Teacher Education (Chicago: American Association of Colleges for Teacher Education, 1958), pp. 26-35.

backgrounds, to provide the necessary motivations, and to meet the needs of the pupils. He firmly believes that professional education courses provide the latter kind of teachers, and further, that the student can best acquire the necessary skills and understandings when ". . . very early in his training he gets back into public school classroom situations where he can practice making observations and assessments and inferences regarding what is going on."[46]

One additional benefit according, to Corey, that accrues to the interested student who participates in professional laboratory experiences other than student teaching is the opportunity these experiences give him in learning to get along well with others. Obviously his ability to relate to others will be noted during his student teaching program, but in almost all teacher training institutions, student teaching comes toward the end of the student's professional training. If the student should be one who finds it difficult to get along with others and this fact is not discovered until the student teaching experience, a great deal of money, time, and energy has been wasted.

In reviewing data collected at Stanford University, Hearn[47] found that successful teachers were those who could

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[46] Ibid., p. 29.

[47] Arthur C. Hearn, "Case Studies of Successful Teachers," Educational Administration and Supervision, 38:376-79, October, 1952.

relate well to other people. He pointed out the following implications for those concerned with the selection, training, and placement of teachers:

> (1) Serious attention should be given to the appraisal of effectiveness in human relationships early in the professional program of teaching candidates. Self-appraisal by the candidate should be an important aspect of this process.
>
> (2) The practice-teaching experience should provide the setting whereby the candidate might participate in a wide variety of situations involving person-to-person interaction. This implies a much broader scope than that which characterizes the usual practice teaching program.
>
> (3) The competence of the candidate in the many human relationships involved in the profession of teaching should be observed often, regularly, and by several observers, to the end that the validity and reliability of appraisal might be raised and that the training and placement of candidates might become increasingly more effective from the standpoint of the institution, the employer, and the teacher himself.[48]

Thus, by providing opportunities for each candidate to meet and work with children and adults who are working with youngsters, it would become more apparent earlier in his professional training whether or not he has chosen the proper profession.

According to Toulouse[49] the public should demand laboratory experiences for teachers just as they do for physicians. The laboratory experiences for teachers must contain a scope and sequence which provide for their needs and do not ignore the concept of growth and development for teachers.

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[48] Ibid., pp. 378-79.

[49] Robert B. Toulouse, "Providing Essential Experiences in Teacher Training," Educational Administration and Supervision, 37:436-40, November, 1951.

"Although maturation and readiness are terms usually associated with elementary school learning, teacher training requires a readiness for certain types of experiences involving children. Some experiences have significance to the neophyte teacher only if they are a part of a total sequence."[50]

In a corroborating statement Sister Mary Lucina[51] describes three factors which determine a student's readiness to profit from laboratory experiences. These are:

> (1) the ability to observe and comprehend the relationships between principle and action expressed in the behavior of children, (2) the possession of a suitable vocabulary for self-expression and communication of the observation and reaction, and (3) the acquisition of desirable attitudes toward the learning situation.[52]

The need for students to attain a certain degree of readiness or maturity in order to profit from their professional laboratory experiences has been vividly portrayed by Beauchamp.[53]

Her description of "Operation Manhattan," a cooperative project among the National Conference of Christians and Jews, the Center for Human Relations and Community Studies of the New York University College of Education, and

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[50] Ibid., p. 436.

[51] Sister Mary Lucina, "Readiness for Professional Laboratory Experiences," The Journal of Teacher Education, 10: 310-14, September, 1959.

[52] Ibid., p. 314.

[53] Mary L. Beauchamp, "Field Participation and Professional Education," The Journal of Educational Sociology, 31: 219-32, February, 1958.

the University Settlement, has pointed out the acute needs of students to learn more about communities in which they might teach. This is particularly important when these communities are very different from the average middle class background of most teachers. The students who had spent a year with this project before doing their student teaching in the same area, a fifteen square block area of New York's Lower East Side, seemed better able to relate effectively to the children, and therefore, were able to prepare lessons more in keeping with the children's needs.

In his description of the internship program being utilized by ten California colleges and universities, Stone[54] has shown that this is but one of many programs of teacher education in each institution. He stated that in order to meet the different needs and varying degrees of readiness of students, colleges and universities must provide different paths to teaching competence.

Many colleges and universities, however, find it extremely difficult to arrange observation-participation experiences in the public schools near them when these schools are already accommodating a full complement of student teachers. In order to provide students with an opportunity to visit and work in public schools prior to their student teaching, a plan of "September field experiences"[55] was

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[54]James C. Stone, "The Internship Concept of Teacher Education--Its Essential Elements," California Journal of Secondary Education, 32:486-90, December, 1957.

[55]Dorothy M. McGeoch, Direct Experiences in Teacher Education: A Story of Three Programs (New York: Bureau of Publications, Teachers College, Columbia University, 1953), pp.

devised. While varying in details in different institutions, the September experiences have certain common characteristics.

In the spring of their freshman year students are informed of the possibilities that await them in the following fall. During the two or three weeks in September when public schools begin their classes before the colleges begin theirs, the students visit public schools in or near their homes. They have the opportunity to assist the teaching staff in many ways, such as collecting fees, distributing books and materials, arranging bulletin boards, moving furniture, observing teachers and children, correcting papers, and so on with an infinite variety of experiences. Some colleges and universities help students arrange their visits, others leave it up to the students; some colleges and universities give credit for September experiences, others do not; and some colleges and universities provide supervisory personnel who visit schools where students are located, others make no provision for this.

Students are encouraged to repeat their September field experiences each year before they return to their own classes. Here again the policies of different teacher training institutions vary. Some colleges and universities grant credit each year while some only grant credit for one year; some colleges and universities require students to participate in a September field experience once, others do not require any participation at all, while still others require participation from the sophomore through the senior years.

To some it may seem that colleges and universities are imposing upon the public schools to an alarming degree. While it is true that public schools are being used more and more often for professional laboratory experiences by teacher training institutions, the fact is that the help of the public schools will be needed increasingly in the future.[56]

The University of Texas has developed a course for elementary teachers, "Methods and Materials of Teaching,"[57] which illustrates the need for continuing and increasing co-operation between public schools and teacher training institutions. In this course, which carries six semester hours of credit, the laboratory approach is utilized whereby the student is assigned to a particular class for six hours per week for one semester. Usually taken during the junior year, the course has given students an opportunity to see how experiences are provided for children and how children are guided into these experiences over a relatively long period of time.

If a public school were cooperating in this or any similar program, it would not be long before a school building or school system would reach the saturation point. In this event, other schools would have to help the teacher training institutions by providing professional laboratory

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[56]Association for Student Teaching, The Supervising Teacher, Thirty-eighth Yearbook (Cedar Falls, Iowa: The Association for Student Teaching, 1959), p. lx.

[57]Harold G. Shane, Mary Aline Callis, and Howard V. Merideth, op. cit., pp. 36-37.

experiences, including student teaching, for the soon-to-be members of the teaching profession.

How far a college or university can effectively expand its off-campus activities, and how much responsibility for helping to prepare teachers public schools are willing and able to assume are two areas needing further research.

The assumption that student teaching alone is a sufficient experience for students was refuted over thirty years ago by Charters and Waples.[58]

A check list of 559 items which described the activities of classroom teachers was given to student teachers and experienced teachers. Each checked the duties he had performed and it was found that only eight per cent of the student teachers had performed as many as 219 activities, or 39.2 per cent. Eight per cent of the experienced teachers, on the other hand, performed all activities on the list. In addition to this, student teachers were not able to distinguish between easy and difficult tasks, since they uniformly rated tasks as easy regardless of the easy or difficult rating given by experienced teachers. "The wide difference between the difficulty ratings of the two groups is expressed by the low coefficient of correlation, .236 $\pm$ .057."[59]

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[58] W. W. Charters and Douglas Waples, The Commonwealth Teacher-Training Study (Chicago: The University of Chicago Press, 1929), pp. 30-34.

[59] Ibid., p. 32.

Richey,[60] also, has stated that a long period of time, preferably the student's entire college career, is necessary for the student to gain the insight necessary for a successful teaching career. He further points out that these insights are best learned through participation with children rather than from books.

During World War II a survey of nearly six thousand teachers concerning better selection procedures for teachers brought forth the idea that candidates for entrance into the teaching profession be given "carefully supervised and selected work experiences in classrooms"[61] in order to observe their various abilities in an effort to determine who should or who should not be admitted into the profession.

The above survey substantiated an earlier opinion which was expressed by a group of representatives of teachers colleges at the Bennington Planning Conference for the Co-operative Study of Teacher Education[62] at Bennington, Vermont. The representatives at this conference listed their three most pressing problems in teacher education. The two which received at least fifty per cent of the vote were these:

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[60]Robert W. Richey, Planning for Teaching (second edition; New York: McGraw-Hill Book Company, Inc., 1958), pp. 126-27.

[61]M. Margaret Stroh, Ida A. Jewett, and Vera M. Butler, Better Selection of Better Teachers (Washington: The Delta Kappa Gamma Society, 1943), p. 98.

[62]Commission on Teacher Education, Bennington Planning Conference for the Cooperative Study of Teacher Education (Washington: American Council on Ecuation, 1939), pp. 16-17.

1. Selection and guidance of student personnel (53%)
   a. Means of encouraging the right young people to enter the teaching profession
   b. Admission criteria-initial selection, deferred selection
   c. Organization and staffing for guidance--personal and educational
   d. The guidance process
   e. Records-types (anecdotal, statistical) and uses

2. Type and distribution of professional education, (education, psychology, and student teaching) on undergraduate and graduate levels (57%)
   a. Integration of theory and practice and of academic and professional material
   b. Ratio of professional to academic content
   c. Kind and amount of student teaching and internship
   d. Selection and arrangement of experiences for professional growth, especially experiences with children
   e. Time for beginning educational experiences[63]

At the conclusion of the conference, Love delivered an address in which he said he had not met anyone at Bennington who questioned the value and necessity of field laboratory experiences.[64]

The report of another workshop at George Peabody College for Teachers contains the statement that the prospective teacher in his college years "should have many experiences with children of different ages in varied situations."[65]

In spite of the overwhelming evidence of the desirability of professional laboratory experiences, an important

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[63] Ibid.

[64] Ibid., p. 227.

[65] Pre-Service Education of Elementary Teachers (Nashville, Tennessee: Division of Surveys and Field Studies, George Peabody College for Teachers, 1944), p. 47.

caution or condition pertaining to these experiences has been made in a report published by the American Council on Education. It states, "However, because learning by direct observation and participation must, in the nature of the case, lose in perspective what it gains in vividness and wholeness, we insist that it must be combined with thorough class discussion and as much supplementary reading of scientific materials as can be fitted into the undergraduate's schedule."[66]

Borrowman[67] has reported that a poll of the American Association of Teachers Colleges brought a consensus concerning the threefold function of laboratory experiences: "Implementing theory by giving the student a chance to check its pragmatic value and his own understanding, (2) helping students to become conscious of personal and professional needs, and (3) giving them an opportunity for guided experience in actual teaching."[68] He elaborates further by pointing out that the laboratory experiences should be closely integrated with the guidance program so that the individual needs of each student are considered, and further that these experiences should be with children of different

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[66]W. Earl Armstrong, Ernest V. Holis, and Helen E. Davis, The College and Teacher Education (Washington: American Council on Education, 1944), p. 305.

[67]Merle L. Borrowman, The Liberal and Technical in Teacher Education (New York: Bureau of Publications, Teachers College, Columbia University, 1956), pp. 223-28.

[68]Ibid., p. 227.

ages, from different socio-economic backgrounds, and for long enough periods of time for the student to observe the development of growth patterns.

Hill[69] and his associates reviewed the activities of certain workshops of the North Central Association of Colleges and Secondary Schools over an eight year period, 1948-1955, inclusive. One series of workshops was concerned with improving the professional education, as distinguished from general education, of teachers. One predominant trend which was noticed among the member colleges of education was the revision of content in professional education courses toward larger blocks of experiences. "Much of this was done to make possible more extensive laboratory experiences."[70]

From Ball State Teachers College, Beyerl[71] has described a program where students in their sophomore year have the opportunity to work one afternoon or one evening per week in the Boys' Club of Muncie, Indiana, while enrolled in a campus course in human growth and development. One of the advantages he described is that students get a chance relatively early in their college careers to find out whether or not they have chosen the proper profession. The students are assigned to the Club for an entire term which seemingly

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[69]George E. Hill and Others, Improving Teacher Education through Inter-College Cooperation (Dubuque, Iowa: Wm. C. Brown Company, 1956), pp. 111-52.

[70]Ibid., p. 130.

[71]M. C. Beyerl, "A Boys' Club and A Teachers College Provide Laboratory Experiences for Prospective Teachers," The Journal of Teacher Education, 8:393-98, December, 1957.

is sufficiently long enough for them to gain some insights into the needs and interests of youth.

All of the various programs which different colleges and universities have developed are attempts to provide students with skills and understandings necessary for successful teaching. Each of the programs of recent years which was reviewed by the writer dealt with increased time for professional laboratory experiences of one type or another. Nowhere in the literature, since 1948, was this investigator able to find a report or description of any plan or idea which tried to find a comparable substitute for professional laboratory experiences.

A good professional education program has been described by Lindsey as follows:

> To provide for students a professional education program in which they will learn through direct experience the significance of sound and accepted principles in human growth and development and in the psychology of the learning process calls for a sequence of activities planned cooperatively with students to meet their needs as citizens and as members of a profession; a program with flexibility; extensive and intensive experiences related directly to the job to be done by teachers today; guidance based upon sound principles.[72]

The better the teachers we have in our schools, the better the education our youth will enjoy. Perhaps no one has spoken more eloquently on the need for good education in our country than did Daniel Webster over a century ago at a reception in Madison, Indiana, June 1, 1837:

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[72]Margaret Lindsey, "What They're Saying in Teacher Education--Opinions of Important People," Education, 70: 135-41, November, 1949.

> On the diffusion of education among the people rest the preservation and perpetuation of our free institutions. I apprehend no danger to our country from a foreign foe. . . . Our destruction, should it come at all, will be from another quarter. From the inattention of the people to the concerns of their government, from their carelessness and negligence, I must confess that I do apprehend some danger. . . . Make them intelligent, and they will be vigilant; give them the means of detecting the wrong, and they will apply the remedy.[73]

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[73] The Works of Daniel Webster (seventeenth edition; Boston: Little Brown and Company, 1877), Volume I, pp. 403-404.

CHAPTER III

METHOD OF PROCEDURE AND SOURCES OF DATA

Selection of the Groups

This study began during the Spring Term, 1959 when a count in the Student Teaching Office of the applications for Winter Term, 1960 student teaching showed that 108 students had completed their applications. A random division of these students placed forty students in the reading group, forty students in the observation group, and the remaining twenty-eight in the control group. Subsequent applicants were added to the control group.

The Reading Group

A memorandum[1] was sent to the forty students in the reading group requesting their presence at a meeting in the College of Education Building. This meeting was held while the students were all present on the campus.

At the meeting the students were told for the first time what their role was to be. The forty students in the reading group were informed that they had an opportunity to enroll in Teacher Education Course 424, Section A, "Problems in Education" in the Fall Term, 1959. The following information was presented to them:

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[1]Appendix A.

1. They would be free to read as widely as they chose in the field of education.
2. They would have to keep a written account of what they had read.
3. They would be interviewed by this researcher at least twice during the term.
4. They would be provided with a suggested bibliography[2] which they could use at their discretion.
5. They would earn three term credits.
6. They would not have to write a term paper nor a final examination.

Thirty-four students agreed to enroll in this class in the Fall Term, 1959, but only thirty actually did enroll.

The Observation Group

In a similar manner the forty students who had been randomly selected for the observation section were summoned to a different meeting.[3] They were told that they had an opportunity to enroll in Teacher Education 424, Section B. It was further explained to them that they would have an opportunity to observe and participate in a classroom in one of the elementary schools in the East Lansing school system. The following information was presented to them:

1. They would spend three hours per week in the public school classroom.

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[2]Appendix C.

[3]Appendix B.

2. They would be able to indicate their first three choices of the grade in which they wanted to be assigned.
3. They would observe and participate in the classroom activities to the extent that they and the classroom teacher would decide.
4. They would be interviewed by the writer twice during the term.
5. They would keep a written account of their activities in the classroom.
6. They would not have to write a term paper nor a final examination.
7. They would earn three term credits.

Thirty-eight students agreed to enroll in this class in the Fall Term, 1959, but only thirty-two actually did enroll.

The Testing Program

In the evening of the second day of classes, of the Fall Term, 1959, all students who had applied for Winter Term, 1960 student teaching were called together. This group consisted of the thirty student reading group, the thirty-two student observation group, and the seventy-two student control group.

The Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination: How I Teach, Form A were administered to the entire assembly of 134 students.

The students in the observation group were instructed to remain after the other students were dismissed at the

completion of the examination period. At this latter meeting, the assignments to classrooms in the East Lansing Public Schools were given. Each of the students was placed in either her first or second choice of grade levels at this time.

Interviews

Interviews with students in both sections began with the fourth week of the term and continued to the final week. Notes were kept of each interview with the sixty-two students in both experimental groups. These notes were amplified by the writer after each interview in order to preserve as much of the expressed feeling of the subject as possible.

Evaluations by Students

During the last week of the term, the students turned in the written accounts of their readings or of their experiences in the classroom. In addition, the students submitted an evaluation of their experiences. This evaluation was an additional paper which was agreed upon during the interview sessions.

Each student was asked to include in her evaluation two points: (1) whether or not she thought her experience (reading or observation-participation) had been valuable to her and why; (2) whether or not she would recommend such a class as Teacher Education 424, Section A or B to other students and why. Beyond these two directives, each evaluation was to reflect the opinions concerning the pre-student teaching

experience of each student. In an effort to obtain as objective an answer as possible, each student was given her letter grade for the course before she submitted her evaluation. In this way the student knew that what she said about her experience in Teacher Education 424 would not be used in determining her grade for the course. Each student was also told that her name need not appear on her evaluation. The structure of arranging for the anonymity of each student and of giving each her grade before her evaluation was received, made it possible for her to express herself free of reprisal through grades or knowledge of her identity.

Testing During Student Teaching

When the students began their student teaching during the Winter Term, 1960, all were given the same two tests. The Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination: How I Teach, Form B, at their first seminar session.

Each college coordinator was sent a packet of test materials with instructions[4] for their use. After administering the tests, these were returned to the University where the scoring was completed.

Again, at the end of the Winter Term, 1960, all of the elementary student teachers were given the same two tests for a third time. Form A of the Purdue Teachers Examination was used in this session. The tests were administered by the

[4]Appendix D.

college coordinators who were sent the same test packets and instructions as they had received at the beginning of the term. Once again the tests were returned to the University for scoring.

Summary

One hundred thirty-four of the 142[5] elementary student teachers for the Winter Term, 1960 were the subjects of this study. These students were divided into three groups; reading group, observation group, and control group. Two instruments, the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination, were administered to the three groups on three separate occasions: first, at the beginning of the Fall Term, 1959; second, at the beginning of their student teaching experience; and third, at the conclusion of their student teaching experience.

The basic data for this study have come from the test results of the 134 elementary student teachers of Winter Term, 1960; from the interviews with the sixty-two students in the reading and observation groups; and from evaluations submitted by the same sixty-two students.

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[5]The eight students who comprise the difference between the total number who did their student teaching in the Winter Term, 1960 and the 134 students included in this study are students who were not in school during the term immediately preceding their term of student teaching.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The design of this study included three testing situations. The first was to determine whether or not the three groups, selected at random, were equal. This test was administered during the first week of the Fall Term, 1959.

The second battery of tests was administered during the first week of student teaching in the Winter Term, 1960. The objective of this testing session was to determine what changes, if any, occurred among the groups as a result of different experiences during the previous term.

The third and last battery of tests was administered during the final week of student teaching. This testing session was designed to measure the influence of student teaching on the different groups. If each group was different from the other at the beginning of student teaching, this battery of tests was to measure whether these differences increased, stayed the same, or decreased. If there were no differences at the beginning of student teaching, this battery of tests would show whether or not the groups were still alike at the completion of student teaching.

The Raw Scores

A superficial look at the raw scores in Appendices G-L show many variations among individuals. For example, subject number ten in the reading group achieved a higher score each time she took the Purdue Teachers Examination, but she achieved a lower score each time on the Minnesota Teacher Attitude Inventory. In the control group subject number eleven achieved an opposite pattern; on the Purdue Teachers Examination she achieved a lower score each time while achieving a higher score each time on the Minneosta Teacher Attitude Inventory. Individual variations of scores on both instruments are not limited to any one of the groups, but rather are present in all three. This is illustrated in the following sections which present a more detailed picture of the distribution of raw scores for each of the three groups.

The Reading Group

The distribution of lowest and highest scores of the reading group on the Minnesota Teacher Attitude Inventory is shown in Table 1. Of the five students who achieved their lowest scores in September, 1959, three achieved successively higherscores at their next two testing sessions. Thus, ninety per cent of the students in the reading group did not show consistent improvement in the development of attitudes as measured by the Minnesota Teacher Attitude Inventory.

Table 1. Distribution of highest and lowest scores of reading group on Minnesota Teacher Attitude Inventory.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	5	15	10	30
Highest	12	6	11	29*

*Subject 13 achieved the same high score in September and March.

The distribution of lowest and highest scores of the reading group on the Purdue Teachers Examination is shown in Table 2. Of the eight who achieved their lowest scores in September, 1959, four students improved on each successive examination. A fifth student (number 21) achieved her low score in September, 1959 and the same higher score on the two subsequent tests. Thus, 83.3 per cent of the students in the reading group showed no consistent improvement in their understanding of the needs, interests, age characteristics, or personality problems of boys and girls as measured by the Purdue Teachers Examination.

Table 2. Distribution of highest and lowest scores of reading group on Purdue Teachers Examination.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	8	12	9	29*
Highest	16	6	7	29**

*Subject 26 achieved the same low score in January and March.
**Subject 21 achieved the same high score in January and March.

The Observation Group

The distribution of lowest and highest scores of the observation group on the Minnesota Teacher Attitude Inventory is shown in Table 3. Of the seven students who achieved their lowest scores in September, 1959, four achieved successively higher scores at their next two testing sessions. A fifth student, number 17, achieved the same higher score on the January and March tests. Thus, 84.4 per cent of the students in the observation group did not show consistent improvement in the development of attitudes as measured by the Minnesota Teacher Attitude Inventory.

Table 3. Distribution of highest and lowest scores of observation group on Minnesota Teacher Attitude Inventory.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	7	12	13	32
Highest	14	8	9	31*

*Subject 17 achieved the same high score in January and March.

The distribution of lowest and highest scores of the observation group on the Purdue Teachers Examination is shown in Table 4. Of the seven students who attained their lowest scores in September, 1959, four achieved successively higher scores at their next two testing sessions. Thus, 87.5 per cent of the students in the observation group did not show consistent improvement in their understanding of the needs,

interests, age characteristics, or personality problems of boys and girls as measured by the Purdue Teachers Examination.

Table 4. Distribution of highest and lowest scores of observation group on Purdue Teachers Examination.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	7	8	16	31*
Highest	18	6	8	32

*Subject 20 achieved the same low score in January and March.

The Control Group

The distribution of lowest and highest scores of the control group on the Minnesota Teacher Attitude Inventory is shown in Table 5. Of the twenty students who achieved their lowest scores in September, 1959, fifteen achieved successively higher scores at their next two testing sessions. One additional student, number 21, achieved the same higher score on the January and March tests. Thus, 76.1 per cent of the students in the control group did not show consistent improvement in the development of attitudes as measured by the Minnesota Teacher Attitude Inventory. However, it should be noted that the percentage of students who did show consistent improvement in this group was more than twice that of the reading group and one and one-half times that of the observation group.

Table 5. Distribution of highest and lowest scores of control group on Minnesota Teacher Attitude Inventory.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	20	23	23	66*
Highest	26	12	27	65**

*Subject 16 achieved the same low score in January and March.
**Subject 21 achieved the same high score in January and March and subject 35 achieved the same high score in September and March.

The distribution of lowest and highest scores of the control group on the Purdue Teachers Examination is shown in Table 6. Of the twenty students who attained their lowest scores in September, 1959, six achieved successively higher scores at their next two testing sessions. In addition to these students, two others, subjects 6 and 57, attained a low score in September, the same score in January, and a higher score in March. Thus, 88.1 per cent of the students in the control group did not show consistent improvement in their understanding of the needs, interests, age characteristics, or personality problems of boys and girls as measured by the Purdue Teachers Examination.

The percentage of students in the control group who did not show consistent improvement from September, 1959 to March, 1960 on the Purdue Teachers Examination was similar to the percentages of students in the reading and observation groups on this test.

Table 6. Distribution of highest and lowest scores of control group on Purdue Teachers Examination.

Score	September 1959	January 1960	March 1960	Total No.
Lowest	20	12	28	60*
Highest	24	27	15	66**

*Subject 6 and 57 achieved the same low score in September and January. Subjects 17, 44, 46, and 47 achieved the same low score in January and March. Subject 62 achieved the same low score in September and March.
**Subject 67 achieved the same high score in September and January.

The percentage of students in the different groups who showed consistent improvement from September, 1959 to March, 1960 on each test is shown in Table 7.

Table 7. Percentage of students in each group who showed consistent improvement on the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

Group	MTAI	Purdue
Reading Group	10.0%	16.7%
Observation Group	15.6%	12.5%
Control Group	23.9%	11.9%

With the exception of the control group on the Minnesota Teacher Attitude Inventory where nearly one-fourth of the students showed consistent improvement, the preponderance

of students in this study do not appear to have gained many of the skills, knowledge, and attitudes which are measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination. This is the case in spite of the fact that the two-term period covered in this study included a term of full time student teaching for all of the students and another term for two of the groups (reading and observation) where specific attempts were made to prepare these students for a better experience with children during their student teaching.

Statistical Analysis of Data

After the cursory examination above, a more refined analysis of the data is warranted. An analysis of variance was made to determine (1) whether or not the three groups were alike in the beginning of this study; (2) what changes, if any, resulted from the different experiences of the three groups during the term prior to student teaching; and (3) what differences, if any, existed among the groups at the conclusion of the student teaching experience.

It was assumed that the three groups were alike in their mean scores on the Minnesota Teacher Attitude Inventory and Purdue Teachers Examination before their preparatory experiences for student teaching. In order to determine whether or not this assumption was correct, an analysis of variance was used. By this analysis it was found (see Table 8) from the scores of the Minnesota Teacher Attitude Inventory that

no significant difference in the mean scores existed among the groups before their preparatory experiences for student teaching.

Table 8. Analysis of variance of observation, reading, and control groups on Minnesota Teacher Attitude Inventory before preparatory experiences for student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	2904.1466	2	1452.0733	2.249	NS
Within group variance	81336.4736	126	645.5275		
TOTAL	84240.6202	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

The students in all groups were tested again at the beginning of student teaching. An analysis of variance was computed at this time to determine what differences existed among the mean scores of the groups as a result of the different experiences of the three groups during the previous term. Table 9 shows that no significant difference in their mean scores existed among the groups at the beginning of student teaching according to scores achieved on the Minnesota Teacher Attitude Inventory.

The last testing session was held at the conclusion of the student teaching experience. Once again an analysis of variance was computed to determine what differences existed

Table 9. Analysis of variance of observation, reading, and control groups on Minnesota Teacher Attitude Inventory when they began student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	2622.1845	2	1311.0922	1.8293	NS
Within group variance	90303.1179	126	716.6914		
TOTAL	92925.3024	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

among the groups as a result of their student teaching experience. Table 10 shows that no significant difference in their mean scores existed among the groups at the conclusion of student teaching according to scores achieved by the different groups on the Minnesota Teacher Attitude Inventory.

Table 10. Analysis of variance of observation, reading, and control groups on Minnesota Teacher Attitude Inventory at the conclusion of student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	3319.9991	2	1659.9995	1.9718	NS
Within group variance	106071.5358	126	841.8375		
TOTAL	109391.5349	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

Similar analyses of variance were computed for the scores of the Purdue Teachers Examination for each time the test was given. Table 11 shows that there was a significant difference at less than the five per cent level of probability among the groups before their preparatory experiences for student teaching according to the mean scores achieved by the groups on the Purdue Teachers Examination.

Table 11. Analysis of variance of observation, reading, and control groups on Purdue Teachers Examination before preparatory experiences for student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	304.4519	2	152.2260	4.6527	<.05
Within group variance	4122.4473	126	32.7178		
TOTAL	4426.8992	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

Table 12 shows the mean scores and variances for each of the three groups at this time.

Table 12. Means and variances of observation, reading, and control groups on the Purdue Teachers Examination before preparatory experiences for student teaching.

	Observation group	Reading group	Control group
Number of subjects	32	30	67
Mean score	29.233	28.219	25.716
Variance	36.7368	29.9183	32.2668

There seems to be no ready explanation for any significant difference existing among the groups at the beginning of this study. According to the mean scores on the Minnesota Teacher Attitude Inventory, there was no significant difference among the groups, but the mean scores on the Purdue Teachers Examination, which were attained at the same testing session, do show a significant difference at less than five per cent level of probability.

After computing the multiple t tests, it was found that there was a significant difference at the one per cent level of significance between the observation and control groups where $t = 2.87$. There was no significant difference between the reading group and either of the other two groups. Thus, according to the mean scores on the Purdue Teachers Examination, it may be stated that the control group and the observation group probably came from different populations while the reading group could have come from either of these populations.

It may also be stated that similar differences in mean scores, as indicated in Table 11, might be expected in five out of one hundred chances. This, then, may be one of those five chances.

An analysis of variance was computed with the scores from the Purdue Teachers Examination to determine what differences existed at the beginning of student teaching among the three groups. Table 13 shows that there was no significant difference in their mean scores at this time.

Table 13. Analysis of variance of observation, reading, and control groups on Purdue Teachers Examination when they began student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	57.7484	2	28.8742	0.6202	NS
Within group variance	5865.7865	126	46.5539		
TOTAL	5923.5349	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

Again, at the conclusion of student teaching, an analysis of variance was computed to determine what differences existed among the groups at that time. Table 14 shows that no significant difference in their mean scores existed among the groups on the Purdue Teachers Examination.

Table 14. Analysis of variance of observation, reading, and control groups on Purdue Teachers Examination at the conclusion of student teaching.

	Sum of squares	df	Mean of squares	F	P
Among groups variance	153.9282	2	76.9641	1.9563	NS
Within group variance	4957.1106	126	39.3421		
TOTAL	5111.0388	128			

$F_{(P=.05)}=3.07$ $F_{(P=.01)}=4.79$

Table 15 contains information derived from an analysis of differences between the September, 1959 and March, 1960 scores on the Minnesota Teacher Attitude Inventory. Similar information is given in Table 16 for the Purdue Teachers Examination.

The difference between the scores achieved in September, 1959 and March, 1960 was computed for each student on both tests (see Appendices G-L). By the use of the t test, it was found that the mean difference in one group is equal to the mean difference in other groups from September, 1959 to March, 1960 on both the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

The greatest difference between mean differences on the Minnesota Teacher Attitude Inventory was between the reading and observation groups. The t test was computed with the result that $t = 0.349$ which is not significant. Since the greatest difference between mean differences on the Minnesota Teacher Inventory is not significant, the smaller mean differences on this test also would not be significant.

On the Purdue Teachers Examination the greatest difference between mean differences was between the observation and control groups. The t test was computed with the result that $t = 0.992$ which is not significant. Since the greatest difference between mean differences on the Purdue Teachers Examination is not significant, the smaller mean differences on this test also would not be significant.

Table 15. Date for the test of difference between means of the difference from September, 1959 to March, 1960 on the Minnesota Teacher Attitude Inventory.

	Reading Group	Observation Group	Control Group
N	30	32	67
Mean	-3.17	-4.88	-4.57
Variance	190.0057	564.2097	501.0977
Standard deviation of mean difference	2.517	4.199	2.735
t to test difference from 0 difference	-1.259	-1.162	-1.671

Table 16. Data for the test of the difference between means of the difference from September, 1959 to March, 1960 on the Purdue Teachers Examination.

	Reading Group	Observation Group	Control Group
N	30	32	67
Mean	-1.73	-2.69	-1.21
Variance	35.4437	52.7379	38.8042
Standard deviation of mean difference	1.087	1.284	0.761
t to test difference from 0 difference	-1.592	-2.095 P=.05	-1.590

A further analysis was made to determine if the differences were different from a theoretical zero. All results were not significant except the observation group on the Purdue Teachers Examination which was significantly different from zero at the five per cent level of significance.

Summary

It appears rather evident from the foregoing analysis that the different experiences of the three groups did not make a significant difference in the attitudes and knowledge among the groups according to the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

The three groups were similar when they were first selected at random in September, 1959, according to the mean scores of the Minnesota Teacher Attitude Inventory.

However, at this same testing session, there was a significant difference at less than the five per cent level of probability among the mean scores of the Purdue Teachers Examination. It was found that the observation group and control group were significantly different at the one per cent level of significance on this test. There was no significant difference between the reading group and either of the other two groups.

At the beginning of student teaching in January, 1960, there was no significant difference among the three groups according to the results of the two tests which were used. Likewise, at the conclusion of student teaching in March, 1960

there was no significant difference among the three groups on the same two tests.

It was also found that the difference in one group from September, 1959 to March, 1960 was equal to the differences in other groups during this period on both the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination. Going one step further, it was found that there was no significant difference among the differences from a hypothesized zero difference with one exception. This one exception is the observation group on the Purdue Teachers Examination where there is a significant difference at the five per cent level of confidence. Since this difference is in the negative direction, one may conclude (1) the term of observation prior to student teaching was not beneficial to the students, (2) the Purdue Teachers Examination did not adequately measure the knowledge and understanding which it was thought to do, or (3) that this difference occurred by chance.

The data collected from the use of the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination have not confirmed the four hypotheses of this study. These hypotheses are:

1. Students in the reading, observation, and control groups will have different attitudes and knowledge about teaching before and after student teaching.

2. Students in the observation group will achieve the greatest gain of the three groups in attitudes and knowledge

as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

3. Students in the reading group will achieve more gain than the control group and less gain than the observation group in attitudes and knowledge as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

4. Students in the control group will achieve the least gain of the three groups in attitudes and knowledge as measured by the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

CHAPTER V

INTERVIEWS AND STUDENT EVALUATIONS

Introduction

In addition to the data described in Chapter IV, the writer had a minimum of two interviews with each student in the reading and observation groups. Each student in these two groups was also required to submit an evaluation of her experiences as a member of one of the groups.

Interviews

Interviews with the students in the reading and observation groups began during the fourth week of the Fall Term, 1959. Each interview was scheduled for thirty minutes which seemed to be an adequate period of time in which to learn about the activities and experiences of the students.

A total of sixty-nine interviews was held with the thirty members of the reading group. Each student was seen at least twice, while nine of the group were seen three times.

One of the purposes in forming the reading group was to allow the student as much freedom as possible in deciding the type of reading she wished to do. The professional objectives of each student determined, in a large part, the scope of her reading. Some students chose to read widely in many different

areas, while others chose to read more intensively in only one or two areas. Both plans were equally acceptable for the purpose of this study.

Interviews with the students in the reading group were so structured that some aspects of the experimental program, other than their readings, were discussed. Definite patterns regarding advantages and disadvantages of the reading group emerged during the term.

All thirty of the students said they enjoyed the freedom to read what they wanted and as much or little as they wanted in any phase of educational literature. Twenty-one of the students expressed the desire for small group meetings or meetings of the entire class in order to share ideas and summaries of one another's readings. Twelve of these students mentioned the fact that they assembled on occasion for this purpose.

Twenty-eight of the students said that they would have preferred being in the observation group. When this point was pursued, they said that being with children in the classroom was better than reading about them, but each hastened to add that she was grateful for the opportunity to be included in the reading class.

The other two students expressed the opinion that it did not make too much difference whether they were in the reading or observation group. Both of these students had three years of camping experience with children, both were active in

Sunday school classes, and both said that they felt the need to do some extensive reading.

Twenty-two of the students claimed to have read more for this class than they had for any other class in their previous three years in college. The evidence they presented and the fund of information they possessed concerning their readings offered to support the fact that they did do a great amount of reading. How this compares with the amount of reading they had done in previous classes, however, remains unknown.

It is the opinion of the writer that the thirty students in the reading group were a sincere, conscientious, interested group who spent considerable time and effort in reading and learning in many areas of educational literature.

A total of seventy-eight interviews was held with the thirty-two members of the observation group. Each student was seen at least twice while fourteen were interviewed three times each.

The students in the observation group explained in detail the many and varied activities in which they were involved in the classroom. There was not a single student in this group who was merely a passive observer; each of them participated in the classroom in one way or another.

Some of the activities in which they were engaged included: story telling, reading of stories, playground supervision, helping individual children, preparing bulletin

boards, correcting papers, comforting a child who became ill, directing plays, playing the piano for a class, operating audio-visual equipment, assisting on field trips, showing motion pictures and slides of trips, teaching games, making felt boards, attending to bloody noses, constructing models, teaching songs, and working with many different art media.

Interviews with the thirty-two students in the observation group brought forth accounts of interesting experiences with children in the classrooms. Each student said that she was discovering for herself, and was able to make practical application of many of the theories and practices about which she had been learning for three years in college classes.

Each one of the thirty-two students was most emphatic in her belief that the observation class was the most interesting and meaningful one she had taken while in college. Each of the students said that she was certain that student teaching would be easier for her, particularly in the beginning, because now she knew how to relate to children in the classroom.

Every student in the observation class said that she was glad to have been chosen for this class rather than for the reading or control group. Each student stressed the fact that she believed neither of the other two groups could provide the kind of experiences with children that the observation group had. Each student also stated that she felt that she would be better prepared for student teaching than the students in the

other two groups who had lacked the opportunity to be with pupils in the classroom.

It was apparent to the writer that the thirty-two students in the observation group were eager to be with and to learn from the children in the classrooms.

Evaluations

During the final week of the Fall Term, 1959 all students in the reading and observation groups were required to submit an evaluation of their experiences in the experimental program. These evaluations could be submitted anonymously, if they so desired.

Twenty-eight of the reading group signed their evaluations, thirty of the observation group signed their names. There was little difference in ideas presented in the papers between those who signed and those who did not in each of the two experimental groups. There was, however, a difference in evaluations between the reading and observation groups.

The evaluations submitted by the students in the reading group closely paralleled the views which they had expressed during the interviews.

The most frequent criticism, made by nineteen students, was the lack of small group or class meetings. Suggestions ranged from at least one class meeting during the term to one meeting per week for those who wished to attend. Other criticisms included: lack of sufficient directions to the students, mentioned by three students; the course would be

more meaningful to students after student teaching rather than before, mentioned by three students; and students should have a required reading list, mentioned by two students.

The students in the experimental program were asked to include in their evaluations a recommendation as to whether or not a course similar to the one in which they were enrolled should be added to the offerings of the College of Education at Michigan State University.

Twenty-eight of the thirty students in the reading group said they would recommend a class similar to the reading class in which they were enrolled. Of these twenty-eight students, twenty-four suggested that some observation time in elementary classrooms be incorporated with the reading class.

Some of the advantages of the reading class pointed out by the students, included the following:

1. The freedom to read what they, the students, thought would be of most value to them, stated by all thirty students.

2. The feeling of being treated as adults and allowed to assume the responsibility for their own work, stated by fourteen students.

3. The opportunity to take the class immediately prior to student teaching which allowed better preparation for that experience, stated by eight students.

The evaluations submitted by the thirty-two students in the observation class were more positive than those submitted by the students in the reading class. The observation group offered the following criticisms of the class:

1. This type of observation class should be offered by the College of Education to freshmen and sophomores rather than to seniors, stated by six students.

2. Students should be required to divide their observation time between morning and afternoon sessions in the elementary classroom so they would have an opportunity to observe a greater number of activities, stated by four students.

3. Three hours per week is not enough observation time, mentioned by fourteen students.

Some of the advantages of the observation class which were referred to by the students in the group, included the following points:

1. They became familiar with a wide variety of teaching materials and learned some uses of them. This was stated by the entire group of thirty-two students.

2. They were anticipating their term of student teaching rather than being apprehensive and fearful of it. This was stated by the entire group of thirty-two students.

3. They felt self-confident in front of a classroom. They had learned how to communicate with a class of elementary school children. This was stated by thirty students.

4. They felt they grasped the meaning of "individual differences" for the first time. This was stated by twenty-three students.

5. They learned the importance of daily lesson plans, and equally important, that these plans must be kept flexible. This was mentioned by fourteen students.

6. They were in a better position to judge whether or not the teaching profession was the correct occupational choice for them. This was stated by nine students.

7. They learned some effective techniques for classroom management. This was stated by nine students.

8. They were able to make a critical comparison between the theory of the college classroom and the practice in the elementary classroom. This was mentioned by eight students.

Every student in the observation group recommended that an observation class similar to the one in which they were enrolled be offered by the College of Education. Four of the students wrote that such a course should be a prerequisite for entering student teaching.

Summary

The students in the reading and observation groups gave unanimous approval to the idea of providing a course in the College of Education specifically designed to prepare them better for student teaching. Every student in these two groups thought she was better prepared for student teaching than were the students in the control group.

All of the students in the observation group expressed the belief that they were the most fortunate of the three groups. Their attitude was that no amount of reading or college classes could satisfactorily substitute for being with children in the classroom.

The members of the reading group, likewise, held similar beliefs. Twenty-eight of the thirty students in the reading

group said that, although they benefited from the opportunity they had, they would have preferred assignment to the observation group.

Both the interviews and the evaluations of the students in the reading and observation groups seem to reflect what they preferred to do. The opinions expressed by the students in these two groups are not supported by their scores on the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

This study was conducted to determine which of three different experiences prior to student teaching best prepared students for student teaching.

During the Spring Term, 1959 at Michigan State University, the applicants for Winter Term, 1960 elementary student teaching were divided at random into a reading group, an observation group, and a control group. Subsequent applicants were placed in the control group.

During the Fall Term, 1959, students in the reading group earned three term credits in the College of Education through independent reading in the field of education. Students in the observation group earned three term credits in the College of Education by observing three hours per week in an elementary classroom in a public school. Students in the control group enrolled in the normal classes.

The Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination were administered to all of the students in the three groups on three different occasions. The first occasion was a pre-test administered in September, 1959. The second was in January, 1960 at the beginning of

student teaching. The last occasion was in March, 1960 at the conclusion of student teaching.

An analysis of variance was made to determine (1) whether or not the three groups were alike in the beginning of this study; (2) what changes, if any, resulted from the different experiences of the three groups during the term prior to student teaching; and (3) what differences, if any, existed among the groups at the conclusion of student teaching.

It was found that no significant difference existed in the mean scores of the three groups on the Minnesota Teacher Attitude Inventory at any of the occasions when the test was given during the two-term period of this study.

Using the data of the Purdue Teachers Examination, however, it was found that a significant difference at less than the five per cent level of probability did exist among the groups at the first testing session. By using the multiple t tests, it was found that there was a significant difference at the one per cent level of significance between the observation and control groups where $t = 2.87$. There was no significant difference between the reading group and either of the other two groups. No significant difference in the mean scores of the three groups on the Purdue Teachers Examination existed on the two subsequent administrations of this test.

The mean differences between September, 1959 and March, 1960 were computed for the three groups on both the Minnesota Teacher Attitude Inventory and the Purdue Teachers

Examination. Using the t test, it was found that the mean difference in one group is equal to the mean difference in other groups from September, 1959 to March, 1960 on both tests.

During the term prior to student teaching, at least two interviews were held with each student in the reading and observation groups. In addition, each of the students in these two groups submitted an evaluation of her experiences as a member of one of the groups.

Interviews with students in the reading group and the evaluations submitted by them have indicated that, in their opinion, they were better prepared for student teaching than were the students in the control group. However, twenty-eight of the thirty members of the reading group expressed the belief that they were not as well prepared for student teaching as were the members of the observation group.

The thirty-two students in the observation group unanimously expressed the belief that they were better prepared for student teaching than were the students in the reading or control groups.

Conclusions

The statistical analysis of the objective data collected in the course of this study and the expressed opinions of the students involved in the experimental program do not appear to be in agreement. Where little or no difference among the three groups of this study seems evident from the scores achieved by the students on the Minnesota Teacher

Attitude Inventory and the Purdue Teachers Examination, a noticeable difference among the groups prior to student teaching appeared evident to the students in the reading and observation groups.

If there were differences among the groups, the testing did not reveal that these differences existed. The fact that so many of the students in the reading and observation groups thought that the members of the observation group were the best prepared of the three groups for student teaching as a result of their prior experiences with children, may be partially due to the conditioning they had received over a three-year period of attending courses in education. "Learning by doing" is an axiom which most students hear from the beginning of their professional training until they graduate. Since the observation group was occupied with "doing" through their experiences in the elementary classroom, this may have caused them as well as the students in the reading group to believe that those in the observation group were better prepared for student teaching than were the students in the other two groups.

However, the opinions of the students in the reading and observation groups are not supported by their scores on the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination.

A review of the literature has shown that many educators are of the opinion that prior experiences with children,

especially in a classroom setting, better prepare students for their student teaching experience.

In order to make a more objective observation, it is concluded that new or different instrumentation must be obtained which will indicate to a greater extent than have the Minnesota Teacher Attitude Inventory and the Purdue Teachers Examination the changes which occur among students during their professional preparation for teaching.

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APPENDIX A

COPY OF MEMORANDUM TO STUDENTS SELECTED FOR READING GROUP

MICHIGAN STATE UNIVERSITY East Lansing

College of Education · Office of Student Teaching

MEMORANDUM

May, 1959

To: Selected Elementary Student Teachers for
Winter Term, 1960

From: Student Teaching Office

Re: Improvement in Student Teaching Program

You have been chosen to be one of a group of elementary student teachers to assist in an effort now being made to evaluate and improve the student teaching program at Michigan State University.

In order to acquaint you with the proposals being considered and your role in them, a meeting has been called for 7:00 P.M. Tuesday, June 2,1959 in room 113, College of Education Building.

You are urged to make every effort to be present, but if you find it impossible to attend, please call Mr. Ward Sinclair, Principal, Red Cedar School, East Lansing, at ED 2-5469 from 8:00 to 11:30 A.M. and 1:00 to 4:30 P.M. by Monday, June 1.

You may be confident that your participation will be of considerable benefit to you.

You earnest consideratiion of this matter is sincerely appreciated.

Sincerely,

Ward Sinclair/s/

APPENDIX B

COPY OF MEMORANDUM TO STUDENTS SELECTED FOR OBSERVATION GROUP

MICHIGAN STATE UNIVERSITY East Lansing

College of Education · Office of Student Teaching

MEMORANDUM

May, 1959

To: Selected Elementary Student Teachers for Winter Term, 1960

From: Student Teaching Office

Re: Improvement in Student Teaching Program

You have been chosen to be one of a group of elementary student teachers to assist in an effort now being made to evaluate and improve the student teaching program at Michigan State University.

In order to acquaint you with the proposals being considered and your role in them, a meeting has been called for 8:00 P.M. Tuesday, June 2, 1959 in room 113, College of Education Building.

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You may be confident that your participation will be of considerable benefit to you.

Your earnest consideration of this matter is sincerely appreciated.

Sincerely,

Ward Sinclair/s/

APPENDIX C

SELECTED BIBLIOGRAPHY USED BY READING GROUP

BIBLIOGRAPHY FOR ELEMENTARY TEACHERS

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APPENDIX D

INSTRUCTIONS TO COLLEGE COORDINATORS FOR ADMINISTERING THE MINNESOTA TEACHER ATTITUDE INVENTORY AND THE PURDUE TEACHERS EXAMINATION: HOW I TEACH

DIRECTIONS FOR THE ADMINISTRATION
of the
MINNESOTA TEACHER ATTITUDE INVENTORY

Administer this test first.

General information:

Seating should be arranged to prevent any discussion or comparison of answers.

There is no time limit, but the subject should be encouraged to work rapidly and indicate his first impressions rather than to deliberate over one item very long. It usually takes from 20 to 30 minutes to finish.

Standard procedure:

Distribute a booklet, an answer sheet, and a pencil to each subject. (Any pencil will do.)

Say: "Read the instructions on the front page of the booklet, but do not turn the page until you are told to do so."

After allowing time to read the instructions, answer any appropriate questions.

Then say: "Remember you are to make no marks on the booklet; mark your answers on the answer sheet. If you decide to change an answer, be sure to erase completely the answer you wish to change. Do not ask me to interpret an item for you. If an item appears ambiguous to you, answer it according to your best interpretation of it.

"First write your name on the answer sheet. On the second line put your term and class such as 'Second Term - Senior'. Mark the appropriate sex and enter the date on the bottom line.

"When you finish turn your answer sheet over until all are finished at which time I shall collect both the test booklet and the answer sheet.

"Answer each item of the Inventory. You may begin the test."

DIRECTIONS FOR ADMINISTERING

HOW I TEACH

Administer this test last.

General information:

The subjects answer this test on the test booklet itself. Scoring will be done by hand so any pencil will do.

Seating should be arranged to prevent any discussion or comparison of answers.

There is no time limit, but the subjects should be encouraged to work fairly rapidly. It usually takes from 20 to 30 minutes to finish.

Standard procedure:

Distribute a booklet to each subject. Have the information requested on the cover completed only for the first six lines; that is, through "Grades or subjects which you would like to teach---."

Note: On the second line, the subjects should put their address while student teaching.

When all have completed the cover page, say: "Open your booklets and read the General Directions."

After answering any appropriate questions, say: "Answer all items. You may begin."

APPENDIX E

MINNESOTA TEACHER ATTITUDE INVENTORY

DO NOT OPEN UNTIL TOLD TO DO SO

MINNESOTA TEACHER ATTITUDE INVENTORY

Form A

WALTER W. COOK
University of Minnesota

CARROLL H. LEEDS
Furman University

ROBERT CALLIS
University of Missouri

DIRECTIONS

This inventory consists of 150 statements designed to sample opinions about teacher-pupil relations. There is considerable disagreement as to what these relations should be; therefore, there are no right or wrong answers. What is wanted is your own individual feeling about the statements. Read each statement and decide how YOU feel about it. Then mark your answer on the space provided on the answer sheet. Do not make any marks on this booklet.

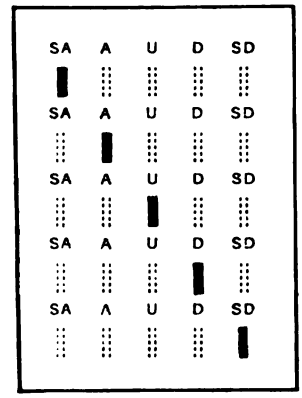
If you **strongly agree,** blacken space under "SA" .....

If you **agree,** blacken space under "A" .....

If you are **undecided** or **uncertain,** blacken space under "U" .....

If you **disagree,** blacken space under "D" .....

If you **strongly disagree,** blacken space under "SD" .....



Think in terms of the general situation rather than specific ones. There is no time limit, but work as rapidly as you can. PLEASE RESPOND TO EVERY ITEM.

The Psychological Corporation
304 East 45th Street
New York 17, N. Y.

Printed in U.S.A.

51-161 TB

SA—Strongly agree A—Agree	U—Undecided or uncertain	D—Disagree SD—Strongly disagree

1. Most children are obedient.
2. Pupils who "act smart" probably have too high an opinion of themselves.
3. Minor disciplinary situations should sometimes be turned into jokes.
4. Shyness is preferable to boldness.
5. Teaching never gets monotonous.
6. Most pupils don't appreciate what a teacher does for them.
7. If the teacher laughs with the pupils in amusing classroom situations, the class tends to get out of control.
8. A child's companionships can be too carefully supervised.
9. A child should be encouraged to keep his likes and dislikes to himself.
10. It sometimes does a child good to be criticized in the presence of other pupils.
11. Unquestioning obedience in a child is not desirable.
12. Pupils should be required to do more studying at home.
13. The first lesson a child needs to learn is to obey the teacher without hesitation.
14. Young people are difficult to understand these days.
15. There is too great an emphasis upon "keeping order" in the classroom.
16. A pupil's failure is seldom the fault of the teacher.
17. There are times when a teacher cannot be blamed for losing patience with a pupil.
18. A teacher should never discuss sex problems with the pupils.
19. Pupils have it too easy in the modern school.
20. A teacher should not be expected to burden himself with a pupil's problems.
21. Pupils expect too much help from the teacher in getting their lessons.
22. A teacher should not be expected to sacrifice an evening of recreation in order to visit a child's home.
23. Most pupils do not make an adequate effort to prepare their lessons.
24. Too many children nowadays are allowed to have their own way.
25. Children's wants are just as important as those of an adult.
26. The teacher is usually to blame when pupils fail to follow directions.
27. A child should be taught to obey an adult without question.
28. The boastful child is usually over-confident of his ability.
29. Children have a natural tendency to be unruly.
30. A teacher cannot place much faith in the statements of pupils.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree.

31. Some children ask too many questions.

32. A pupil should not be required to stand when reciting.

33. The teacher should not be expected to manage a child if the latter's parents are unable to do so.

34. A teacher should never acknowledge his ignorance of a topic in the presence of his pupils.

35. Discipline in the modern school is not as strict as it should be.

36. Most pupils lack productive imagination.

37. Standards of work should vary with the pupil.

38. The majority of children take their responsibilities seriously.

39. To maintain good discipline in the classroom a teacher needs to be "hard-boiled."

40. Success is more motivating than failure.

41. Imaginative tales demand the same punishment as lying.

42. Every pupil in the sixth grade should have sixth grade reading ability.

43. A good motivating device is the critical comparison of a pupil's work with that of other pupils.

44. It is better for a child to be bashful than to be "boy or girl crazy."

45. Course grades should never be lowered as punishment.

46. More "old-fashioned whippings" are needed today.

47. The child must learn that "teacher knows best."

48. Increased freedom in the classroom creates confusion.

49. A teacher should not be expected to be sympathetic toward truants.

50. Teachers should exercise more authority over their pupils than they do.

51. Discipline problems are the teacher's greatest worry.

52. The low achiever probably is not working hard enough and applying himself.

53. There is too much emphasis on grading.

54. Most children lack common courtesy toward adults.

55. Aggressive children are the greatest problems.

56. At times it is necessary that the whole class suffer when the teacher is unable to identify the culprit.

57. Many teachers are not severe enough in their dealings with pupils.

58. Children "should be seen and not heard."

59. A teacher should always have at least a few failures.

60. It is easier to correct discipline problems than it is to prevent them.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

61. Children are usually too sociable in the classroom.

62. Most pupils are resourceful when left on their own.

63. Too much nonsense goes on in many classrooms these days.

64. The school is often to blame in cases of truancy.

65. Children are too carefree.

66. Pupils who fail to prepare their lessons daily should be kept after school to make this preparation.

67. Pupils who are foreigners usually make the teacher's task more unpleasant.

68. Most children would like to use good English.

69. Assigning additional school work is often an effective means of punishment.

70. Dishonesty as found in cheating is probably one of the most serious of moral offenses.

71. Children should be allowed more freedom in their execution of learning activities.

72. Pupils must learn to respect teachers if for no other reason than that they are teachers.

73. Children need not always understand the reasons for social conduct.

74. Pupils usually are not qualified to select their own topics for themes and reports.

75. No child should rebel against authority.

76. There is too much leniency today in the handling of children.

77. Difficult disciplinary problems are seldom the fault of the teacher.

78. The whims and impulsive desires of children are usually worthy of attention.

79. Children usually have a hard time following instructions.

80. Children nowadays are allowed too much freedom in school.

81. All children should start to read by the age of seven.

82. Universal promotion of pupils lowers achievement standards.

83. Children are unable to reason adequately.

84. A teacher should not tolerate use of slang expressions by his pupils.

85. The child who misbehaves should be made to feel guilty and ashamed of himself.

86. If a child wants to speak or to leave his seat during the class period, he should always get permission from the teacher.

87. Pupils should not respect teachers anymore than any other adults.

88. Throwing of chalk and erasers should always demand severe punishment.

89. Teachers who are liked best probably have a better understanding of their pupils.

90. Most pupils try to make things easier for the teacher.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

91. Most teachers do not give sufficient explanation in their teaching.

92. There are too many activities lacking in academic respectability that are being introduced into the curriculum of the modern school.

93. Children should be given more freedom in the classroom than they usually get.

94. Most pupils are unnecessarily thoughtless relative to the teacher's wishes.

95. Children should not expect talking privileges when adults wish to speak.

96. Pupils are usually slow to "catch on" to new material.

97. Teachers are responsible for knowing the home conditions of every one of their pupils.

98. Pupils can be very boring at times.

99. Children have no business asking questions about sex.

100. Children must be told exactly what to do and how to do it.

101. Most pupils are considerate of their teachers.

102. Whispering should not be tolerated.

103. Shy pupils especially should be required to stand when reciting.

104. Teachers should consider problems of conduct more seriously than they do.

105. A teacher should never leave the class to its own management.

106. A teacher should not be expected to do more work than he is paid for.

107. There is nothing that can be more irritating than some pupils.

108. "Lack of application" is probably one of the most frequent causes for failure.

109. Young people nowadays are too frivolous.

110. As a rule teachers are too lenient with their pupils.

111. Slow pupils certainly try one's patience.

112. Grading is of value because of the competition element.

113. Pupils like to annoy the teacher.

114. Children usually will not think for themselves.

115. Classroom rules and regulations must be considered inviolable.

116. Most pupils have too easy a time of it and do not learn to do real work.

117. Children are so likeable that their shortcomings can usually be overlooked.

118. A pupil found writing obscene notes should be severely punished.

119. A teacher seldom finds children really enjoyable.

120. There is usually one best way to do school work which all pupils should follow.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

121. It isn't practicable to base school work upon children's interests.

122. It is difficult to understand why some children want to come to school so early in the morning before opening time.

123. Children that cannot meet the school standards should be dropped.

124. Children are usually too inquisitive.

125. It is sometimes necessary to break promises made to children.

126. Children today are given too much freedom.

127. One should be able to get along with almost any child.

128. Children are not mature enough to make their own decisions.

129. A child who bites his nails needs to be shamed.

130. Children will think for themselves if permitted.

131. There is no excuse for the extreme sensitivity of some children.

132. Children just cannot be trusted.

133. Children should be given reasons for the restrictions placed upon them.

134. Most pupils are not interested in learning.

135. It is usually the uninteresting and difficult subjects that will do the pupil the most good.

136. A pupil should always be fully aware of what is expected of him.

137. There is too much intermingling of the sexes in extra-curricular activities.

138. The child who stutters should be given the opportunity to recite oftener.

139. The teacher should disregard the complaints of the child who constantly talks about imaginary illnesses.

140. Teachers probably over-emphasize the seriousness of such pupil behavior as the writing of obscene notes.

141. Teachers should not expect pupils to like them.

142. Children act more civilized than do many adults.

143. Aggressive children require the most attention.

144. Teachers can be in the wrong as well as pupils.

145. Young people today are just as good as those of the past generation.

146. Keeping discipline is not the problem that many teachers claim it to be.

147. A pupil has the right to disagree openly with his teachers.

148. Most pupil misbehavior is done to annoy the teacher.

149. One should not expect pupils to enjoy school.

150. In pupil appraisal effort should not be distinguished from scholarship.

APPENDIX F

PURDUE TEACHERS EXAMINATION: HOW I TEACH

Score .....

Percentile .....

HOW I TEACH

No. .....

Analysis of Teaching Practices

By

IDA B. KELLEY
and
KEITH J. PERKINS

FORM A

NAME ..... Sex ..... Date ..... 195....

Local Address ..... Tel. ..... Age .....

No. of years of teaching experience ..... Single .... Married .... Widowed .... No. children .....

Home Address .....

Grades or subjects which you teach .....

Grades or subjects which you would like to teach .....

No. years training beyond H. S. ..... Degrees ..... Major .....

Years in which your training was taken .....

Dates of any subsequent training .....

Give the approximate number of ☐ quarter ☐ semester hours you have taken in the following courses:

PSYCHOLOGY	EDUCATION
..... General	..... Principles of Teaching
..... Educational	..... Principles of Secondary Education
..... Child	..... Junior High School
..... Adolescent	..... Guidance
..... Abnormal	..... Extracurricular Activities
..... Clinical	..... Tests and Measurements
..... Mental Hygiene	..... High School Administration
..... Social	..... Curriculum
..... Individual Differences	..... Supervision
....	....
....	....

LIST THE LAST FIVE TEACHING POSITIONS YOU HAVE HELD

	LOCATION	GRADES OR SUBJECTS TAUGHT	YEARS
1.	.....	.....	.....
2.	.....	.....	.....
3.	.....	.....	.....
4.	.....	.....	.....
5.	.....	.....	.....

Published by EDUCATIONAL TEST BUREAU, EDUCATIONAL PUBLISHERS, Inc.

GENERAL DIRECTIONS

The items in "How I Teach" are designed to allow the applicant or teacher to record what he thinks of certain teaching practices, what his opinions are concerning some specific phases of personality development, and what his judgment is on various questions in the field of child and adolescent behavior and training.

Keep in mind that in every one of the items a general situation is described, and one is therefore not to think in terms of individual cases.

There is a choice of five answers for each item. There is no time limit but work fairly rapidly.

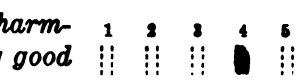
NOTE: *Child, children, and pupil are used interchangeably to apply to all ages through elementary and high school.*

PART I

DIRECTIONS: Part I questions beginning at the top of the next page are made up of a group of practices all of which are actually being used by different teachers. In each case some action in regard to the situation is indicated. Please mark this action in terms of what your own practice is (or would be) in dealing with this problem or situation. Please respond to every item. Indicate your response by blackening the space between the parallel lines under the number at the side which best describes your evaluation of the practice. For instance, if you judge the practice to be "probably good," you would blacken the space between the parallel lines under the number 4. If you had thought it of "doubtful value," you would have blackened the space between the lines under 3.

Example:

USE THIS SCALE: 1-*Decidedly harmful* 2-*Probably harmful* 3-*Doubtful value* 4-*Probably good* 5-*Decidedly good*



Form A No. .....

PART I

1. Seating the pupils alphabetically in the classroom. 1 2 3 4 5
2. Requiring an additional assignment from a pupil who misbehaves in class. 1 2 3 4 5
3. Referring the pupil who steals to the police or sheriff. 1 2 3 4 5
4. Allowing the classroom to resemble a work shop. 1 2 3 4 5
5. Keeping study halls absolutely quiet. 1 2 3 4 5
6. Commending the high school pupil for not being interested in having dates. 1 2 3 4 5
7. Warning a child that he is daydreaming too much. 1 2 3 4 5
8. Adapting the content of the course to the pupil's mental ability. 1 2 3 4 5
9. Threatening to punish the pupil who tells lies. 1 2 3 4 5
10. Requiring a very shy girl to take a shower with other girls. 1 2 3 4 5
11. Telling the child who worries excessively just to forget it and everything will be all right. 1 2 3 4 5
12. Requiring pupils to follow explicitly the instructions for classroom work. 1 2 3 4 5
13. Curbing the "show-off" by calling the attention of others to his actions. 1 2 3 4 5
14. Expecting a pupil to be able to give adequate reasons for his undesirable behavior. 1 2 3 4 5
15. Avoiding small and unimportant issues with the pupil who is very stubborn. 1 2 3 4 5
16. Emphasizing what a child cannot do rather than what he can do. 1 2 3 4 5
17. Encouraging all children to aim at the highest academic goals. 1 2 3 4 5
18. Reprimanding the child who asks to have directions repeated. 1 2 3 4 5
19. Shaming the child who bites his nails. 1 2 3 4 5
20. Insisting on perfect order in desks and lockers at all times. 1 2 3 4 5
21. Keeping the pupil guessing as to what you expect of him. 1 2 3 4 5
22. Warning the pupils before starting on an excursion that there will not be another one if they misbehave. 1 2 3 4 5
23. Telling a child that there is no good reason for his disliking to read. 1 2 3 4 5
24. Trying to get the pupil to confess to something you know he has done. 1 2 3 4 5
25. Displaying a boy's poor writing to get him to write better. 1 2 3 4 5
26. Showing a friendly attitude toward the truant. 1 2 3 4 5
27. Taking a firm hold of an angry child and making him stop what he is doing. 1 2 3 4 5
28. Warning a boy that he is following in the footsteps of an older delinquent brother. 1 2 3 4 5
29. Teaching pupils that smoking is an immoral habit. 1 2 3 4 5
30. Having a separate room for all disciplinary cases. 1 2 3 4 5

PART II

DIRECTIONS: Below are a number of statements about which teachers are known to have different opinions. Please indicate your opinion of each statement.

USE THIS SCALE: *1-Strongly disagree 2-Disagree 3-Undecided 4-Agree 5-Strongly agree*

31. The best education for children of low intelligence is a little less of the same kind of education planned for the more intelligent. 1 2 3 4 5
32. When a child spends all his time with one other child and will have little or nothing to do with any others, the teacher should break up that friendship. 1 2 3 4 5
33. When the sole purpose of discipline is to make the child suffer, he is justified in his resentment against those who punish him. 1 2 3 4 5
34. A good way to punish an offender is to allow others to make fun of him. 1 2 3 4 5
35. When a method of handling a pupil fails, the method and not the pupil is at fault. 1 2 3 4 5
36. If much practice is given, sixth grade children of low intelligence can be brought up to the level of their bright fellow-pupils in the solution of sixth grade arithmetic problems. 1 2 3 4 5
37. Probably more teachers fail because of inability to direct behavior of children than because of inability to teach subject matter. 1 2 3 4 5
38. Children outgrow their early emotional experiences, as they do shoes and clothes. 1 2 3 4 5
39. A teacher should keep in mind that pupils have to be forced to think. 1 2 3 4 5
40. Sex instruction should be given in the pre-adolescent years. 1 2 3 4 5

41. All of a child's behavior is as much the responsibility of the school as is his knowledge of English grammar. 1 2 3 4 5

42. The teacher should plan playground activity in detail to insure its being worth-while. 1 2 3 4 5

43. Some pupils are just naturally stubborn. 1 2 3 4 5

44. Most high school pupils are too young to make vocational plans for themselves. 1 2 3 4 5

45. Unacceptable sexual behavior is more often a sign rather than a cause of maladjustment. 1 2 3 4 5

46. Homogenous grouping handicaps the slower pupil. 1 2 3 4 5

47. It is better for a girl to be shy and timid than "boy crazy." 1 2 3 4 5

48. Repeating grades is one of the most desirable ways of solving the problems of the mentally deficient pupil. 1 2 3 4 5

49. The boastful child is usually compensating for feelings of inferiority. 1 2 3 4 5

50. Lying can be detected by the evasive eye of a guilty suspect. 1 2 3 4 5

51. Giving a pupil low grades may satisfy his need for attention rather than stimulate him to do better work. 1 2 3 4 5

52. Inattention, carelessness, and disorder are more serious than is the behavior of the child who refuses to talk or play with the other children. 1 2 3 4 5

53. The primary purpose of tests and examinations should be to provide a basis for giving grades. 1 2 3 4 5

54. Dull boys are naturally better athletes than are boys of high intelligence. 1 2 3 4 5

55. The more closely the teacher directs study, the more effective it is. 1 2 3 4 5

56. The first signs of delinquency in a pupil should be received by a tightening of discipline and more restrictions. 1 2 3 4 5

57. The newer methods of education tend to standardize children's behavior. 1 2 3 4 5

58. Stealing and lying are much more important as indications of serious maladjustment than are extreme shyness and fearfulness. 1 2 3 4 5

59. Over self-confidence may be an attempt to cover up a real feeling of inferiority. 1 2 3 4 5

60. The least liked teachers are those who see the children's weaknesses clearly. 1 2 3 4 5

PART III

DIRECTIONS: For this group of items, please blacken between the lines that represent what you think of each statement. Express your opinion on all items.

USE THIS SCALE: *1-Undoubtedly false 2-Probably false 3-Uncertain 4-Probably true 5-Undoubtedly true*

61. Own children often truly believe they are adopted. 1 2 3 4 5

62. A below average rating on an intelligence test reveals the cause for any queer or undesirable behavior. 1 2 3 4 5

63. Children should have more supervision and discipline than they usually get. 1 2 3 4 5

64. As a rule rapid learners are quick forgetters. 1 2 3 4 5

65. The same child may be quite honest in one situation and dishonest in another similar situation 1 2 3 4 5

66. An activity to be educationally valuable should train reasoning and memory in general. 1 2 3 4 5

67. Criticism of children by teacher is more effective for obtaining desired behavior than criticism of children by others of their own age. 1 2 3 4 5

68. The foundations of delinquency are usually laid before adolescence. 1 2 3 4 5

69. It is easier to teach children to think than it is to teach them to memorize. 1 2 3 4 5

70. Recent developments in education have made it possible to speed up the rate of development of most of the high-grade feeble-minded. 1 2 3 4 5

71. As a rule boys play by themselves and girls by themselves during the pre-adolescent year. 1 2 3 4 5

72. Learning emotional control uses the same principles of learning as does learning to read. 1 2 3 4 5

73. A pupil's previous record is the best single index to use in predicting what grades he will make. 1 2 3 4 5

74. The sooner a child has all the children's diseases such as measles and scarlet fever, the better off he is. 1 2 3 4 5

75. The adolescent likes to feel that he is different from others of the same age. 1 2 3 4 5

Score .....

Percentile .....

HOW I TEACH

No. .....

Analysis of Teaching Practices

By

IDA B. KELLEY
and
KEITH J. PERKINS

FORM B

NAME ..... Sex ..... Date ..... 195....

Local Address ..... Tel. ..... Age .....

No. of years of teaching experience ..... Single .... Married .... Widowed .... No. children .....

Home Address .....

Grades or subjects which you teach .....

Grades or subjects which you would like to teach.....

No. years training beyond H. S. ..... Degrees..... Major .....

Years in which your training was taken .....

Dates of any subsequent training .....

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..... General
..... Educational
..... Child
..... Adolescent
..... Abnormal
..... Clinical
..... Mental Hygiene
..... Social
..... Individual Differences
....
....

EDUCATION

..... Principles of Teaching
..... Principles of Secondary Education
..... Junior High School
..... Guidance
..... Extracurricular Activities
..... Tests and Measurements
..... High School Administration
..... Curriculum
..... Supervision
....
....

LIST THE LAST FIVE TEACHING POSITIONS YOU HAVE HELD

	LOCATION	GRADES OR SUBJECTS TAUGHT	YEARS
1.	.....	.....	.....
2.	.....	.....	.....
3.	.....	.....	.....
4.	.....	.....	.....
5.	.....	.....	.....

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GENERAL DIRECTIONS

If machine scoring is to be used, the spaces between the parallel dotted lines must be thoroughly blackened by means of a *special* pencil. The emphasis is on *thoroughly* blackening.

If the scoring is to be done by hand, the blackening can be done with an *ordinary* pencil.

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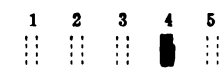
Example:



PART I

Urging a pupil to make up his work at once after returning from an illness. 1 2 3 4 5

Telling the pupil who isn't making good grades to study harder. 1 2 3 4 5

Suspending from school the pupil who plays truant more than once. 1 2 3 4 5

Taking a copy of "Love Stories" (or magazines of that type) away from a pupil. 1 2 3 4 5

Denying pupils the privilege of talking without permission. 1 2 3 4 5

Encouraging a pupil to take only those subjects in which his mental ability indicates that he can achieve success. 1 2 3 4 5

Keeping a record of all unusual behavior. 1 2 3 4 5

Showing a sympathetic and understanding attitude toward "puppy love" affairs. 1 2 3 4 5

Assigning topics for themes or oral reports rather than allowing the pupil to select his own. 1 2 3 4 5

Encouraging the pupils to regard the teacher as an example to follow. 1 2 3 4 5

Planning for a variety of activities during the recitation period. 1 2 3 4 5

Lowering class grades for misconduct in class. 1 2 3 4 5

Teaching a pupil to accept the superiority of others without feeling inferior himself. 1 2 3 4 5

Frequently reminding children to sit up straight and hold their shoulders back. 1 2 3 4 5

Expecting all children to conform to the standards of the school at all times. 1 2 3 4 5

Making a child who misbehaves feel guilty and ashamed. 1 2 3 4 5

Telling a pupil that he can succeed in any type of work if he works hard. 1 2 3 4 5

Telling a child that he isn't doing as well in school as an older brother did. 1 2 3 4 5

Requiring the same standards of all pupils for a passing grade. 1 2 3 4 5

Telling the dull pupil who isn't doing good work that he is lazy. 1 2 3 4 5

Insisting that a child tell why he lied. 1 2 3 4 5

22. Following the same exact schedule every day. 1 2 3 4 5

23. Laughing a child out of his fears. 1 2 3 4 5

24. Forcing a child to admit a mistake you know he has made. 1 2 3 4 5

25. Requiring children to follow orders without questioning them. 1 2 3 4 5

26. Telling a child just to forget unpleasant experiences. 1 2 3 4 5

27. Requiring the pupil to apologize for what he has done. 1 2 3 4 5

28. Making personal comparisons between children. 1 2 3 4 5

29. Telling all parents their children's ratings on intelligence tests. 1 2 3 4 5

30. Placing crippled children in separate classes for all work. 1 2 3 4 5

PART II

DIRECTIONS: Below are a number of statements about which teachers are known to have different opinions. Please indicate your opinion of each statement.

USE THIS SCALE: *1-Strongly disagree 2-Disagree 3-Undecided 4-Agree 5-Strongly agree*

31. Each time a pupil lies his punishment should be increased. 1 2 3 4 5

32. To make a special study of the pupil who constantly misbehaves spoils him by making him the center of attention. 1 2 3 4 5

33. Boys and girls are naturally lazy and careless about school work. 1 2 3 4 5

34. The course of study should be so adjusted to the children's abilities that the dull child, too, would be proud to show his report card. 1 2 3 4 5

35. If a teacher keeps school conditions exactly the same and gives all pupils an equal opportunity to respond, she has done all she can do. 1 2 3 4 5

36. If a child constantly performs for attention, the teacher should see to it that he gets no attention. 1 2 3 4 5

37. Dishonesty is a more serious personality characteristic than unsocialness. 1 2 3 4 5

38. The teacher's first responsibility in all cases of misconduct is to locate and punish the offender. 1 2 3 4 5

39. Children have no one to blame but themselves if they are bad. 1 2 3 4 5

40. "Failed because of lack of application" is a reasonable explanation of a child's failure in arithmetic. 1 2 3 4 5

41. Children should be made to feel that curiosity concerning sex is wrong. 1 2 3 4 5

42. A pupil's inability to get along with others is a product of conditions largely beyond his control. 1 2 3 4 5

43. The child who can keep out of the hurly-burly of school activities and content himself with daydreams is fortunate. 1 2 3 4 5

44. Teachers usually recognize the most serious problems of personality maladjustment. 1 2 3 4 5

45. The physically handicapped child needs sympathy more than anything else. .. 1 2 3 4 5

46. Teachers must understand the reasons for their own behavior before they can guide pupils effectively. 1 2 3 4 5

47. It is the teacher's first job to make pupils like her. 1 2 3 4 5

48. The pupil who steals may be trying to punish some person or society in general for a real or imagined injury. 1 2 3 4 5

49. One of the chief causes of delinquency is low intelligence. 1 2 3 4 5

50. Homogeneous grouping eliminates the necessity for further individualization of instruction. 1 2 3 4 5

51. A teacher's attitudes toward the children are more important to the children's development than is her knowledge of the subject matter she is teaching. 1 2 3 4 5

52. No conduct is peculiar when it is understood. 1 2 3 4 5

53. The best way to manage the aggressive pupil is to be equally aggressive. 1 2 3 4 5

54. The bully probably is fearful and insecure in his relations with others. 1 2 3 4 5

55. Most pupils need some of the natural meanness taken out of them. 1 2 3 4 5

56. The problems of adolescent adjustment have become more simplified as civilization has progressed. 1 2 3 4 5

57. To a large extent the school has failed to adapt itself to the pupil. 1 2 3 4 5

58. A task that is too difficult for a pupil encourages him to work harder. 1 2 3 4 5

59. When a pupil lies, it is usually because he has no better way of meeting the situation. 1 2 3 4 5

60. When a pupil obeys all the rules of the school, one can be sure he is developing moral character. 1 2 3 4 5

PART III

DIRECTIONS: For this group of items, please blacke between the lines that represent what you think of statement. Express your opinion on all items.

USE THIS SCALE: 1-*Undoubtedly false* 2-*Probably fal* 3-*Uncertain* 4-*Probably true* 5-*Undoubtedly true*

61. If a child is intensely afraid something, having him face th feared situation is usually a cu for the fear. 1 2 3 4 5

62. The pupil who excells in one ab ity necessarily is poor in son other. 1 2 3 4 5

63. The success of one child nece sarily involves the failure others. 1 2 3 4 5

64. A child who prefers to associa with either much older or mu younger children is showing sig of maladjustment. 1 2 3 4 5

65. To give a pupil intensive drill words and their definitions is th best way to improve his vocab lary. 1 2 3 4 5

66. Since a person memorizes be during childhood, that peri should be regarded as a time store up facts for later use. 1 2 3 4 5

67. The school room presents th same environment to all childr in it. 1 2 3 4 5

68. Teachers are more accurate their judgment of the ability the dull child than of the brig child. 1 2 3 4 5

69. The laws of habit formation a ply to the mentally deficient. 1 2 3 4 5

70. "Youngest" in the class is index of superior ability. 1 2 3 4 5

71. Offenses of children are usual directed at the teacher personall 1 2 3 4 5

72. Adolescents often worry over th matter of their rapid growth. 1 2 3 4 5

73. Ideas about sex rarly occur b fore adolescence. 1 2 3 4 5

74. The length and difficulty of a signments rather than the pupil mental deficiency may cau problem behavior. 1 2 3 4 5

75. Delinquency which results in se offences is more common amor boys than girls. 1 2 3 4 5

APPENDICES G -- L

RAW SCORE DATA

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APPENDICES G -- L

RAW SCORE DATA

APPENDIX G

RAW SCORE DATA OF READING GROUP ON THE MINNESOTA TEACHER ATTITUDE INVENTORY

Subject	September 1959	January 1960	March 1960	Difference from September, 1959 to March, 1960
1	56	54	50	- 6
2	71	55	59	-12
3	62	45	60	- 2
4	66	13	54	-12
5	48	66	59	11
6	12	- 2	3	- 9
7	77	67	84	7
8	84	79	94	10
9	43	45	51	8
10	95	88	78	-17
11	86	58	65	-21
12	72	95	99	27
13	96	84	96	0
14	37	39	32	- 5
15	16	14	24	8
16	91	100	81	-10
17	22	36	25	3
18	93	86	77	-16
19	82	81	81	- 1
20	44	41	61	17
21	43	48	23	-20
22	39	41	45	6
23	93	60	76	-17
24	19	10	-11	-30
25	57	55	50	- 7
26	69	58	81	12
27	99	72	68	-31
28	51	49	52	1
29	64	57	73	9
30	52	42	54	2
	$\bar{X}$=61.30	54.87	58.13	- 3.17
	s=25.623	25.712	26.590	2.517

APPENDIX H

RAW SCORE DATA OF READING GROUP ON
PURDUE TEACHERS EXAMINATION: HOW I TEACH

Subject	September 1959 Form A	January 1960 ~~Form~~ B	March 1960 Form A	Difference from September, 1959 to March, 1960
1	26	23	28	2
2	23	27	31	8
3	28	24	12	-16
4	29	33	30	1
5	31	34	32	1
6	11	13	10	- 1
7	37	39	33	- 4
8	35	31	33	- 2
9	18	32	28	10
10	24	30	31	7
11	33	25	32	- 1
12	37	28	34	- 3
13	31	35	36	5
14	27	23	24	- 3
15	39	35	26	-13
16	32	31	25	- 7
17	27	19	24	- 3
18	32	29	26	- 6
19	35	32	27	- 8
20	28	27	30	2
21	28	29	29	1
22	29	28	26	- 3
23	36	28	29	- 7
24	34	22	23	-11
25	27	22	24	- 3
26	29	28	28	- 1
27	36	31	32	- 4
28	27	22	29	2
29	21	24	27	6
30	27	28	26	- 1
	$\bar{X}$=29.23	27.73	27.50	- 1.73
	s= 5.470	5.413	5.569	1.087

APPENDIX I

RAW SCORE DATA OF OBSERVATION GROUP ON THE MINNESOTA TEACHER ATTITUDE INVENTORY

Subject	September 1959	January 1960	March 1960	Difference from September, 1959 to March, 1960
1	72	79	81	9
2	51	54	16	-35
3	39	11	38	- 1
4	80	60	36	-44
5	90	83	86	- 4
6	67	54	46	-21
7	67	56	55	-12
8	54	44	18	-36
9	19	42	25	6
10	48	37	43	- 5
11	54	11	38	-16
12	46	54	34	-12
13	45	55	41	- 4
14	68	37	43	-25
15	50	42	84	34
16	29	44	13	-16
17	66	76	76	10
18	50	47	73	23
19	79	83	88	9
20	46	56	57	11
21	63	76	74	11
22	43	35	62	19
23	89	82	87	- 2
24	43	39	80	37
25	76	53	69	- 7
26	57	54	45	-12
27	28	58	74	46
28	93	95	70	-23
29	76	58	25	-51
30	65	75	52	-13
31	64	19	18	-46
32	57	53	71	14
	$\bar{X}$=58.56	53.81	53.69	- 4.88
	s=18.180	20.386	23.592	4.199

APPENDIX J

RAW SCORE DATA OF OBSERVATION GROUP ON
PURDUE TEACHERS EXAMINATION: HOW I TEACH

Subject	September 1959 Form A	January 1960 Form B	March 1960 Form A	Difference from September, 1959 March, 1960
1	29	30	32	3
2	29	15	25	- 4
3	23	30	28	5
4	30	24	21	- 9
5	34	31	35	1
6	33	22	16	-17
7	33	31	25	- 8
8	31	27	21	-10
9	26	19	22	- 4
10	18	23	21	3
11	19	20	22	3
12	18	26	24	6
13	27	17	21	- 6
14	35	30	28	- 7
15	23	27	36	13
16	18	14	13	- 5
17	34	32	26	- 8
18	24	17	26	2
19	27	28	26	- 1
20	24	21	21	- 3
21	33	27	21	-12
22	27	24	23	- 4
23	38	35	33	- 5
24	25	27	34	9
25	31	36	26	- 5
26	34	32	18	-16
27	26	22	38	12
28	27	31	26	- 1
29	36	31	29	- 7
30	32	31	34	2
31	31	23	21	-10
32	28	23	25	- 3
	$\bar{X}$=28.22	25.81	25.53	- 2.69
	s= 6.061	5.783	5.967	1.284

APPENDIX K

RAW SCORE DATA OF CONTROL GROUP ON THE MINNESOTA TEACHER ATTITUDE INVENTORY

Subject	September 1959	January 1960	March 1960	Difference from September, 1959 to March, 1960
1	37	14	53	16
2	84	87	92	8
3	58	57	76	18
4	40	25	7	-33
5	79	84	90	11
6	35	47	32	- 3
7	36	67	38	2
8	48	61	62	14
9	80	47	65	-15
10	115	109	110	- 5
11	59	68	87	28
12	58	55	29	-29
13	80	60	36	-44
14	56	43	29	-27
15	81	62	57	-24
16	29	28	28	- 1
17	59	62	64	5
18	41	37	51	10
19	66	74	75	9
20	12	- 5	20	8
21	48	55	55	7
22	-20	-50	-54	-34
23	68	39	58	-10
24	42	38	56	14
25	33	5	-10	-43
26	73	36	44	-29
27	18	7	27	9
28	77	70	72	- 5
29	66	38	54	-12
30	82	67	56	-26
31	44	41	31	-13
32	78	81	90	12
33	46	6	70	24
34	29	37	42	13
35	66	46	66	0
36	44	35	73	29
37	73	20	25	-48
38	88	89	96	8
39	47	54	56	9
40	44	50	32	-12

APPENDIX K--Continued

Subject	September 1959	January 1960	March 1960	Difference from September, 1959 to March, 1960
41	12	15	-15	-27
42	1	19	-15	-16
43	12	14	23	11
44	21	12	-13	-44
45	74	28	19	-55
46	36	44	45	9
47	18	30	46	28
48	58	52	34	-24
49	28	56	39	11
50	38	49	15	-23
51	16	56	28	12
52	98	100	83	-15
53	43	30	58	15
54	55	37	22	-33
55	63	59	82	19
56	80	102	95	15
57	-27	- 4	21	48
58	81	84	100	19
59	101	95	107	6
60	34	46	27	- 7
61	58	41	56	- 2
62	52	9	31	-21
63	0	-13	6	6
64	33	30	31	- 2
65	72	68	65	- 7
66	55	52	45	-10
67	78	80	18	-60
	$\bar{X}$=50.58	45.33	46.16	- 4.57
	s=28.083	29.708	32.172	2.735
68*	44	54	61	
69	35	50	52	
70	47	20	32	
71	11	-11	-22	
72	32	30	5	

*The subjects below the double line, numbers 68-72, represent male student teachers. Since they all fell in the control group, it was thought best to eliminate them from the statistical analysis of this study, and there eliminate one variable.

APPENDIX L

RAW SCORE DATA OF CONTROL GROUP ON
PURDUE TEACHERS EXAMINATION: HOW I TEACH

Subject	September 1959 Form A	January 1960 Form B	March 1960 Form A	Difference from September, 1960 to March, 1960
1	32	14	26	- 6
2	34	37	41	7
3	26	27	24	- 2
4	24	22	21	- 3
5	33	39	32	- 1
6	22	22	28	6
7	25	24	35	10
8	30	18	24	- 6
9	24	36	28	4
10	41	47	40	- 1
11	32	28	27	- 5
12	22	23	28	6
13	23	31	25	2
14	30	24	21	- 9
15	34	24	31	- 3
16	14	32	24	10
17	25	20	20	- 5
18	34	33	32	- 2
19	20	17	18	- 2
20	22	19	24	2
21	25	31	26	1
22	21	23	28	7
23	21	17	10	-11
24	27	26	22	- 5
25	19	23	28	- 9
26	25	16	18	- 7
27	33	29	28	- 5
28	21	20	24	3
29	21	22	27	6
30	33	27	23	-10
31	27	34	26	- 1
32	28	26	23	- 5
33	26	24	33	7
34	29	35	30	1
35	16	23	18	2
36	30	33	31	1
37	24	27	28	4
38	36	25	13	-23
39	34	42	35	1
40	24	21	25	1

APPENDIX L--Continued

Subject	September 1959 Form A	January 1960 Form B	March 1960 Form A	Difference from September, 1960 to March, 1960
41	19	23	17	- 2
42	15	19	18	3
43	18	16	14	- 4
44	12	7	7	- 5
45	26	29	17	- 9
46	27	25	25	- 2
47	25	17	17	- 8
48	31	29	26	- 5
49	25	23	19	- 6
50	24	28	15	- 9
51	26	37	24	- 2
52	27	43	39	12
53	24	34	21	- 3
54	30	26	17	-13
55	26	24	31	5
56	24	40	28	4
57	18	18	22	4
58	22	21	27	5
59	36	38	35	- 1
60	23	31	28	5
61	27	24	22	- 5
62	21	27	21	0
63	27	34	28	1
64	27	30	26	- 1
65	31	40	24	- 7
66	20	32	28	8
67	25	25	19	- 6
	$\bar{X}$=25.72	26.88	24.78	- 1.21
	s= 5.680	7.765	6.690	.761
68*	21	25	29	
69	28	31	39	
70	24	16	17	
71	24	24	26	
72	17	16	15	

*The subjects below the double line, numbers 68-72, represent male student teachers. Since they all fell in the control group, it was thought best to eliminate them from the statistical analysis of this study, and thereby eliminate one variable.

APPENDIX M

STANDARD VI--PROFESSIONAL LABORATORY EXPERIENCES

APPENDIX M

STANDARD VI--PROFESSIONAL LABORATORY EXPERIENCES[1]

Meaning and Function of Professional Laboratory Experiences

The significance of direct experience in the learning process requires that the curriculum of teacher education make provision for such experience, for the need is great at all maturity levels. To build the resourcefulness needed by today's teacher in meeting varying and different situations requires many opportunities to study the major professional activities of the teacher by participating in such activities. There is need for direct experience to develop understanding that goes beyond verbalization and fixed skills; to develop action based upon thinking and the flexible and creative use of skills. Such direct experience for the teacher-to-be may be called professional laboratory experiences. These laboratory experiences should provide:

1. an opportunity to implement basic concepts and ideas discussed in college classes so that the student may study the pragmatic value of the theory and check his understanding of the theory in action;
2. help for the student in seeing his needs (both personal and professional) and outlining experiences which should be included in his further study; and
3. an opportunity for the student to study his ability to guide actual teaching-learning situations.

The first two of these purposes call for laboratory experiences as an integral part of education courses and of professionally treated content courses. In fact, such laboratory experiences may well be a part of academic courses whose content, while directed toward the student as individual and citizen, is used professionally by the teacher of children and youth. The third purpose suggests a period of intensive, continuous work with a given group of learners in which the student carries major responsibility for guiding the learning process. Such a period also contributes to the

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[1]American Association of Colleges for Teacher Education, Revised Standards and Policies for Accrediting Colleges for Teacher Education of the American Association of Colleges for Teacher Education (Oneota, New York: American Association of Colleges for Teacher Education, 1951), pp. 20-32.

first two purposes and may well be provided through a separate course known as student teaching. Although the student teaching period contributes to all three purposes, it cannot take the place of the more diversified laboratory experiences extending throughout the period of college study. Such experiences need to be included in course work to give meaning to ideas discussed and concepts developed. Nor can laboratory activities had in connection with college classes replace the more intensive work with a given pupil group. Both are needed in the program of professional education of teachers. "Professional laboratory experiences" is an inclusive term; student teaching is one type of such experience.

> Professional laboratory experiences include all those contacts with children, youth, and adults which make a direct contribution to an understanding of individuals and their guidance in the teaching-learning process.
>
> Student teaching is a period of guided teaching when the student takes increasing responsibility for guiding the school experiences of a given group of learners over a period of consecutive weeks.

Implementing the Concept of Professional Laboratory Experiences

To be adequate, a standard for implementing the foregoing concept of professional laboratory experiences must deal with the qualitative aspects of the college program. The abilities and needs of individual students vary within any given college while the background of experience of students in one college may differ greatly from that of students enrolled in another institution. Therefore, a simple quantitative standard must give way to one that is flexible, yet gives direction in planning a desirable program for a teacher education institution. The following paragraphs outline the several aspects of a standard which is designed to guide the development of professional laboratory experiences appropriate for the purposes and conditions of each member institution.

A. The Place of Professional Laboratory Experiences in the College Curriculum. The nature of a student's preceding experiences in a given area, rather than the age of the learner or his position in the educational ladder, is the criterion for determining the amount and place of direct experience in the college curriculum. Professional laboratory experiences, therefore, should be an integral part of the work of each year of college. This aspect of the standard is implemented most fully:

1. When laboratory experiences prior to student teaching are integrated with other parts of the college program. The student derives more from his direct experiences prior to student teaching when they grow out of and are brought back to his work in college courses than when they comprise a separate and independent series of guided experiences.

2. When there is flexibility in planning for professional laboratory experiences as work progresses rather than scheduling laboratory experiences for a considerable period in advance. This is necessary if provision is to be made for the needs of individual students and for student participation in the planning of experiences.

3. When the intensive period of work, known as student teaching, occurs at that point in the professional sequence when the student is ready to assume a growing share of the responsibility for guiding the experience of a group of learners. Such readiness has many component parts, both personal and professional, and is conditioned by a variety of factors. For example, the student who is ready to engage in student teaching should possess some sensitivity to problems and factors affecting a teaching-learning situation, some understanding of the major aspects of child growth and development, some ability to study the needs, interests, and abilities of a given group of learners, and some understanding of how to apply basic principles of learning. He should likewise possess some degree of emotional stability, a reasonable amount of poise, and good mental and physical health. These factors of readiness should be viewed in terms of development to the point where the student can profitably extend his competencies by assuming greater responsibility for guiding the activities of a group of learners over a consecutive period of weeks.

   Readiness is an individual matter. Recognition of individual differences means that not all students will enter upon the work of student teaching at the same point in the professional sequence. Each placement is contingent upon the ability of the student and the nature of earlier professional laboratory experiences.

4. When provision is made for professional laboratory experiences following student teaching: (a) to

permit students to do more intensive work in areas of special interest or competence; (b) to make it possible to strengthen shortage areas; (c) to help students gain a new overview of the larger school situation and to study the interrelationships of its various parts. Again the nature and extent of laboratory experiences at this point will vary greatly in terms of the needs of the individual student. For some the work will be largely observation, for others direct teaching; for some there will be many short contacts, for others an extended period of work in a single situation; for some the experiences will be largely within the school situation, for others chiefly in the community. For some such laboratory contacts will be extensive; for others they will be a resource to be used occasionally.

B. Nature of Professional Laboratory Experiences. If the student is to build an action-picture of the role of the teacher in public education there must be opportunity to experience the work of the teacher both within and without the classroom. This includes a study of the work of the school as a whole, of pupil and community backgrounds as a basis for improving the educational program, of the responsibilities of the teacher and the school in sharing and improving community activities. The professional program should be designed to afford opportunity for responsible participation in the major areas of the teacher's work. This aspect of the standard is implemented most fully:

1. When a variety of experiences helps the student to form working concepts of the role of the teacher in the school and the community; to understand children and youth of varied abilities and socio-economic backgrounds; and to develop competence in working with children, parents, colleagues, and community agencies.

2. When the period of student teaching provides opportunities for the student to perceive the major aspects of the teacher's work as a whole and to gain in a functional understanding of the interrelationships among the various aspects through being an active agent in the teaching process.

3. When provision is made for some full-time student teaching--a period of constructive weeks when the student's college program consists only of those activities related to student teaching. While the student may have contact with a range of activities of the teacher through diversified laboratory

experiences prior to student teaching, it is through a period of full-time student teaching that the student can best see these activities in relationship, in a single setting, and test his ability to carry on these activities concurrently.

4. When the needs of the individual student dictate for each area of teaching the particular activities to be engaged in and the sequence of those activities.

5. When the activities engaged in are those inherent in the particular laboratory situation and ones that would normally be carried on with the given group of learners.

6. When the internship, as a part of a fifth year of professional study, is recognized as providing certain experiences that have unique values for the preparation of teachers. Chief among the values to be kept in mind by colleges having an opportunity to develop an internship program are: (a) continuity between pre-service and inservice education; (b) gradual induction as a member of a school staff with part-supervision by those who know the beginning teacher; (c) more effective placement for work; (d) opportunity for the college to study the effectiveness of its work and make needed curricular modifications.

C. Assignment and Length of Laboratory Experiences. Where the student should engage in the various types of professional laboratory experiences and how long he should continue with a given experience, and how long he should remain in each situation are conditioned by the needs of the student, the degree to which the given experience can contribute to those needs, and the student's rate of growth. Choice of laboratory situation and length of time spent there will vary with individuals. Each experience should be long enough to help the student achieve the purposes for which he entered upon it. This aspect of the standard is implemented most fully:

1. When the assignment to a particular laboratory situation is based upon the needs, interests, and abilities of the individual student and the characteristics and opportunities of the given situation. Attention should be given to the personality of the student, the kind of professional work anticipated, and indicated professional competence and need. In judging the laboratory situation such

items as the following should be considered:

a. The group of children or youth. Is this projected assignment in the best interest of the children?

b. The person directly responsible for guiding the laboratory experience (hereafter called the laboratory teacher). What is the ability of this teacher to give the particular type of guidance needed by the student? Is such an appointment advisable in terms of the teacher's total load--teaching load, committee responsibilities, health factors?

c. The program of the group and the school. Are the normal interests and activities of the group those which provide the needed experiences for the given student?

2. When the length of time spent in a given laboratory situation, as well as in each professional laboratory experience or activity, is flexible in terms of the best interests of the student. This includes consideration of the needs of the individual student, his rate of growth, whether his needs can best be met during the present period or through later experiences in other situations, and consideration of opportunities provided in the given situation to meet the changing needs of the student.

3. When provision is made for continuity in the study of a given laboratory situation. Really to understand a situation, to be intelligently active about it, and to note change and how it came about call for continuing contact with that situation. Other things being equal, fewer laboratory situations, of varying types, studied in their various aspects and really understood are to be preferred to a larger number that are partial and not continued long enough really to achieve the purposes for which they are designed.

4. When the period of full-time student teaching is long enough to permit the student teacher to understand the growth of learners resulting from the guidance given. There is need for each student to stay with at least one laboratory situation for a period sufficiently long to observe how activities develop and how learnings are extended and horizons widened. The student should stay with a laboratory

situation long enough to see the growth emerging from cooperative efforts of teachers and learners so that he may know the satisfactions of teaching, know his strengths and weaknesses in guiding teaching-learning situations, and attain a functional understanding of the learning process.

5. When withdrawal from a laboratory situation is made with consideration for the nature of the particular activities the student is developing with children. A contact should be terminated with regard for the best interests of the children and at the point where withdrawal can be satisfying to the student himself.

6. When the number of different laboratory contacts is varied to meet the needs of individual students. What and how many contacts are needed by the student are contingent upon opportunities in a given situation to meet the needs of the student for experience with the scope of the teacher's work in the school and the community, with pupils of different socio-economic backgrounds, abilities, and maturity levels, and with different curriculum patterns and administrative organizations in schools.

D. Guidance of Professional Laboratory Experiences. The quality of the professional laboratory experience is as important as the range of experience, if not more so; quality of experience is conditioned in large part by the guidance given as the student engages in a particular activity. The quality and nature of the guidance given become especially important when fixed patterns and prescribed regulations are replaced by concern for individual differences among students. Guidance of professional laboratory experiences should be at all times in terms of basic educational principles. Guidance should demonstrate the principles recommended for use in working with children and youth. This aspect of the standard is implemented most fully:

1. When the student has a vital and growing part in the managing of his professional laboratory experiences. As the student shares in developing plans for his own program, he has first hand experience with the guidance process and can see its effect upon himself. Thus, he can grow in his understanding of what is involved in the process of guiding children and youth.

2. When guidance of professional laboratory experiences is directed toward helping the student

generalize from experiences and develop a set of educational principles. Underlying concepts and basic principles, rather than patterns and fixed ways of responding, give the prospective teacher the power needed to meet changing conditions in the laboratory situation and in later teaching situations.

3. When evaluation of growth in meeting and dealing with laboratory experiences is a continuous and integral part of the learning process rather than a separate activity engaged in periodically and when it is in terms of the student's ability to use basic generalizations in meeting new experiences. Throughout, evaluation is based on study and analysis by the staff, cooperatively with the student, of anecdotal and other types of descriptive records of specific reactions to situations.

E. Guidance of Professional Laboratory Experiences as a Cooperative Responsibility. If professional laboratory experiences are to be an integral part of the college program, the development of these experiences should be the joint responsibility of the person directly responsible in the laboratory situation and the college representatives most closely associated with the student's activities in the laboratory situation. Laboratory and college staff members should work together to help the student see the interrelationships between laboratory experiences and other college activities and mutually to re-enforce learning experiences. College and laboratory staff members should coordinate their efforts to eliminate conflicts that interfere with learning. This aspect of the standard is implemented most fully:

1. When assignments to laboratory situations are made cooperatively by those persons who are most fully acquainted, on one hand, with the student and his needs and, on the other, with the needs and opportunities in the laboratory situation. Usually these persons are the student's college advisor, the student himself, and the director of the laboratory program who brings knowledge of the work of the various laboratory groups and the over-all program of the laboratory center.

2. When data relative to the needs, abilities, and background of experience of the student are shared with the laboratory teacher prior to the student's work in the laboratory situation. This may be done through conference, a special report, or making student cummulative records easily accessible. Coordination is more easily realized where provision

is made for the cooperative study and discussion of the data.

3. When conferences and other channels of communication between laboratory and college teachers are easily available throughout the several years of college. These, both with and without the participation of the student, may include consideration of such items as selection of laboratory experiences, evaluation of student progress and growth, determining needed additional laboratory experiences, advisement regarding teaching problems in a given laboratory situation, and understanding the respective philosophies and educational points of view of laboratory and college teachers.

4. When both college and laboratory teachers share in the supervision of laboratory experiences. Each has a definite contribution to make to the growth and development of the student--the college teacher in helping implement ideas developed in college courses, in building upon the student's particular abilities and background of experience, and in turn modifying his own teaching and the college curriculum in terms of the needs shown by students at work in laboratory situations; the laboratory teacher in providing guidance based upon an intimate knowledge of a particular teaching-learning situation, upon a depth of understanding of child development, and upon the competencies of a capable teacher of children.

F. Facilities Needed to Implement the Program of Professional Laboratory Experiences. Facilities should always be viewed with reference to the goals to be achieved. They are essentially service tools and their worth and the use to which they are to be put can be judged only in terms of that which they are to serve. The number of college students to be served, the specific curriculum design, the nature and availability of educational resources in the given community all are factors that condition decisions regarding the scope and nature of needed laboratory facilities. There is need for laboratory facilities sufficiently extensive to provide for each student contact with "normal" situations, varied enough to provide contacts with different pupil groups and different curriculum and administrative organizations, and located for student convenience and staff accessibility. This aspect of the standard is implemented most fully:

1. When one or more college-controlled schools are available for laboratory experiences related to a school and its community. Control refers to a

reasonable influence by the college over policies relating to selection of staff and to procedures in curriculum development. In general, this school (or schools) should be a representative school in the sense of having a non-selected group of children or youth and a definite community setting, a staff of able teachers qualified to guide professional laboratory experiences, and a program that is dynamic and forward-looking. The school should be one in which the staff, the administration, and the community are willing to cooperate in making the school a situation serving the dual function of providing the best possible program for children and of providing desirable experiences for prospective teachers. In some cases this will mean a college-owned campus laboratory school, in others an off-campus school or schools developed cooperatively by the college and the local school system, in still others a combination of campus and off-campus facilities.

2. When a range of other school situations is available. No one school can provide the needed range of experiences with children of varied socio-economic backgrounds, with different major educational philosophies, with varied types of instructional materials, with different patterns of administrative organization. No one school can provide the suggested range of professional laboratory experiences for a large student body. Schools or particular situations within a school should be selected for the differentiating philosophy, curriculum design, administrative organization, and community setting presented. Like the college-controlled situations named in the preceding paragraph, these schools should be staffed by teachers qualified to help students study the particular point of view or organization represented, see what is involved in its implementation, and analyze critically its effects upon children, teachers, and the community.

3. When non-school educational agencies are available for use cooperatively by the college. Learning to understand and help educate children and youth means seeing them in a variety of situations, recognizing the place of the school in the community, and understanding its role in relation to other educational agencies. Direct contact with a range of community agencies and situations helps to develop the understandings necessary for the modern teacher. Initiative for the supervision of the

student's work in these agencies should be taken by the college representatives. The staffs of the agencies can make a direct contribution to the student's thinking but should not be expected to have the same qualifications for the guidance of professional laboratory experiences as the teachers named in items 1 and 2 foregoing.

4. When the extent of facilities is such that (a) each student has contacts with varied types of school and community situations, (b) a student can continue in a situation for a period of time that the experience has learning value for him, and (c) his experiences in the situation are consistent with those inherent in the given setting. This means, for example, that class groups should not be divided to accommodate a given or growing number of college students, nor should the length of laboratory contacts be conditioned by the number of students. Rather, as college enrollments increase, steps should be taken to extend laboratory facilities.

5. When each laboratory teacher qualifies as a child specialist, a competent teacher of children, and one skillful in guiding another in the art of teaching through direct participation in teaching-learning situations. It is not enough that the laboratory teacher who is responsible for guiding the experiences of the college student be a teacher highly qualified to work with children. He should be equally competent in his understanding of the college student and in his ability to guide the student in working with children.

6. When the contribution of college instructors and laboratory school teachers is recognized a differing in type rather than in quality or extent. If the college program and laboratory activities are to be coordinated as closely as they should be, responsibility for developing the curriculum of the college-controlled laboratory schools should be shared by the entire college staff, and planning of the unique function of laboratory experiences in the college program should be done jointly by the college and the laboratory school teachers. The laboratory school teacher who carries major responsibility for guiding the student should be a recognized member of the college faculty. There should be no differences in remuneration, rank, or faculty privileges to cause status barriers to arise.

7. When the instructional load of all staff members (laboratory teachers of college classes) is adjusted to provide for the inclusion of activities with students in laboratory situations. Not only should the load of each staff member be adjusted to make it possible to include professional laboratory activities, but those activities should be considered a regular part of the teaching load. To view the teaching load in terms of number of classes or clock hours of class instruction does not coincide with the basic point of view of this report.

8. The laboratory school library should serve three main purposes:

   a. It should be a demonstration library for the laboratory school and an important part of the educational experiences of the children.

   b. It should help student teachers to learn how to use public school libraries and community libraries effectively both as a teaching tool and as a means of continuing their own education.

   c. It should serve as a laboratory and practice center for the preparation of teacher-librarians in those institutions in which these are prepared.

If the laboratory school facilities of the college are located in a separate building or in separate buildings a library unit should be provided in each building or in each closely-located group of buildings. This need is sometimes met, although less adequately, by providing a reading room and other facilities for the laboratory school children in the main library.

Provisions should be made in the laboratory school library for such facilities as reading tables and chairs of appropriate height for all the students who will use it, and for a small adjacent room in which student-teachers can work on the preparation of teaching units and have ready access to the children's books and materials that are kept in that library.

Librarians, experienced in the field of public school library service, should have general responsibility for the special library units in the laboratory schools and should be able to demonstrate the services of a school library with children of various ages and also supervise the work of prospective school librarians, and classroom teachers in the use of the school library.

The foregoing standard is described in terms of six major aspects, all parts of an integral whole. As the art of teaching is a mosaic made up of many parts, so the various aspects of professional laboratory experiences are an integral part of the total program of teacher education. Each has a part to play and that part must be seen in the light of the total design of the curriculum of the teachers college.