

STUDENT TEACHING IN INDUSTRIAL ARTS:
A STUDY OF SELECTED PROBLEMS WITH
RECOMMENDATIONS FOR THEIR TREATMENT

By

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PREFACE

Student teaching is one of the most important phases of the teacher's pre-service education. It provides the opportunity to apply principles of instruction to actual teaching-learning situations, and to experience first hand the teacher's job.

The study has assumed that the student teacher in Industrial Arts should be provided with broad experiences meeting the responsibilities of the Industrial Arts teacher. These experiences should not be viewed narrowly and confined to the activities of developing skills and imparting information. Instead, the student teacher should be guided into those experiences that will assist in developing an understanding of the Industrial Arts teacher's job in the shop, school, and community, in the development of boys and girls as productive and useful citizens in a democratic society.

The literature contains many studies dealing with student teaching in other areas, and much value can be derived from their perusal. There has been no comprehensive study made to date in the student-teaching area of Industrial Arts education. Surveys of practices and visits to the various institutions preparing Industrial Arts teachers reveal a variety of philosophies, practices, and emphases. This condition indicates a need for study and analysis of such activities and concepts, in order to attempt to arrive at those experiences and procedures which would be of most value to the prospective teacher.

It was felt that this study should deal with an analysis of practices, and the opinions regarding these practices, in a limited number of institutions. Furthermore, it was decided that rather than attempt

to find answers and conclusions regarding the total student-teaching program in Industrial Arts education, a comprehensive study would be made in the following areas: goals or purposes; evaluation of student teaching; experiences to precede and to follow student teaching; student teaching experiences of practice teachers; and, administration of student teaching.

This report includes an extensive list of conclusions regarding present practices in Industrial Arts student-teaching programs. Recommendations are made for the further improvement of existing conditions as indicated by the study.

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CHAPTER I

INTRODUCTION

Statement of the Problem. The problem of this study is threefold: (1) to determine major problems in Industrial Arts student teaching in teacher-education programs; (2) to analyze procedures which attempt to meet these problems; and, (3) to present recommendations regarding the more promising procedures.

More specifically, the problems dealt with in this study include: goals or purposes; administrative procedures; experiences to precede and to follow practice teaching; student-teaching experiences; and evaluative procedures.

The fundamental character of this work revolves around the selecting of a number of institutions which present evidence of having well-developed programs in operation and in synthesizing the reactions of the persons responsible for the administration of these superior programs.

Evidence of Need. The selected problems in Industrial Arts teacher education in this study have assumed significance for these and other reasons:

1. Student teaching has been almost universally accepted by teacher-education institutions as a necessary part of the prospective teacher's education. At least a hundred thirty-five degree-granting institutions in the United States preparing Industrial Arts teachers have some form of student teaching as a required part of the teacher-education program.

2. A preliminary survey of practices and procedures in Industrial Arts teacher-education institutions showed significant differences among the schools. Wide variations were found in the supervision of the program, in administrative practices, in length and duration of the student-teaching experience, in time location within the curriculum, and in experiences preceding student teaching.

3. There has been no evidence of other studies of an extensive nature dealing with Industrial Arts student teaching. Numerous studies have been made on a general basis, predominately at the elementary school level, several at the secondary level, and others dealing with subject areas. (An extensive study of student teaching practices and principles is being carried on at present by the Vocational Education in Agriculture Committee in Teacher Education and Research in the North Atlantic Region.) Magazine articles regarding student-teaching activities are numerous and pertain not only to the various levels but also to the subject-matter areas, home economics, business education and agricultural education included. However, the field of literature is barren of articles or studies dealing with student teaching in the Industrial Arts area.

4. Fryklund in his study of Industrial Arts teacher education (11, p. 68, 70, 71, 81)¹ makes numerous reference^s to the need for further study on several aspects of Industrial Arts student teaching that are dealt with in this study.

¹ This type of reference is used throughout the study. The first number in the parentheses indicates the reference to be found in the bibliography of the same sequential number. The second number in the parentheses refers to page number.

5. Although numerous studies have been made on student teaching in other areas, it is felt that Industrial Arts student teaching has many features that are unique with Industrial Arts, and need separate study. Such features include particular aspects of shop organization, content planning, material and equipment requisitioning, the nature of the work done in Industrial Arts, demonstration and teaching techniques, and evaluation.

6. The presence of the numerous beginning-teacher difficulties, and the nature of difficulties experienced by beginning Industrial Arts teachers warrants a thorough study of present practices. Such a study should be made in an attempt to improve upon and to make recommendations for a more complete pre-service education of the Industrial Arts teacher in view of his future responsibilities as a teacher.

7. The public school programs in Industrial Arts depend upon the caliber of teachers graduated from the various Industrial Arts teacher-education institutions. It is important therefore that careful study and analysis be conducted in an attempt to further improve the teacher-education programs. It is also important that the optimum benefit be derived by both the individual teacher and society as a whole.

8. Education today exists in a society characterized by the word "change". The dynamic nature of the present-day society presents new and varied problems as well as presenting new findings and techniques for solving man's needs. It is important therefore that the major elements within the teacher-education program also keep pace with this movement. It is in light of such a concept, that there should be a closer scrutiny of student teaching with regard to its proper place and function in the teacher-education program.

Assumptions. For purposes of explanation and clarification several basic assumptions underlying this study are presented.

1. The student-teaching phase of Industrial Arts teacher education is a necessary and valuable part of the teacher's pre-service education.
2. The value of the student-teaching experience is dependent upon the nature and scope of the experience.
3. The demands and responsibilities placed upon teaching personnel in the modern society requires that prospective teachers have practical and guided experiences in dealing with the problems of boys and girls in real school and life situations.
4. It is felt that the nature and character of the work done in Industrial Arts gives rise to many problems which are unique to Industrial Arts student teaching, and therefore warrant separate and thorough treatment.
5. It is possible to derive principles which pertain to the five aspects of this study and which may be of use to critic teachers, supervisors, teacher educators, principals, and students.
6. Goals and purposes for student teaching in Industrial Arts education are definable.
7. The techniques and procedures used in selecting the fourteen programs included in this study were valid and adequate for purposes of this study.
8. The questionnaire used was inclusive of the major points under consideration and was understood by those who responded to it.
9. The responses obtained through the use of the combined questionnaire and interview were comparable with those obtained through the use of the questionnaire alone.

10. The responses obtained were correct statements of fact and the persons responding were capable of providing the information.

11. The techniques used in the analysis and summarization of the information forms were statistically valid and adequate for purposes of this study.

12. A comprehensive study of a limited number of selected programs has greater merit than the use of a large number of unselected programs.

Terminology. The fundamental words and terms used in this study are defined, for purposes of this study, as follows:

1. Critic teacher: The person who is immediately responsible for the shop or class in which the student does his student teaching, and who is responsible for the direction and guidance of the student teacher in the shop or classroom.

Critic teacher, master teacher, supervising teacher, and directing teacher are used interchangeably and refer to the same person.

2. Demonstration school: a teaching-learning situation on- or off-campus under the control of the teacher-education institution and whose function it is to provide a setting for pupil study and student teaching.

Demonstration school and laboratory school are used in the same regard throughout the study.

3. Director of student teaching: a person in charge of the administration of the student-teaching program at a teacher-education institution.

4. Laboratory experiences: Those experiences with pupils in the classroom, clinic, conference room, or other similar situation that contribute to a better understanding of the teaching-learning process.

This definition is in harmony with that given in School and Community Laboratory Experiences in Teacher Education by the American Association of Teachers Colleges. (1, p. 7)

5. Observation: That phase of the pre-service teacher-education program wherein the student is permitted to observe and take a limited part in the activities of a class or shop. This phase of the student's work is characterized by a minimum of class or shop responsibility. Activities usually carried on by the student may include observing class routine, organization and pupil behavior; making case studies; checking papers, and assisting in testing activities.

6. Student teaching: That phase of the student's pre-service education wherein he is permitted to assume responsibility, under guidance of a supervising teacher, for the conduct and management of classes as well as perform other duties of the regular teacher in the shop, school, and community.

This statement regarding student teaching is in harmony with that given in Good's Dictionary of Education. (14,p. 392)

Student teaching, practice teaching, and directed teaching are used interchangeably in the discourse of this study and are meant to be essentially the same experience.

7. Student-teaching position: The physical location (shop or class) and the environment in which the student does his practice teaching.

Student-teaching position, practice-teaching situation, and student-teaching location are used interchangeably in the study.

8. Student-teaching supervisor: A person on the staff of the teacher-education institution whose function it is to coordinate the student teaching activities between the teacher-education institution and the practice-teaching situation; and to assist in the direction of the

student-teaching program. One or more supervisors may be used in a single program.

Procedure. The procedure used in the development of this study may be outlined as follows:

1. The problem was defined by identifying several broad areas of the Industrial Arts student-teaching program.
2. An extensive bibliography of literature was compiled dealing with the topic of student teaching. This bibliography was used in conducting a study of policies and practices in student teaching in all areas and in determining whether one or more similar studies had been made in the Industrial Arts area.
3. A number of conferences were held with leaders in education for the purposes of clarifying the problem and obtaining suggestions.
4. A preliminary survey of all the Industrial Arts teacher-education programs in the United States was conducted for the purpose of selecting the better programs in Industrial Arts student teaching.
5. A selection of the better Industrial Arts student-teaching programs was made, based upon criteria applied to the findings in the preliminary survey.
6. Comprehensive information forms were developed and a series of conferences were held with various educators to assist in the improvement of the survey instrument.
7. The final survey was made by mail and personal visit using the comprehensive information forms.
8. A compilation of the returns from the questionnaire was made and a summary of the data drawn up.
9. A summary of the data was submitted to a jury of persons whose major interest is in the area of student teaching or teacher education.

10. The conclusions and recommendations were made from an analysis of the data from the thirteen institutions and the reports of the three jurors.

Defining the Problem. A tentative problem was set up whereby the student teaching aspect of Industrial Arts education would be studied. This broad topic was divided into a number of problem areas dealing with pertinent phases of Industrial Arts student teaching. These areas included:

1. Evaluation procedures in Industrial Arts student teaching.
2. Goals or purposes of Industrial Arts student teaching.
3. Problems of Industrial Arts student teachers and overcoming these problems.
4. Administrative procedures in an Industrial Arts student-teaching program.
5. Selection of student-teaching locations.
6. Experiences to precede and to follow student teaching.
7. Student-teaching experiences.

These seven phases of the Industrial Arts student-teaching problems were eventually reduced to five areas through eliminating some and combining other units.

Bibliography and Study. An extensive bibliography listing the articles published on student teaching was made. This bibliography included articles on student teaching at all maturity levels as well as in the various subject-matter areas. Every one of the articles that could be found in the University of Maryland Library, the Library of Congress, the U.S. Office of Education Library, and the National Educational Association library was read in an attempt to develop an understanding of the literature pertaining to the problem.

Several Industrial Arts teacher-education institutions were contacted and were requested to send information pertaining to their programs. These materials were read and analyzed for their content and suggestions.

Conferences with Educational Leaders. In order to further clarify the problem and to gain a broader understanding of student teaching, a series of conferences were held with the following persons: Mr. Arthur M. Ahalt, Dr. Henry Brechbill, Dr. R. Lee Hornbake, Dr. Clarence A. Newell, and Dr. Alvin Schindler from the University of Maryland; Dr. Earl Armstrong, U.S. Office of Education; Miss Anna Holberg, Wilson Teachers College, Washington, D.C.; and Dr. Timothy M. Stinnett, National Educational Association, Washington, D.C.

These persons were first contacted by letter requesting an interview, and a duplicated form was enclosed describing the topics that were to be considered. (See Appendix "A" for a sample letter and topic outline.)

The conferences with these educators had several significant results.

1. They brought new problems into focus. They raised many pertinent questions that one would have to answer.
2. They introduced divergent ideas and philosophies into the study.
3. They provided suggestions for further study and materials that may be utilized.
4. They suggested names of persons who and institutions which may be helpful.
5. They assisted the writer in obtaining a better understanding of the scope and nature of the student-teaching problem.

Preliminary Survey. It was decided that the study should be centered about the practices of a select group of institutions and from the reactions of persons associated with these institutions rather than be a survey of practices in a large number of institutions without consideration for the caliber of the respective programs. This preliminary survey is the subject of Chapter III.

Comprehensive Study. The final phase of this investigation deals with a comprehensive and detailed study of five major problem areas within the student-teaching program of each of the schools selected as having the better programs.

The five major problem areas include: (1) goals or purposes of student teaching; (2) evaluation of student teaching; (3) experiences to precede and to follow student teaching; (4) student-teaching experiences of practice teachers; and, (5) administration of student teaching.

Extensive reading was done in each of the areas in an attempt to obtain a broad basis for analyzing the selected programs. Literature dealing with the operation and practices of specific programs was reviewed. Conferences and discussions were held. As a result of such procedures, the information forms were drawn up by the writer in their preliminary state.

To further check upon the information forms and the type of questions asked, a series of conferences were held with the following faculty members at the University of Maryland: Dr. Henry Brechbill, Dr. Clarence A. Newell, Dr. Alvin Schindler, and Mr. Frank A. Sievers, as well as repeated conferences with Dr. R. Lee Hornbake.

During these conferences, the information forms were subjected to suggestion and criticism. Each conferee was asked to review the forms in view of the type of answer one would expect, the validity of

the information, as well as the completeness of each area within the total problem.

As a result of these conferences and the suggestions made, the final forms were drawn up. (See Appendix "E") The final forms consist of 507 items to which responses were sought.

The forms were designed to obtain an overview of current student teaching practices in the selected institutions. The respondent was also asked to indicate his personal opinion as to the value of each of the items listed without reference to his particular program. Both the degree to which the item was being practiced, and the estimated value were to be recorded by means of a numerical value from one to five with five being the highest.

Each topic area of the information forms was duplicated on a different color paper to assist in the final compilation and analysis upon being returned by the respondents.

Because of the distances involved, certain of the institutions had to be contacted solely by mail. Visits were made to those institutions which were within reasonable traveling distance.

Those that were handled by mail included: Tuskegee Institute, Tuskegee Institute, Alabama; San Jose State College, San Jose, California; University of Georgia, Athens, Georgia; Eastern State College, Charleston, Illinois; Southern State College, Carbondale, Illinois; East Kentucky State Teachers College, Richmond, Kentucky; and Louisiana State University, Baton Rouge, Louisiana.

Prior to sending out the information forms, each of the above institutions was contacted and the person in charge was asked if he would care to participate in the study. The nature and the extend^d of the information forms were described in this contact letter. (See Appendix "F" for the

letter used to make this participation request.) It was requested that the forms be completed by either the head of the department or the Industrial Arts staff person in charge of the supervision of student teaching.

Every one of the seven schools contacted in this manner agreed to participate in the study, and the forms were mailed to them with a request that they be returned within twenty-one days thereafter.

The remaining seven schools were contacted by a letter asking if they would participate in the study. It was also requested that the investigator be permitted to visit the school personally for the purpose of securing the information on the prepared forms as well as for getting a close-up view of the program. (See Appendix "H" for sample letter.)

The State Teachers Colleges at California and Millersville, Pennsylvania and the State Teachers College at Newark, New Jersey were visited on separate trips. The Buffalo, New York; Oswego, New York; Fitchburg, Massachusetts; and New Britain, Connecticut schools were visited. At no point during these stops at the various institutions were the forms completed by the persons visited. In each instance the persons visited agreed to complete and return the forms at a later date.

However, the visits were fruitful to the extent that at each school, the discussion centered about the Industrial Arts student-teaching practices of that institution. In this way a clearer picture and keener insight into the operation of each program was possible.

Summary of the Data. Thirteen schools completed and returned the study forms. Primary importance was given to the "value" ratings given the items. Items that were indicated by a four "high" or five "very high" value by nine of the respondents were accepted as having sufficient significance for inclusion in the final summary. The degree of practice for each of the items accepted in the above procedure was also indicated. An

analysis of the findings was then made for consistencies, omissions, and point of view in the replies.

Jury Reaction. A jury of three prominent persons in teacher education reviewed the findings in the study. The purpose of the jury was to obtain the reactions of prominent authorities on teacher education to the responses received in the questionnaire. The jury reports are included verbatim as a unit within the study.

Conclusions and Recommendations. The final phase of the study consisted of drawing conclusions and recommendations from the information gathered by the questionnaire study and the reports of the jury.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter deals with a review of the literature on student teaching. In a review of literature pertaining to student teaching in Industrial Arts several reservations are made. First, there are no extensive or outstanding studies to date in the student-teaching area of Industrial Arts education. Fryklund's study Industrial Arts Teacher Education in the United States (11, p. 112) has two chapters dealing with a number of aspects of Industrial Arts student teaching. Secondly, it is believed that many of the studies made in student teaching in other branches of education have a relationship to the problems dealt with in Industrial Arts student teaching. Lastly, it is felt that the review of studies and literature in phases of student teaching other than Industrial Arts will have real value in adding breadth of understanding and suggestion for a study in Industrial Arts student teaching. Thus, the materials presented in this unit are chiefly studies or articles on phases of teacher education other than Industrial Arts.

The studies are grouped in accordance with their classification under the following headings: evaluation, supervision, administration, trends, and general studies inclusive of many factors directly and indirectly related to Industrial Arts student teaching. Each of the studies is described as a unit in order that a more complete understanding of the purpose, procedures, and findings may be seen coherently.

Following the various studies, there are several reviews of periodical articles, books, or parts of books. These items are included in the

review of the literature to add concepts and points of view, thus broadening the bases for study and investigation into the subject.

Following these two units, a summary of the literature is presented from the findings, conclusions, and points of view found in the materials reviewed.

Evaluation. Studies in evaluation of student teaching included in the review of the literature are those reported by Woellner (30, p. 267-271), and Burns. (7, p. 274-279)

A report of evaluating practices and procedures used in student teaching programs was made by Woellner (30, p. 267-271) in the April, 1941, issue of School Review. The purpose of this study was to attempt to obtain a more useful rating schedule for reporting observations of essential characteristics of apprentice teachers.

The procedure in this work involved sending letters to 119 colleges, universities, and normal schools asking for a copy of their rating devices used in evaluating apprentice teachers.

One hundred and two institutions sent charts. This group included 54 universities, 42 teachers colleges, and 6 normal schools.

From the 102 rating charts it was found that 252 traits were rated. The mean number of items on the 102 charts was 32.

The ten traits most frequently found on the various rating charts included: scholarship, appearance, use of English, cooperation, voice, lesson preparation, provision for individual differences, professional attitude, discipline, and questioning skill.

In the use of these traits, a large proportion of the schools used a five-point rating scale without graduations between points.

Seventy-two institutions either gave no directions or gave only technical directions for using the scales.

Conclusions derived from this study include:

1. Universities, teachers colleges, and normal schools use a rating chart scored on a five-point scale.
2. There is no specific definition of points and only technical directions for using the scales.
3. There is some evidence of dissatisfaction with these scales.
4. There is no evidence of attempts to differentiate the traits and techniques at the different grade levels, or subject fields.
5. There is little agreement in terminology.
6. There is a real need for further understanding of this professional problem.

Burns (7, p. 274-279) made a study of fifty instruments used in the rating and evaluating of student teachers. The purpose of this study was to make an analysis of evaluation practices in terms of the philosophy upon which they were founded, and to indicate those trends in evaluation which hold most promise of genuine worth in assisting critic teachers do a better job with the student teacher.

Procedures used to evaluate student teachers were classified into three categories: "A rating scale with items listed which the critic teacher checks according to a point system; a rating scale which allows a little space for comments in addition to the points checked; and a more informal evaluation sheet setting up certain large headings which the supervisor uses as a guide in writing a brief analysis of the student teacher."

Nearly all of the fifty evaluation forms fell into the first two categories. The large classifications to be rated within the instruments were generally found to be personal attitudes, professional attitudes,

teaching techniques, and classroom management. Each of these major aspects were sub-divided into a number of component traits or characteristics. The method of checking was usually on a five-point rating scale such as A, B, C, D, and E, or by such terms as superior, strong, average, and failure.

There was also the practice of varying the total point score for the different characteristics evaluated.

The second method was very similar to that just described except that a small blank space was provided for the insertion of a brief comment.

These two approaches were criticized because of their atomistic approach to a process that is essentially organismic in nature. Criticism was also made of the practice of having pupils evaluate the student teacher.

The third approach was based upon an evaluation consisting of several broad headings under which the supervising teacher writes a description of the student teacher. Such broad headings included: "Elements of Strength", "Elements of Weakness", "Estimates of Personal, Professional and Administrative Qualities", and "Recommendations and Remarks". Some evaluation devices employed similar headings as indicated above, but also included questions to guide the supervising teacher's evaluation.

There is a trend towards an organismic concept with a tendency towards studying the individual with respect to both the reaction and the situation in which the reaction occurred. There is also a significant movement towards a greater use of anecdotes in recording behavior.

Principles and conclusions derived from this critical analysis include:

1. There needs to be a greater agreement as to what constitutes a teacher in the present-day society.

2. There should be a closer refining of terminology.
3. The evaluation should be made with regard to the individual frame of reference.
4. "Evaluation should be based upon the needs of the individual."
5. The evaluation should include only those items or classifications of behavior useful as a guide to teachers, and as a useful basis for evaluation.

The use of anecdotal records as a whole new field in the evaluation of student teachers should be investigated.

Supervision. Studies in supervision of student teaching included herein are those reported by Strebel (27, p. 155), Fielstra (9, p. 536-540) and Jacque (20, p. 367-372).

Strebel (27, p. 155) made a study of supervision of student teaching in universities using cooperating public high schools. The problem of this study was to investigate the nature of the supervision of student teaching done in these universities.

The study involved the use of three different questionnaires; one for the supervising personnel; one for the student teachers; and a third for directors of student teaching. Forty-two institutions were included in the study.

Conclusions reached by Strebel as a result of the study were:

1. There was a wide fluctuation in the organization and conduct of the supervision of student teaching.
2. The administrative control was generally in the hands of a director of student teaching.
3. The two types of supervisory officers included the university supervisors and the supervising teachers.

4. Degrees held by college supervisors were as follows: bachelors degree 23.7 percent; masters degree 44.7 percent; and doctors degree 31.6 percent.

5. Degrees held by supervising teachers were as follows: bachelors degree 48.8 percent; masters degree 44.2 percent; and doctors degree 2.9 percent.

6. A large percentage of both groups of supervisors had no supervisory training.

7. Supervision is not as yet on the same footing as college class work or administration.

8. The universities studied had little or no control over the educational programs in the student-teaching situation.

9. There was little effort to integrate the activities of the college supervisor and those of the supervising teacher.

10. A large percentage of the universities did not subsidize their cooperating high school teachers.

11. Eighty-three and eight-tenths percent of the university supervisors and eighty-three percent of the supervising teachers used the personal observation form of evaluation with a conference afterwards.

12. The greater percentage of the university supervisors used group conferences while the supervising teachers used individual conferences predominantly.

Strebel recommended that the professional status of supervision of student teaching in the Universities should be raised, and that the study revealed many of the institutions carrying on supervisory programs that were not on equal academic levels with teaching and administration.

Fielstra (9, p. 536-540) reported a survey of supervisory practices which student-teachers considered most helpful at Stanford University. The survey was for the purpose of obtaining a better insight into the program at Stanford. Hundreds of replies were received from student teachers in more than dozen public high schools.

The listing of the "supervisory practices considered most helpful" included:

1. Accepting the student-teacher as a co-worker, presenting him as a fellow teacher to the class, and maintaining this relationship in conference as well as in class.
2. Giving the student-teacher frank, direct criticism, presenting it in a tactful, helpful manner, and including constructive suggestions.
3. Demonstrating methods, devices, and techniques of special value to the student teachers, when the supervising teacher takes over the class.
4. Allowing the student teacher much freedom in planning, selecting, and using materials and methods.
5. Leaving the classroom for part of the period when the student teacher is in charge, at increasingly frequent intervals, and for increasing periods of time.
6. Giving the student teacher many helpful suggestions in finding additional methods.
7. Providing for frequent conferences with the student teacher.
8. Remembering that the student teacher has other obligations besides student-teaching and avoiding loading on unnecessary or valueless work.

Fielstra was of the opinion that the conditions existing with the Stanford University student teachers were not greatly different than those experienced by student teachers elsewhere. Therefore, supervisors of

student teaching at other institutions could also profit by such information as revealed herein.

"Supervision of Practice Teaching on the High School Level by Arts Colleges" was the subject of a study reported by Jacques (20, p. 367-372) in the Educational Administration and Supervision periodical. The purpose of this study of student teaching was to determine the present status, and evaluating existing conditions in the light of supervisory standards. (Sic).

The materials presented in the study were gathered by means of questionnaires, interviews, and a perusal of relevant literature.

A college supervisor of student teaching is usually in charge of the program.

The number of supervisors that a student teacher works under ranges from one to six with a majority of the student teachers working under no more than three.

There is an overlapping of supervisory authority between the college supervisor and the critic teacher. This is due to the college supervisor being handicapped by the lack of time. The critic teacher tends to wield a greater influence because there is a tendency to delegate almost complete authority to him.

The selection of student teachers is based on academic average, and occasionally on personality. There is no common method of selection used by all, and few have any systematized procedure. Duties of the student teacher include: teaching one class five hours per week; making lesson plans; helping with extra-curricular activities, and serving on hall duty. The student teacher also takes an average of twelve credits of course work at the college along with his practice teaching.

It was found that students having difficulty usually suffer from

a lacking in emotional maturity and poise, good teaching personality, or intelligence. The problems of student teachers arise from discipline, difficulty in presenting subject matter, insufficient background, or personality difficulties.

Assignment of students to the various student-teaching locations is based upon subjects to be taught, previous arrangements with the school, or requests from the student.

Selection of critic teachers is made at a joint conference of the college supervisor, superintendent of schools, or high-school principal.

The typical supervisor aims to perform the following functions: (1) orientate beginning teachers; (2) improve instruction; (3) improve learning processes; and, (4) raise standards of future teaching. Conferences are used by the supervisors as a follow-up of classroom visitation.

Evaluation of the student teacher is usually made through observations of the college supervisor and the reports of the critic teacher. Most schools employ rating scales with the grading of such qualities as personal attitudes, professional attitudes, and teaching skills. Many schools are still experimenting with various rating devices.

Conclusions and recommendations derived from this study include:

1. The college supervisor should be given a reasonably light college schedule to permit adequate time for supervisory duties.
2. The college supervisor must define his own and the critic teacher's duties more definitely to prevent overlapping.
3. Selection of student teachers should be on the basis of intelligence, educational background, and personality for the teaching profession. The practice teacher should have a background of Educational Philosophy, Psychology, and Methods. He should not carry an excessive load during his practice-teaching period.

4. The college supervisor should base his supervision on the following aims: the orientation of beginning teachers; the improvement of instruction and the learning process; and the elevation of standards of future teaching.

5. All supervisors should visit their practice teachers at least two or three times a semester.

6. Supervisors should continue their efforts to find more efficient means of making their ratings objective.

7. The supervisor of practicing-teaching on the high school level is still in a formative stage.

Administration. Studies in administration of student teaching included in this review of the literature are those reported by Brink, (6, p. 394-402), Baldwin (4, p. 674-682), Henderson (19, p. 125), Grim (15, p. 89-98), Marshall (21, p. 91), and Stiles, Lindley J. (25, p. 8-11), (24, p. 706-712).

A report of a study on the administration of student teaching was made by Brink (6, p. 394-402) in the Educational Administration and Supervision periodical of October, 1945. The purpose of this study was to obtain information concerning the administration of student-teaching in large universities which use the facilities of the public schools.

The study involved a survey of practices in forty institutions. Twenty-two were large state universities, and eighteen were privately-endowed universities with enrollments of more than four thousand students. The study was made by means of questionnaire and by personal visit to three of the cooperating institutions.

Twenty-six of the schools used the public school facilities exclusively, while fourteen used both the public schools and the demonstration schools. The number of practice-teaching schools ranged from three

to sixty elementary and secondary schools per institution. Most universities in the study were found to confine student teaching to within the immediate area such as: "within a mile of the campus"; "Ten to fifteen minutes walking time", and "The farthest is five miles". The majority of the universities have no formal contracts with the affiliated schools.

The supervisory organization of student teaching consisted of a general director or coordinator, a number of university supervisors in the specialized areas, and the supervising teachers in the classrooms.

The amount of time spent on the direction of supervised teaching by the director of student teaching in fifty percent of the cases ranged from one-third to two-thirds of his time. Five schools reported less than one-fourth of the director's time is devoted to this work, while six schools indicated that the director devoted from three-fourths to full time to student teaching activities. The duties of the general director included making arrangements with the public schools, selecting and placing student teachers, outlining policies, coordinating the work of special supervisors, and selecting supervising teachers. In most of the schools studied, the responsibility for student-teacher placement rests with the director and university supervisors in conference with appropriate school officials. Not more than one or two student teachers were generally assigned to any one supervising teacher.

Thirty-five institutions indicated that student teaching is most frequently done in the senior year, and five schools listed the graduate or fifth year. The length of the student-teaching period ranged from one quarter in six universities to a full year in eight universities. The most frequent practice was to offer the course for a full semester. The amount of credits varied from one or two semester hours to twelve, with the most frequent practice being five or six semester hours.

Those preparing for the secondary school level were generally found to devote from one to two hours each day at student teaching, while those on the elementary level more frequently devoted a half-day to such activities. At the secondary level, the normal practice was for the student teacher to teach in one area only. There was little agreement among the schools on pre-requisites for student teaching.

In nearly all the schools, the student-teaching experience was regarded as a culminating course in the teacher-education program. In twenty-one universities, student teaching was accompanied by a weekly seminar for the purpose of discussing problems in student teaching.

Conclusions derived from this study include:

1. There is a wide diversity of practices followed in student teaching among the universities, and there is a common feeling of a need for improvement.
2. There is a pressing problem of need for more adequate supervision.
3. There is a need for a re-orientation of viewpoint regarding the value of first-hand experiences in teaching. This conclusion was arrived at in view of the limited time allotted to such activities.
4. There needs to be a critical examination of the total teacher-education program to see if there can be a more economic and effective selection of courses and activities for prospective teachers.

Baldwin (4, p. 674-682) reported a study of credit pre-requisites for student teaching. The purpose of this study was to discover what the leading teacher-education institutions have done in recent years to insure an adequate mastery of academic majors and minors by candidates for admission to student teaching.

The study was conducted by means of an analysis of pre-requisites listed in the catalogs of sixty institutions. The term "student teaching" in the study refers to the period in which actual teaching is done, and does not include the preparatory period.

Findings indicate that the typical teachers college maintains standards for admission to student teaching equivalent to those of the typical university.

Over a five-year period (1937-1942) the following changes were observed: (1) the average requirement for majors in state universities increased from twenty-four and one-half to twenty-seven hours; (2) the average requirement for majors in the teachers colleges increased from twenty-eight to twenty-nine hours; (3) in independent institutions, the average requirement for majors changed from twenty-four and one-half to twenty-three hours; (4) in the sixty institutions combined, the average major requirement increased from twenty-four and one-half to twenty-six hours.

In special subjects, all institutions combined increased from twenty-six to twenty-eight hours in the major requirement.

"The Organization and Administration of Student Teaching in State Teachers Colleges" was the subject of a doctoral study by Henderson.

(19, p. 125)

The purpose of this study was threefold: (1) to discover present practices in state teachers colleges with reference to the organization and administration of student teaching; (2) to evaluate these procedures in light of present theory and practice; and (3) to offer suggestions that may be of value to administrative officials in teacher-training institutions in the organization and administration of student teaching.

The study was made with the use of three questionnaires: one for the directors of the training schools; another for training supervisors; and a third one for the student teacher.

Conclusions drawn by Henderson regarding student teaching include:

1. There should be a scholarship and professional standard made pre-requisite to a course in student teaching.
2. A student should not do his student teaching before his senior year.
3. The selection of student teachers who have met all pre-requisites for student teaching should be made by a committee composed of the director of the training school and heads of the subject-matter department concerned in the high school. The supervising teachers and principal should be consulted before any student is assigned to a specific teaching position.
4. The needs of the pupils and the special abilities, interests, needs, and choice of the student teacher should be considered in making all assignments.
5. The training supervisor or principal should have the right to request a change of teaching position for any student teacher who is so placed that his work might be detrimental to the best interests of the children.
6. The student teacher should be permitted to begin his teaching with a small group.
7. Student teachers should not do more than sixty percent of the teaching of any group of children as a general rule.
8. The amount of student teaching required should be dependent upon the ability of the student.
9. It should be the duty of the supervisory staff to determine all policies of methods of supervision of student teaching.

10. Student teachers should be required to work out well-organized plans for teaching their specific groups of children.

11. The student teacher's final grade should be a composite opinion of the training supervisor and all others who come into direct contact with the student teacher's work.

Grim (15, p. 85-89) reported a study of various phases of student teaching. The purpose of this study was to answer certain questions and to solve certain issues relating to student teaching at the University of Minnesota.

The study was made by means of a questionnaire with forty-nine institutions cooperating in the study.

Student teaching was carried on in campus schools, off-campus laboratory schools, and in public schools. The combination of off-campus laboratory school with other public schools was found to be used most frequently.

The use made of campus laboratory schools and co-operative laboratory schools was divided among such activities as experiment and research, demonstration, observations, student teaching, and other uses. The greatest percentage of usage was found in the student-teaching activities.

Twenty-six of the thirty-four institutions using city public schools reported that supervision was provided by a combination of the services of public school teachers, and those of the training institution.

The supervising teacher was responsible for eighty-two percent of the supervision in the public schools that were used. Fifty-three percent of the institutions reported they had meetings with their public-school supervisors of student teaching.

In only nine of the twenty-nine institutions using off-campus laboratory schools did the principal hold academic rank. These ranks were

instructor, lecturer, consultant, assistant professor, and associate professor.

Approximately half of the institutions using city public schools had a remuneration policy for the supervising teacher. The range of pay for off-campus teachers varied widely as indicated in the following ranges: \$25 to \$65 a month, \$10 to \$75 a quarter, \$25 to \$60 a semester, \$100 to \$1,400 a year, and \$5 per credit hour.

Approximately forty percent of the principals of co-operating off-campus laboratory schools received part of their pay from the teacher-education institution. The range of pay reached as high as ninety-five percent of the salary, with a median of less than ten percent.

In conclusion, the trends indicated by this study were towards a closer cooperation with city schools, more in-service training of supervisors, more adequate supervision, and higher remuneration for public school supervisors.

Marshall (21, p. 91) made a doctoral study of the value of different types of student teaching. The purpose of this study was to evaluate certain types of student teaching in use in some of the teacher-education institutions.

The study was conducted as a controlled experiment of three equivalent groups and three experimental factors. The subjects included three groups of students from The Maryland State Normal School at Salisbury, Maryland. The experiment included all students admitted as juniors to the school in September 1926 and 1927, and who upon graduation taught in the schools of Maryland in 1928-29 and 1929-30.

The three types of student teaching evaluated were:

1. Type "A", which was graded and distributed over more than one term's work. Observation and participation were experiences before the

actual student teaching. The total number of hours spent in student teaching was 180.

2. Type "B" had the student teaching experience concentrated into one term of work as near to the close of the normal school course as possible. No classes were taken at this time. The student spent three weeks in one room of a graded city school and three weeks in a nearby rural school. The total number of hours was 180.

3. Type "C" student teaching was done in less time than in types "A" and "B". In this instance the teaching was preceded by demonstration lessons with very careful evaluations made of the lessons. This period took 90 hours. The total number of hours inclusive of the demonstration and practice lessons was 180.

The three groups of thirty-one each were equated through the use of such instruments as:

1. The Thorndike Intelligence Examination for College Freshmen.
2. The Stanford Achievement Advanced Examination, Form A.
3. Cross English Test, Form A.
4. Steele-Herring Professional Knowledge Test.
5. Holloway Professional Achievement Test.

The methods used to evaluate the teaching success of the students from the respective groups included: (1) Standardized tests administered in November and again in May to measure pupil achievement; (2) Ratings by county supervisors on the Jacob's Scale for Rating Teaching Effectiveness; (3) Ratings by the normal school supervisors on the Jacob's Scale for Rating Teacher Effectiveness; (4) Results of questionnaires sent to teachers; and (5) Questionnaires to critics for information regarding attendance, promotion, retention, resignation, and transfer.

The results revealed by this study include:

1. That the long extended period of student teaching is desirable.
2. That a given number of hours of student teaching graded over a period of practice is more effective than a concentrated experience of an equal number of hours.
3. That a given number of hours of student teaching graded and extended over a period of time is more effective than the same number of hours divided between directed observation and actual teaching.

"Supervision of Student Teaching in Universities" (25, p. 8-11) is the title of an article written by L. J. Stiles from information presented in a doctoral study Pre-service Education of High School Teachers in Universities.

The purpose of the article was to present the "more important" findings of the doctoral study that dealt with the supervision of student teaching.

The two persons most responsible for supervising activities are the supervising teacher and the director of student teaching. The selection of supervising teachers was largely dependent upon "the willingness to supervise and training for the task". Considerable effort was made to assign student teachers to the best teachers in the high schools.

While seventy percent of the authorities believed that the supervising teachers should belong to both the public school faculty and the college of education staff, there was only about thirteen percent of the universities that followed this practice.

Sixty-five percent of the cooperating authorities believed that the supervising teacher should be paid by both the public school and the university. It was found that in the majority of cases the supervising

teacher teaches a full load in addition to the supervising duties connected with student teachers.

Conclusions presented in the article included: (1) There was little administrative relationship between the university and the supervising teacher in the typical situation; (2) Few supervising teachers have had special training for their supervisory duties; (3) Universities, as a rule, do not assume responsibility for remuneration of the public schools for their facilities nor their supervising personnel; and (4) Supervising teachers are overloaded with work.

Recommendations by Stiles included: (1) Supervising teachers should be trained for their duties. (2) Supervising teachers should be responsible to, and reimbursed by, both the public school and the university. (3) The number of student teachers for a supervising teacher should be confined to one. (4) Supervising teachers should be given rank on the university faculty and be considered a part-time staff member of both the university and the public school system.

Lindley J. Stiles (24, p. 706-712) discusses the organization of student teaching in an article developed from the findings in a doctoral study titled Pre-service Education of High School Teachers in Universities. The study included eighty-one universities and the opinions of thirty-one authorities.

Sixty-five percent of the universities had student teaching as a separate and distinct course. Twenty-nine percent reported student teaching as a part of a correlated course.

The most common scholastic requirement for admission into student teaching was a grade of "C". The course most often correlated with student teaching was some type of methods. The majority of the student teaching

was done in the public schools of the city in which the university was located.

There were wide variations of time devoted to such activities as observation, preparation, participation, teaching, directing extra-class activities, and conferences with supervising teachers. The number of clock hours spent daily at student teaching ranged from one to five with the greatest number of cases being two hours daily. The number of weeks of student teaching ranged from twelve to thirty-six.

Sixty-one percent of the respondents indicated that observation was done at the same time as student teaching. The minimum number of credits granted for student teaching was two with the maximum being fifteen.

The jurors were of the opinion that student teaching should be strengthened by "earlier participation in teaching; arranging for students to teach in campus, off-campus, and internship situations; improving campus facilities; making the program continuous--observation, participation, and actual teaching; putting student teaching in the fifth year; and keeping the student teacher in the training program until confidence develops".

Trends. Studies dealing with trends in student teaching included in this review are those reported by Hammock (17, p. 162-165), and Stiles (23, p. 141-148).

Hammock (17, p. 162-165) reported a study of trends in secondary-school student teaching. The purpose of the study was to determine the practices and trends in student teaching. A survey was conducted by means of a questionnaire with 216 teacher-education institutions participating in the study.

Findings from this survey study included:

1. A broad conception of teaching as guiding child development

pervades the literature and is noticeable in current practice.

2. There is a trend to individualize the work of the secondary-school student teacher by allowing progress through the developmental process of teacher education to be dependent upon the individual's readiness for advanced phases.

3. There is a widely felt need for secondary school teachers with educational theory and practice well integrated.

4. Rating scales and anecdotal records were the most common types of evaluative devices. Dissatisfaction with rating scales is apparent in the literature.

5. There is a trend towards internships in the education of secondary-school teachers.

6. There is a trend towards a lengthening of the time for student teaching in public schools, with a corresponding shortening of time in campus schools.

7. There is an increased tendency towards placing less emphasis on strictly classroom teaching, with a greater emphasis on extra-curricular activities.

8. In general, teachers colleges are taking the lead in the employment of the newer practices in secondary-school student teaching.

Implications from this study include: (1) There is a discarding of the belief that all educational theory is learned before student teaching, and that student teaching puts into practice these latent learnings. (2) There is a need for actual contact with children from the beginning of the prospective-teacher's training. (3) There is a need for a period of student teaching probably longer than one semester, with the length dependent upon the goals and progress of the individual. (4) There is a need for the development of better evaluative instruments.

Stiles (23, p. 141-148) reported six major trends that were identified over a six-year period in a study conducted by the Commission on Teacher Education. The six trends were listed as:

1. The fusion of student teaching with other experiences directed towards professional preparation of teachers.

2. The provision of vital experiences with children, schools and with communities prior to student teaching.

3. Opportunities provided for prospective teachers to observe and participate in both laboratory schools and public schools.

4. The encouragement of continuous teacher-pupil planning between the college staff supervisor, the directing teacher and the prospective teacher.

5. The development of the full-time student-teaching internship.

6. Emphasis upon evaluation of student teaching. Procedures employed included: (1) the development of an anecdotal observation guide; (2) an analysis of problems faced by the student-teacher; (3) the building of check-lists of activities; (4) the use of student diaries; (5) frequent informal conferences between the student-teacher and supervisors; (6) the development of student notebooks; (7) the analysis of summaries of experiences prepared by student-teachers, and (8) various types of discussions.

General. Studies of a general nature in student teaching included in this review are those reported by Stratemeyer (26, p. 134-144), Blyler (5, p. 75-85), and Gilbreth (13, p. 11-14).

Stratemeyer (26, p. 138-144) summarized the progress of a study of student teaching being conducted by the Committee on Student Teaching of the American Association of Teachers Colleges. The following observations were in evidence:

There is little or no flexibility with reference to the point of beginning student teaching. Practically all schools report the beginning of student teaching at the same time, either the last semester of the junior year, or the first semester of the senior year.

There is a greater recognition of (1) the wider extension of school experiences in the community, (2) the conditioning of the in-school experiences by the forces that act upon the child outside of school, and (3) the teacher's place in community leadership.

Present practices give opportunity for student teachers to study children through reading about them and through observing and working with them in the classroom.

In most of the colleges the staff personnel have little or no responsibility in the assignment of students to the laboratory work. Student records are not made available to the laboratory teacher. Also, evaluation is frequently the major responsibility of the directing teacher with little or no integration between the laboratory school and the college.

A study of student teaching in the American Association of Teachers Colleges was reported by Blyler (5, p. 75-85). The purpose of this study was to determine the practices and trends in the field of practice-teaching among member schools of the American Association of Teachers Colleges.

The procedure used involved drawing up a questionnaire and sending it to the directors of teacher-training at the schools who were members of the American Association of Teachers Colleges. One hundred eighty-three questionnaires were sent out and one hundred thirty-five or 73.2 percent were answered.

One hundred eight of the teacher-training institutions had campus schools. Three of these schools were secondary schools. Fifty-three had

elementary and high schools, while twenty-six had elementary and junior high schools. Fourteen indicated that they had kindergartens. City schools were used by ninety-five teachers colleges. Only eight colleges have rural laboratory demonstration schools on campus, while fifty-three colleges used secondary rural schools for practice-teaching purposes.

The following plans for student teaching were revealed:

1. Forty-eight institutions had students teach one clock-hour per day, per quarter or semester. Credit for this plan ranged from one to eight quarter hours with a median of three quarter hours.

2. In eighteen colleges students teach more than one hour but less than a half day per quarter. The credits granted for this work ranged from four to ten quarter hours with an average of 4.7 quarter hours.

3. In twenty-eight schools student teachers taught a half day. Of the twenty-eight using this plan, three were for periods of six weeks, while twenty-five were for twelve weeks. Credit for this type of student teaching ranged from two to twenty-four quarter hours with a median of seven.

4. In thirty-two schools the student teacher teaches a full day. The time period for this plan of student teaching ranged from four weeks to a full quarter with credit ranging from three to sixteen quarter hours. The median was eight quarter hours.

5. In the fifth plan students live and teach full time in a particular community. The time period ranges from six to twelve weeks. Credit granted for this plan ranged from three to sixteen quarter hours with a median of eight quarter hours.

On the whole, credit granted for practice teaching ranged from two to twenty-four quarter hours with an average of 7.0.

Observation was found to be done in three ways: (1) as a part of professional courses (eighty-four schools); (2) as a part of practice teaching (twenty-five schools); and (3) as a special course (twenty-seven schools).

The ten pre-student-teaching courses mentioned most frequently were: methods, educational psychology, principles of teaching, general psychology, child psychology, educational measurements, integrated courses, classroom management, the child and the curriculum, and curriculum.

Eighty-eight colleges require lesson plans of student teachers during the entire period of their teaching, while twenty-two require them only during the first half of the period.

Requirements for entering practice teaching included the following:

1. Education credits ranged from three to twenty-four quarter hours.
2. Ninety-seven colleges require a "C" average, four a "C plus", eight a "B", and one a "B minus".
3. Sixty-two required recommendations or approval from the head of their major department before permitting a student to do student teaching, while thirty-one required additional recommendations.
4. Few colleges require personality ratings.
5. Sixty-three require a health certificate.
6. Twenty-five schools require a formal application for student teaching.

In fifty-five cases the critic teacher was responsible for the subject-matter taught by the student teacher, while in forty-seven cases the college teacher and critic teacher combined, took the responsibility for the subject matter taught.

Forty-four colleges indicated that college teachers observe students who have completed courses under their direction.

In regard to the question "Do the college teachers attend conferences of critic teachers and student teachers?", twenty-five said, "yes", and twenty-nine said, "occasionally".

Sixty-seven of the institutions said that the student teacher's duties were the same as those of the regular teacher.

Conclusions drawn from this study include:

1. There is a feeling that laboratory schools are not being used as much as they could be.
2. The college and the laboratory school (as a laboratory) should be brought closer together.
3. Observing or teaching a whole or half day is regarded as ideal but is not always administratively feasible.
4. The section on requirements for doing practice teaching indicates that the teachers colleges lag far behind the state universities.

Gilbreth (13, p. 11-14) reported a study of student-teacher reaction to the student-teaching experience in an article appearing in the Business Education World. The purpose of this study was to show the attitude of student teachers in business education towards their student teaching experience.

Letters were sent to every institution that was a member of the National Association of Business Teacher-Training Institutions. This letter requested that the institutional representatives pass on to two thoughtful student teachers a form on which the student teachers were to suggest two changes which they thought would result in a better student-teaching program at their institution. The students were also asked to give reasons for their statements.

Replies were received from seventy-two student teachers who sent a total of one hundred thirty-eight suggestions. These replies came from students in thirty-eight different institutions.

The following is a listing of the fifteen suggestions more frequently made by the seventy-two students in the thirty-eight colleges responding:

1. Provide more teaching experience.
2. Better preparation for teaching before assignment to student teaching.
3. More constructive criticism on the part of the supervisor.
4. Allowance for more student-teacher initiative.
5. Student teachers should be allowed to teach more than one subject.
6. Provide adequate arrangements for conferences with supervisors.
7. Change the rate of induction of student teachers into student teaching.
8. Permit student teachers to work alone at times.
9. Student teachers should be allowed to experiment with their own methods rather than always follow those of the supervisor.
10. Provide for a light college load during the period of student teaching.
11. Business experience should be a pre-requisite for student teaching.
12. Provide more adequate periods of observation.
13. Provide for examination and discussion of textbooks to be used in high school classes before assignment to student teaching.
14. Study of and participation in extra-curricular activities should be provided.

15. Student teachers should be allowed to teach successive periods rather than isolated periods.

Conclusions drawn by Gilbreth on this study indicates that such an expression of opinion by the participants in a program may have real value in the further improvement and progress of the program.

Articles and Books. The following items are reviews of selected periodical articles and books pertaining to student teaching. Certain of these materials are included for their point of view, while others are reviews of practices and procedures in existing programs at teacher-education institutions.

"Student Teacher Supervision" was the subject of an article by Arthur(3, p. 152).

It was the concensus of the Illinois conference on supervision of student teaching in home economics that the experiences of the student teacher should include: studying school and individual records; making and filing analyses of pupils, anecdotal records, and case studies; conducting pupil conferences; guiding out-of-class activities; participating in home, school, and community affairs; visiting pupils in their homes; observing participating in and sometimes teaching academic classes; attending school faculty meetings; collecting and using suitable teaching materials; planning and conducting various teaching procedures; judging results of teaching in terms of pupils and their objectives; understanding the meaning and values of, as well as the home economics teacher's obligations towards, the extra-curricular and other activities of the school; and utilization of time and energy in meeting the demands of a teaching job.

In addition, the conference was of the opinion that student teachers should learn the importance of growing professionally as well as the means

by which this growth can be accomplished.

In an article dealing with problems of integration in student teaching Haas (16, p. 263-269) cites three vital aspects of the cadet teaching program that cannot be sacrificed: (1) there is the development of the child; (2) there is the training and improvement of the student teacher; and (3) there is the specific use that the college of education has for the tools of the laboratory school as an integral part of the pre-cadet professional education.

In view of the need for safeguarding the above items, Haas cites three specific problems of integration that arise and need be dealt with: (1) the problem of integrating theory with practice; (2) the problem of integration of the experimental philosophy with that of the typical situation in the classroom; (demonstration school versus public school situations), and (3) the problem of attaining a full-day's teaching experience over an extended period of time.

Conclusions developed by Haas hinge upon the adding of an additional year to the professional education program of the teacher. The present obstacles of integration could be more easily and better attacked with the addition of the extra year. The campus schools could be used for laboratory purposes (comparable to that which medical schools provide for their students) with the off-campus situations set up for student teaching, using the extra time allotted for a broader and fuller experience.

"Student Teaching in the Cooperative Study" is one of the topics discussed in The College and Teacher Education by Armstrong, Hollis, and Davis (2, p. 180-211).

The materials presented in this text were the result of a project

in joint thinking and group action with respect to the preparation and continuous growth in service of teachers. The materials pertain to the experiences of certain colleges and universities associated for three years in a nation-wide project.

In a review of student-teaching conditions in the cooperative study, conducted by Armstrong, Hollis, and Davis, it was found that there was a marked lessening of the separateness and isolation that existed between student teaching and the preceding college program. This isolation was perpetuated by many complicated relationships in the programs. In this connection, it was concluded that education will never be adequately served by individuals or small groups working alone.

There was an increasing tendency for institutions to provide for a greater range and scope in the opportunities made available to students. This increase in activities goes beyond the classroom activities to include real experiences in community activities. The developing of community studies has become a part of certain programs.

There was a trend in the study for the cooperating institutions to make the practice-teaching experience as self-contained and professionally realistic as possible.

There has been a tendency in the colleges studied to centralize the management of off-campus contacts. Such a practice is evidenced by the appointment of a single person to make all the initial contacts, secure practice-teaching positions, arrange for meetings and conferences, and to handle placement of students.

On the other hand, there was a tendency for greater decentralization in the supervision of student teaching. This is shown by the increased tendency for faculty members to participate in the supervision of student teaching.

Fishback (10, p. 498-504) discusses several points of view regarding a "rationale" for the evaluation of student teaching.

The term "rationale" as used by Fishback is a frame of reference in which one justifies his actions. The defense of a "rationale" in the evaluation of student teaching should be based upon both philosophical and psychological principles.

Fishback presents five characteristic features of such a rationale:

1. The evaluation of a student teacher should be a continuous process starting at that point where application is made for student teaching and continuing thereafter. This concept is based upon the theory that student teaching is both a graduated and a continuous process which is not characterized by a spotty, unsequential pattern.

Such an evaluation requires careful observation and recording of evidences which will be used as bases for conferences and follow-up activities.

2. The evaluation of student teaching should be based upon clearly defined tasks. There should be a formulation of general objectives for student teaching that are in harmony with the basic objectives of education. There must also be a definition of the general objectives in terms of specific behavior. There must be an identification of sources of evidence that can be used in observing the behavior of a student teacher. There should be methods developed whereby evidence that is desired can be secured. And finally, there must be an interpretation of the observations and recordings in view of the goals or objectives set up.

3. The instruments used in evaluating the student teacher must be understood by the student teacher. The instrument should be valid and reliable in content, make-up, and use. The rating scheme, despite its many shortcomings, may have many real values in stimulating growth and

improvement among teachers if used for diagnostic purposes.

4. There must be a respect for the evaluative processes developed within the student teacher. This factor involves the problems connected with human relations, mind sets, emotions, attitudes, and factors of the social atmosphere. The evaluation processes used may provide a real source of zest and stimulation if properly used and applied.

5. There should be developed within the student teacher a feeling of desire for professional self-improvement. This factor involves first, an understanding of the characteristics of a good teacher, and secondly, a transference of such an understanding into a course of action that will lead to professional self-improvement.

The most permanent effects upon the student teacher may be attained if the individual is permitted to arrive at his own definition of a good teacher and what personal traits are possessed by a good teacher.

In closing his article, Fishback draws the following conclusions:

1. Evaluations should be continuous in nature.

2. The justification for evaluating student teaching should be made with regard to the objectives of education and in view of the learning process.

3. Desirable behavior changes should be defined, described, and then situations provided wherein such behavior can be observed.

4. The development and use of evaluative instruments requires the use of discriminating judgment on the part of those who are charged with these activities.

5. There must be a respect for the evaluative process on the part of the student teacher.

Daniel and Helsabeck (8, p. 313-314) describe a September pre-school experience for college students majoring in education.

A program for participation in public school activities prior to the opening of college in September was provided in 1940 by the Radford State Teachers College at Radford, Virginia.

In the Spring semester a meeting of juniors in elementary and secondary education was called for purposes of planning the September pre-college activities. At this meeting an outline was developed which the students, principals and teachers were to use in recording activities, values, and recommendations. The following points were included in the outline:

1. Activities in which students engaged and services which they rendered.
2. Value of the experience to the student.
3. Problems and difficulties encountered.
4. Recommendations.

The main areas of participation at the public schools during this pre-college period in the fall were: (1) assisting in the principal's office; (2) assisting the teacher; and (3) working with teachers.

Daniel and Helsabeck report the following list of activities or values as taken from the student's reports of their experiences: "(1) acquaintance with the school, faculty, and children; (2) making friends in the school and community; (3) appreciation of changes and improvements in school plants and attitudes of teachers, pupils, and parents; (4) obtaining a picture of the school system and how it operates; (5) learning how buildings and grounds are equipped and arranged for work and play; (6) becoming more conscious of the value of well-planned routine; (7) seeing examples of varied types of pupil-teacher relationships; (8) learning something of the likes and dislikes of children; (9) seeing how children react to me and how I feel about them; (10) seeing how problems arise and

become the problems of class study; (11) learning ways of securing social control; (12) learning more about specific methods and procedures; (13) acquaintance with problems which come to the principal's office; (14) discovery of needs for myself."

The authors conclude that evidences gathered from this program indicate that public schools and colleges can cooperate in broadening the experiences of prospective teachers and in rendering a worthwhile service to the public school program.

Payne (22, p. 37-46) stresses nine points of view which she uses in the supervision of student teachers in her classes at Oberlin, Ohio.

1. The out-of-school background of student teachers is the most important variable in their professional equipment.

2. What student teachers want to do in their practice teaching period may indicate latent talents and traits which in turn may become a part of their professional equipment.

3. The personal growth of student teachers is the most important element in the practice situation: --an attempt is made to evaluate this factor instead of the quality of teaching techniques.

4. The ability to meet new situations independently is more important than the mastery of specific techniques for given situations.

5. Student-teachers feel confident or adequate somewhat to the extent that they are oriented, inside their profession as well as out of it.

6. Personal relationships which extend beyond the routine and the obvious may be profitable in the case of student teachers and critic.

7. Knowledge of child behavior gained from evidence collected by the student gives greatest insight into the various learning processes.

8. The critic teacher has little direct influence upon the student teacher's attitudes and general behavior patterns. The influence, if any,

comes indirectly from the laboratory situation which the critic is chiefly responsible for arranging.

9. Student teachers are the final judges of the worth to them of experiences in the practice-teaching period.

Harris (18, p. 615-619) is the author of an article titled "Aims of Observation and Directed Teaching". In this article, Harris lists a number of aims of observation and directed teaching that were set up at Shaw University, Raleigh, North Carolina.

1. Observation and directed teaching is aimed towards the development of skill in procedures, fundamental methods, and techniques used in the teaching and learning processes.

2. Observation and directed teaching is aimed towards the development of a greater degree of mastery of subject-matter content and of educational principles and implications involved.

3. Observation and directed teaching is to develop desirable professional interests, attitudes, and ideals.

4. Observation and directed teaching is to work for the development of desirable personal characteristics and relationships.

The student teachers rate of induction into the various aspects of the job is adjusted to the individual's ability, experience, background and needs. The greatest factors in the rate of adjustment are the student's alertness, zeal, personality, initiative, poise, and ease in social adjustment.

The students at Shaw University do their teaching in the public schools. These students are supervised by the Division of Education Staff, the principal of the school, the critic teacher, and Shaw University instructors.

A general methods course entitled "A Correlated Course in Methods and Supervision of the Division of Education", is given under the direction of the Division of Education. This course meets two hour-and-a-half periods a week for a semester, and deals with the following topics: child growth, child development, planning, methods concepts, appraisal, extra-class duties of the teacher, use of audio-visual aids, classroom routine and management, directed study, discussion of student-teacher problems and general experiences, the reading of professional books, special lectures by outstanding teachers and principals, an analysis of community problems, and similar problems.

Secondary-school student teachers spend from 180 to 500 hours in observation and directed teaching. During the directed teaching period an attempt is made to have the student teacher participate in as many of the activities of the school and community as possible. Such activities include: faculty meetings, extra-curricular and club activities, guidance and homeroom projects, socially desirable community organizations, the religious life of the people, and many other types of activities.

Special methods courses are held in conjunction with student teaching.

The student-teaching program at Syracuse is discussed under the topic "Administration and Evaluation of Extramural Teaching" in the book A Functional Program of Teacher Education. (28, p. 150-159)

Student teaching at Syracuse University is carried on for the most part in the public schools within a 100-mile radius of Syracuse. Half of these schools are twelve-grade rural schools which serve consolidated groups. In 1940, there were 250 student teachers in 141 secondary schools in the area.

Assignment to student teaching at Syracuse is made by a committee consisting of the faculty member in charge of administering the extramural teaching program, the placement officer, and the student's dual professor. The assignment of the student to individual classes in a school is done by the principal. While at the school, the student teacher is entirely responsible to the supervising teacher, and through him to the principal. The student teacher is given ample opportunity for initiative and resourcefulness.

Due to the wide geographical spread of the practice-teaching situations, there is little opportunity for any real degree of supervision by the college faculty.

Neither the cooperating schools or any of their personnel receive any remuneration for student-teaching activities.

A study was made of the student teachers returning to the campus with regard to their reaction to the practice-teaching experience. Sixty-nine indicated that it was the most valuable aspect of their professional program, and twenty-four indicated that it was a very important phase of the teacher-education program.

Students were also asked to comment on their various student-teaching situations from the standpoint of opportunities for desirable teaching experiences. The major reasons given for considering the schools outstanding were: the cooperative attitude of the teachers and principal; its progressive philosophy and practice; its good building and equipment; the freedom in teaching allowed apprentice teachers; its good program of extra-curricular activities; and the fact that the school was the center of the community life.

The length of student teaching was three weeks. More than half of the students indicated that they had full responsibility during

practically all of the three-week period.

The student teachers were also required to submit weekly diaries to their dual professors. These diaries gave further check and evidence on the nature of the experiences had by the apprentice teachers.

Evaluation of the student teachers was made cooperatively by the principal and the supervising teacher. This evaluation was made on a check-list of personal items, items of professional understandings and attitudes, and items relating to teaching skill and success.

Troyer and Pace (29, p. 179-231) discuss the topic "Student Teaching" in their text Evaluation in Teacher Education. This chapter deals with the student teaching aspect of the teacher-education program. Materials presented in this section are mainly descriptions and analyses of techniques carried on at several different schools as well as a description of the Ohio Teaching Record.

The authors point out that before one passes judgment on a student teacher he should know how extensively the particular student-teaching situation has provided opportunities for the student to reveal in actions the skills and insights his education has sought to develop. It is further emphasized that probably no single instrument can be used to fully evaluate any one program.

The Ohio Teaching Record in its present form is the result of the work and revisions done on two previous forms of teacher rating. The first form was called the "Observational Record". This first edition was mainly concerned with the procedures employed, the mechanics of teaching, meeting pupil needs, democratic aspects of teaching-learning situations, and the personality of the teacher.

The second form or the Ohio Teaching Record, experimental edition was made up in 1940. The main headings in the instrument were the same

as the previous instrument except that the items on procedures employed were divided into procedures relative to pupil-teacher planning, and objectives guiding the teaching process. Revisions were also made in the method of recording information.

The third edition of the Ohio Teaching Record added new headings as well as discarding a few of the earlier items. The final listing of major headings include: materials, purposes, methods, effectiveness, pupil problems, community, democracy, and special area.

The changes in recording anecdotes were from brief statements under specific headings to broad descriptions under general headings. The changes in recording judgments were from on-the-spot decisions to the withholding of judgments until the student and the observer could have a conference on the observation.

Emphasis with the Ohio Teaching Record changed from an evaluation procedure of "using on" to one of "using with" the student teacher.

All three forms provided space at the end for observations to be summarized. This summary is intended to be based upon two factors: (1) what the teacher does; and (2) the goals towards which the progress of the individuals in the program are to be evaluated.

The rating scale developed at Furman University was an adaptation of the Ohio Teaching Record. The new instrument adapted from the Ohio Record included the following factors: (1) meeting pupil needs, (2) democratic procedure, (3) pupil response, (4) functional mastery of subject matter, (5) teaching technique, (6) classroom morale, (7) classroom routine, (8) teaching personality, (9) professional attitude, and (10) community relationships. The present device using the above headings has two forms for summaries. One form consists of a graphic rating scale, with the other one using the same headings but leaves space under each

heading for the staff person to write a descriptive appraisal.

At Columbia University each student reports on specially prepared forms their experience with regard to the following factors: (1) the nature of their teaching activity for every day in the week; (2) problems they meet; (3) value of the various activities; and (4) where they felt they needed additional help or preparation. Each of these statements or descriptions were classified into one of three groups:

1. The major topics with which it was concerned.
2. The context in which the problem was regarded by the student.
3. According to causation, educational outlook or attitude, and kind of problems, questions or needs.

It was through such reporting, classifying, and subsequent analyzing that a better integration and coordination of activities as well as evaluation was being attempted.

In a description of student teaching in the vocational agriculture program at the Michigan State College, two techniques are discussed: the use of diaries or logs, and the use of an activity chart which is a checklist of activities classified under the major objectives of the student-teaching program. The program of student teaching in vocational agriculture at the University of Michigan has the following features.

1. Students live almost full time in the community in which they teach.
2. Students participate as widely as possible in the activities of the regular vocational agriculture teacher.
3. Student-teaching experiences are accompanied by and closely related to instruction and methods of teaching vocational agriculture.
4. Supervision and instruction in methods is provided by staff members of the college, and the supervising teacher who is also a member

of the university staff.

5. Student teachers return to the campus each Saturday for a seminar in methods and materials with the University faculty.

Another unique procedure in the vocational agriculture program at the University of Michigan consists of having the student formulate general objectives to pursue in his program as a student teacher. These general objectives are analyzed into specific objectives, and then a breakdown is made into activities which will bring about these objectives.

Students at the College of William and Mary enter the department of education in the junior year. During the junior year, the prospective elementary teachers take two closely integrated courses in principles and methods plus observation in the demonstration school. The senior year includes practice teaching. A unique phase of this program is the development of four notebooks, each dealing with a different aspect of professional study and development.

The main source of evidence about the student teacher is gathered from how he works with boys and girls and his cooperating with teachers and supervisors. This is done mainly through observation. The notebooks provide the second source of evidence for evaluation.

In the final analysis, the accuracy of the interpretation and evaluation depends in part upon the techniques and procedures used in observing, recording, and judging.

In conclusion, Troyer and Pace make the following suggestions:

1. The purposes of evaluating need to be clarified. One of these purposes must be focused upon the student teacher. A second purpose must be directed on the situation in which the student teaching was done, and a third purpose must be directed towards the general and professional education which preceded student teaching.

2. There is a need for getting many people to share in planning and carrying out the program.

3. There is a need for a synthesizing framework in which the whole teacher-education program can be studied.

4. There is a need for improving the evaluative techniques used in student teaching.

School and Community Laboratory Experiences in Teacher Education

is the title of a publication describing a study of student teaching which was conducted by the American Association of Teachers Colleges. (1, p. 340) The purpose of this project was to make a study of student teaching in the professional education of teachers.

A sub-committee of the Standards and Surveys Committee of the American Association of Teachers Colleges was appointed to make the study. The foundation for the study was based upon the precepts underlying nine principles of laboratory experiences as set up by the committee. The following is a listing of the nine principles:

1. The particular contribution of professional laboratory experiences to the education of teachers is three-fold: (1) an opportunity to implement theory-both to study the pragmatic value of the theory and to check with the student his understanding of the theory in application; (2) a field of activity which, through raising questions and problems, helps the student to see his needs for further study; and (3) an opportunity to study with the student his ability to function effectively when guiding actual teaching-learning situations.
2. The nature and extent of professional laboratory experiences should be planned in terms of the abilities and needs of the student and should be an integral part of the total program of guidance.
3. Professional laboratory experiences should provide guided contact with children and youth of differing abilities and maturity levels and of differing socio-economic backgrounds for a period of time sufficient to contribute to functional understanding of human growth and development.

4. The professional program should be so designed as to afford opportunity for responsible participation in all of the important phases of the teacher's activities, both in and out of school.
5. Professional laboratory experiences should be cooperatively developed by the student and his advisors. Adequate supervision and guidance should be provided through cooperative efforts of laboratory and college teachers.
6. Professional laboratory experiences should be integrated with other phases of the student's program. Professional education is the responsibility shared by all members of the faculty, each contributing to the maximum development of the student as individual, as citizen, and as member of the teaching profession.
7. Evaluation of professional laboratory experiences should be in terms of growth in understandings and abilities needed in the situations faced by the teacher working in our democracy.
8. Physical facilities should be adequate to provide a range of first-hand experiences with children, youth, and adults in varied school, home, and community situations.
9. Professional laboratory experiences should be developed to recognize needed continuity in the pre-service and in-service educational programs.

In conjunction with the basic principles listed above, a questionnaire was drawn up and submitted to 182 member institutions of the American Association of Teachers Colleges. Of this group, 157 returns were received. In addition to the questionnaire other sources of data included: printed and mimeographed materials from institutions reporting; notes on regional conferences; and notes on observations and interviews on the occasion of visits to selected institutions.

Recommendations based upon a summary and analysis of the materials presented in this report are:

1. There should be a program of professional education developed that would be based upon the idea to promote the ability to act on thinking and to guide others in developing the ability to act on thinking.
2. There is a need for a teacher-education program whereby professional laboratory experiences are a resource turned to by both student

and instructor to give meaning to ideas and implementation to those ideas.

3. There is a need for professional laboratory experiences in which the students share in selecting, and see a need in their plan of work, and from which emerge new needs and new purposes to give direction to future steps in their college program.

4. There is a need for professional laboratory experiences wherein opportunities are provided for the student to evaluate his ability to function effectively in the duties of the present-day teacher.

5. Direct laboratory experiences should be an integral part of the four-year teacher-education program.

6. The laboratory experiences offered a student teacher should afford the individual opportunity for responsible participation in all the major activities of the regular teacher.

7. The assignment to any length of professional laboratory experience in a given situation will vary in accordance with the individual. Each contact should be long enough for the individual to achieve the purpose for which he entered the experience.

8. The guidance given students in laboratory experiences should be in terms of basic educational principles rather than patterns.

9. There should be developed a cooperative responsibility between the laboratory teacher and the college representative for the guidance of the student's activities in the laboratory situation.

10. The laboratory experiences should be extensive enough to provide for each student the contacts with normal situations, varied enough to provide contact with different pupil groups, curriculum and administrative organizations; and located for the student's convenience and the staff's accessibility.

Industrial Arts. The study dealing with Industrial Arts student teaching is Fryklund's Industrial Arts Teacher Education in the United States. (11, p. 112)

Two chapters of Fryklund's study Industrial Arts Teacher Education in the United States, (16, p. 112) were devoted to the report of student teaching in Industrial Arts education. The purpose of this study was to reveal the current beliefs, conditions, and trends in Industrial Arts teacher education in the United States.

The project was undertaken by the Committee on Research of the National Association of Industrial Teacher Trainers, an affiliate of the American Vocational Association. The study of the various institutions was made by means of an extensive questionnaire. Ninety institutions were represented in the study. Chapters VI and VII of the report of the study deal with the student-teaching phase of Industrial Arts teacher education, and are reviewed herein.

Fifty-five schools reported campus demonstration schools while thirty-six listed student teaching being done in the public schools. There were eleven duplications in these two groups. Directed teaching was carried on for the most part in junior and senior high schools. Sixty-six reported using junior high schools, and sixty-one reported using senior high schools. Again certain duplications appear in the figures. Twenty-five institutions offered directed teaching in the elementary schools.

The classes in which directed teaching was done were relatively small. Thirty institutions reported class sizes of from 15 to 19 pupils; twenty-one institutions reported 20 to 24 pupils, and sixteen reported 25 to 29 pupils. Class sizes in city schools ranged from 25 to 29.

Teacher-education institutions had for the most part from one to five student teachers in a single term. Schools having one to ten student

teachers per semester had two supervisors in charge. This, however, accounted for only part of the supervisor's duties. The largest programs reported from twenty-one to thirty student teachers and used six to nine supervisors on a part-time basis. The typical program had one or two supervisors as indicated by sixty-two schools.

Thirty schools reported non-Industrial Arts majors doing student teaching in Industrial Arts classes, while seventeen respondents said that Industrial Arts majors could be graduated on academic-directed teaching only. Thirty-seven schools permit some academic-directed teaching in Industrial Arts teacher education. The average amount of credit for this work was five.

There was little agreement on the amount of directed teaching required for graduation. The study revealed a credit requirement for certification with a mode of six, and graduation a mode of five.

The major part of the student teaching is done in unit shop situations.

As regards the factor of pre-student-teaching observation, fifty-two indicated that students do observation under supervision. The classes to be taught later are observed by the students in thirty-six institutions. The teaching of other subjects is observed by students in sixteen institutions.

Eighteen schools require daily lesson plans, forty-two require weekly plans, and six require monthly plans. Also, it was found that fifty-eight institutions use instruction sheets in connection with practice teaching.

In the part of the study dealing with the experiences in Industrial Arts student teaching, it was found that the common experiences were well provided for. However, the item of extra-curricular activities were neglected

as a student-teaching experience in about half of the responding schools.

Conclusions based upon this section of the report of the study were mainly in the form of questions directed towards the advisability and nature of many of the items noted. Each of the separate classifications of items used gave rise to further questions thus necessitating more research.

Approximately one-fourth of the respondents said that their particular situations were typical of situations in other institutions. There was a general feeling that student teachers should do their student teaching in situations that are typical as to type of pupil, size of class, equipment, and responsibility for handling classes.

Several institutions reported their strong features as being close supervision, personal conferences, definite planning, and checking of plans with the supervisors. Some institutions indicated that one of their strong points was the typical nature of their student-teaching situations. Certain schools stated that full responsibility was assumed by students in directed teaching. The factor of making home contacts was stressed by a few.

Adverse Criticism. The criticism regarding supervision of student teaching was that there was either not enough, too much, no control, or no time for supervision. There was also the criticism of a lack of time on the part of the student teacher to deal adequately with the situation. The lack of facilities was also expressed by several.

Some institutions pointed out the lack of adequate and broad teaching experiences for student teachers.

In conclusion, Fryklund points out that the weakest link in the Industrial Arts teacher-education program is student teaching. He further states that such a condition can be bolstered by having the student teaching done in situations which approach closely the typical public school teaching situation.

Summary. The following material is presented as a summary of the studies and literature in this unit.

Evaluation. Evaluations of the student teacher in most instances are made by the directing teacher. In some cases, the directing teacher is assisted in the evaluation by the student-teaching supervisor, the principal, other teachers at the student-teaching location, and in a few institutions by members of the college faculty.

Evaluation is done mainly with the use of rating scales. Traits that are evaluated include scholarship, appearance, use of English, cooperation, voice, lesson preparation, provision for individual responses, professional attitude, discipline, and questioning skill. Other broader classifications for evaluation include personal attitudes, professional attitudes, teaching techniques, and classroom management. Rating of each of the classifications is usually done on a five-point scale.

A less frequently used method of evaluation is based upon the writing of descriptive statements about the student under certain specified headings. This procedure is slowly supplanting the use of rating scales in some schools.

The use of anecdotal records is also advocated as a means of assisting in evaluating student teachers. There is a feeling that the evaluation of student teaching should be a continuous process and not one characterized by a spot check at random intervals.

The following is a listing of procedures employed in the evaluation of student teaching: (1) the development of an anecdotal observation guide; (2) an analysis of problems faced by the student teacher; (3) the building of checklists of activities; (4) the use of student diaries; (5) frequent informal conferences between the student teacher and supervisors; (6) the development of student notebooks; (7) the analysis of summaries of

experiences prepared by student teachers; and (8) various types of discussions.

The literature indicates a wide-spread dissatisfaction with the present rating scales and similar devices as a means for the evaluation of student teaching.

Supervision. In a review of the literature, it is evident that the supervisory phase of the student-teaching program is carried on with a wide variety of practices. Two types of supervisors commonly found were the college supervisor of student teaching and the supervising teacher. There is evidence of frequent overlapping of duties between these two supervising elements. In view of the findings and conclusions presented there is a need for better prepared supervisors with a more specific clarification of duties and responsibilities.

There is evidence that the college supervisors in many instances lack sufficient time to devote to supervisory duties, thus relinquishing the major responsibility for supervision to the supervising teacher. There is a further complicating fact that the colleges have little control of the educational program in the student-teaching situations. The integration of theory and practice between the college and the student-teaching location is obviously lacking.

The aims of the typical supervisor of student teaching are: (1) to orient beginning teachers; (2) to improve instruction; (3) to improve the learning conditions; and (4) to raise the standards of future teachers.

The literature reveals that the supervisors of student teaching use the group conference method predominantly, while the supervising teachers use the individual conference technique.

Most college supervisors of student teaching devote part of their time to college teaching in addition to the supervision of student teaching.

Administration. The administrative organization in the student teaching programs consists of a director of student teaching with one or more supervisors of student teaching, and the necessary supervising teachers.

Student teaching was found to be done for the most part in the public schools and in demonstration schools, with the greater part of the work being done in the public school facilities.

The time and duration of the practice-teaching period varies widely. The predominant procedure at the secondary level was where student-teaching was done one hour a day for a full semester. The amount of credit granted for student teaching varied significantly with an average of seven credit hours among the programs studied. The amount of student teaching in a number of instances is governed by the state minimum requirements. Student teaching was found to be done predominantly in the last semester of the junior year or the first semester of the senior year.

Standards for admission into student teaching in teachers colleges were found to be equivalent to the credit requirements in universities. The average major requirement for admission to student teaching was twenty-six credit hours. Most colleges and universities require a "C" average in academic attainment prior to student teaching.

Recommendations regarding the selection of student-teaching locations indicate that the decision should be based upon a consideration of the abilities, interests, needs, and choice of the student. It was further recommended that the amount of student teaching required should be dependent upon the ability of the student.

As to the nature of experiences to be offered the student, there is wide acceptance of the idea that the student-teaching experience should be typical of the duties, and activities of the regular teacher on the job.

Approximately fifty percent of the off-campus supervising teachers in the public schools receive remuneration for their services.

The materials reviewed indicate that there are few instances where a formal contract is drawn up between the teacher-education institution and the system providing the practice-teaching facilities.

Trends. Trends identified through a review of the literature may be indicated under specific headings such as evaluation, administration, and supervision.

There is a trend in the evaluation of student teachers towards a more individualized and organismic approach. Rating scales are being questioned, and the newer approaches to evaluation utilize the description of behavior relative to specific situations. A greater importance is being placed on the anecdotal record form of recording behavior in student teaching.

In the administration of student-teaching programs, there is a trend toward a closer integration of the college and practice-teaching activities. There is a growing emphasis for increasing the time allotted to student teaching, and having the student teacher experience as many as possible of the activities and responsibilities of a regular teacher on the job.

There has been a movement toward centralizing the management of off-campus contacts by the appointment of a single person to make all the initial contacts, secure practice-teaching positions, arrange for meetings and conferences, and to handle placement of students.

There is a trend toward having the student teacher participate to a greater extent in the extra-curricular functions of the school and in community activities, rather than devoting full time to classroom work and routine. Emphasis is also being given to a greater understanding of pupil growth and development.

There is a trend toward a closer analysis of the supervisor's duties in an attempt to further increase the effectiveness of this phase of the student-teaching program. There has also been evidence of a trend in the decentralization of the supervision of student teaching as indicated by the increasing tendency for faculty members to participate in the supervision of student teaching in their specific areas of work.

CHAPTER III

A PRELIMINARY SURVEY OF SELECTED FACTORS IN INDUSTRIAL ARTS STUDENT TEACHING

In order to arrive at the better programs to be studied, a preliminary survey was made of all the institutions listed in The 1948 Industrial Arts Teacher Education Directory. (12,p.22) This preliminary survey was also designed to assist the investigator in obtaining a broader understanding of some of the existing practices in Industrial Arts student teaching.

A post-card questionnaire and letter of transmittal was sent to each of the 158 institutions listed in the directory. (See appendixes "B" and "C" for the questionnaire and letter of transmittal.) These questionnaires were sent to the head of the Industrial Arts department at each of the institutions listed.

The information asked for in this questionnaire included:

1. Is an Industrial Arts staff person(s) directly responsible for the supervision of Industrial Arts student teaching?
Yes _____ No _____
2. What percent of this person's load is devoted to this supervision? _____ Percent
3. The students do their teaching in _____ public schools, _____ demonstration schools, _____ other (explain) _____.
4. Students earn _____ credits for their student teaching. For this credit they teach _____ weeks, _____ all day, _____ half day, _____ other, (explain) _____.
5. What courses or experiences involving pupil contacts precede student teaching? _____
When does student teaching occur? (year(s) and semester(s))
_____.

6. What are the academic requirements for the "master" teacher? _____ degree. How much teaching experience must he have had? _____ years.

One hundred and forty-nine replies (or 94%) were received. These replies were processed in accordance with criteria set up for the selection of the better programs.

The following criteria were used:

1. There is an Industrial Arts staff person directly responsible for supervising Industrial Arts student teaching.
2. At least part of the student teaching is done in public schools.
3. The student teaching is done in all-day situations.
4. The length of student teaching is a minimum of eight weeks or a half semester.
5. There is a program of organized contacts with children prior to student teaching.

One hundred and thirty-five of the one hundred forty-nine institutions answering the questionnaire had student teaching as a part of the Industrial Arts teacher-education program. Fourteen of the total number returned were rejected from the survey for the following reasons:

1. Ten of the institutions had no Industrial Arts program.
2. Two institutions had only Vocational and Trade Education.
3. One school was a two-year preparatory school.
4. One school was a junior college with only a two-year program.

One hundred and one institutions indicated that an Industrial Arts staff person(s) was directly responsible for the supervision of Industrial Arts student teaching. Thirty-four institutions stated that there was no Industrial Arts staff person responsible for the supervision of Industrial Arts student teaching. In other words, 74.8 percent of the one hundred and thirty-five institutions had an Industrial Arts staff person in charge of supervising Industrial Arts student teaching.

The per cent of the Industrial Arts staff person's time devoted to the supervision of Industrial Arts student teaching ranged from three per cent to one hundred per cent. Table 1 presents the per cent of the Industrial Arts staff person's time devoted to Industrial Arts student-teaching supervision.

Table 1

PER CENT OF INDUSTRIAL ARTS STAFF PERSON'S LOAD DEVOTED TO SUPERVISION OF INDUSTRIAL ARTS STUDENT TEACHING IN 92 INSTITUTIONS

Per cent	Institutions
100	4
95	0
90	0
85	0
80	1
75	6
70	0
65	2
60	1
55	0
50	19
45	0
40	3
35	9
30	6
25	17
20	14
15	2
10	3
5	1
Less than 5	1
No reply	2
TOTAL	92

In addition to the cases listed in the table, a number of institutions require more than one person for Industrial Arts student-teaching supervisory duties. The following is a listing of such practices by institutions.

Institution

- a. Two men supervising student teaching in Industrial Arts; each fifty percent of their load.

- b. Three men supervising student teaching in Industrial Arts; one person 100 percent of his load, one person 80 percent of his load, one person 33 percent of his load.
- c. Five men supervising student teaching in Industrial Arts; each 75 percent of their load.
- d. Two men supervising student teaching in Industrial Arts; each $12\frac{1}{2}$ percent of their load.
- e. Two men supervising student teaching in Industrial Arts; one person 80 to 100 percent of his load, one person 30 percent of his load.
- f. Two men supervising student teaching in Industrial Arts; each 50 percent of their load.
- g. Four men supervising student teaching in Industrial Arts; two persons 50 percent of their load, two persons 25 percent of their load.
- h. Two men supervising student teaching in Industrial Arts; one person 100 percent of his load, one person 50 percent of his load.
- i. Two institutions indicated the amount of time allotment in the following phrase: "as much as needed".

In summarizing the statistics on the load devoted to supervising student teaching, it was found that the supervisor of Industrial Arts student teaching has on an average (mathematical) 40 per cent of his load designated for supervision of student-teaching activities.

Industrial Arts student-teaching activities were carried on in most instances in the public schools, with the combination of public and demonstration schools second, and the demonstration school alone, third. Table 2 indicates the number and per cent of programs located in the various types of school situations:

Table 2

LOCATION OF INDUSTRIAL ARTS STUDENT-TEACHING
ACTIVITIES IN 135 INDUSTRIAL ARTS TEACHER-EDUCATION PROGRAMS

Location	Number	Per cent
Public Schools only.....	66	48
Demonstration schools only.....	24	18
Public and demonstration schools.....	30	22
Others.....	15	11
Which included:		
a. Schools for physically and mentally handicapped		
b. Adult classes		
c. Agricultural school		
d. College department		
e. Trade schools		
f. Engineering shop classes		
g. Schools in industry		
TOTAL.....	135	100 per cent

The time allotted to student teaching by the various institutions showed wide variations in length and practice. Practice-teaching periods, in terms of time, ranged from forty clock hours to a full semester, five full days per week. A composite summary of the findings in this portion of the survey is presented in Table 3 .

Table 3

TIME ALLOTMENT FOR STUDENT-TEACHING
IN 135 INDUSTRIAL ARTS TEACHER EDUCATION INSTITUTIONS

Period of Time	Number	Total
1. Full day five days per week		
a. full semester.....	10	
* b. full quarter.....	10	
c. half semester.....	2	
* d. half quarter.....	5	
		27

Table 3 (continued)

Period of Time	Number	Total
2. Half day five days per week		
a. Twenty-four weeks.....	1	
* b. full semester.....	14	
* c. full quarter.....	11	
d. half semester.....	0	
e. half quarter.....	<u>0</u>	26
3. Two hours every day five days per week		
a. thirty-six weeks.....	2	
b. twenty-four weeks.....	1	
c. full semester.....	10	
d. full quarter.....	5	
e. half semester.....	2	
f. half quarter.....	<u>0</u>	20
4. One hour daily five days per week		
a. thirty-six weeks.....	6	
b. twenty-four weeks.....	3	
* c. full semester.....	17	
d. full quarter.....	12	
e. half semester.....	2	
f. half quarter.....	<u>2</u>	43
5. Three hours per week		
a. full semester.....	1	
* b. full quarter.....	0	
c. half semester.....	0	
d. half quarter.....	<u>0</u>	1
6. Designation by clock hours		
a. 180 clock hours.....	2	
b. 100 clock hours.....	1	
c. 90 clock hours.....	2	
d. 80 clock hours.....	1	
e. 60 clock hours.....	1	
f. 40 clock hours.....	<u>1</u>	8
7. Other specific instances		
a. twelve weeks at three-fourths time..	1	
b. twenty-four weeks at eight hours per week.....	1	
c. eighteen weeks, full day, three days per week.....	1	
d. seventeen weeks at two hours every other day.....	1	
e. eighteen weeks at two hours per day, three days per week.....	<u>1</u>	

A total of thirty different procedures for allotting time to student teaching were listed, with the largest single procedure having a frequency of seventeen in which the student spends two hours daily, five days per week for a full semester.

Approximately one-third of the institutions follow the procedure of allotting one hour daily, five days a week. The number of weeks within this group ranged from six to thirty-six.

Credit granted for student teaching in Industrial Arts teacher-education programs ranged from two to sixteen credits. The average number of credits granted by 128 institutions was 6.3 semester credits.

Table 4 presents the variations in credits granted by institutions in the study.

Table 4

CREDITS GRANTED FOR STUDENT TEACHING
IN 135 INDUSTRIAL ARTS TEACHER-EDUCATION PROGRAMS

Credits	Frequency
2.0	4
2.5	6
3.0	16
3.5	0
4.0	20
4.5	1
5.0	21
5.5	0
6.0	19
6.5	0
7.0	1
7.5	0
8.0	13
8.5	0
9.0	6
9.5	0
10.0	6
10.5	0
11.0	0
11.5	0
12.0	3
12.5	0
13.0	1

Table 4 (continued)

Credits	Frequency
13.5	0
14.0	0
14.5	0
15.0	7
15.5	0
16.0	4
No reply.....	<u>7</u>
TOTAL	135

The credit-granting practices for the different institutions center mainly in the credit range of from three to eight credits. A total of ninety-one institutions are included in this group. The range extending from four to six credits includes sixty-one schools or nearly half of the total group.

Student teaching is done at most of the institutions during the senior year. One hundred and seventeen schools replied to this part of the questionnaire with seventy-six (or 65 percent) indicating that student teaching was done in the senior year "either semester". The next largest areas of concentration for this factor were found in the "senior year second semester", and in the "junior or senior" year. A complete summary of the findings in this part of the questionnaire are presented in Table 5 .

Table 5

TIME WHEN STUDENT TEACHING OCCURS IN THE
INDUSTRIAL ARTS TEACHER-EDUCATION PROGRAMS AT 135 INSTITUTIONS

Year and/or Semester	Institution frequency
Senior year, either semester.....	76
Senior year, 1st semester.....	3
Senior year, 2nd semester.....	13
Junior year, either semester.....	3
Junior year, 1st semester.....	0
Junior year, 2nd semester.....	4

Table 5 (continued)

Year and/or semester	Institution frequency
Junior or senior year.....	15
Sixth or seventh semester.....	1
First year.....	1
Fifth year.....	1
Question not answered.....	<u>18</u>
TOTAL.....	135

With two exceptions, the student-teaching experience occurs in the junior or senior year.

There are however, two other situations listed that place their respective student-teaching programs at the extremes of their curriculum period. One has the experience occur in the freshman year, while the second school extends the teacher-education program to a fifth year at which time student teaching appears in the curriculum.

Observation was listed most frequently as the course or experience involving pupil contacts that precede student teaching. Forty-one (or 40 percent) of the one hundred and two replies on this question showed observation as a pre-student-teaching experience involving pupil contact. "Pre-practice-teaching experiences" was listed by four schools, and a "three-month contact in extra-curriculum activities" was listed by another program.

Other replies to this same part of the questionnaire included: methods courses; laboratory in education; education survey; and educational psychology. Fourteen schools indicated that they had no courses involving pupil contacts prior to student teaching.

That part of the questionnaire dealing with the requirements and qualifications of the "master" teacher was of little value because of the large number of respondents who misinterpreted the term "master" teacher.

The replies from each of the one hundred and thirty-five institutions were evaluated in terms of the criteria set up (see page 67) for the selection of better programs.

Through this process, the following institutions were chosen for study on the basis of the information submitted in the questionnaire:

1. Tuskegee Institute
Tuskegee Institute, Alabama
2. San Jose State College
San Jose, California
3. Teachers College of Connecticut
New Britain, Connecticut
4. University of Georgia
Athens, Georgia
5. Eastern State College
Charleston, Illinois
6. Southern Illinois University
Carbondale, Illinois
7. East Kentucky State Teachers College
Richmond, Kentucky
8. Louisiana State University
Baton Rouge, Louisiana
9. New Jersey State Teachers College
Newark, New Jersey
10. New York State College for Teachers
Buffalo, New York
11. State Teachers College
Oswego, New York
12. State Teachers College
Fitchburg, Massachusetts
13. State Teachers College
California, Pennsylvania
14. State Teachers College
Millersville, Pennsylvania

As a further check upon each of these schools a letter was sent to the registrar of each institution for a copy of the school catalog that

pertains to the Industrial Arts teacher-education program. After a confirming investigation into the offerings listed in the school catalogs, the fourteen schools were accepted for inclusion in the comprehensive study.

The schools selected had a wide geographical distribution, coming from the following states: Alabama, California, Connecticut, Georgia, Illinois, Kentucky, Louisiana, Massachusetts, New Jersey, New York, and Pennsylvania. Two schools are in each of the states of Illinois, New York, and Pennsylvania.

CHAPTER IV

SUMMARY OF DATA GATHERED FROM THIRTEEN INDUSTRIAL ARTS TEACHER EDUCATION PROGRAMS

The survey of practices in the final study includes information gathered from thirteen of the fourteen schools chosen in the preliminary survey. San Jose State College at San Jose, California returned an incomplete questionnaire. This chapter is a report of the responses of the thirteen participating institutions.

The items in the summary are listed as they appeared in the questionnaire. (Appendix "E") Primary consideration was given to the responses in the "value" column. The distribution of frequencies for each of the "value" ratings is presented with each item. The purpose of this distribution is to indicate the extent to which the respondents agreed or varied in their opinions as regards the value of such principles or statements for student teaching in Industrial Arts teacher preparation.

The column marked "70% level" was used to indicate those items that were rated with a four "has a high degree of value" or a five "has a very high degree of value" by at least nine of the thirteen respondents. (approximately seventy percent) To facilitate locating those items that were rated with a four or five by seventy percent of the respondents a red block is placed adjacent to the item.

Two hundred and eighty items or fifty-six percent of the original items were indicated by the respondents as having a "high" or "very high" degree of value.

The "practiced in %" column refers to the degree to which the

item was practiced at the institution responding to the questionnaire. Only those items which reached the seventy percent level were tabulated for their degree of practice. The degree of practice is indicated by a per cent. This per cent was determined by adding the point scores in the "degree practiced" column in the questionnaires for each item and dividing this figure by the total possible score which would be sixty-five (5 x 13) in the event all thirteen schools responded to the statement. In case only twelve schools replied to the statement, sixty (5 x 12) was used as the denominator.

The column marked "NR" was used to indicate the frequency in which there was no response to the item.

DETERMINING GOALS OR PURPOSES OF STUDENT TEACHING IN INDUSTRIAL ARTS EDUCATION

GOALS OR PURPOSES OF THE STUDENT TEACHING PROGRAM IN INDUSTRIAL ARTS EDUCATION

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. To provide for the fullest development of the individual in view of his becoming a teacher of Industrial Arts.....	0	0	0	0	3	10			87
2. To give practical experience in applying theory, content, and methods learned in pre-student teaching courses at college...					2	11			87
3. To provide for participating experiences in teaching that will give the student teacher ample opportunity, under supervision, to participate in a broad cross section of the work of the teacher of Industrial Arts.....					2	10	1		85
4. To give the student teacher the greatest possible contact with boys and girls in a real teaching, learning situation.....					3	10			92
5. To direct each student toward attaining specific stated proficiencies.....				5	4	3	1		
6. To develop the student's teaching and shop management ability to a point where he will be able to assume full responsibility for the operation of a school shop.....				1	2	10			91
7. To make students aware of the duties and responsibilities of the Industrial Arts teacher, and to make the student familiar with high standards of teaching, by working with high caliber teachers.....				1	2	10			80
8. To lead student teachers to observe intelligently, and to give the student opportunity to see sound principles of teaching Industrial Arts.....				1	3	9			82
9. To enable the student to develop judgment and skill in setting up aims, in selecting and arranging subject matter for teaching, and in choosing appropriate types of projects and instruction for accomplishing such aims.....				2	4	7			73
10. To contribute to the development of those personal, professional, and social traits which are necessary for a successful teacher of Industrial Arts.....				1	5	7			80

DETERMINING GOALS OR PURPOSES OF STUDENT TEACHING IN INDUSTRIAL ARTS EDUCATION

GOALS OR PURPOSES OF THE STUDENT TEACHING PROGRAM IN INDUSTRIAL ARTS EDUCATION

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
11. To develop in the student teacher the ability to work for the optimum development of each pupil rather than solely imparting knowledge and skills associated with a given body of subject matter.....					3	10			77
NATURE OF THE GOALS									
1. There is a written statement of the goals or purposes of the student teaching program in Industrial Arts education.....			1	2	3	7			69
2. The goals as set up are nebulous or not well defined.....	3		1	2	1	2	4		
3. The goals as set up are of a practical nature.....					2	9	2		85
4. Student teaching goals are transformed into operating practices and procedures.....			1	1	5	6			82
5. Student teaching goals are not attained because of administrative limitations at the institution.....	3	2		2	1	3	2		
6. Student teaching goals are narrow in scope and operation because of certain administrative factors or conditions.....	4	3	1	1		2	2		
7. Goals vary in accordance with the different student-teaching locations.....	2		1	3	3	3	1		
8. Objectives or goals as set up are very general with a wide margin for interpretation.	3		2		7	1			
9. Objectives or goals as set up are very specific, calling for definite outcomes and conclusions.....		2	1	3	1	5	1		
10. Goals vary with the individual student teacher.....	2	1		1	3	4	2		
11. Goals tend to be rather stable with no significant changes over long periods of time.	2	2		4	1	2	2		

DETERMINING GOALS OR PURPOSES OF STUDENT TEACHING IN INDUSTRIAL ARTS EDUCATION

NATURE OF THE GOALS

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
12. The objectives or goals emphasize broad purposes of education and includes understandings of pupil growth and development..					4	9			78
13. The objectives or goals are identical with or grow out of the total teacher-education program.....					3	10			92
14. The objectives or goals are student-teaching goals; that is, specific goals set up for the period of student teaching.....	4		1		4	3	1		
15. The objectives or goals emphasize detailed or routine procedures which are, by and large, matters of shop organization and management.....	2	1	2	2	3	2	1		

RESPONSIBILITY FOR SETTING UP GOALS

1. The responsibility for setting up the goals for student teaching is assumed by the supervisor of student teaching.....	2				4	3	4		
2. The responsibility for setting up goals for student teaching is assumed by a committee consisting of college faculty, student teaching supervisor(s), critic teachers, principals, and students.....			1	1	3	8			46
3. The responsibility for setting up the goals for student teaching is assumed by the head of the Industrial Arts Department.....	3	1	1	3	2		3		
4. The responsibility for setting of goals for student teaching is assumed by the state department of education.....	5	2			2	1	3		
5. The student participates in conferences held for the purpose of setting up goals for student teaching.....	1		2		1	8	1		55

DETERMINING GOALS OR PURPOSES OF STUDENT TEACHING IN INDUSTRIAL ARTS EDUCATION

METHODS BY WHICH GOALS OR PURPOSES ARE ARRIVED AT

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. Goals or purposes are arrived at through conferences attended by college faculty, student-teaching supervisor(s), critic teachers, principals, and students.....	1	1			2	9			49
2. Goals are set up by the department head....	4	2		5			2		
3. Goals are arrived at through a meeting of the Industrial Arts teacher-education staff.	1			4	4	2	2		
4. Goals are arrived at or set up by the supervisor of student teaching.....	2	2	1	2	1	3	2		
5. Goals are accepted as set up by the state department of education.....	4	3	1		1	1	3		
6. Goals were arrived at through the joint collaboration with several teacher-education institutions within a given state.....	1	2	1	3	3		3		
7. Goals were adopted from published statements of goals by recognized educational organizations or associations.....		3	2	2	2	1	3		
8. Goals were arrived at through joint collaboration of several teacher-education institutions in a multi-state or regional conference.....	1	1	1	2	2	2	4		
9. The goals for the individual student teacher are arrived at after:									
a. Consultation with the student-teacher's faculty advisor.....	1	3		3	1	3	2		
b. Consultation with the student-guidance personnel in the college.....	4	2		2	1	1	3		
c. A review of the student's cumulative record.....	3	1	2	1	1	3	2		
d. A conference of faculty members who know the student.....			2	1	4	3	3		
e. A review of the student's undergraduate record.....			3	4	3	1	2		
f. A review of the student's special aptitudes or skills.....		2	2	5	2	2			
g. A review of the student's past experiences with boys and girls in a leadership capacity.....	1	1		7	1	2	1		

TRANSFORMING GOALS INTO OPERATING PRACTICES

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. Goals are understood by and accessible to all who are linked with the student teaching program.....				1	4	8			69
2. Operating practices in the student teaching program are developed through an analysis of the objectives or goals of student teaching.....				2	6	5			65
3. Goals and objectives of the student-teaching program are made known to student teachers, critic teachers, and supervising personnel by written communications.....			1	1	3	8			63
4. A well-developed program of conferences is held to integrate and provide communication of goals and objectives among the various personnel involved.....			1		2	9	1		76
5. The individual goals of the student teaching experience are dealt with by areas or phases of activities participated in by the student.....	1		1	1	5	4	1		65
6. An adequate program of pre- and post-student teaching activities provides for a greater integration of the whole program with respect to the goals of student teaching.....			1		4	8			57

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

PURPOSES OF EVALUATION

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. The evaluation is used to assist the department in arriving at a grade for the student.....	2	1		2	3	5		
2. The evaluation is used to assist the student in a greater understanding of his strengths and weaknesses.....					2	11		83
3. The evaluation is used to show the degree of progress being made by the student.....			1	1	2	9		72
4. The evaluation is used in planning the student's post-student teaching activities and studies.....			2	5	4	1	1	
5. The evaluation is used as a source of reference data for placement purposes.....			1	1	7	4		72
6. The purpose of the evaluation is to make an appraisal of the adequacy of the student's preparation leading up to the student teaching experience.....		1	3	4	1	4		
7. The evaluation is used to reveal needed changes in the teacher-education program..		1	2	4	4	2		
8. The student's self-evaluation is used as one of the bases for the final evaluation.		2	1	3	3	4		
9. The student's self-evaluation is used only for diagnostic and remedial purposes.....	2	2	2	2	3		2	
10. The evaluation is used to appraise the quality of the school as a student-teaching center.....	6	1		1	1	2	2	

RELATING EVALUATION TO THE OBJECTIVES

1. Evaluation of the student teaching experiences is based upon the degree to which the objectives of the Industrial Arts teacher-education program were attained...					5	6	2		66
--	--	--	--	--	---	---	---	--	----

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

DEVELOPING EVALUATIVE PROCEDURES

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. Evaluation policies are jointly developed by college representatives, critic teachers, and student teachers.....			1	3	5	3	1		
2. Evaluation policies and procedures are developed by the supervisor of student teaching in Industrial Arts, or by some other single individual.....	7		1	3			2		
3. Evaluation policies and/or procedures were set up by the state department of education	9					1	3		
4. Evaluation policies are understood, if not developed by college faculty and supervisors, critic teachers, and student teachers.....	2		1	1	4	4	1		
5. Evaluation policies and procedures were developed for the department after a thorough analysis of student teaching objectives or goals, teaching facilities available, personnel, and educational philosophy underlying the student teaching experience.....				2	2	9			65
6. Evaluation procedures were developed as a result of a study of practices in other similar institutions.....				4	6	3			62
7. Evaluation procedures were wholly adapted from a student-teaching program at some other institution.....	10			1		1	1		
8. The evaluation procedures were adapted in part or totally from suggested programs set up by some professional organization or association.....	2	3	2	4	1		1		
9. Evaluation procedures were taken from a study of student-teaching evaluation made by some other college, association, or individual.....	3	2	6		1	1			

EVALUATION PROCEDURES USED

1. A check sheet or itemized report sheet is used in the evaluation of a student teacher, with a letter grade or numerical scale associated with each of the items.....				1	6	6			94
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EVALUATING OF STUDENT TEACHING IN INDUSTRIAL ARTS

EVALUATION PROCEDURES USED

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
2. Evidence of specific behavior is included with the total evaluation of the student teacher.....			1	1	4	7			78
3. Factors selected for evaluation purposes are given a letter grade.....	1	1	2	1	3	4	1		
4. The critic teacher makes use of anecdotal records in evaluating the student.....		1	1	2	5	4			49
5. In the evaluation of the various factors, significant incidents and anecdotes are recorded to implement the evaluation.....		1		2	4	6			57
6. The critic teacher holds a conference with the student teacher for purposes of discussing the evaluation.....			1	1	2	9			85
7. Evaluation is based upon a series of well-planned and carefully recorded observations by the supervisor.....	1	1		1	4	6			66
8. The evaluation report by the critic teacher is made in the form of a letter at the close of the student teaching experience...		1	1		3	5	3		
9. A standard procedure is applied to the evaluation of every student teacher in the Industrial Arts curriculum.....			1	3	3	5	1		
10. The final grade for the student is determined at a conference of the student teacher, supervisor, and critic teachers..		1		5		5	2		
11. The evaluation form consists of a number of "teacher traits" or characteristics. Each of these is divided into a number of degrees of excellence or proficiency, with a descriptive paragraph describing each variation in degree or proficiency.....				2	3	8			78
12. The supervisor of student teaching makes a written report of each student teaching observation.....	1			2	2	8			69
13. The student teacher submits a written report each week to the supervisor of student teaching indicating the significant happenings and developments for that week.	1	1	1	3	2	5			

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

WHAT IS EVALUATED?

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. Evaluative factors vary with each student..	2	2	1	2	1	4	1	
2. The factors used for evaluation of student teaching are changed periodically in view of changing educational practices.....			1		4	8		76
3. The evaluation of student teaching is considered in part to be an evaluation of the total teacher-education program and its effect upon the individual.....	1		1		2	9		76
4. The following personal qualities of the student teacher are evaluated:								
a. Personal appearance.....				1	4	8		89
b. Personal habits.....					4	9		72
c. Personal attitude towards life.....		1			4	8		58
d. Leadership abilities.....				1	3	9		78
e. Personality traits.....				1	4	8		87
f. Voice and diction.....				2	5	6		82
g. Work habits.....					6	7		87
h. Initiative.....					5	8		87
i. Dependability.....					3	10		95
j. Emotional stability.....					4	9		80
k. Health and physical fitness.....				1	6	6		68
l. Philosophy guiding the student-teacher's activities.....					6	7		63
m. Honesty.....					3	10		86
n. Cooperation with school practices and policies.....				1	3	9		85
o. Tact and courtesy.....				1	4	8		82
p. Friendliness.....					7	6		80
q. Self-confidence.....					5	8		82
r. School and community interests.....			1	1	5	6		65
5. The following professional qualities of the individual are evaluated:								
a. Interest in teaching.....				3	2	8		80
b. Professional reading.....				4	5	4		35
c. Professional ethics.....				3	3	7		69
d. Professional attitude.....			1	2	2	8		77
e. Professional preparation.....				1	5	7		76
f. Attitude toward young people.....				2	4	7		72
g. Understanding of aims of general education.....			1	2	2	8		65
h. Understanding objectives of Industrial Arts in relation to general education..			1	1	2	9		83
i. Setting up and correlating aims of individual units taught.....			1	1	4	6		60
j. Knowledge of Industrial Arts content...				2	2	9		85
k. Shop skills.....				1	5	7		91

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

WHAT IS EVALUATED?

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. Teaching skills.....				1	2	10		91
m. Knowledge of and application of instru- ments of pupil measurement.....				2	5	6		66
6. The following instructional proficiencies of the student teacher are evaluated:								
a. Selecting appropriate teaching materials					4	9		82
b. Selecting appropriate visual aids.....			1	1	5	6		65
c. Selecting appropriate auxiliary teach- ing materials.....				4	5	4		60
d. Planning appropriate lesson units in view of the pupils taught.....				1	5	7		77
e. Presenting materials so that they will be understood by the pupils.....					4	9		82
f. Organizing shop activities.....				3	5	5		72
g. Presenting appropriate questions.....				1	6	6		74
h. Assigning work.....			1	2	6	4		57
i. Developing instructional materials.....				3	5	5		66
j. Using a wide variety of teaching techniques.....			1	1	3	8		58
k. Demonstrating shop operations.....					4	9		89
l. Presenting shop or related content.....				1	3	9		80
m. Selecting shop projects.....					6	6	1	58
n. Guiding pupil activities.....					7	6		68
o. Pupil-teacher planning procedures.....			1	1	4	7		55
p. Securing pupil response.....			1	1	3	8		72
q. Daily preparation.....					7	6		82
r. Selecting teaching content in view of stated aims.....				1	3	8	1	55
s. Motivating pupils.....			1	1	2	9		80
t. Efficiency in group instruction.....					7	6		77
u. Efficiency in individual instruction....				2	5	7		76
v. Foreseeing instructional needs.....				1	5	7		63
w. Conducting and supervising field trips..	1			1	3	5		3
x. Finding and using good illustrations....				1	2	2		8
7. The student teacher is evaluated on his ability to stimulate pupil growth and de- velopment through:								
a. Recognizing pupil interest.....			1	1	3	8		68
b. Recognizing pupil background differ- ences.....			1		5	7		57
c. Providing variations in teaching methods in accordance with individuality of pupils taught.....			1	1	4	7		68
d. Providing variations in teaching con- tent in accordance with individuals taught.....				1	6	6		63
e. Understanding the characteristics of the various pupil-age groups.....					6	7		78

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

WHAT IS EVALUATED?

	Value						NR	70% Level	Pract. in%
	0	1	2	3	4	5			
f. Understanding the special abilities of the students.....			1		5	6	1		58
g. Understanding the emotional characteristics of the pupils taught.....			1		6	6			60
h. Analyzing pupils in terms of physical differences.....			1		4	8			63
8. The student teacher is evaluated on his relationships with the following individuals or groups:									
a. The pupils.....				2	2	9			78
b. The critic teacher.....		1	1	3	3	5			
c. The supervisor of Industrial Arts student teaching.....	2		2	4	3	2			
d. Other faculty members of the Industrial Arts department of the student-teaching situation.....	1	2	1	3	3	2	1		
e. Faculty members in other subject areas.....	1	3	1	5	2		1		
f. The principal.....	1		3	3	3	2	1		
g. Administrative officers other than the principal.....	2	1		4	3	1	2		
h. Staff officers in the school.....	3	1		3	3	1	2		
i. Parent-teacher associations.....	4	1	1	1	5	1			
j. The community.....	3		3	1	2	3	1		
9. The student teacher is evaluated on his ability to deal effectively with shop personnel and management problems such as:									
a. Organizing an adequate personnel system.....	1		1	4	2	5			
b. Supervising the checking of tools and equipment.....				1	5	7			87
c. Requisitioning materials.....	1		2	3	6	1			
d. Taking inventory.....		1		4	6	2			
e. Arranging shop facilities.....			2	3	5	3			
f. Recommending changes in existing physical conditions.....	1		2	4	2	4			
g. Securing pupil cooperation in shop up-keep and repair.....		1		1	7	4			65
h. Dealing with various disciplinary problems.....	1			3	3	6			94
i. Classroom morale.....				1	7	5			82
j. Care of physical equipment.....			1	1	6	5			82
k. Judgment in pursuing responsibilities and duties.....			1	1	1	9	1		87
l. Care of materials and supplies.....			1		5	7			85
m. Securing cooperation from pupils.....			1		4	8			78
n. Maintaining adequate instructional equipment and materials.....	1			2	7	3			66
o. Developing desirable social patterns through democratic management.....			1		7	5			55

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

WHAT IS EVALUATED?

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
p. Keeping accurate and adequate records...			2		4	7		60
q. Handling shop finances.....	3		1	1	4	4		
r. Anticipating material needs.....	1	1		4	5	2		
s. Starting the class period.....			1	1	3	8		78
t. Closing the class period.....			2	1	2	8		68
u. Storing of materials and projects.....	1		2	1	4	5		66
v. Maintaining proper lighting, heating, and ventilation conditions.....				1	5	7		74
w. Maintaining and supervising an adequate safety program.....					3	10		85
10. Evaluation is based upon evidences of stu- dent-teacher growth in the following areas:								
a. A finer professional point of view.....			1	2	2	8		76
b. A better selection of professional reading material.....			1	2	6	4		49
c. A greater control over shop management activities.....				2	4	7		78
d. A noticeable improvement in teaching abilities.....				1	3	9		83
e. An increased interest in teaching.....				2	6	5		72
f. A keener insight into and understanding of pupils.....				1	5	7		72
g. A finer degree of personal relationship.....				1	4	8		76

BY WHOM IS THE EVALUATION MADE?

1. A separate evaluation is made by both the supervisor of Industrial Arts student teaching and the critic teacher.....				1	3	9		72
2. A composite or summary of all evaluations of each student teacher is made by the supervisor of Industrial Arts student teaching.....	2		1		5	5		66
3. Critic teachers make the final evaluations (Grade) in nearly every instance.....	6	1	1		4		1	
4. Self-evaluation by the student is practiced	1		2	1	3	6		51
5. The self-evaluation by the student is con- sidered as a part of the total evaluation.	2	1			6	4		40
6. The reactions of other teachers at the practice-teaching situation are used in making the evaluation.....	2	3	2	2	3		1	

EVALUATION OF STUDENT TEACHING IN INDUSTRIAL ARTS

BY WHOM IS THE EVALUATION MADE?

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
7. The reactions of the principal at the practice-teaching situation are used in arriving at the evaluation of the student teacher.....	4	1	2	2	3	1			
8. The reactions of the community in which the student teaching was done are considered in making the evaluation.....	4	1	3	1	2	1	1		
9. The pupils' reactions to the student teacher are used in making the evaluation.....	2		1	1	6	3		48	
10. The supervisor of student teaching makes the only evaluation.....	7	1	2		1		2		

WHEN IS THE EVALUATION MADE?

1. Periodic conferences involving the critic teacher, the student teacher supervisor, and student teacher are held for purposes of evaluating the progress of the student teacher.....				3	5	5		65
2. Evaluation is a day-by-day affair involving at least the student teacher and the critic teacher.....				3	2	7	1	58
3. An evaluation report is made weekly to the college by the critic teacher.....	4	2	2	2	1	2		
4. An evaluation report is made monthly to the college by the critic teacher.....	4	1	1	5		2		
5. An evaluation report is made only at the close of the student teaching experience..	5	1	1	2	1	2	1	
6. An evaluation is made at the time of each visit by the supervisor of student teaching.....	2			3	2	6		
7. An evaluation is made at the time of each visit by the supervisor of student teaching by both the supervisor and the critic teacher.....	1	1	1	3	3	3	1	

EXPERIENCES TO PRECEDE AND TO FOLLOW TEACHING

EXPERIENCES TO PRECEDE STUDENT TEACHING

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. The student experiences an adequate program for the development of shop skills....	1				1	11			80
2. The student is given guided experiences in observing boys and girls at work and play..				3	3	7			55
3. The student makes one or more detailed case study.....		1	2	3	3	3	1		
4. Educational psychology or its equivalent is taken prior to the student teaching experience.....				2	2	9			93
5. A course in human growth and development precedes student teaching.....				3	2	7	1		78
6. There is a laboratory experience in directed observation prior to the student teaching experience.....		1	1		3	7	1		55
7. There is a course in educational sociology prior to the student-teaching experience...	1	1	1	2	3	5			
8. The student is required to make a community study as a means of analyzing and interpreting the needs of the pupils.....	1	1		5	3	2	1		
9. There is a course in "methods" prior to the student-teaching experience.....					1	11	1		98
10. The student participates in some voluntary activity, such as boys' clubs, recreational groups, etc., prior to the student-teaching experience.....			1	3	3	4	2		
11. The student participates in curriculum planning in light of pupil-needs in a given situation.....	1		1	1	5	4	1		37
12. Students are given preparation in counseling techniques.....		1	1	1	4	4	2		
13. Students are given preparation in the use of diagnostic and psychological instruments.....			1	4	5	2	1		
14. Students are given preparation in the organization of instruction.....				1		11	1		87

EXPERIENCES TO PRECEDE AND TO FOLLOW TEACHING

EXPERIENCES TO PRECEDE STUDENT TEACHING

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
15. Students are given preparation in the evaluation of pupil growth.....				2	5	5	1		55
16. Students are given preparation in educational measurements prior to student teaching.....				1	4	7	1		52
17. Students are given preparation in the making of cumulative records.....			1	4	6	1	1		
18. Students are given preparation in shop inventorying procedures.....	1			2	5	4	1		66
19. Students are given preparation in shop requisitioning procedures.....	1			2	4	5	1		66
20. Students are given preparation in shop planning.....					5	7	1		85
21. Students are given preparation in equipment selection.....				1	4	7	1		80
22. Students are given preparation in lesson planning.....					2	10	1		98
23. Students are given preparation in the noting and writing of anecdotal records....				6	5		2		
24. Students are given preparation in analyzing materials, objects and topics in view of their teachable content.....				3	5	4	1		63
25. The student works with parents and adults in church organizations, community centers, civic associations, etc.....		2	1	4	2	2	2		
26. The student works with children in the neighborhood.....	1	2	1	3	1	3	2		
27. The student has experience with craft programs in connection with summer camps.....		2	1	2	5	2	1		
28. The student has leadership experiences with summer camp groups.....		2	1	3	4	1	2		
29. The student has laboratory experiences in connection with methods and theory courses.				3	4	4	2		
30. The student has an opportunity to observe boys and girls in a variety of school situations.....				1	6	5	1		62

EXPERIENCES TO PRECEDE AND TO FOLLOW PRACTICE TEACHING

EXPERIENCES TO PRECEDE STUDENT TEACHING

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
31. The student has an opportunity to observe boys and girls in a number of non-school situations.....			4	1	3	3	2		
32. The student has an opportunity to observe the administration of tests and participating and interpreting results.....		1		1	5	4	2		54
33. The pre-student-teaching observation experiences call for active participation on the part of the student.....				2	5	4	2		31
34. Provision is made for continuous contact with boys and girls throughout the four years of pre-service education.....	1			2	6	2	2		
35. Cooperative supervision and guidance of students is provided by the college and laboratory teachers.....				3	3	5	2		

TEACHER EDUCATION PRACTICES REQUIRED DURING THE STUDENT-TEACHING EXPERIENCE

1. Students meet once weekly (or _____) for a seminar on teaching problems experienced on the job.....	1			1	4	6	1		60
2. Students submit weekly reports of activities.....				1	4	6	2		63
3. Students report personally each week (or _____) to the college campus for conferences and reports.....	2			3	4	2	2		
4. Students record outstanding incidents with their significance to the learning situation.....				1	4	7	1		74
5. Students keep a diary of daily activities..	2		1	3	2	4	1		
6. Students keep a notebook of student-teaching materials and information.....				1	6	5	1		76
7. The students build a morgue of teaching materials.....	2				4	5	2		63

EXPERIENCES TO PRECEDE AND FOLLOW STUDENT TEACHING

TEACHER EDUCATION PRACTICES REQUIRED DURING THE STUDENT-TEACHING EXPERIENCE

	Value						NR	70% Level	Pract. in%
	0	1	2	3	4	5			
8. Students take a course in curriculum materials at the same time as student teaching.....	4		1		4	2	2		

TEACHER-EDUCATION EXPERIENCES TO FOLLOW STUDENT TEACHING

1. There is a follow-up period for personal adjustment and problem solving on the college campus.....			1	1	3	7	1		46
2. Opportunity is provided for further study and analysis of problems experienced while doing student teaching.....			1	1	1	9	1		57
3. The final semester's work is based mainly upon the "shortages" of the student as indicated by the student-teaching experience.....	1	1	1	2	2	3	3		
4. Provision is made for the development of teaching devices and aids resulting from needs found in the student-teaching experience.....			2	4	2	4	1		
5. Provision is made for further study and research on problems of pupil growth and development.....			1	5	3	3	1		
6. Provision is made for the improvement of techniques and methods experienced in student teaching.....			1	5	3	3	1		
7. There is an extension of the student-teaching period if necessary for individuals showing evidence of such a need.....	1	1	3	1	4	2	1		
8. Students participate in off-campus organizations of boys and girls such as scouts, hobby clubs, church schools, and boys' clubs.....		2		1	3	5	2		
9. The student attends professional meetings.....				2	2	8	1		62
10. The student has conferences with administrators and supervisors in local and near-by school systems.....	1		1	3	4	2	2		

EXPERIENCES TO PRECEDE AND TO FOLLOW PRACTICE TEACHING

TEACHER-EDUCATION EXPERIENCES TO FOLLOW STUDENT TEACHING

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
11. The student participates in community surveys.....	1		1	3	4	1	3		
12. Students are directed to participate in community affairs.....	1	1	1	2	6	1	1		
13. The student takes work in curriculum construction.....			1	5	2	3	2		
14. The student is placed in charge of field projects wherein contact with youngsters is a factor.....	2		1	2	3	2	3		
15. There are education seminars provided for students.....	1			2	3	5	2		
16. There are one or more professional courses required.....				3	2	7	1		69
17. Student teaching is done the last semester with no opportunity for additional work on the undergraduate level.....	8			1			4		

STUDENT-TEACHING EXPERIENCES

OBTAINING A KNOWLEDGE AND UNDERSTANDING OF THE COMMUNITY IN WHICH THE STUDENT
TEACHING IS DONE

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. The student reviews surveys of the community in terms of its social, economic, and political aspects.....		1	3	3	2	3	1	
2. The student reviews surveys and analyses of the occupations of the inhabitants of the community.....		1	2	4	2	4		
3. The student reviews surveys and analyses of local and neighboring industries.....		1	1	5	2	4		
4. The student reviews follow-up studies on former pupils of the school.....	2		1	4	4	2		
5. The student reviews reports on the cultural and educational institutions in the community and neighboring vicinity.....	1		2	3	4	3		
6. The student reviews the recreational and avocational facilities of the community...			1	5	3	4		
7. The student reviews the history, background, and tradition of the community....		1	1	5	3	3		
8. The student studies the community in view of potential teaching materials and facilities such as: guest speakers, industrial and commercial exhibits, parks, construction, community fairs, excursions, etc....		1		5	3	4		
9. The student becomes acquainted with the organization and structural pattern of the local school administration.....				2	5	6		58
10. The student becomes acquainted with the employment and placement agencies in the community.....	2	1	1	2	4	2	1	
11. The student reads the local newspaper(s)...				3	2	8		69

FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

1. The student spends at least one full day or its equivalent in the principal's office, being permitted to observe some of the duties, functions and place of the principal in the total school program.....	1	1	4	1	6			
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STUDENT-TEACHING EXPERIENCES

FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
2. The student spends at least two full days (or _____) in the counselor's office becoming familiar with:									
a. Duties of the counselor.....		1	2	4	2	4			
b. Nature of counseling problems.....		1	2	3	4	3			
c. Availability of occupational information.....	1	1	1	2	3	5			
d. Test materials available.....			1	3	3	6			26
e. Interviewing techniques.....		1	1	3	6	2			
f. Referral agencies.....	1	2	1	5	1	3			
3. The student spends one full day (or _____) in the central administrative office of the student-teaching situation to observe the functioning of the school from that point.....	1	1		5	2	4			
4. The student is taken on an "orientation tour" of the school to familiarize him with the various units and facilities of the school.....				2	3	5	3		
a. Such an "orientation tour" includes:									
1. Heating plant.....	1		2	2	4	3	1		45
2. Fire control measures.....				2	4	6	1		48
3. Stock rooms.....				3	5	5			49
4. Maintenance facilities.....	1		1	2	4	5			54
5. Laboratories.....	1		2	2	3	4	1		35
6. Administrative offices.....			1	3	6	3			
7. Staff offices.....	1		1	2	4	4	1		
8. Duplicating rooms.....	1			2	5	5			
9. Auditorium.....	1		1	4	2	5			
5. The student has a conference with the principal.....				2	2	9			60
6. The student has a conference with the school supervisor of Industrial Arts.....					1	12			89
7. The student has a conference with the superintendent of schools.....	2			5	3	3			
8. The student spends a half day, (or _____) in the school library.....	1		1	3	2	6			
9. The student becomes informed on school policy through:									
a. Reading written statements of policy...	1		1	1	6	4			60
b. Conferring with proper officials.....					6	7			72
c. Conferences with teachers.....	2		2	1	4	4			
d. Faculty meetings.....	1	1	1		4	6			55

STUDENT-TEACHING EXPERIENCES

FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
10. The student attains an understanding of school policy on:								
a. Vacations.....	1		1	2	4	5		65
b. Absences.....				2	3	8		80
c. Salary.....		1	1	5	4	2		
d. Leaves of absence.....	1	1	2	4	4	1		
e. Tenure.....			2	3	6	2		
f. Placement.....			2	4	5	1	1	
g. Community and school standards of conduct.....				2	5	6		76
h. Teacher contracts.....			1	4	4	4		
i. School reports.....		1		1	6	5		78

ACQUAINTING THE STUDENT TEACHER WITH THE SCHOOL PERSONNEL

1. Arrangements are made for meeting and becoming acquainted with the following people:								
a. Local superintendent of schools.....	3	1		4	1	3	1	
b. Local division supervisor (i.e., elementary, secondary).....	1	1	3	3	2	3		82
c. Industrial Arts supervisor (local).....	1			3	2	7		
d. Industrial Arts supervisor (state).....	1		2	3	1	3	3	
e. Principal of the school in which practice-teaching is done.....				1	2	10		94
f. Head of the Industrial Arts department (school).....			1		1	11		92
g. Heads of other departments in the school.....	1	1	1	5	3	2		
h. Other teachers.....		1	3	3	4	2		
i. Personnel officer (faculty).....	1	2	2	5	3			
j. Guidance personnel.....		1	1	2	7	2		20
k. School nurse.....	1	1	1	4	3	3		
l. School doctor.....	1	1	2	4	3	2		
m. Attendance officer.....	1	2	2	4	2	2		
n. Librarian.....			2	4	2	5		
2. The student participates in faculty social functions.....		1	1	1	6	4		58
3. The student participates in faculty meetings.....	2		1	1	4	5		57
4. The student participates in Industrial Arts in-service training meetings.....				2	3	8		78

STUDENT-TEACHING EXPERIENCES

ACQUAINTING THE STUDENT TEACHER WITH THE SCHOOL PERSONNEL

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
5. The student attends local N.E.A. meetings..	1	1	2	3	3	3			
6. The student attends district N.E.A. meet-ings.....	1	1	2	3	3	3			
7. The student attends professional meetings held by Industrial Arts teachers.....				1	3	9			74

TEACHING RESPONSIBILITIES OF THE STUDENT TEACHER

1. The student makes daily lesson plans.....	1				3	7	2		72
2. The student is given gradually increasing responsibility in the classroom or shop....					3	9	1		92
3. The student is given opportunity to teach both shop and drawing classes.....					4	5	4		65
4. The student teacher takes direct responsibility for the organization and presentation of certain units of instruction.....				1	5	6	1		72
5. The student teacher gives group demonstrations.....					3	9	1		93
6. The student teacher gives individual instruction to pupils needing such help.....					3	9	1		92
7. The student is permitted to experiment with and try out new materials and methods..				2	4	6	1		73
8. The student teacher teaches one or more sessions with the use of motion pictures..					7	6			51
9. The student teacher teaches one or more sessions with the use of slide films.....					7	6			34
10. The student assists in the correlation of a shop activity with one or more other subject-matter areas, e.g. mathematics, physics, chemistry, English, or history...	1				7	5			35
11. The student teaches two or more class sessions in some related field or in his minor field.....	2	1	1	7	2				38

STUDENT-TEACHING EXPERIENCES

TEACHING RESPONSIBILITIES OF THE STUDENT TEACHER

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
12. The student teacher assists pupils in the development of research units.....	3			4	5	1		
13. The student takes one or more groups on field trips pertaining to the work being studied.....			2	2	4	4	1	
14. The student in due time is permitted to assume full control over several class sessions in the absence of the critic teacher.....				2	5	6		77
15. The student assists pupils in the planning of their work.....				1	5	6		85
16. The student assists pupils in realizing their goals.....				2	5	6		80
17. The student assists pupils in the evaluation of their progress.....				2	5	6		74
18. The student assists the critic teacher in supervising a homeroom.....	1			1	4	6	1	49
19. The student teacher checks and evaluates the progress of certain special students assigned to him.....			1	3	4	5		54
20. The student teacher assists the critic teacher in judging results of teaching in terms of pupils and objectives.....				3	2	8		76
21. The student teacher studies the program of study for the department.....				1	6	6		78
22. The student teacher assists the critic teacher in overall pupil evaluation.....				2	5	6		68
23. The student teacher assists the critic teacher with attendance reports.....				2	3	8		80
CLASSROOM ACTIVITIES RELATIVE TO PUPIL STUDY AND DEVELOPMENT								
1. The student makes case studies of two or more students.....	2			3	7	1		

STUDENT-TEACHING EXPERIENCES

CLASSROOM ACTIVITIES RELATIVE TO PUPIL STUDY AND DEVELOPMENT

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
2. The student keeps anecdotal records of pupil activities.....	1			2	9	1			20
3. The student studies and reviews pupil activities using cumulative records of the pupils.....	1			4	4	4			
4. The student assists pupils in planning their school program.....	2	2	1	4	3		1		
5. The student extends guidance and counseling services to pupils in keeping with policies of the regular guidance personnel of the school.....	1	1	3	5	3				
6. The student visits two or more students in their homes for purposes of background study and analysis.....	1		2	3	5	1	1		
7. The student studies certain pupils under his care in view of their needs.....			1	4	2	6			
8. The student is encouraged to seek consultation of the guidance personnel or other referral agencies on special pupil problems.....		1	3		5	4			55
9. The student is given shop experiences with both junior and senior high school pupils..			1	1	2	9			68
10. Student takes charge of directing activities of one or more problem cases.....		1	2	3	4	3			
11. The student observes a pupil-teacher conference conducted by the critic teacher...				3	5	5			58
12. The student observes two or more pupil-counselor conferences conducted by the counselor.....	1			2	8	2			10
13. The student summarizes case study data and discusses the findings with the critic teacher.....				9	3	1			

STUDENT-TEACHING EXPERIENCES

CURRICULUM PLANNING AND CONTENT ANALYSIS ACTIVITIES OF THE STUDENT TEACHER

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. The student teacher studies the aims and objectives of the school.....				3	3	7		66
2. The student teacher studies the aims and objectives of the department.....				2	3	8		82
3. The student teacher analyzes the class personnel for appropriate subject matter or shop activities.....	2			5	3	3		
4. The student teacher analyzes the class personnel for needed teaching techniques or devices.....	1			2	6	4		57
5. The student teacher assists the critic teacher in analyzing and dealing with certain discipline cases.....				1	7	5		63
6. The student teacher makes a summary of individual pupil activities for inclusion in the cumulative record.....	3			4	4	1	1	
7. The student teacher studies records of former students who are now prominent in the local community.....	1	1	2	6	2		1	
8. The student teacher obtains parent, employer, and community reaction to the program.....			3	5	3		2	
a. The student teacher discusses the findings with the critic teacher.....	1		1	5	2	1	3	
9. The student studies past reports of the department.....	2			7	2	2		
10. The student teacher assists the critic teacher in the development of the course of study to be used during the period in which the student teacher is on the job...	1		1	1	7	3		51
11. The student teacher discusses the shop program with the critic teacher.....				1	3	9		87
12. The student teacher observes planning procedures and techniques used by the critic teacher.....				1	4	8		83
13. The student discusses lesson planning procedures with the critic teacher.....					1	12		94

STUDENT-TEACHING EXPERIENCES

CURRICULUM PLANNING AND CONTENT ANALYSIS ACTIVITIES OF THE STUDENT TEACHER

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
14. The student teacher visits other school shop activities in the same school or vicinity.....				3	1	9			82
15. The student teacher interviews one or more recognized leaders in the Industrial Arts field.....			2	2	4	4	1		
STUDENT TEACHING EXPERIENCES RELATIVE TO SHOP ORGANIZATION									
1. The student teacher assists in keeping the shop in order.....				1	2	10			94
2. The student teacher assists the critic teacher in the conditioning of the shop prior to the beginning of the school term..	1			2	4	5	1		37
3. The student teacher assists the critic teacher in the shop-closing activities at the end of the school term.....				1	5	7			65
4. The student teacher assists the critic teacher in the financial matters of the shop.....			1	3	4	5			57
5. The student teacher assists the critic teacher in setting up any new equipment or machinery.....			1		4	8			77
6. The student teacher assists with the pupil-personnel organization of the shop.....			1	1	2	9			82
7. The student teacher assists in developing and maintaining an adequate safety program in the shop.....					2	11			94
8. The student teacher assists the critic teacher with the physical organization of the shop.....				3	4	6			78
9. The student teacher assists in the planning for storage of equipment, supplies, and pupil projects.....			1	3	3	6			66

STUDENT-TEACHING EXPERIENCES

STUDENT TEACHER PARTICIPATION IN EXTRA SHOP ACTIVITIES

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. The student participates in and provides leadership in shop or hobby clubs.....			1	3	4	5			52
2. The student assists in the organization of assembly programs.....	3		1	2	5	2			
3. The student assists in the direction of certain school activities such as dances, plays, athletic meets, luncheons, parties, etc.....	2	1	1	1	6	2			
4. The student is called upon to act as a chaperon at dances and parties.....	4	1	3		4	1			
5. The student assists with school publications.....	4	1	2		6				
6. The student assists with the publication of a shop paper.....		1	2	4	4	1	1		
7. The student assists in the promoting of special drives for funds; i.e., community fund, Red Cross, etc.....	2	2	2	3	3	1			
8. The student organizes or sponsors a club...	2	1	1	3	5	1			
9. The student participates in adult education work.....	1	1	1	3	6	1			
EXTRA-TEACHING ACTIVITIES CARRIED ON BY THE STUDENT TEACHER IN THE INDUSTRIAL ARTS SHOP									
1. The student takes an inventory of materials and supplies on hand.....	1		1	2	6	3			45
2. The student is required to make out requisitions for needed supplies or materials.....		1	1	2	6	3			45
3. The student teacher assists the critic teacher in the development of new activities in the shop.....				5	4	4			
4. The student teacher assists the critic teacher in the ordering of new equipment for the shop.....		1		5	4	3			

STUDENT-TEACHING EXPERIENCES

EXTRA-TEACHING ACTIVITIES CARRIED ON BY THE STUDENT TEACHER IN THE INDUSTRIAL ARTS SHOP

	Value					NR	70% Level	Pract. in%
	0	1	2	3	4			
5. The student teacher assists in the selection and ordering of textbooks for the department.....	1	1	1	2	5	3		
6. The student teacher assists the critic teacher in club or extra-curricular activity work.....			1	2	5	5		65
7. The student teacher checks the department inventory against the materials on hand....		1	1	3	4	4		
8. The student teacher assists in the receiving and checking equipment, supplies or tools.....			1	4	5	3		
9. The student teacher assists students in preparing a display or working exhibit for public view.....				2	7	4		65
10. The student teacher handles various types of discipline cases.....	1			3	5	4		60

STUDENT TEACHING EXPERIENCES WITH TEACHING AIDS AND TECHNIQUES

1. The student teacher arranges for one or more guest speakers to discuss topics relative to the work studied.....	1	1	5	1	3	1	1	
2. The student teacher examines magazines for articles or illustrations to be used in units to be taught.....			1	1	5	6		69
3. The student teacher collects and files magazine articles and illustrations to be used in future presentations.....			1		5	7		72
4. The student teacher assists in the development of a shop display.....				4	3	6		68
5. The student plans and constructs teaching aids and devices to further implement existing practices.....				3	2	8		77
6. The student teacher makes necessary arrangements for securing motion pictures for presentation in the shop.....			1	2	4	6		29

STUDENT-TEACHING EXPERIENCES

COMMUNITY EXPERIENCES FOR THE STUDENT TEACHER

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. The student rooms and boards in the community.....	1			3	4	5			66
2. The student attends church in the community	1		1	2	4	4	1		
3. The student participates in at least one social, professional, or fraternal organization in the community.....	2		2	5	2	2			
4. The student attends at least one meeting of the local governing body (council, board of commissioners, etc.).....	2		5	3	2		1		
5. The student attends at least one meeting of the local school board.....	3	3	1	4	1	0	1		
6. The student attends two or more meetings of the local P.T.A., parent's club, or other school-community organizations.....		1	2	3	3	3	1		
7. The student visits the homes of two pupils (or _____) for purposes relative to school and educational activities.....	1	1	1	2	3	4	1		

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES REGARDING ORGANIZATION OF THE STUDENT-TEACHING PROGRAMS

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1. Student-teaching activities are derived through conferences attended by college faculty members, critic teachers, supervisor(s) and students.....	1			2	3	7		60
2. There is a written statement of policy regarding student teaching practices and procedures.....			1	1	4	7		69
3. A formal written contract is drawn up between the teacher-education institution and the participating schools.....	3	1	2	2	3	2		
4. Student teaching practices and procedures are based upon verbal agreements between the individuals at the teacher-education institution and the participating schools..	2		2	1	3	4	1	
5. Assignments to student teaching are conducted by means of telephone conversations between the personnel at the college and the participating schools.....	5	3	2	1	1		1	
6. A formal letter of introduction is used to acquaint the principal and critic teacher with the student teacher.....	3			1	6	3		38
7. A standard printed form is used to introduce the student teacher to the principal and the critic teacher.....	4		1	2		4	2	
8. The student's cumulative record is made available for the critic teacher.....	2		2	3	3	1	2	
9. Each student teacher is taken by the supervisor of student teaching to make the initial contacts with the principal and critic teacher.....	2	1		2	1	6	1	
10. A copy of each student's teaching schedule is maintained by the supervisor of student teaching.....	1				3	9		87
11. The critic teachers have a bachelor's degree with a major in Industrial Arts education.....					1	10	2	72
12. The critic teachers have a master's degree (or 30 semester hours of graduate credits) with a major in Industrial Arts education..				1	4	8		52

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES REGARDING ORGANIZATION OF THE STUDENT-TEACHING PROGRAMS

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
13. The critic teachers have at least three years of successful teaching experience on an elementary or secondary school level....			1	1		11		80
14. The critic teachers have at least five years of successful teaching experience on an elementary or secondary school level....				2	3	7	1	55
15. The critic teacher is a member of the college faculty.....	1	2	2	4	1	3		
16. The critic teacher is a part-time teacher on the college staff.....	7		1	1	3		1	
17. Qualifications for the critic teacher are set up by the state board of education....	7		1	2		2	1	
18. There are no specific qualifications for the critic teacher.....	6				2	3	2	
19. The supervisor of student teaching is a full-time member of the college staff.....	1				2	10		95
20. The supervisor of student teaching must meet certain requirements set up by the state board of education.....	1			3	1	7	1	

ADMINISTRATIVE PRACTICES WITH REGARD TO THE REQUIREMENTS FOR THE STUDENT TEACHER

1. Eligibility for student teaching is dependent upon the demonstrated readiness of the student.....	1				4	8		55
2. Eligibility for student teaching is based upon the completion of a given number of semester hours.....				4	4	5		86
3. Eligibility for student teaching is based upon the student's attainment of a certain scholastic average above the passing grade.....	1			3	4	5		74
4. A health examination is required prior to admission to student teaching.....	3			2		7	1	
5. An oral examination is required prior to admission to student teaching.....	3		1	4	2	1	2	

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES WITH REGARD TO THE REQUIREMENTS FOR THE STUDENT TEACHER

	Value						NR	70% Level	Pract. in%
	0	1	2	3	4	5			
6. A written examination is required for admission to student teaching.....	6	1	1	2	1		2		
7. A written application for student teaching is made by the student.....	4	1	1		3	3	1		
8. A review of the student's cumulative record is made by the college authorities prior to acceptance for student teaching.....				2	5	6			72
9. A review of the student's cumulative record is used to assist in placement in a student-teaching position.....					4	9			72
10. The student is admitted to student teaching after a review of observation and participation experience.....	2		1	2	3	4	1		

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SUPERVISION OF STUDENT TEACHING

1. Supervision of the student teacher is totally the responsibility of the critic teacher.....	7				4		2		
2. Supervision of the student teacher is the joint responsibility of the critic teacher and the supervisor of student teaching.....				2	4	7			76
3. The student holds daily conferences with the critic teacher.....	1		1	1	4	5	1		66
4. The student holds conferences with the critic teacher as the need arises.....	1				2	10			86
5. The student teacher has a conference every week with the supervisor of student teaching.....	4	1	1	2	2	3			
6. The student teacher has a conference with the supervisor of student teaching at least three times (or _____ times) during the student-teaching period.....				1	3	9			77
7. Conferences with all the student teachers together and the supervisor are held weekly.....	4	2		2	1	2	2		

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SUPERVISION OF STUDENT TEACHING

	Value					NR	70% Level	Pract. in%
	0	1	2	3	4				5
8. Conferences with all the student teachers together and the supervisor are held two or more times during the student-teaching period.....	2			3	2	6		
9. There are scheduled meetings at which all the student teachers, supervisor(s), and faculty members attend.....	3			3	4	2	1	
10. College faculty members (not supervisors) make two or more student-teacher visitations during each student-teaching period..	4		3	1	1	3	1	
11. The supervisor of student teaching visits each student three or more times in a student-teaching period.....	1				1	11		68
12. The supervisor of student teaching visits the student teacher as the supervisor deems necessary or is informed of the need for such a visit.....	5		1	2	3	2		
13. The critic teacher and the student teacher are given advance notice of the supervisor's visits.....	4		1	2	1	4	1	

ADMINISTRATIVE PRACTICES WITH REGARD TO THE STARTING OF THE PROGRAM

1. The student teacher reports to the school at the same time as the regular teacher prior to the beginning of the school term.	1		1	1	4	6		47
2. The student teacher is present for the first day of school even though the college program does not begin until a later date.	1		1	1	2	8		51
3. The student teacher is present for the last day of school even though the college program has terminated at a prior date....			1		1	9	2	42
4. The student teaching experience is placed at least one semester before the end of the student's undergraduate career.....			2	2	2	7		76

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES WITH REGARD TO THE STARTING OF THE PROGRAM

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
5. The student teaching experience is at least eight weeks long with teaching done on a full-day basis.....	1		1			7	4		
6. The student-teaching experience is at least twelve weeks long with teaching done on a full-day basis.....				1	2	7	3		65
7. Student-teaching assignments are made at least one month (or _____) before the beginning of student teaching.....				1	2	10			94
8. The prospective student teacher is notified of the location of his student teaching experience at least one month prior to the beginning of student teaching.....		1		2	2	8			82
9. The prospective student teacher is notified of the location of his student teaching experience at least one week prior to the beginning of student teaching.....		1	1	2	1	6	2		
10. There is a program of conferences between the teacher-education personnel and the critic teachers for the purpose of greater coordination and correlation of the program.....					5	8			66
11. The student teacher is looked upon as another professional person on the staff of the school in which practice teaching is done.....			1	1	3	8			85
12. The student teacher is introduced to the student body as an assistant to the regular teacher.....	1		2	1	3	4	2		
13. The teaching load of the critic teacher is lessened sufficiently to permit time for conferences and student-teacher planning and guidance.....	1			4	3	4	1		
14. The student-teacher load of the critic teacher does not exceed one full-time student teacher for any single period of time.....		1	1	4	3	3	1		
15. The critic teacher is reimbursed by the teacher-education institution for services rendered.....	1			1	3	7	1		31

ADMINISTRATIVE PRACTICES IN INDUSTRIAL ARTS STUDENT TEACHING PROGRAMS

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SELECTION OF STUDENT TEACHING LOCATIONS

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
1. Student-teaching assignments are based on the demonstrated abilities, special interests, inadequacies and potentialities of the individual who is to do the student teaching.....					3	8	2		60
2. The student-teaching location is selected because of its facilities and environment being typical of situations in which the student may choose to teach upon graduation.....				1	5	7			68
3. Selection of student-teaching locations is based upon a careful consideration of:									
a. Cooperative attitude of teachers and principal.....	1			2	5	5			72
b. Progressive philosophy and practice....	1			2	5	5			74
c. A good building with adequate equipment.....			1	2	6	3	1		65
d. Freedom in teaching permitted student teachers.....	2				6	4	1		65
e. The school being the center of community life.....	1		1	2	5	3	1		
f. Professional preparation of teaching personnel.....				1	5	5	2		68
g. Extra-school activities.....	2		1	2	4	2	2		
h. Community and environment.....	2			2	5	2	2		
i. Nature of the shop program.....					6	6	1		82
4. Two or more visits by college faculty members and student-teaching supervisor(s) precede acceptance of a situation as a location for student teaching.....				1	3	9			60
5. Student-teaching locations are selected because of their convenience to the student teacher.....	4			7	1	1			
6. Student-teaching locations are selected because of their nearness to the college..	3	1	2	3	1	2	1		
7. Selection of a student-teaching location is based upon the recommendations of an appraisal committee at the college specifically set up for such selection activity..	2			2	1	6	2		
8. Selection of student-teaching locations are based upon recommendations by superintendents of schools, supervisors (state, county, city, local) principals, etc.....	1	1	1	1	5	2	2		

The two hundred and eighty practices, procedures, or concepts reaching the seventy percent level were chosen by representatives of thirteen outstanding Industrial Arts student teaching programs as having significant value in Industrial Arts student teaching.

Sixty-nine percent of the original items in the section titled "Evaluation of student teaching in Industrial Arts" were indicated as having "high" or a "very high" degree of value for student teaching programs in Industrial Arts education. Each of the four other areas had approximately fifty percent of their items listed as having a "high" or "very high" degree of value.

The greatest point of agreement on items having high value was in the sub-topic "What is evaluated?" in the evaluation section. The least agreement among the persons representing the programs in thirteen institutions was found in the following sub-topics: "Methods by which goals or purposes are arrived at"; "Student-teacher participation in extra-shop activities"; "Obtaining a knowledge and understanding of the community in which the student teaching is done"; and "Community experiences for student teachers". Values indicated for individual items in each of the above topics ranged from "no value" up to and including "very high" value. A very small percentage of the items in these five sub-topics obtained consistent enough "high" or "very high" values to be included in the final selection of items listed in this chapter.

The degree of practice for the various items judged as having sufficient value ranged from ten to ninety-eight percent. It was also found that the "value" column received in most instances a higher rating than the "degree practiced" column. This fact is further illustrated by an analysis of the various averages of the "degree practiced" column. The average "degree practiced" for the five major areas ranged from

sixty-three to sixty-nine percent, with the former being the area "Student teaching experiences", and the latter being "Administrative practices in Industrial Arts student teaching programs".

Since both the degree practiced and the value columns were rated on similar scales, it is evident that those per cents ranging from sixty-two to sixty-nine would place the average scale value at approximately three. This is obviously less than the four and five ratings given by at least nine of the respondents to each of the items selected as having significant value for the study.

The following chapter is an analysis of the reactions to the questionnaire.

CHAPTER V

AN ANALYSIS OF REACTIONS TO THE QUESTIONNAIRE

The purpose of this chapter is to point out those practices that were indicated as having high value in Industrial Arts student teaching programs and to analyze the responses for consistency, omissions, and points of view. Reference is also made to trends or generalizations indicated by the responses.

A review of the reactions shows a marked agreement on specific items involving operations, principles, or procedures that are strictly classroom or shop routine. There is also considerable harmony regarding the student-teacher characteristics which should be evaluated, or the specific attributes he should possess. However, once there is a departure from the "mechanics" of the program, there appears to be a greater amount of dispersion in the opined value of the various items. This generalization is based upon the consistently low value ratings given items in the areas of extra-curricular activities of the student teacher, community participation by the student teacher, community study and understanding by the student teacher, and the student teacher's relationship with other staff and faculty members. A closer analysis of the data reveals that the same institutions consistently rate these factors high, while on the other hand another group consistently rates these factors low. In view of the most recent literature in the field, it is permissible to say that forward-looking teacher-education programs will place increasing emphases upon many items which received only a limited number of high value ratings in this survey. It is with this thought in mind that many of these items are included in subsequent analyses of practices possessing

considerable value in the teacher-education program.

Practically every item received a four or five rating in the value column indicating that some authority holds them in high regard. However, a few items did not have a five rating by any respondent, and a fewer still had neither a four nor a five rating in value. The following discussion deals with an analysis of such responses.

There were three items whose value was not indicated by either a four or a five. These items were:

1. Goals are set up by the department head.
2. Evaluation policies and procedures are developed by the supervisor of student teaching in Industrial Arts, or by some other single individual.
3. Student teaching is done the last semester with no opportunity for additional work on the undergraduate level.

These three items received consistently low value ratings. The first two were consistent in the concept that such matters should not be entrusted to a single individual. The third item is in line with the responses to other items in the study which indicate a need for further study after having had the student teaching experience.

Eighteen items were not indicated with a five rating by any of the respondents. These items are presented in the sequence in which they appear in the questionnaire.

1. The responsibility for setting up the goals for student teaching is assumed by the head of the Industrial Arts department.
2. Goals are arrived at through joint collaboration with several teacher-education institutions within the state.
3. The student's self-evaluation is used only for diagnostic and remedial purposes.
4. The evaluation procedures were adopted in part or totally from suggested programs set up by some professional organization or association.

5. The student teacher obtains parent, employer, and community reaction to the program.
6. The student assists in school publications.
7. The student attends at least one meeting of the local governing body. (council, board of commissioners, etc.)
8. The student attends at least one meeting of the local school board.
9. The critic teacher is a part-time teacher on the college staff.
10. A written examination is required prior to admission to student teaching.
11. Supervision of the student teacher is totally the responsibility of the critic teacher.
12. The student teacher is evaluated on his relationships with faculty members in other subject areas.
13. The reactions of other teachers at the practice-teaching situation are used in making the evaluation.
14. The supervisor of student teaching makes the only evaluation.
15. Students are given preparation in the noting and writing of anecdotal records.
16. The student assists pupils in planning their school program.
17. The student extends guidance and counseling services to pupils in keeping with policies of the regular guidance personnel of the school.
18. The student teacher studies records of former students who are now prominent in the local community.

Analysis of the above items gives some clue to the possible reasons for such ratings by the respondents. Most of the above items may be covered by one or more of the following ideas regarding the responses:

1. There is an apparent narrowness of concept regarding the work and responsibility of the Industrial Arts teacher in the whole school program.
2. There is a general feeling expressed in the responses that the borrowing or adopting of materials or procedures from other institutions

or organizations has little value.

3. There is a consistent regard for democratic action in the formulating of policies and procedures as well as in deciding basic issues.

4. There is a narrowness of philosophy regarding the shop teacher's responsibility and function in the community, as well as a restriction of concept in the relationship existing between the school and the community.

Further analysis of certain items in the study reveals that ten items were consistently ranked as having "no value" by a number of the respondents.

The following is a listing of items that were ranked as having "no value" by six or more of the thirteen respondents.

1. The supervisor of student teaching makes the only evaluation.
2. Student teaching is done the last semester with no opportunity for additional work on the undergraduate level.
3. The critic teacher is a part-time teacher on the college staff.
4. A written examination is required prior to admission to student teaching.
5. Supervision of the student teacher is totally the responsibility of the critic teacher.
6. Evaluation policies and procedures are developed by the supervisor of student teaching in Industrial Arts, or by some other single individual.
7. The evaluation is used to appraise the quality of the school as a student-teaching center.
8. Evaluation procedures were wholly adopted from a student-teaching program at some other institution.
9. Qualifications for the critic teacher are set up by the state board of education.
10. There are no specific qualifications for the critic teacher.

Further consistency among the respondents is revealed by the above items. The opinions of a number of the respondents are against having

a single individual decide basic issues and policies. There is also an expression of opinion against the adoption or borrowing of policies and procedures from other institutions or organizations. The items on the critic teacher's qualifications indicate that there should be some qualifications set up for the position, but this matter should not be delegated to the state board of education. There is also the expressed feeling that the evaluation is only for the evaluation of the student teacher and not to any great extent directed towards the situation in which the student teaching was done.

Goals or Purposes of Student Teaching. The respondents to the questionnaire were largely in agreement in their opinions regarding the goals or purposes of student teaching in Industrial Arts teacher education as they were listed in the study forms. The statements of goals or purposes were in the form of broad purposes, thus indicating a trend in thought among the respondents.

However, there is a degree of inconsistency among some of the respondents in their replies to the statement "Objectives or goals as set up are very general with wide margin for interpretation". This item did not reach the seventy percent level of value. Three respondents assigned it "no value" and two listed it as having "little or occasional value".

There was a feeling among the respondents that the responsibility for setting up goals for student teaching should be assumed by a committee consisting of college faculty, student teaching supervisor(s), critic teachers, principals, and students. The responses revealed an emphasis on having the student participate in the responsibility for setting up goals as was indicated by the replies to the statement "The student participates in conferences for the purpose of setting up goals or purposes for student teaching". However, the degree of practice for this item was only fifty-five percent.

The method of arriving at goals or purposes which was indicated as having a high degree of value was "through conferences attended by college faculty, student teaching supervisor(s), critic teachers, principals, and students". This view is in harmony with the concept noted above regarding who should share the responsibility for setting up goals. The value of having goals or purposes arrived at through collaboration with other institutions or educational associations showed wide variation.

There was considerable agreement among the replies that the transforming of goals into operating practices should be accomplished by way of three procedures: (1) all persons concerned with the student teaching and its operation should be fully informed; (2) operating practices should be developed through an analysis of goals or purposes; and (3) there needs to be an adequate program of pre- and post-student teaching activities to provide for an integration of the whole teacher-education program.

Evaluation of Student Teaching. The responses to the purposes of evaluation revealed that the evaluation should be directed towards the individual, his progress, strengths, weaknesses, and eventual placement. Little value was placed upon evaluation for the purpose of planning the student's post-student teaching activities. This finding indicates a certain amount of inconsistency with the previous statement. Divergent opinions were indicated as to the significance of "evaluation" as a means of improving the teacher-education program at the school, or as an evaluation of the student-teaching location.

The evaluation of student teaching experiences based upon the degree to which the overall objectives of Industrial Arts teacher education are met was indicated with considerable value. It is not obvious from the questionnaire that these objectives are clearly set forth and defined in terms of student development.

The two methods for developing evaluation policies and procedures were (1) through an analysis of student teaching objectives or goals, teaching facilities available personnel, and educational philosophy underlying the student teaching experience; and (2) as a result of practices in other similar institutions. The respondents were largely against adopting the evaluation procedures from other institutions or from the state department.

The evaluation procedures receiving high value included the use of itemized check lists, anecdotal records, the recording of evidence of specific behavior, conferences, and observations. The evaluation form consisting of a number of "teacher traits" or characteristics each of which is divided into a number of degrees of excellence or proficiency, with a descriptive paragraph describing each variation was indicated by most respondents as having a "high" or "very high" degree of value. "High value" was also placed upon having the supervisor make a written report of each student-teaching observation.

In view of the degree of practice, the check sheet or itemized report sheet is practiced in ninety-four percent of the evaluations. The critic teacher-student teacher conference for the purpose of discussing the evaluation was practiced eighty-five percent of the time. The use of anecdotal records in evaluating student teaching was practiced forty-nine percent of the time.

There was considerable agreement revealed on the value of the personal qualities, professional qualities, instructional proficiencies, the abilities necessary to stimulate pupil growth and development, and shop organization and management abilities, as they were listed in the questionnaire. However, wide variations in value were reported in the evaluation of the student teacher's relationships with such people as the critic teacher, supervisor of Industrial Arts student teaching, faculty members,

principal, staff officers in the school, and the community in general.

The persons responding to the questionnaire placed high value upon applying the following procedures in arriving at the evaluation of a student-teaching experience: a separate evaluation is made by both the supervisor of Industrial Arts student teaching and the critic teacher; a composite or summary of all evaluations of each student teacher is made by the supervisor of student teaching; self-evaluation; and pupil reaction to the student teacher. The respondents place little value on the reactions of other teachers, the principal, or the community in making an evaluation. This latter condition is consistent with the general trend of thought indicated by the respondents, inasmuch as little value was placed upon the evaluation of the student's relationships with other teachers, principal, or the community. This trend of thought presents a restricting concept with no great emphasis being placed upon having the student become acquainted with the whole school program and the community.

The time at which the evaluation is made was indicated with high value in two instances: (1) periodic conferences involving the critic teacher, student-teacher supervisor, and student teacher; and (2) evaluation on a day-by-day basis involving the student teacher and the critic teacher. In every instance where a definite time (weekly, monthly, or semester) was set up for the evaluation, wide variation in value was reported by the respondents. This trend of thought is consistent with the procedures that received high value ratings, in that it tends to make the evaluation an integral part of the learning process rather than a scheduled event to be experienced periodically by the student teacher.

Experiences to Precede and to Follow Student Teaching. The pre-student teaching experiences that received high value or greater may be listed in two groups. The one consists of course and observation work

within the school, and the second deals with the student's preparation for performing the mechanics of the shop teacher's job.

In the former classification the following items received high ratings in value: guided experiences in observing boys and girls at work and play; educational psychology; a course in human growth and development; directed observation; a course in methods; curriculum planning; organization of instruction; evaluation of pupil growth; educational measurement; preparation in analyzing materials, objects and topics in view of their teachable content; and observation of the administration of tests and participating in interpreting results.

The second group mentioned above included the following experiences which were in the seventy percent level or above: an adequate program for the development of shop skills; preparation in shop inventorying; preparation in shop requisitioning; preparation in shop planning; preparation in equipment selection; and preparation in lesson planning.

There is extensive agreement with regards to the above items having a high degree of value. However, the data indicate a wide variation of opinion regarding community experiences prior to student teaching. A degree of inconsistency is in evidence when the items -- "The student participates in curriculum planning in view of pupil-needs in a given situation." and -- "Students are given preparation in analyzing materials, objects, and topics in view of their teachable content." are viewed with a high degree of value, while nearly every item dealing with the community or away from the school was indicated with a wide range of value. The item -- "The student is required to make a community study as a means of analyzing and interpreting the needs of the pupils." did not attain the seventy percent level and was indicated with a wide range of value with the mode being "a fair amount of value". Educational sociology, likewise, did not reach the seventy percent level.

The teacher education practices required during the student-teaching period which were considered of high value consisted of compiling a morgue, keeping a notebook, recording outstanding instances with their significance to the learning situation, and submitting weekly reports of activities. The respondents also indicated a high value on having the students meet once weekly for a seminar on teaching problems experienced on the job. The "keeping of a diary" met with a wide range of value and was not included in the seventy percent level.

The teacher-education experiences to follow student teaching which were viewed as having "high" or "very high" value consisted in having the student teaching done prior to the last semester, with opportunity provided for study of problems experienced in student teaching. There was also a high regard for one or more professional courses to follow student teaching and for the student to attend professional meetings.

At this point there is an indication of certain inconsistencies in the replies indicated on items under the "Purposes of Evaluation", and the responses regarding teacher-education experiences to follow student teaching. The item -- "The evaluation is used to assist the student in a greater understanding of his strengths and weaknesses." was indicated as having a very high degree of value by eleven respondents, and a high degree of value by two respondents. However, the item "The final semester's work is based mainly upon the "shortages" of the student as indicated by the student teaching experience." is indicated relatively low in value.

There is an indication of high value for one or more professional courses following student teaching, but there is no mention of the possible areas of study. This is evidenced by the lack of high value being placed on any of the eight or ten items that contain suggested areas of study.

Student Teaching Experiences. This phase of the discussion deals with those experiences that the student undergoes in student teaching. Two items out of eleven in the sub-topic "Obtaining a Knowledge and Understanding of the Community in Which the Student Teaching is Done" reached the seventy percent level of value. Those two items are -- "The student becomes acquainted with the organization and structural pattern of the local school administration." and -- "The student reads the local newspaper(s)."

Several other items under this same sub-topic that deserve mentioning include: The student reviews surveys of the community in terms of its social, economic, and political aspects. The student reviews surveys and analyses of local and neighboring industries; The student reviews surveys and analyses of the occupations of the inhabitants of the community. The student reviews follow-up studies on former pupils of the school. The student reviews reports on the cultural and educational institutions in the community and neighboring vicinity. The student reviews the recreational and avocational facilities of the community. The student reviews the history, background, and tradition of the community. The student becomes acquainted with the employment and placement agencies of the community. The student studies the community in view of potential teaching materials and facilities such as guest speakers, industrial and commercial exhibits, parks, construction, community fairs, and excursions. These items were rated "high" or "very high" by approximately forty-six percent of the respondents. The inclusion of these items in the student teaching program constitutes a new departure in teacher education in harmony with the literature in the general field of student teaching. Therefore, it is important that they be included in the practices to be considered as a part of the total program.

In familiarizing the student with the school, high value was

assigned to an "orientation tour" of the school which included the fire control measures, stock rooms, maintenance facilities, administrative offices and the duplicating room. The student's relations with the counselor had only one item at the seventy percent level. This included becoming familiar with the testing materials available.

The tabulations showed high value for the student to have a conference with the principal and the supervisor of Industrial Arts in the school. A fairly high amount of value was assigned to familiarizing the student with the school library, the superintendent, the central administrative office, and the principal's office.

Significant value was attached to the student's attaining an understanding of school policy on vacations, absences, community and school standards of conduct, and school reports. The student would become informed on these items through reading written statements of policy, conferring with proper officials, and attending faculty meetings.

In acquainting the student with the school personnel, the following acquaintances were regarded with high value: The local Industrial Arts supervisor; the principal of the school; the head of the Industrial Arts department; and guidance personnel. The following people did not reach the seventy percent level in relation to the student making their acquaintance: the local superintendent of schools; the local division supervisor (i.e., elementary, secondary); the state supervisor of Industrial Arts; heads of other departments in the school; other teachers; faculty personnel officer; school nurse; school doctor; attendance officer; and the librarian. These responses again implies a narrowness of concept in understanding the job responsibility of a teacher in the total school program.

Meetings which received high value for the student teacher to attend included faculty social functions, faculty meetings, Industrial Arts in-

service training meetings, and professional meetings held by Industrial Arts teachers. Wide variation in value was revealed in the items relating to attendance at local and district National Educational Association meetings. One interpretation may be that meetings identified with the subject area directly are thought important but professional meetings which cut across subject lines are held in less regard.

Nearly every item in the area of teaching responsibilities of the student teacher that was listed in the forms reached the seventy percent level. The two items that did not reach this level of value were:-- "The student assists pupils in the development of research units." and -- "The student takes one or more groups on field trips pertaining to the work being studied." The lack of high regard for the former may be due to a concept method which makes pupil research unnecessary.

In a review of the findings in the classroom activities of the student teacher relative to pupil study and development, the following activities were viewed with "high" or "very high" value by seventy percent of the respondents: "the student keeps anecdotal records of pupil activities; the student is encouraged to use the facilities of the counseling and referral agencies; the student receives experience at both the junior and senior high school level; the student observes a pupil-teacher conference conducted by the critic teacher; and the student observes two or more pupil-counselor conferences conducted by the counselor. This latter item had a degree of practice of ten percent, and the keeping of anecdotal records had a degree of practice of twenty percent. Items which were indicated as having fairly high value just below the seventy percent level included the making of case studies, using cumulative records, assisting in pupil planning, studying pupil needs, and directing the activities of problem cases. Although these items were not at the seventy percent level,

there was sufficient "high" and "very high" value attached to them by certain of the respondents to warrant their consideration in the student teacher's activities.

Every item in the area "Student Teaching Experiences Relative to Shop Organization" was rated "high" or "very high" by at least seventy percent of the respondents. This complete acceptance by the respondents is consistent with other findings in the study. However, there is a reversal of acceptance, yet a great deal of consistency in value rating when one views the respondents' reactions to the items in the area "Student Teacher Participation in Extra-Shop activities." Only one out of nine items in this area was included in the seventy percent level. This item was -- "The student participates in and provides leadership in shop or hobby clubs." Those items that were indicated with a lesser value included: assisting in assembly programs; directing school activities; chaperoning dances and parties; assisting in school publications; promoting special drives for funds; organizes or sponsors a club; and participates in adult education work. Major inconsistencies are in evidence when one analyzes the goals or purposes of student teaching that were rated so highly in the beginning of the study, and then compares the broadness of those statements with the narrowness of function as is illustrated in this and several other areas.

Extra-teaching activities carried on in the shop by the student teacher that were indicated sufficiently high to attain the seventy percent level include: taking inventory of materials and supplies; making requisitions for supplies and materials; assisting the shop teaching with extra-curricular activities; assisting pupils in preparing a display or exhibit; and handling various types of discipline cases. Several other items in this area received sufficiently high ratings to be mentioned in

the planning of student teaching activities, inasmuch as every item was ranked by nearly every respondent as having a "fairly high" value or higher.

The items dealing with student teaching experiences with teaching aids and techniques received nearly complete acceptance at the seventy percent level. The only item not accepted, and which received a relatively low value rating was -- "The student teacher arranges for one or more guest speakers to discuss topics relative to the work studied."

The only item in the area of community experiences for the student teacher that reached the seventy percent level was -- "The student rooms and boards in the community." Two other items received a fairly high degree of value. These items included: "The student attends church in the community.", and "The student visits the homes of two pupils for purposes relative to school and educational activities." All other items were ranked relatively low in value. Such items included: participation in a local social, professional, or fraternal organization; attending at least one meeting of the local governing body; attending one meeting of the school board; and attending two or more meetings of the local P.T.A., parent's club, or other school-community organization. This minimizing of the value of such community activities is consistent with the other responses in the study. However, the importance of these items is still recognized in the consistently high value placed upon them by certain of the respondents who appear to have forward-looking programs.

Administrative Practices. The authorities on student teaching who responded to the questionnaire placed considerable value on having the student teaching activities derived through conferences attended by college faculty members, critic teachers, supervisor(s) and students. This procedure is consistent with the respondents opinions on other items that were mentioned earlier in which the above persons were called into

conference to decide certain policies and issues. The respondents placed high value on having a written statement of policy regarding student teaching practices and procedures.

Qualifications for the critic teacher which were indicated of high value consisted of a master's degree with at least five years of successful teaching experience on the elementary or secondary school level.

Although three respondents indicated that having the critic teacher as a member of the college staff was of very high value, it did not reach the seventy percent level. This item ranged in value from "no value" to "very high" value with a mode at "a fair amount of value".

Considerable agreement was revealed among the respondents as regards the supervisor of student teaching being a full-time member of the college staff. Although the item -- "The supervisor of student teaching must meet certain requirements set up by the state board of education." did not reach the seventy percent level, it was indicated by seven respondents to have "very high" value, and by one respondent a "high" value. Three indicated a fair amount of value.

Three procedures were indicated as having "high" or "very high" value for determining the eligibility of students for student teaching: (1) dependent upon the demonstrated readiness of the pupil; (2) based upon the completion of a given number of semester hours; and (3) based upon the student's attainment of a certain scholastic average above the passing grade. The first procedure based upon the demonstrated readiness of the student was indicated by ninety-two percent of the respondents as having a "high" or "very high" value, while the latter two were at the seventy percent level. There was a difference in the degree of practice among these three procedures. The first was practiced only fifty-five percent of the time, while the second and third were practiced eighty-seven and seventy-four percent, respectively.

The item setting up a health examination as a requirement prior to admission to student teaching was not included in the seventy percent level, although it was indicated with a "very high" value by seven of the respondents. A review of the student's cumulative record was included in the seventy percent level both as a means of accepting the student for student teaching, and for placement in a student-teaching position.

Supervision of the student teacher as a joint responsibility of the critic teacher and the supervisor of student teaching was indicated to have high value. Conference methods that were held in high regard included: the student has daily conferences with the critic teacher; the student teacher and the critic teacher have conferences as the need arises; and the student teacher has a conference with the supervisor of student teaching at least three times during the student-teaching period.

The item -- "The supervisor of student teaching visits the student teacher as the supervisor deems necessary or as he is informed of the need for such a visit." ranged in value from "no value" to "very high" value. The mode was at the "no value" rating. The underlying concept behind this item was based upon supervision for a purpose, and not one of a series of scheduled visits.

Considerable agreement was revealed among the respondents regarding the administrative practices at the beginning and end of the school term. The following concepts were received with "high value": The student teacher reports to the school at the same time as the regular teacher prior to the beginning of the school term. The student teacher is present for the last day of school even though the college program has terminated at a prior date. Student teaching is at least twelve weeks long on a full-day basis. And the prospective student teacher is notified of the location of his student-teaching position at least a month prior to the beginning of student

teaching. The degree of practice among these items presents a somewhat different picture. Although the items -- "The student teacher reports to the school at the same time as the regular teacher prior to the beginning of the school term." and -- "The student is present for the last day of school even though the college program has terminated at a prior date." were indicated to have high value, they were only practiced forty-seven and forty-two percent of the time, respectively.

A procedure for greater coordination of the student-teaching program that received much favor was to have a program of conferences between the teacher-education personnel and the critic teachers. The status of the student teacher as another professional person on the school staff was indicated to have high value, while a similar item -- "The student teacher is introduced to the student body as an assistant to the regular teacher." did not reach the seventy percent level.

Seventy-seven percent of the respondents placed high value on having the critic teacher reimbursed by the teacher education institution for services rendered.

Unanimous accord was reached among the respondents as to the high value of having student teaching assignments based on the demonstrated abilities, special interests, inadequacies and potentialities of the individual who is to do the student teaching. High regard was also placed upon the student-teaching situation being typical of situations in which the student may choose to teach.

The following factors were rated with considerable value in the selection of student-teaching locations: (1) cooperative attitude of teachers and pupils; (2) progressive philosophy and practice; (3) a good building with adequate program; (4) freedom in teaching permitted student teachers; (5) professional preparation of teaching personnel; and (6) the nature of

the shop program. Each of the above items reached the seventy percent level or above. Those items for the selection of student-teaching locations that did not reach the seventy percent level were: the school being the center of the community life; extra-school activities; and community and environment. Here again these factors are related to the community and extra-school function, and because they have not met the seventy percent level is no reason to discount their value.

The final selection process that was indicated with high value consisted of having two or more visits by college faculty members and student-teaching supervisor(s) precede acceptance of the situation.

Items dealing with convenience to the student and nearness to the college in selecting student-teaching locations were not regarded very highly.

The following chapter deals with the jury reactions to the findings and responses indicated in the study.

CHAPTER VI

JURY REACTIONS TO THE RESPONSES TO THE QUESTIONNAIRE

The purpose of this chapter is to present the jury's reactions to the responses made by representatives of the thirteen Industrial Arts teacher-education programs included in this study.

The jury consisted of three persons who have attained recognition for their work in teacher education. These three men are: Dr. W. Earl Armstrong, Associate Chief for Teacher Education, United States Office of Education; Dr. John R. Ludington, Specialist in Industrial Arts, United States Office of Education; and Dr. Allen D. Patterson, Director of Teacher Education and Placement, State Teachers College, Lock Haven, Pennsylvania. Only one of the above persons is directly connected with Industrial Arts education. It was felt that the selection of persons outside as well as within the Industrial Arts field would give different valuations as well as contribute the benefits of study and understanding in other student teaching areas.

A verbatim report of each of the juror's reactions is presented in the following pages. The several written reactions are presented anonymously.

Reaction Number 1. "I have read carefully the materials which you have collected on student teaching in Industrial Arts. In general, my thinking would lead me to agree with the reaction of others to the issues and problems which you have raised. I should like to emphasize my agreement with two points under Administration of Student Teaching; namely, the student teaching experience is at least twelve weeks long with teaching done on a full-day basis, and selection of student-teaching locations

is based upon careful consideration of - and you mention items "a" to "i".¹

There are, however, other items that I would emphasize more than those who have reacted to the evaluation form. Those items that I would emphasize more than others have done are:

1. Item 8 under Nature of the Goals²
2. Item 2 under Responsibility for Setting up Goals³
3. Item 10 under Methods by Which Goals or Purposes are Arrived At. For item 10, I would include consultation with student teacher, advisor, and cumulative record.

N.B. Each of the items referred to by the jurors is presented in its entirety at the bottom of the page on which it is mentioned.

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
¹ Selection of student-teaching locations is based upon a careful consideration of:								
a. Cooperative attitude of teachers and principal.....	1		2	5	5			72
b. Progressive philosophy and practice.....	1		2	5	5			74
c. A good building with adequate equipment.....			1	2	6	3	1	65
d. Freedom in teaching permitted student teachers.....	2				6	4	1	65
e. The school being the center of community life.....	1		1	2	5	3	1	
f. Professional preparation of teaching personnel.....				1	5	5	2	68
g. Extra-school activities.....	2		1	2	4	2	2	
h. Community and environment.....	2			2	5	2	2	
i. Nature of the shop program....					6	6	1	82
² Objectives or goals as set up are very general with a wide margin for interpretation.....	3		2		7	1		
³ The responsibility for setting up goals for student teaching is assumed by a committee consisting of college faculty, student teaching supervisor(s), critic teachers, principals, and students....			1	1	3	8		46

4. Item 4 under Purposes of Evaluation¹
5. Item 1 under Developing Evaluative Procedures²
6. Item 4 under Evaluation Procedures Used³
7. Item 8 under What is Evaluated, and in item 8 I would emphasize the sub-topic "e".⁴
8. Under Experiences to Precede Student Teaching, I would emphasize a point that has not been listed in the questionnaire; namely, that students should have experience in seeing what it means for a teacher to work with other teachers before those students start to do student teaching.
9. Item 2 under Teacher-Education Experiences to Follow Student Teaching⁵

	Value						NR	70% Level	Pract. in %
	0	1	2	3	4	5			
¹ The evaluation is used in planning the student's post-student teaching activities and studies..			2	5	4	1	1		
² Evaluation policies are jointly developed by college representatives, critic teachers, and student teacher.....			1	3	5	3	1		
³ The critic teacher makes use of anecdotal records in evaluating the student.....		1	1	2	5	4			49
⁴ The student teacher is evaluated on his relationships with the following individuals or groups:									
a. The pupils.....				2	2	9			78
b. The critic teacher.....		1	1	3	3	5			
c. The supervisor of Industrial Arts student teaching.....	2		2	4	3	2			
d. Other faculty members of the Industrial Arts department of the student-teaching situation	1	2	1	3	3	2	1		
e. Faculty members in other subject areas.....	1	3	1	5	2		1		
f. The principal.....	1		3	3	3	2	1		
g. Administrative officers other than the principal.....	2	1		4	3	1	2		
h. Staff officers in the school..	3	1		3	3	1	2		
i. Parent-teacher associations...	4	1	1	1	5	1			
j. The community.....	3		3	1	2	3	1		
⁵ Opportunity is provided for further study and analysis of problems experienced while doing student teaching.....			1	1	1	9	1		57

10. Item 12 under Obtaining a Knowledge and Understanding of the Community in Which the Student Teaching is Done. The whole area of community understanding seems to be considered rather unimportant to the people who have reacted to your form. In my judgment it is one of the important areas in teacher education.
11. Items 8¹ and 9² under Teaching Responsibilities of the Student Teacher are emphasized more than Item 13³, which seems to me to be in the same category. I doubt if any of them should be singled out as specific methods of teaching to be used a certain amount of time.
12. Item 10 under Student Teacher Participation in Extra-Shop Activities. This whole area seems to be neglected. Those who have marked the form seem to have failed to realize that the job of the shop teacher extends beyond the classroom."

Reaction Number 2. "As you requested in our recent conversation, I have examined very carefully the questionnaire prepared in connection with the study you are making of "Problems in Industrial Arts Student Teaching" and a summary of the findings obtained from it. May I compliment you upon the thoroughness of your thinking in analyzing this problem and the clarity of the questionnaire form.

In most instances I find myself in agreement with the results indicative of practices in Industrial Arts programs of student teaching. Certain inconsistencies of practice or value judgments have caused me

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1 The student teacher teaches one or more sessions with the use of motion pictures.....					7	6		34
2 The student teacher teaches one or more sessions with the use of slide films.....					7	6		35
3 The student teacher takes one or more groups on field trips pertaining to the work being studied.....			2	2	4	4	1	

some concern, i.e., Evaluation Procedures Used, item 4, page 2¹ and item 5, page 3². Item 3 under What is Evaluated³, on page 3 receives a higher rating than any of the items under Responsibility for Setting Up Goals or Methods by Which Goals or Purposes Are Arrived At, which might be related to the individual needs of a student teacher.

On page 1 under Purposes of Evaluation, item 8⁴ involving students' self-evaluation received no rating, whereas on page 7, under By Whom is the Evaluation Made, item 5⁵, this same point receives a forty percent degree of practice.

It is certainly revealing to note that on page 2, item 2⁶, the goals as set up are nebulous or not well defined, and then to see the

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
1 The critic teacher makes use of anecdotal records in evaluating the student.....		1	1	2	5	4		49
2 In the evaluation of the various factors, significant incidents and anecdotes are recorded to implement the evaluation.....		1		2	4	6		57
3 The evaluation of student teaching is considered in part to be an evaluation of the total teacher-education program and its effect upon the individual...	1		1		2	9		76
4 The student's self-evaluation is used as one of the bases for the final evaluation.....		2	1	3	3	4		
5 The self-evaluation by the student is considered as a part of the total evaluation.....	2	1			6	4		40
6 The goals as set up are nebulous or not well defined.....	3		1	2	1	2	4	

high ratings given on page 4 to items 1, 2, 3, 4, 5, and 6,¹ where emphasis is placed upon the use of these goals in guiding operating practices, and in the sections dealing with evaluation.

In my opinion the section on Experiences to Precede Student Teaching tends to reflect a status quo situation and some of the items receiving attention in only a few schools might be more indicative of "good" programs. This situation is perhaps revealing of needed research and experimentation by our teacher-education leaders. This same comment seems to apply equally well to the section dealing with Experiences to Follow Student Teaching.

Certainly good teaching is based upon a knowledge of young people in the community or social setting. I am disappointed in that the items

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
¹ Goals are understood by and accessible to all who are linked with the student teaching program.....				1	4	8		69
Operating practices in the student teaching program are developed through an analysis of the objectives or goals of student teaching.....				2	6	5		65
Goals and objectives of the student-teaching program are made known to student teachers, critic teachers, and supervising personnel by written communications....			1	1	3	8		63
A well-developed program of conferences is held to integrate and provide communication of goals and objectives among the various personnel involved.....			1		2	9	1	76
The individual goals of the student teaching experience are dealt with by areas or phases of activities participated in by the student.....	1		1	1	5	4	1	65
An adequate program of pre- and post-student teaching activities provides for a greater integration of the whole program with respect to the goals of student teaching.....			1		4	8		57

1 through 8 on page 1 on Understanding the Community¹ do not rank higher in this study of practices. This same criticism applies to those items relative to Pupil Study and Development, page 5, items

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
¹ The student reviews surveys of the community in terms of its social, economic, and political aspects.....		1	3	3	2	3	1	
The student reviews surveys and analyses of the occupations of the inhabitants of the community.		1	2	4	2	4		
The student reviews surveys and analyses of local and neighboring industries.....		1	1	5	2	4		
The student reviews follow-up studies on former pupils of the school.....	2		1	4	4	2		
The student reviews reports on the cultural and educational institutions in the community and neighboring vicinity.....	1		2	3	4	3		
The student reviews the recreational and avocational facilities of the community.....			1	5	3	4		
The student reviews the history, background, and tradition of the community.....		1	1	5	3	3		
The student studies the community in view of potential teaching materials and facilities such as: guest speakers, industrial and commercial exhibits, parks, construction, community fairs, excursions, etc.....		1		5	3	4		

1, 3, 4, 7, 10, 13.¹ These deficiencies are reflected in the Curriculum Planning section, page 6, in items 3, 6, 9,² and tend to perpetuate an undue emphasis on traditional organizations of subject matter and tool skills irrespective of pupils and communities."

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
¹ The student makes case studies of two or more students.....	2			3	7	1		20
The student studies and reviews pupil activities using cumulative records of the pupils.....	1			4	4	4		
The student assists pupils in planning their school program....	2	2	1	4	3		1	
The student studies certain pupils under his care in view of their needs.....			1	4	2	6		
Student takes charge of directing activities of one or more problem cases.....		1	2	3	4	3		
The student summarizes case study data and discusses the findings with the critic teacher.....				9	3	1		
² The student teacher analyzes the class personnel for appropriate subject matter or shop activities	2			5	3	3		
The student teacher makes a summary of individual pupil activities for inclusion in the cumulative record.....	3			4	4	1	1	
The student studies part reports of the department.....	2			7	2	2		

Reaction Number 3. "Three questions have guided the reviewer in his study of the replies to the questionnaire prepared by Mr. Maley. In what direction is student teaching moving in these selected "best" schools which prepare teachers of Industrial Arts? How well do these trends correspond to emphases recommended by competent students of the professional activity known as student teaching? Does the program pictured by the replies to the questionnaire reveal any inconsistencies that should lead to further study of the programs represented by these colleges which participated in the study?"

A recent study of the basic theories and practices in student teaching has shown that there is marked agreement with the principle that student teaching should be closely related to sound educational theory, help the student to see his need for further study, and afford the student an opportunity to find out how well he can guide actual teaching-learning situation. (1, p. 16) Replies to the questionnaire show substantial affirmation of this principle. The purposes of student teaching in these colleges grow out of the larger purposes of the total professional program and emphasize the need for applying in practical ways the theory and content presented in preparatory courses. There appears to be little agreement that these purposes should be narrowly specific and definite. Moreover, there is a high degree of agreement that student teaching should yield a richer understanding of pupil growth and development.

Because the responsibilities of teachers of Industrial Arts are relatively more specific than those in other areas of the secondary school curriculum, the institutions studied agree very completely upon the need for developing responsibilities for the many duties of a teacher who is in charge of a school shop. Throughout the questionnaire it is

noticed that the percentage of agreements increase as activities center around shop practice and as they focus upon the more common responsibilities of the Industrial Arts teacher. However, these replies also reveal marked concern for developing abilities to work with pupils as persons rather than as merely pupils who are to be taught skills and subject matter. Likewise, the importance of teaching from principles to practice meets with a high degree of agreement among these institutions.

Some specialists in the field of student teaching have recently stressed that objectives need to be continuous with if not derived from the needs of the student teacher, from the characteristics of the community, and from the larger social and economic scene in which Industrial Arts education inevitably operates. Little emphasis upon such objectives as these seems to be evident in the replies to the questionnaire. The absence of a useable response to item 9, page 4,¹ seems to indicate that goals or objectives are departmentally developed in advance of the appearance of the student teacher. This might indicate that goals are ready-made

- ¹ The goals for the individual student teacher are arrived at after:
- a. Consultation with the student-teacher's faculty advisor.....
 - b. Consultation with the student-guidance personnel in the college.....
 - c. A review of the student's cumulative record.....
 - d. A conference of faculty members who know the student.....
 - e. A review of the student's undergraduate record.....
 - f. A review of the student's special aptitudes or skills...
 - g. A review of the student's past experiences with boys and girls in a leadership capacity

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
a.	1	3		3	1	3	2	
b.	4	2		2	1	1	3	
c.	3	1	2	1	1	3	2	
d.			2	1	4	3	3	
e.			3	4	3	1	2	
f.		2	2	5	2	2		
g.	1	1		7	1	2	1	

more or less cooperatively by the faculty and carefully explained to the in-coming student teachers who are then expected to achieve the goals which have been set up in advance by their professors.

Part II. Part II seems to indicate that evaluation of student teaching is still carried on by highly objective and specific procedures. Very few show a percentage agreement of more than 90% and three of these indicate directly the popularity of itemized report sheets and the evaluation of shop skills and teaching skills. Data included in this part of the questionnaire also indicate (a) that evaluation is essentially the task of the master teacher or specialist in this field, not that of the student or the pupils, and (b) critical items to be evaluated are the practice skills needed for proper shop and classroom administration.

There has been marked emphasis in the field of evaluation that the objectives of the total program should guide the evaluation of progress. In the institutions reporting there seems to be a reasonable agreement with this principle as shown by the replies to item 5, page 2,¹ of this section of the questionnaire.

A second principle in evaluation requires that specific behavior reported in anecdotal records be collected to support the ratings given. This practice is approved at the 50% level. There is also evidence that the evaluation practices in these institutions deal with a wide range of personal and professional qualities and abilities among which appears skill in the use of some of the newest teaching techniques.

¹ Evaluation policies and procedures were developed for the department after a thorough analysis of student teaching objectives or goals, teaching facilities available, personnel, and educational philosophy underlying the student teaching experience.....

Value						NR	70% Level	Pract. in %
0	1	2	3	4	5			
			2	2	9			65

This reviewer is not certain that the questionnaire shows the wide-spread use of cooperative evaluation, a practice that is recommended by students in this field. Although item 4, page 7,¹ and items 5 and 9² on the same page indicate that self-evaluation and evaluation based upon pupil's reactions are approved at the 50% level of response, the marked agreement with items in which the critic teacher does the evaluation seems to indicate that older and more authoritative attitudes dominate practice in these institutions.

Another principle that has received some attention recently emphasizes the cooperative nature of evaluation processes. Even though one grants that Industrial Arts is a specialized field, it would seem that the entire institution has a stake in the college product. This study seems to indicate that determination of policies and procedures is largely a departmental matter. The absence of any significant response to the item at the bottom of page 1 of Part II³ would seem to substantiate this observation.

One might be somewhat disturbed by the high values attached to the long lists of specific qualities, proficiencies, and abilities listed in Part II beginning with the bottom of page 3. Specific items have their place. On the other hand, many institutions are questioning the validity

	Value					NR	70% Level	Pract. in %
	0	1	2	3	4				5
¹ Self-evaluation by the student is practiced.....	1		2	1	3	6		51
² The self-evaluation by the student is considered as part of the total evaluation.....	2	1			6	4		40
The pupils' reactions to the student teacher are used in making the evaluation.....	2		1	1	6	3		48
³ Evaluation policies are jointly developed by college representatives, critic teachers, and student teachers.....			1	3	5	3	1	

of evaluations of personal and professional traits and the rather mechanistic study of a student to see how well he is carrying out many scores of specific duties, habits, and skills that occur in the teaching process. To this reviewer these replies seem to explain why item 1 on page 2¹ is rated so highly and poses a problem for study by those interested in a broader and more subjective scheme of evaluation in student teaching.

Part III. The recent report of the sub-committee of the American Association of Teachers Colleges places considerable emphasis upon the experiences which should precede student teaching. Of course, if student teaching is thought of primarily as classroom performances, those experiences will be of one sort. If, on the other hand, student teaching is a combination of processes that place primary attention upon the teacher as a guide for the development of boys and girls as persons, as citizens, and as technical workers, these experiences will follow a different pattern. There is considerable evidence that replies to this section of the questionnaire follow the more conventional pattern. Highest agreement is upon the necessity for a course in Educational Psychology, a course in methods, preparation in the organization of instruction, preparation in lesson planning, and experiences in the development of shop skills.

The absence of any marked agreement upon the need for a course in Educational Sociology, for the making of a community study, for participation in boys' clubs and so forth, for preparation in counseling techniques in the noting and writing of anecdotal records, working with children in the neighborhood and so forth, is negative evidence that the

¹ A check sheet or itemized report sheet is used in the evaluation of a student teacher, with a letter grade or numerical scale associated with each of the items....

Value						NR	70% Level	Pract. in %
0	1	2	3	4	5			
			1	6	6			94

observations made in the preceding program are justified.

One could so define the task of the teacher of Industrial Arts that the program pictures by these institutions could be judged as inadequate. Its inadequacy appears in its emphasis upon what the student teacher is doing in the classroom rather than upon what the teacher is expected to become as a guide and counselor of youth in a broader educational program. It is, in fact, difficult to see how teachers of Industrial Arts can escape being concerned with the broader economic and social problems present in most communities. How the experiences pictured here would develop such an awareness and equip the students to become sensitive to the play of social and economic forces in our society is not clear. It is one thing to turn out skilled teachers of Industrial Arts; it is another to develop teachers who can be intelligent students of the industrial scene in which boys and possibly girls are soon to be making a living, joining unions, seeking unemployment compensation, and voting upon questions that involve the relationships of the public, management, and labor.

Although there is a high percentage of agreement that a course in human growth and development should precede student teaching, it is somewhat disturbing to notice that experiences in which a student could learn at first-hand about child growth and development are not rated in the replies on page 2 of Part III. Surely working with children in the neighborhood, teaching craft programs in summer camps, having laboratory experiences in connection with the methods and theory courses, and observing boys and girls in non-school situations, could be so directed as to make better teachers of Industrial Arts.

Specialists in student teaching are today pointing out that active participation in pre-student-teaching situations is preferable to observations alone. This principle is recognized by the reporting institutions,

but only at a percentage level that is relatively low. Another significant proposal is that contacts with boys and girls should be continuous throughout the four years of pre-service education. This is not the practice, apparently, of reporting institutions.

There has been some discussion recently of the value of professional experiences that follow student teaching. Too often, it is believed, student teaching is delayed until the closing semester, after which there is no time for the further development of the student or the remedying of his demonstrated weaknesses. It is not surprising that these institutions show little agreement in the practice of this principle. This, however, does not invalidate this proposal but suggests a problem for future study. It is difficult to interpret the conclusion that few schools postpone student teaching to the last semester with the further observation that apparently most schools make little use of this last semester for follow-up processes. There seems to be an opportunity which has not been taken. Does this suggest that professional preparation is regarded as finished once student teaching has been "passed"?

Part IV. One of the most generally accepted principles proposed by the sub-committee of the American Association of Teachers Colleges states that the student should have the experiences with the major duties of a teacher in the performance of his school responsibilities. The reporting institutions are very sensitive to this principle and show a high degree of agreement upon the importance of giving the student teacher a wide range of responsibility and experiences, not only with the school program as a whole but also with the activities of the Industrial Arts program itself.

In student teaching, of course, time is of the essence, and not everything that should be done, can be done. This reviewer again desires

to emphasize that the things which are expected of student teachers reveal the philosophies of the student teaching program. Conversely, experiences omitted likewise reveal the philosophies of these institutions.

An examination of this section from the point of view defined in the preceding paragraph appears to show that knowing the community, working with children in a counseling relationship, becoming sensitive to the total personality of the pupil, and assisting in extra-curricular activities lying outside of an Industrial Arts program, are of secondary value in the programs which are reported by this study. This conclusion is supported by the fact that almost all of the items under "Teaching Responsibilities of the Student Teacher" secure significant and positive agreement from the responding institutions. Likewise those experiences relative to shop organization on page 7 of this section are rated very high as practices carried on by these colleges. However, the items on page 5 in the section entitled "Classroom Activities Relative to Pupil Study and Development" fail even to receive ratings that justified a positive percentage score in the report.

It may be pointed out that teachers of Industrial Arts, as well as teachers in other areas of the secondary school program, are still unsure that the school exists as an agency that is concerned with the quality of community living, but is rather an institution in which knowledges and skills are of prime importance, certain statements in our printed philosophies of education to the contrary notwithstanding.

This is not said in a spirit of criticism because it is observed that what is pictured here is an unusually broad and serious program designed to prepare a student to fulfill the teaching responsibilities of a successful classroom teacher. The problem again comes back to the definition of the proper work of a teacher in a school and the proper place of a school in the community.

Part V. There is general agreement today that an adequate program of student teaching should be a full-time of experience that stretches over a period of at least one semester and that it should be supervised by competent master teachers who are recognized members of the faculty of a professional school, persons who have demonstrated not only successful experience as teachers but also as persons qualified to guide student teachers. There is general agreement upon all of these principles among the responding schools.

Another principle is that eligibility for student teaching should be determined by the readiness of a student for the experiences involved. According to the study made by the sub-committee of the American Association of Teachers Colleges, most students are admitted to student teaching upon the completion of prescribed courses and semester hours of credit at a determined scholastic grade. It is apparent that the programs of these colleges are no exception to these findings. If, however, one follows the recommendations of the sub-committee that determining readiness is a much more complicated problem, a problem that involves a knowledge of individual differences, it is apparent that the practices reported here will leave much to be desired. It is doubtful that the relatively objective practices reported on page 2 of Part V would reveal the wide range of needs, strengths, or deficiencies that will be later uncovered in the actual student teaching process itself. Although it is true that items 8 and 9 at the bottom of page 2,¹ Part V, indicate that the student's

¹ A review of the student's cumulative record is made by the college authorities prior to acceptance for student teaching.....
 A review of the student's cumulative record is used to assist in placement in a student-teaching position.....

Value						NR	70% Level	Pract. in %
0	1	2	3	4	5			
			2	5	6			72
				4	9			72

cumulative record is used, yet its use appears to be for purposes of placement rather than for the purpose of determining the readiness for student teaching. Admitting students to student teaching at a time of demonstrated readiness is certainly a severe challenge to an administrator. Its validity will need to be tested. Here is an area for experimentation.

The administrative and supervisory practices approved and practiced in this study are certainly high up in the list of best procedures recommended by specialists in the field of student teaching. Supervision is regarded as a cooperative undertaking, visits by the college representative are relatively frequent, student-teaching experiences begin in many cases one semester before the end of the student's undergraduate career, assignments are made early enough for the student and the school staff to make the necessary arrangements and studies before the actual assignment begins, and the criteria by which schools and supervisory staff are selected appear to be sound.

One might question the limitation of supervision to the professional representative of the college and the supervising or cooperating teacher. It has often been recommended that other members of the faculty who have known the student as a member of a professional class or who have worked with him in a counseling capacity should be a part of the supervisory process. It does not appear that in these institutions this policy has been achieved.

It is also apparent in these replies that the student teacher is made to feel that he is really becoming a professional person. The fact that he is accepted as a member of the professional staff in the school in which his practice teaching is done, that he attends faculty meetings, and that he is placed in a school with a progressive philosophy and practice of education should help develop his attitude.

There is some evidence that critic teachers in these institutions are not given adequate time or reimbursement needed to encourage them to do a serious professional job. There is less than 50% agreement with the need for reimbursing the critic teachers while the replies as to lightening of the teaching load of the critic teacher were not of sufficient significance to be tabulated.

This reviewer, who is not a specialist in the field of Industrial Arts, has been impressed by the thoroughness with which the reporting schools are carrying on the job of student teaching of Industrial Arts majors as they see it. However, the study appears to support the conclusion that among these institutions the task of teaching and the function of the school in the total social situation are still defined in a rather limited way. Programs of student teaching will grow in scope and significance as the vision of the task of the teacher is guided by a broadening educational philosophy."

Summary. The jurors were in agreement with most of the replies given by the respondents to the questionnaire. Agreement was expressed with the high value attached to a number of the items in Part V, Administration of Student Teaching Programs. Several points of inconsistency were also pointed out by the jurors.

The jurors tended to be critical of the narrowness on the part of the respondents in their reactions to such items as community understanding, personal relationships of the student teacher, pupil growth and development activities, procedures used in evaluation, and the place of the school shop teacher in the school and community. Several areas for further study were also revealed in the reports.

Two of the jurors indicated that the responses to the section dealing with student-teaching experiences to precede and to follow student teaching represent a conventional pattern or a status quo situation.

It was also pointed out that there was an undue amount of emphasis on the traditional organization of subject matter and tool skills.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to review the phases of study and research used in the development of the problem, to present some of the significant conclusions derived from the study, and to offer recommendations germane to the study.

Overview of the study. The purpose of this study was (1) to determine the major problems in Industrial Arts student teaching in teacher-education programs, (2) to analyze procedures which attempt to meet these problems, and (3) to present recommendations regarding the more promising procedures.

Preliminary work on the study involved compiling an extensive bibliography and reading the available literature pertaining to student teaching at all maturity levels as well as in the various subject-matter areas. Materials were also requested from several institutions preparing Industrial Arts teachers. These materials were reviewed for their content and possible use in the study.

In order to further clarify the problem and obtain a broader understanding of the subject, a number of conferences were held with prominent persons in teacher education. This group included educators from the University of Maryland, Wilson Teachers College, the National Educational Association, and the United States Office of Education. As a result of these conferences and the review of the literature, the following areas of Industrial Arts student teaching were selected for study: (1) goals or purposes of student teaching; (2) evaluation of student teaching; (3) experiences to precede and to follow student teaching; (4) student-

teaching experiences of practice teachers; and (5) administration of student teaching.

The study centers about the practices and judgments representing a small group of the "better programs" in Industrial Arts teacher education. The selection of these programs was accomplished by means of a survey of all the schools listed in The 1948 Industrial Arts Teacher Education Directory. This was a post-card survey of specific practices at the various institutions. Chapter III deals with a report of this preliminary study and a summary of the findings. The selection of the "better programs" from the returns of this questionnaire study was done by applying the following criteria:

1. There is an Industrial Arts staff person directly responsible for supervising Industrial Arts student teaching.
2. At least part of the student teaching is done in public schools.
3. The student teaching is done in all-day situations.
4. The length of student teaching is a minimum of eight weeks or a half semester.
5. There is a program of organized contacts with children prior to student teaching.

Fourteen schools were chosen to be included in the major study. The final study was made by the use of a comprehensive questionnaire. The questionnaire was set up on an incidence basis. The respondent was to indicate the degree to which each item was practiced in his specific program, and he was also asked to indicate the amount of value that the item had for the student-teaching program in Industrial Arts education.

Thirteen of the fourteen schools completed and returned the questionnaires. The responses to the items were tabulated for their degree of practice and estimated value. Primary consideration was given to the "value" tabulations. It was decided that in order for any item to be

accepted as having significant value, it must be indicated as having "high" or "very high" value by at least nine (seventy percent) of the respondents. Approximately fifty-six percent of the items were accepted at the seventy percent level. Chapter IV is a summary of the data gathered from the thirteen programs. Chapter V is an analysis of the reactions to the questionnaire.

The findings from the survey were submitted to a jury consisting of three prominent people in teacher education. The jury was asked to review the findings for consistency, omissions, trends, and relationships to progressive practices and theories. Chapter VI is a verbatim report of the jurors' reactions.

The final section deals with the conclusions and recommendations derived from the study.

Conclusions. The implications for student teaching in Industrial Arts education that one could draw from a study of this nature are many and varied. Each item by its mere acceptance or rejection in value or practice is cause for reaction on the part of the reader. As a result, the conclusions presented herein are not all-inclusive. However, an attempt has been made to present a number of "significant" conclusions regarding the better practices indicated by the study as well as some of the poorer practices or reactions.

The following is a number of conclusions drawn from the study:

1. There is an evident lag in the extent of practice as compared to estimated value of a large majority of the items. In other words, practice is not on a level with the thinking and understanding of the authorities in the field.

2. There is a consistently high regard for group participation in formulating policies and procedures as well as in deciding basic issues.

3. The borrowing or adopting of materials or procedures from other institutions or organizations is regarded as having little value.

4. An analysis of the responses to items dealing with community understanding, school and community participation, pupil growth and development, and personal relationships reveals that, although the total replies did not warrant acceptance at the seventy percent level, a number of the schools consistently rated these items "high" or "very high". This fact may lead one to conclude that these few institutions are pointing the way toward better student-teaching practices.

5. Goals or objectives of student teaching in Industrial Arts education should be stated in the form of broad purposes, and should be identical with or grow out of the total teacher-education program.

6. The responsibility for setting up goals for student teaching should be assumed by a committee consisting of college faculty, student teaching supervisor(s), critic teacher, principals, and students.

7. The duties and activities of the student teacher should be based upon the acceptance and understanding of the work of a shop teacher in the total school program, and the place of the school in the community.

8. The student teacher should be made familiar with the school plant, facilities, personnel, and matters of school policy.

9. The student teacher should participate in curriculum planning and in content derivation.

10. Teacher education practices associated with student teaching should include compiling a morgue, keeping a notebook, recording outstanding instances with their significance to the learning situation, and submitting weekly reports of activities.

11. Evaluation of student teaching experiences should be based upon the degree to which the overall objectives of Industrial Arts teacher education are met.

12. Evaluation policies and procedures should be developed after a thorough analysis of student teaching objectives or goals, teaching facilities available, personnel, and educational philosophy underlying the student-teaching experience.

13. Evaluation procedures include the use of itemized check lists, anecdotal records, the recording of specific behavior, conferences, and observations.

14. Evaluations should be made at periodic conferences involving the critic teacher, student-teacher supervisor, and the student teacher; and on a day-by-day basis involving the critic teaching and the student teacher.

15. The evaluation should be used for the following purposes: to assist the student in understanding his strengths and weaknesses; to show the degree of progress being made by the student; to assist in placement; and as an aid in planning the student's post-student teaching activities and studies.

16. There is considerable harmony among the teacher-educators regarding the student-teacher characteristics which should be evaluated, or the specific attributes he should possess. This agreement is on the level of personal and professional traits or competencies, and in terms of shop skills and shop management procedures.

17. There should be a written statement of policy regarding student-teaching regulations, practices, and procedures.

18. There should be a program of conferences attended by teacher-education personnel, supervisors, critic teachers, principals, and department heads for the purpose of coordinating student-teaching activities.

19. There is general agreement that the major student-teaching assignment should be done on a full-day basis over a period of at least twelve weeks.

20. Student teaching should be done prior to the last semester, with opportunity provided for study of problems experienced in student teaching. One or more professional courses should follow student teaching.

21. The prospective student teacher should be notified of the location of his student-teaching position at least a month prior to the beginning of student teaching.

22. The eligibility of the student for student teaching should be dependent upon the demonstrated readiness of the student.

23. Student-teaching assignments should be based upon the demonstrated abilities, special interests, inadequacies, and potentialities of the individual who is to do the student teaching.

24. Selection of a student-teaching situation should be based upon a careful consideration of the school philosophy, personnel, building, facilities, environment, activities, nature of the shop program, and the place of the school in the community life.

25. The student teacher should report to the school at the same time as the regular teacher prior to the beginning of the school term in the event his student teaching assignment starts at the first of the school term. He should be present for the last day of school if he is scheduled during the second semester, even though the college program has terminated at an earlier date.

26. Supervision of the student teaching should be carried on for the most part by the critic teacher and the supervisor of student teaching. Other faculty members of the teacher-education staff should participate more actively in student-teaching supervisory work.

27. Qualifications for the critic teacher should include a master's degree with five years of successful teaching on the elementary or secondary school level.

28. There is an apparent narrowness of concept on the part of the respondents in their reactions to such items as community understanding, personal relationships of the student teacher, pupil growth and development activities, procedures used in evaluation, and the place of the school shop teaching in the school and community.

29. The responses to the "Experiences to Precede and to Follow Student Teaching" sections reflect a status quo situation with a possibility of a few of the schools pointing the way with the better practices. For the most part, a conventional pattern of practices was indicated by the responses.

30. Undue emphasis is placed upon traditional organization of subject matter, tool skills, and shop management.

31. Little emphasis is given to the student teacher participating in extra-curricular activities and school functions that occur outside of the school shop, or are not directly connected with Industrial Arts specifically.

32. Evaluation measures tend to be direct solely towards the evaluation of the student teacher and not to any great extent towards the situation in which the student teaching was done.

33. Little value is placed on the reactions of the other teachers, the principal, or the community in making the evaluation.

Recommendations. In addition to the preceding conclusions regarding the practices and procedures in Industrial Arts student teaching, the following statements are presented by way of recommendations for further improvement in the student-teaching programs.

There is a decided need for a bridging of the gap between current practices and current educational philosophy and understanding. The responses to many of the progressive ideas listed in the questionnaire were

viewed with "high" value, yet the degree of practice almost consistently lagged behind. This condition may be a problem requiring further study, or it may be a matter for individual program analysis and solution.

The second major emphasis revealed by the study indicates a definite need for broadening the scope and sphere of activities of the student teacher in Industrial Arts education.

1. A greater emphasis should be placed upon the student's obtaining an understanding and knowledge of the community, as well as an increasing amount of emphasis on the role of the school in the community. Increased significance should be placed upon community study and understanding in pre-student teaching classes such as education^{al} sociology and community field projects. More importance needs to be placed upon studying the community as a source of curriculum content, teaching material, and educational facilities. The community should also be studied in view of the teacher obtaining a better understanding of the pupils in the shop or classroom.

2. There needs to be a broadening of the student's activities devoted to child growth and development. Greater opportunity should be provided for contact with children in a learning situation. Increased emphasis needs to be given to procedures used in recognizing, recording, and analyzing various forms of pupil behavior. The student teacher should be given assistance in pupil understanding and analyzing the individual in terms of his specific needs.

Classroom activities relative to pupil study and development that need greater emphasis include: reviewing and using cumulative records of the pupils, assisting in pupil planning, extending guidance and counseling services to the pupils, analyzing pupil needs, directing the activities of problem children, and visiting the homes of one or more of the pupils for educational purposes relative to child study.

3. There needs to be a broadening of the student-teacher's activities outside of the shop. The student should be given an opportunity to spend a sufficient amount of time in the principal's office, central office, counselor's office, placement office, library, and other staff or administrative offices that would provide for a more complete understanding of the school's function and operation.

The student should be encouraged to participate as a member of the school's faculty in extra-curricular activities such as school dances, parties, excursions, field trips, plays, assembly programs, and community functions.

The student teacher should participate in faculty committees, professional meetings, community programs, and in parent-teacher or school-community club affairs. Opportunity should also be given the student teacher to provide leadership in organizing and conducting a club, or similar pupil organization.

4. There needs to be a broadening of the student's sphere of relationships in the school. The student should be evaluated in terms of his relationships with the pupils, critic teacher, supervisor of student teaching, other faculty members in the Industrial Arts department, faculty members in other subject areas, the principal, administrative officers other than the principal, staff officers in the school, parent-teacher associations, and the community.

Experiences to precede student teaching (in addition to those listed at the seventy percent level) should include: preparation in noting and writing anecdotal records; working with parents and adults in church organizations, community centers, and civic associations; working with children in a number of non-school situations, and having leadership experience with summer camp groups.

Provision should be provided for the prospective teacher to have continuous contact with boys and girls throughout the four years of pre-service education.

Experiences to follow student teaching should be in part based upon the student's needs and problems as revealed in the student-teaching experience.

There needs to be a lightening of the critic teacher's load to provide the additional time necessary for consultation and planning with the student teacher.

Recommendations for further study. In carrying out this project, several problems for additional study became apparent. The following is a listing of these problems in the form of questions:

1. What evaluation techniques and procedures should be used in properly evaluating the student teacher?
2. What techniques of community study would prove most valuable as pre-student-teaching experiences?
3. What procedures or criteria should be used to be reasonably certain that a student is ready to do student teaching?
4. When should the student-teaching experience appear in the student's program?
5. What experiences with children should precede student teaching?
6. What should be the nature of the professional courses to follow student teaching?
7. What criteria should be used in the selection of a student-teaching location?
8. What procedures can be adopted to provide for the greatest coordination of the total student-teaching program?
9. What supervisory techniques and procedures should be used in the student-teaching program?

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APPENDIX A

INDUSTRIAL EDUCATION DEPARTMENT

February 11, 1949

Dear

I am currently doing the groundwork on my doctoral dissertation. The proposed topic deals with a number of vital problems in the area of Industrial Arts student teaching.

I would like to have a conference with you in regard to topics listed on the attached sheet. You may view the topics in a number of ways:

1. You may raise questions that you think should be answered in each of the topics listed.
2. You may discuss your experiences relative to any of the items.
3. You may make suggestions of references that may be of value.
4. You may point out some of the pitfalls or obstacles that one might face in such a study.
5. You may make whatever contributions you please that you think might assist me in further developing the project.

A series of these conferences with various educators is planned to further assist me in obtaining a better understanding and further crystallization of the topic.

Your assistance in this matter will be greatly appreciated.

Sincerely yours,

Date of Conference _____

Donald Maley

Time of Conference _____

Extension 356

CONFERENCE TOPICS

WITH REFERENCE TO INDUSTRIAL ARTS STUDENT TEACHING

1. EVALUATION PROCEDURES IN INDUSTRIAL ARTS STUDENT TEACHING
2. DETERMINING GOALS OR PURPOSES OF INDUSTRIAL ARTS STUDENT TEACHING
3. PROBLEMS OF INDUSTRIAL ARTS STUDENT TEACHERS AND OVERCOMING THEM
4. ADMINISTRATIVE PROCEDURES IN AN INDUSTRIAL ARTS STUDENT TEACHING PROGRAM
5. SELECTION OF STUDENT-TEACHING LOCATIONS
6. EXPERIENCES TO PRECEDE AND TO FOLLOW STUDENT TEACHING
7. STUDENT TEACHING EXPERIENCES
8. _____

APPENDIX B

(SAMPLE LETTER OF TRANSMITTAL FOR PRELIMINARY SURVEY)

College Park, Maryland

March 9, 1949

Dear Mr. Jones:

Enclosed you will find a self-addressed postal card with several questions on the reverse side. These questions pertain to certain aspects of the Industrial Arts student-teaching program at your institution.

Will you please fill in the answers to the questions on the card and return it to me?

This information is to be used in a study of student teaching practices, preliminary to a more comprehensive and detailed study of student teaching in Industrial Arts education.

Your cooperation in this request will be greatly appreciated.

Sincerely yours,

Donald Maley
Instructor
Industrial Education Dept.

APPENDIX C

PRELIMINARY SURVEY FORM SENT TO 158 INDUSTRIAL ARTS
TEACHER EDUCATION INSTITUTIONS LISTED IN THE 1948
INDUSTRIAL ARTS TEACHER EDUCATION DIRECTORY COMPILED
BY THE AMERICAN INDUSTRIAL ARTS ASSOCIATION

Is an Industrial Arts Staff person(s) directly responsible for the supervision of Ind. Arts student teaching?

Yes _____ No _____

What percent of this person's load is devoted to this supervision? _____ Percent

The students do their teaching in _____ public schools, _____ demonstration school, _____ other (explain) _____

Students earn _____ credits for their student teaching. For this credit they teach _____ weeks, _____ all day, _____ half day, _____ other, (explain) _____

What courses or experiences involving pupil contacts precede student teaching? _____

When does student teaching occur?
(year(s) and semester(s)) _____

What are the academic requirements for the "master" or supervising teacher? _____ degree. How much teaching experience must he have had? _____ years.

No. _____

College or University

Name and Position

APPENDIX D

(SAMPLE LETTER TO REGISTRAR FOR CATALOGS)

March 25, 1949

Registrar
State Teachers College
California, Pennsylvania

Dear Sir:

Would you please send me a copy of your college catalog which includes the Industrial Arts and/or Industrial Education curriculum requirements?

Your assistance in this matter will be greatly appreciated.

Sincerely yours,

Donald Maley
Industrial Education Dept.
University of Maryland
College Park, Maryland

APPENDIX E

Information Forms

for

PROBLEMS IN INDUSTRIAL ARTS STUDENT TEACHING

By

Donald Maley
Industrial Education Dept.
University of Maryland
College Park, Maryland

A Doctoral Study Under the Guidance and Direction of
Dr. R. Lee Hornbake, Professor of Industrial Education
University of Maryland

Date _____

Name of Respondent _____

(Position or title) _____

School _____

Location _____

Present undergraduate enrollment in the Industrial Arts Department or
division _____

Average number of student teachers handled each semester _____

Remarks _____

Signed _____

No. _____

INSTRUCTIONS FOR RESPONDING TO THE QUESTIONNAIRE

This is a study of student-teaching programs in twelve institutions presenting evidence of having superior programs. There are five different phases of the Industrial Arts student-teaching program dealt with in this study. These phases include: (1) goals or purposes of student teaching; (2) evaluation of student teaching; (3) experiences to precede and to follow student teaching; (4) student-teaching experiences to practice teachers; and (5) administration of student teaching. Each phase is identified in the questionnaire by a different color of paper.

The respondent is to read over each statement and make the proper response in the columns at the right-hand side of the page. The columns contain the headings; practiced (Yes or No), degree, and value. Each statement in the "practiced" and "degree" columns is evaluated or checked solely on its relationship to the program being studied, and has no bearing or relationship to other programs or practices.

The following is a clarification of terminology and procedure:

Practiced: In the column indicated "practiced" the respondent is to indicate with a "yes" or a "no" whether the statement as written is practiced in the department, or if it applies to the program of the department.

Degree: The column indicated "degree" has a direct relationship to the "practiced" column. If the statement is noted in the "practiced" column with a "yes", the respondent is to indicate the degree of such practice in the "degree" column with a number ranging from one (1) to five (5); one being the least with five being the highest degree of practice. The following is a descriptive statement to assist in standardizing each number under the heading of degree.

Number	Descriptive statement
(1)	Rarely ever practiced or applied.
(2)	Practiced or applied occasionally.
(3)	Practiced or applies in about fifty percent of the cases.
(4)	Practiced or applies in most cases.
(5)	Practiced or applies in all cases.

If the practiced column is answered with a "no", the respondent indicates the degree with a zero (0).

Value: The column marked "value" has no direct relationship to the program being studied. In this column, the respondent is to place his own judgment as to the value of the item for student-teaching programs in Industrial Arts Education. The rating is to be made on a zero to five (0 to 5) basis. The following is a descriptive statement of values to standardize each number under the heading of values:

Number	Descriptive statement
(1)	
(2)	Has no value.
(1)	Has a very slight or incidental value.
(2)	Has little or occasional value.
(3)	Has a fair amount of value.
(4)	Has a high degree of value.
(5)	Has a very high degree of value.

In completing the forms, each item will have been given three designations: "practiced" (yes or no), "degree", and "value". Again it is emphasized that the "value" column represents the respondents own ideas as to the value of the item towards achieving an optimum program of student teaching in Industrial Arts education.

Upon completion the forms are to be returned in the accompanying envelope to:

Donald Maley
Industrial Education Department
University of Maryland
College Park, Maryland

Part I

GOALS OR PURPOSES OF STUDENT TEACHING

GOALS OR PURPOSES OF THE STUDENT TEACHING PROGRAM IN INDUSTRIAL ARTS EDUCATION

	Practiced		Degree	Value
	Yes	No		
1. To provide for the fullest development of the individual in view of his becoming a teacher of Industrial Arts.....				
2. To give practical experience in applying theory, content, and methods learned in pre-student teaching courses at college.....				
3. To provide for participating experiences in teaching that will give the student teacher ample opportunity, under supervision, to participate in a broad cross section of the work of the teacher of Industrial Arts.....				
4. To give the student teacher the greatest possible contact with boys and girls in a real teaching, learning situation.....				
5. To direct each student toward attaining <u>specific</u> stated proficiencies.....				
6. To develop the student's teaching and shop management ability to a point where he will be able to assume full responsibility for the operation of a school shop.....				
7. To make students aware of the duties and responsibilities of the Industrial Arts teacher, and to make the student familiar with high standards of teaching, by working with high caliber teachers.....				
8. To lead student teachers to observe intelligently, and to give the student opportunity to see sound principles of teaching Industrial Arts.....				
9. To enable the student to develop judgment and skill in setting up aims, in selecting and arranging subject matter for teaching, and in choosing appropriate types of projects and instruction for accomplishing such aims.....				
10. To contribute to the development of those personal, professional, and social traits which are necessary for a successful teacher of Industrial Arts.....				
11. To develop in the student teacher the ability to work for the optimum development of each pupil rather than solely imparting knowledge and skills associated with a given body of subject matter.....				
12. (Other) _____ _____ _____				

NATURE OF THE GOALS

	Practiced		Degree	Value
	Yes	No		
1. There is a written statement of the goals or purposes of the student teaching program in Industrial Arts education.....				
2. The goals as set up are nebulous or not well defined.....				
3. The goals as set up are of a practical nature.....				
4. Student teaching goals are transformed into operating practices and procedures.....				
5. Student teaching goals are not attained because of administrative limitations at the institution.....				
6. Student teaching goals are narrow in scope and operation because of certain administrative factors or conditions.....				
7. Goals vary in accordance with the different student teaching locations.....				
8. Objectives or goals as set up are very general with a wide margin for interpretation.....				
9. Objectives or goals as set up are very specific, calling for definite outcomes and conclusions.....				
10. Goals vary with the individual student teacher.....				
11. Goals tend to be rather stable with no significant changes over long periods of time.....				
12. The objectives or goals emphasize broad purposes of education and includes understandings of pupil growth and development.....				
13. The objectives or goals are identical with or grow out of the total teacher-education program.....				
14. The objectives or goals are student-teaching goals; that is, specific goals set up for the period of student teaching.....				
15. The objectives or goals emphasize detailed or routine procedures which are by and large, matters of shop organization and management.....				
16. (Other, describe) _____				

RESPONSIBILITY FOR SETTING UP GOALS

	Practiced		Degree	Value
	Yes	No		
1. The responsibility for setting up the goals for student teaching is assumed by the supervisor of student teaching.....				
2. The responsibility for setting up goals for student teaching is assumed by a committee consisting of college faculty, student teaching supervisor(s), critic teachers, principals, and students.....				
3. The responsibility for setting up the goals for student teaching is assumed by the head of the Industrial Arts Department.....				
4. The responsibility for setting of goals for student teaching is assumed by the state department of education.....				
5. The student participates in conferences held for the purpose of setting up goals for student teaching.....				
6. (Other, describe) _____				

METHODS BY WHICH GOALS OR PURPOSES ARE ARRIVED AT

1. Goals or purposes are arrived at through conferences attended by college faculty, student teaching supervisor(s), critic teachers, principals, and students.....				
2. Goals are set up by the department head.....				
3. Goals are arrived at through a meeting of the Industrial Arts teacher-education staff.....				
4. Goals are arrived at or set up by the supervisor of student teaching.....				
5. Goals are accepted as set up by the state department of education.....				
6. Goals were arrived at through the joint collaboration with several teacher-education institutions within a given state.....				
7. Goals were adopted from published statements of goals by recognized educational organizations or associations.....				
8. Goals were arrived at through joint collaboration of several teacher-education institutions in a multi-state or regional conference.....				

METHODS BY WHICH GOALS OR PURPOSES ARE ARRIVED AT

	Practiced		Degree	Value
	Yes	No		
9. The goals for the individual student teacher are arrived at after:				
a. Consultation with the student-teacher's faculty advisor.....
b. Consultation with the student-guidance personnel in the college.....
c. A review of the student's cumulative record.....
d. A conference of faculty members who know the student.....
e. A review of the student's undergraduate record.....
f. A review of the student's special aptitudes or skills.....
g. A review of the student's past experiences with boys and girls in a leadership capacity.....
10. (Other, describe) _____

TRANSFORMING GOALS INTO OPERATING PRACTICES

1. Goals are understood by and accessible to all who are linked with the student teaching program.....	.....	.....	.....	.....
2. Operating practices in the student teaching program are developed through an analysis of the objectives or goals of student teaching.....	.....	.....	.....	.....
3. Goals and objectives of the student-teaching program are made known to student teachers, critic teachers, and supervising personnel by written communications.....	.....	.....	.....	.....
4. A well-developed program of conferences is held to integrate and provide communication of goals and objectives among the various personnel involved.....	.....	.....	.....	.....
5. The individual goals of the student teaching experience are dealt with by areas or phases of activities participated in by the student.....	.....	.....	.....	.....
6. An adequate program of pre- and post-student teaching activities provides for a greater integration of the whole program with respect to the goals of student teaching.....	.....	.....	.....	.....
7. (Other, describe) _____	.....	.....	.....	.....

Part II

EVALUATION OF STUDENT TEACHING

PURPOSES OF EVALUATION

	Practiced		Degree	Value
	Yes	No		
1. The evaluation is used to assist the department in arriving at a grade for the student.....				
2. The evaluation is used to assist the student in a greater understanding of his strengths and weaknesses.....				
3. The evaluation is used to show the degree of progress being made by the student.....				
4. The evaluation is used in planning the student's post-student teaching activities and studies.....				
5. The evaluation is used as a source of reference data for placement purposes.....				
6. The purpose of the evaluation is to make an appraisal of the adequacy of the student's preparation leading up to the student teaching experience.....				
7. The evaluation is used to reveal needed changes in the teacher-education program.....				
8. The student's self-evaluation is used as one of the bases for the final evaluation.....				
9. The student's self-evaluation is used only for diagnostic and remedial purposes.....				
10. The evaluation is used to appraise the quality of the school as a student-teaching center.....				
11. (Other, describe) _____				

RELATING EVALUATION TO THE OBJECTIVES

1. Evaluation of the student teaching experiences is based upon the degree to which the objectives of the Industrial Arts teacher-education program were attained.....				
2. (Other, describe) _____				

DEVELOPING EVALUATIVE PROCEDURES

1. Evaluation policies are jointly developed by college representatives, critic teachers, and student teachers.....				
---	--	--	--	--

DEVELOPING EVALUATIVE PROCEDURES

	Practiced		Degree	Value
	Yes	No		
2. Evaluation policies and procedures are developed by the supervisor of student teaching in Industrial Arts, or by some other single individual.....				
3. Evaluation policies and/or procedures were set up by the state department of education.....				
4. Evaluation policies are understood, if not developed by college faculty and supervisors, critic teachers, and student teachers.....				
5. Evaluation policies and procedures were developed for the department after a thorough analysis of student teaching objectives or goals, teaching facilities available, personnel, and educational philosophy underlying the student teaching experience.....				
6. Evaluation procedures were developed as a result of a study of practices in other similar institutions.....				
7. Evaluation procedures were wholly adapted from a student-teaching program at some other institution.....				
8. The evaluation procedures were adapted in part or totally from suggested programs set up by some professional organization or association.....				
9. Evaluation procedures were taken from a study of student-teaching evaluation made by some other college, association, or individual.....				
10. (Other, describe) _____				

EVALUATION PROCEDURES USED

1. A check sheet or itemized report sheet is used in the evaluation of a student teacher, with a letter grade or numerical scale associated with each of the items.....				
2. Evidence of specific behavior is included with the total evaluation of the student teacher.....				
3. Factors selected for evaluation purposes are given a letter grade.....				
4. The critic teacher makes use of anecdotal records in evaluating the student.....				

EVALUATION PROCEDURES USED

	Practiced		Degree	Value
	Yes	No		
5. In the evaluation of the various factors, significant incidents and anecdotes are recorded to implement the evaluation.....				
6. The critic teacher holds a conference with the student teacher for purposes of discussing the evaluation.....				
7. Evaluation is based upon a series of well-planned and carefully recorded observations by the supervisor.....				
8. The evaluation report by the critic teacher is made in the form of a letter at the close of the student teaching experience.....				
9. A standard procedure is applied to the evaluation of every student teacher in the Industrial Arts curriculum.....				
10. The final grade for the student is determined at a conference of the student teacher, supervisor, and critic teachers.....				
11. The evaluation form consists of a number of "teacher traits" or characteristics. Each of these is divided into a number of degrees of excellence or proficiency, with a descriptive paragraph describing each variation in degree or proficiency.....				
12. The supervisor of student teaching makes a written report of each student teaching observation.....				
13. The student teacher submits a written report each week to the supervisor of student teaching indicating the significant happenings and developments for that week.....				
14. (Other, describe) _____ _____ _____				

WHAT IS EVALUATED?

1. Evaluative factors vary with each student.....				
2. The factors used for evaluation of student teaching are changed periodically in view of changing educational practices.....				
3. The evaluation of student teaching is considered in part to be an evaluation of the total teacher-education program and its effect upon the individual.....				

WHAT IS EVALUATED?

	Practiced		Degree	Value
	Yes	No		
4. The following personal qualities of the student teacher are evaluated:				
a. Personal appearance.....
b. Personal habits.....
c. Personal attitude towards life.....
d. Leadership abilities.....
e. Personality traits.....
f. Voice and diction.....
g. Work habits.....
h. Initiative.....
i. Dependability.....
j. Emotional stability.....
k. Health and physical fitness.....
l. Philosophy guiding the student-teacher's activities.....
m. Honesty.....
n. Cooperation with school practices and policies.....
o. Tact and courtesy.....
p. Friendliness.....
q. Self-confidence.....
r. School and community interests.....
s. (other).....
t. (other).....
u. (other).....
5. The following professional qualities of the individual are evaluated:				
a. Interest in teaching.....
b. Professional reading.....
c. Professional ethics.....
d. Professional attitude.....
e. Professional preparation.....
f. Attitude toward young people.....
g. Understanding of aims of general education.....
h. Understanding objectives of Industrial Arts in relation to general education.....
i. Setting up and correlating aims of individual units taught.....
j. Knowledge of Industrial Arts content.....
k. Shop skills.....
l. Teaching skills.....
m. Knowledge of and application of instruments of pupil measurement.....
n. (other).....
o. (other).....
6. The following instructional proficiencies of the student teacher are evaluated:				
a. Selecting appropriate teaching materials.....
b. Selecting appropriate visual aids.....
c. Selecting appropriate auxiliary teaching materials.....

WHAT IS EVALUATED?

	Practiced		Degree	Value
	Yes	No		
d. Planning appropriate lesson units in view of the pupils taught.....				
e. Presenting materials so that they will be understood by the pupils.....				
f. Organizing shop activities.....				
g. Presenting appropriate questions.....				
h. Assigning work.....				
i. Developing instructional materials.....				
j. Using a wide variety of teaching techniques.....				
k. Demonstrating shop operations.....				
l. Presenting shop or related content.....				
m. Selecting shop projects.....				
n. Guiding pupil activities.....				
o. Pupil-teacher planning procedures.....				
p. Securing pupil response.....				
q. Daily preparation.....				
r. Selecting teaching content in view of stated aims.....				
s. Motivating pupils.....				
t. Efficiency in group instruction.....				
u. Efficiency in individual instruction.....				
v. Foreseeing instructional needs.....				
w. Conducting and supervising field trips.....				
x. Finding and using good illustrations.....				
y. (other) _____				
z. (other) _____				
7. The student teacher is evaluated on his ability to stimulate pupil growth and development through:				
a. Recognizing pupil interest.....				
b. Recognizing pupil background differences.....				
c. Providing variations in teaching methods in accordance with individuality of pupils taught.....				
d. Providing variations in teaching content in accordance with individuals taught.....				
e. Understanding the characteristics of the various pupil-age groups.....				
f. Understanding the special abilities of the students.....				
g. Understanding the emotional characteristics of the pupils taught.....				
h. Analyzing pupils in terms of physical differences.....				
i. (other) _____				
j. (other) _____				
8. The student teacher is evaluated on his relationships with the following individuals or groups:				
a. The pupils.....				
b. The critic teacher.....				
c. The supervisor of Industrial Arts student teaching.....				

WHAT IS EVALUATED?

	Practiced		Degree	Value
	Yes	No		
d. Other faculty members of the Industrial Arts department of the student-teaching situation.....				
e. Faculty members in other subject areas.....				
f. The principal.....				
g. Administrative officers other than the principal.....				
h. Staff officers in the school.....				
i. Parent-teacher associations.....				
j. The community.....				
k. (other) _____				
l. (other) _____				
9. The student teacher is evaluated on his ability to deal effectively with shop personnel and management problems such as:				
a. Organizing an adequate personnel system.....				
b. Supervising the checking of tools and equipment.....				
c. Requisitioning materials.....				
d. Taking inventory.....				
e. Arranging shop facilities.....				
f. Recommending changes in existing physical conditions.....				
g. Securing pupil cooperation in shop upkeep and repair.....				
h. Dealing with various disciplinary problems.....				
i. Classroom morale.....				
j. Care of physical equipment.....				
k. Judgment in pursuing responsibilities and duties.....				
l. Care of materials and supplies.....				
m. Securing cooperation from pupils.....				
n. Maintaining adequate instructional equipment and materials.....				
o. Developing desirable social patterns through democratic management.....				
p. Keeping accurate and adequate records.....				
q. Handling shop finances.....				
r. Anticipating material needs.....				
s. Starting the class period.....				
t. Closing the class period.....				
u. Storing of materials and projects.....				
v. Maintaining proper lighting, heating, and ventilation conditions.....				
w. Maintaining and supervising an adequate safety program.....				
10. Evaluation is based upon evidences of student-teacher growth in the following areas:				
a. A finer professional point of view.....				
b. A better selection of professional reading material.....				
c. A greater control over shop management activities.....				
d. A noticeable improvement in teaching abilities.....				

WHAT IS EVALUATED?

	Practiced		Degree	Value
	Yes	No		
e. An increased interest in teaching.....
f. A keener insight into and understanding of pupils.....
g. A finer degree of personal relationship.....
11. (Other, describe) _____

BY WHOM IS THE EVALUATION MADE?

1. A separate evaluation is made by both the supervisor of Industrial Arts student teaching and the critic teacher.....	.....	.....	.....	.....
2. A composite or summary of all evaluations of each student teacher is made by the supervisor of Industrial Arts student teaching.....	.....	.....	.....	.....
3. Critic teachers make the final evaluations (Grade) in nearly every instance.....	.....	.....	.....	.....
4. Self-evaluation by the student is practiced.....	.....	.....	.....	.....
5. The self-evaluation by the student is considered as a part of the total evaluation.....	.....	.....	.....	.....
6. The reactions of other teachers at the practice-teaching situation are used in making the evaluation.....	.....	.....	.....	.....
7. The reactions of the principal at the practice-teaching situation are used in arriving at the evaluation of the student teacher.....	.....	.....	.....	.....
8. The reactions of the community in which the student teaching was done are considered in making the evaluation.....	.....	.....	.....	.....
9. The pupils' reactions to the student teacher are used in making the evaluation.....	.....	.....	.....	.....
10. The supervisor of student teaching makes the only evaluation.....	.....	.....	.....	.....
11. (Other, describe) _____	.....	.....	.....	.....

WHEN IS THE EVALUATION MADE?

	Practiced		Degree	Value
	Yes	No		
1. Periodic conferences involving the critic teacher, the student teacher supervisor, and student teacher are held for purposes of evaluating the progress of the student teacher.....				
2. Evaluation is a day-by-day affair involving at least the student teacher and the critic teacher.....				
3. An evaluation report is made weekly to the college by the critic teacher.....				
4. An evaluation report is made monthly to the college by the critic teacher.....				
5. An evaluation report is made only at the close of the student teaching experience.....				
6. An evaluation is made at the time of each visit by the supervisor of student teaching.....				
7. An evaluation is made at the time of each visit by the supervisor of student teaching by both the supervisor and the critic teacher.....				
8. (Other, describe) _____				

Part III

EXPERIENCES TO PRECEDE AND TO FOLLOW STUDENT TEACHING

EXPERIENCES TO PRECEDE STUDENT TEACHING

	Practiced		Degree	Value
	Yes	No		
1. The student experiences an adequate program for the development of shop skills.....				
2. The student is given guided experiences in observing boys and girls at work and play.....				
3. The student makes one or more detailed case study.....				
4. Educational psychology or its equivalent is taken prior to the student teaching experience.....				
5. A course in human growth and development precedes student teaching.....				
6. There is a laboratory experience in directed observation prior to the student teaching experience.....				
7. There is a course in educational sociology prior to the student-teaching experience.....				
8. The student is required to make a community study as a means of analyzing and interpreting the needs of the pupils.....				
9. There is a course in "methods" prior to the student-teaching experience.....				
10. The student participates in some voluntary activity, such as boys' clubs, recreational groups, etc., prior to the student teaching experience.....				
11. The student participates in curriculum planning in light of pupil-needs in a given situation.....				
12. Students are given preparation in counseling techniques.....				
13. Students are given preparation in the use of diagnostic and psychological instruments.....				
14. Students are given preparation in the organization of instruction.....				
15. Students are given preparation in the evaluation of pupil growth.....				
16. Students are given preparation in educational measurements prior to student teaching.....				
17. Students are given preparation in the making of cumulative records.....				

EXPERIENCES TO PRECEDE STUDENT TEACHING

	Practiced		Degree	Value
	Yes	No		
18. Students are given preparation in shop inventorying procedures.....				
19. Students are given preparation in shop requisitioning procedures.....				
20. Students are given preparation in shop planning.....				
21. Students are given preparation in equipment selection.....				
22. Students are given preparation in lesson planning.....				
23. Students are given preparation in the noting and writing of anecdotal records.....				
24. Students are given preparation in analyzing materials, objects and topics in view of their teachable content.....				
25. The student works with parents and adults in church organizations, community centers, civic associations, etc.....				
26. The student works with children in the neighborhood.....				
27. The student has experience with craft programs in connection with summer camps.....				
28. The student has leadership experiences with summer camp groups.....				
29. The student has laboratory experiences in connection with methods and theory courses.....				
30. The student has an opportunity to observe boys and girls in a variety of school situations.....				
31. The student has an opportunity to observe boys and girls in a number of non-school situations.....				
32. The student has an opportunity to observe the administration of tests and participating in interpreting results.....				
33. The pre-student-teaching observation experiences call for active participation on the part of the student.....				
34. Provision is made for continuous contact with boys and girls throughout the four years of pre-service education.....				
35. Cooperative supervision and guidance of students is provided by the college and laboratory teachers.....				

TEACHER EDUCATION PRACTICES REQUIRED DURING THE STUDENT-TEACHING EXPERIENCE

	Practiced		Degree	Value
	Yes	No		
1. Students meet once weekly (or _____) for a seminar on teaching problems experienced on the job.....				
2. Students submit weekly reports of activities.....				
3. Students report personally each week (or _____) to the college campus for conferences and reports.....				
4. Students record outstanding incidents with their significance to the learning situation.....				
5. Students keep a diary of daily activities.....				
6. Students keep a notebook of student-teaching materials and information.....				
7. The students build a morgue of teaching materials.....				
8. Students take a course in curriculum materials at the same time as student teaching.....				
9. (Other, describe) _____				

TEACHER-EDUCATION EXPERIENCES TO FOLLOW STUDENT TEACHING

1. There is a follow-up period for personal adjustment and problem solving on the college campus.....				
2. Opportunity is provided for further study and analysis of problems experienced while doing student teaching.....				
3. The final semester's work is based mainly upon the "shortages" of the student as indicated by the student-teaching experience.....				
4. Provision is made for the development of teaching devices and aids resulting from needs found in the student-teaching experience.....				
5. Provision is made for further study and research on problems of pupil growth and development.....				
6. Provision is made for the improvement of techniques and methods experienced in student teaching.....				
7. There is an extension of the student-teaching period if necessary for individuals showing evidence of such a need.....				

TEACHER-EDUCATION EXPERIENCES TO FOLLOW STUDENT TEACHING

	Practiced		Degree	Value
	Yes	No		
8. Students participate in off-campus organizations of boys and girls such as scouts, hobby clubs, church schools, and boys' clubs.....				
9. The student attends professional meetings.....				
10. The student has conferences with administrators and supervisors in local and nearby school systems.....				
11. The student participates in community surveys.....				
12. Students are directed to participate in community affairs.....				
13. The student takes work in curriculum construction.....				
14. The student is placed in charge of field projects wherein contact with youngsters is a factor.....				
15. There are education seminars provided for students.....				
16. There are one or more professional courses required.....				
17. Student teaching is done the last semester with no opportunity for additional work on the undergraduate level.....				
18. (Other) _____ _____ _____				

Part IV

STUDENT-TEACHING EXPERIENCES OF PRACTICE TEACHERS

OBTAINING A KNOWLEDGE AND UNDERSTANDING OF THE COMMUNITY IN WHICH THE STUDENT
TEACHING IS DONE

	Practiced		Degree	Value
	Yes	No		
1. The student reviews surveys of the community in terms of its social, economic, and political aspects.....				
2. The student reviews surveys and analyses of the occupations of the inhabitants of the community.....				
3. The student reviews surveys and analyses of local and neighboring industries.....				
4. The student reviews follow-up studies on former pupils of the school.....				
5. The student reviews reports on the cultural and educational institutions in the community and neighboring vicinity.....				
6. The student reviews the recreational and avocational facilities of the community.....				
7. The student reviews the history, background, and tradition of the community.....				
8. The student studies the community in view of potential teaching materials and facilities such as: guest speakers, industrial and commercial exhibits, parks, construction, community fairs, excursions, etc.....				
9. The student becomes acquainted with the organization and structural pattern of the local school administration.....				
10. The student becomes acquainted with the employment and placement agencies in the community.....				
11. The student reads the local newspaper(s).....				
12. (Other) _____ _____ _____				

FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

1. The student spends at least one full day or its equivalent in the principal's office, being permitted to observe some of the duties, functions and place of the principal in the total school program.....				
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FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

	Practiced		Degree	Value
	Yes	No		
2. The student spends at least two full days (or _____) in the counselor's office becoming familiar with:				
a. Duties of the counselor.....				
b. Nature of counseling problems.....				
c. Availability of occupational information.....				
d. Test materials available.....				
e. Interviewing techniques.....				
f. Referral agencies.....				
3. The student spends one full day (or _____) in the central administrative office of the student-teaching situation to observe the functioning of the school from that point.....				
4. The student is taken on an "orientation tour" of the school to familiarize him with the various units and facilities of the school.....				
a. Such an "orientation tour" includes:				
1. Heating plant.....				
2. Fire control measures.....				
3. Stock rooms.....				
4. Maintenance facilities.....				
5. Laboratories.....				
6. Administrative offices.....				
7. Staff offices.....				
8. Duplicating rooms.....				
9. Auditorium.....				
5. The student has a conference with the principal.....				
6. The student has a conference with the school supervisor of Industrial Arts.....				
7. The student has a conference with the superintendent of schools.....				
8. The student spends a half day, (or _____) in the school library.....				
9. The student becomes informed on school policy through:				
a. Reading written statements of policy.....				
b. Conferring with proper officials.....				
c. Conferences with teachers.....				
d. Faculty meetings.....				

FAMILIARIZING THE STUDENT WITH THE SCHOOL AND ITS ORGANIZATION

	Practiced		Degree	Value
	Yes	No		
10. The student attains an understanding of school policy on:				
a. Vacations.....				
b. Absences.....				
c. Salary.....				
d. Leaves of absence.....				
e. Tenure.....				
f. Placement.....				
g. Community and school standards of conduct.....				
h. Teacher contracts.....				
i. School reports.....				
11. (Other, describe) _____				

ACQUAINTING THE STUDENT TEACHER WITH THE SCHOOL PERSONNEL

1. Arrangements are made for meeting and becoming acquainted with the following people:				
a. Local superintendent of schools.....				
b. Local division supervisor (i.e., elementary, secondary).....				
c. Industrial Arts supervisor (local).....				
d. Industrial Arts supervisor (state).....				
e. Principal of the school in which practice-teaching is done.....				
f. Head of the Industrial Arts department (school).....				
g. Heads of other departments in the school.....				
h. Other teachers.....				
i. Personnel officer (faculty).....				
j. Guidance personnel.....				
k. School nurse.....				
l. School doctor.....				
m. Attendance officer.....				
n. Librarian.....				
2. The student participates in faculty social functions.....				
3. The student participates in faculty meetings.....				
4. The student participates in Industrial Arts in-service training meetings.....				
5. The student attends local N.E.A. meetings.....				
6. The student attends district N.E.A. meetings.....				
7. The student attends professional meetings held by Industrial Arts teachers.....				
8. (Other, describe) _____				

TEACHING RESPONSIBILITIES OF THE STUDENT TEACHER

	Practiced		Degree	Value
	Yes	No		
1. The student makes daily lesson plans.....				
2. The student is given gradually increasing responsibility in the classroom or shop.....				
3. The student is given opportunity to teach both shop and drawing classes.....				
4. The student teacher takes direct responsibility for the organization and presentation of certain units of instruction.....				
5. The student teacher gives group demonstrations.....				
6. The student teacher gives individual instruction to pupils needing such help.....				
7. The student is permitted to experiment with and try out new materials and methods.....				
8. The student teacher teaches one or more sessions with the use of motion pictures.....				
9. The student teacher teaches one or more sessions with the use of slide films.....				
10. The student assists in the correlation of a shop activity with one or more other subject-matter areas, e.g. mathematics, physics, chemistry, English, or history.....				
11. The student teaches two or more class sessions in some related field or in his minor field.....				
12. The student teacher assists pupils in the development of research units.....				
13. The student takes one or more groups on field trips pertaining to the work being studied.....				
14. The student in due time is permitted to assume full control over several class sessions in the absence of the critic teacher.....				
15. The student assists pupils in the planning of their work.....				
16. The student assists pupils in realizing their goals.....				
17. The student assists pupils in the evaluation of their progress.....				
18. The student assists the critic teacher in supervising a home room.....				

TEACHING RESPONSIBILITIES OF THE STUDENT TEACHER

	Practiced		Degree	Value
	Yes	No		
19. The student teacher checks and evaluates the progress of certain special students assigned to him.....				
20. The student teacher assists the critic teacher in judging results of teaching in terms of pupils and objectives.....				
21. The student teacher studies the program of study for the department.....				
22. The student teacher assists the critic teacher in over-all pupil evaluation.....				
23. The student teacher assists the critic teacher with attendance reports.....				
24. (Other, describe) _____				

CLASSROOM ACTIVITIES RELATIVE TO PUPIL STUDY AND DEVELOPMENT

1. The student makes case studies of two or more students.....				
2. The student keeps anecdotal records of pupil activities.....				
3. The student studies and reviews pupil activities using cumulative records of the pupils.....				
4. The student assists pupils in planning their school program.....				
5. The student extends guidance and counseling services to pupils in keeping with policies of the regular guidance personnel of the school.....				
6. The student visits two or more students in their homes for purposes of background study and analysis.....				
7. The student studies certain pupils under his care in view of their needs.....				
8. The student is encouraged to seek consultation of the guidance personnel or other referral agencies on special pupil problems.....				
9. The student is given shop experiences with both junior and senior high school pupils.....				
10. Student takes charge of directing activities of one or more problem cases.....				

CLASSROOM ACTIVITIES RELATIVE TO PUPIL STUDY AND DEVELOPMENT

	Practiced		Degree	Value
	Yes	No		
11. The student observes a pupil-teacher conference conducted by the critic teacher.....
12. The student observes two or more pupil-counselor conferences conducted by the counselor.....
13. The student summarizes case study data and discusses the findings with the critic teacher.....
14. (Other, describe) _____

CURRICULUM PLANNING AND CONTENT ANALYSIS ACTIVITIES OF THE STUDENT TEACHER

1. The student teacher studies the aims and objectives of the school.....	.....	.....	.....	.....
2. The student teacher studies the aims and objectives of the department.....	.....	.....	.....	.....
3. The student teacher analyzes the class personnel for appropriate subject matter or shop activities.....	.....	.....	.....	.....
4. The student teacher analyzes the class personnel for needed teaching techniques or devices.....	.....	.....	.....	.....
5. The student teacher assists the critic teacher in analyzing and dealing with certain discipline cases.....	.....	.....	.....	.....
6. The student teacher makes a summary of individual pupil activities for inclusion in the cumulative record.....	.....	.....	.....	.....
7. The student teacher studies records of former students who are now prominent in the local community.....	.....	.....	.....	.....
8. The student teacher obtains parent, employer, and community reaction to the program.....	.....	.....	.....	.....
a. The student teacher discusses the findings with the critic teacher.....	.....	.....	.....	.....
9. The student studies past reports of the department.....	.....	.....	.....	.....
10. The student teacher assists the critic teacher in the development of the course of study to be used during the period in which the student teacher is on the job.....	.....	.....	.....	.....
11. The student teacher discusses the shop program with the critic teacher.....	.....	.....	.....	.....

CURRICULUM PLANNING AND CONTENT ANALYSIS ACTIVITIES OF THE STUDENT TEACHER

	Practiced		Degree	Value
	Yes	No		
12. The student teacher observes planning procedures and techniques used by the critic teacher.....				
13. The student discusses lesson planning procedures with the critic teacher.....				
14. The student teacher visits other school shop activities in the same school or vicinity.....				
15. The student teacher interviews one or more recognized leaders in the Industrial Arts field.....				
16. (Other, describe) _____				

STUDENT TEACHING EXPERIENCES RELATIVE TO SHOP ORGANIZATION

1. The student teacher assists in keeping the shop in order.....				
2. The student teacher assists the critic teacher in the conditioning of the shop prior to the beginning of the school term.....				
3. The student teacher assists the critic teacher in the shop-closing activities at the end of the school term.....				
4. The student teacher assists the critic teacher in the financial matters of the shop.....				
5. The student teacher assists the critic teacher in setting up any new equipment or machinery.....				
6. The student teacher assists with the pupil-personnel organization of the shop.....				
7. The student teacher assists in developing and maintaining an adequate safety program in the shop.....				
8. The student teacher assists the critic teacher with the physical organization of the shop.....				
9. The student teacher assists in the planning for storage of equipment, supplies, and pupil projects.....				
10. (Other, describe) _____				

STUDENT TEACHER PARTICIPATION IN EXTRA SHOP ACTIVITIES

	Practiced		Degree	Value
	Yes	No		
1. The student participates in and provides leadership in shop or hobby clubs.....				
2. The student assists in the organization of assembly programs.....				
3. The student assists in the direction of certain school activities such as dances, plays, athletic meets, luncheons, parties, etc.....				
4. The student is called upon to act as a chaperon at dances and parties.....				
5. The student assists with school publications.....				
6. The student assists with the publication of a shop paper.....				
7. The student assists in the promoting of special drives for funds, i.e. community fund, Red Cross, etc.....				
8. The student organizes or sponsors a club.....				
9. The student participates in adult education work.....				
10. (Other, describe) _____				

EXTRA-TEACHING ACTIVITIES CARRIED ON BY THE STUDENT TEACHER IN THE INDUSTRIAL ARTS SHOP

1. The student takes an inventory of materials and supplies on hand.....				
2. The student is required to make out requisitions for needed supplies or materials.....				
3. The student teacher assists the critic teacher in the development of new activities in the shop.....				
4. The student teacher assists the critic teacher in the ordering of new equipment for the shop.....				
5. The student teacher assists in the selection and ordering of textbooks for the department.....				
6. The student teacher assists the critic teacher in club or extra-curricular activity work.....				
7. The student teacher checks the department inventory against the materials on hand.....				

EXTRA-TEACHING ACTIVITIES CARRIED ON BY THE STUDENT TEACHER IN THE INDUSTRIAL ARTS SHOP

	Practiced		Degree	Value
	Yes	No		
8. The student teacher assists in the receiving and checking equipment, supplies or tools.....				
9. The student teacher assists students in preparing a display or working exhibit for public view.....				
10. The student teacher handles various types of discipline cases.....				
11. (Other, describe) _____				

STUDENT TEACHING EXPERIENCES WITH TEACHING AIDS AND TECHNIQUES

1. The student teacher arranges for one or more guest speakers to discuss topics relative to the work studied.....				
2. The student teacher examines magazines for articles or illustrations to be used in units to be taught.....				
3. The student teacher collects and files magazine articles and illustrations to be used in future presentations.....				
4. The student teacher assists in the development of a shop display.....				
5. The student plans and constructs teaching aids and devices to further implement existing practices.....				
6. The student teacher makes necessary arrangements for securing motion pictures for presentation in the shop.....				
7. (Other, describe) _____				

COMMUNITY EXPERIENCES FOR THE STUDENT TEACHER

1. The student rooms and boards in the community.....				
2. The student attends church in the community.....				
3. The student participates in at least one social, professional, or fraternal organization in the community.....				
4. The student attends at least one meeting of the local governing body (council, board of commissioners, etc.).....				
5. The student attends at least one meeting of the local school board.....				

COMMUNITY EXPERIENCES FOR THE STUDENT TEACHER

	Practiced		Degree	Value
	Yes	No		
6. The student attends two or more meetings of the local P.T.A., parent's club, or other school-community organization.....				
7. The student visits the homes of two pupils (or _____) for purposes relative to school and educational activities.....				
8. (Other, describe) _____				

Part V

ADMINISTRATION OF STUDENT TEACHING

ADMINISTRATIVE PRACTICES REGARDING ORGANIZATION OF THE STUDENT-TEACHING PROGRAMS

	Practiced		Degree	Value
	Yes	No		
1. Student-teaching activities are derived through conferences attended by college faculty members, critic teachers, supervisor(s) and students.....				
2. There is a written statement of policy regarding student-teaching practices and procedures.....				
3. A formal written contract is drawn up between the teacher-education institution and the participating schools.....				
4. Student teaching practices and procedures are based upon verbal agreements between the individuals at the teacher-education institution and the participating schools.....				
5. Assignments to student teaching are conducted by means of telephone conversations between the personnel at the college and the participating schools.....				
6. A formal letter of introduction is used to acquaint the principal and critic teacher with the student teacher.....				
7. A standard printed form is used to introduce the student teacher to the principal and the critic teacher.....				
8. The student's cumulative record is made available for the critic teacher.....				
9. Each student teacher is taken by the supervisor of student teaching to make the initial contacts with the principal and the critic teacher.....				
10. A copy of each student's teaching schedule is maintained by the supervisor of student teaching.....				
11. The critic teachers have a bachelor's degree with a major in Industrial Arts education.....				
12. The critic teachers have a master's degree (or 30 semester hours of graduate credits) with a major in Industrial Arts education.....				
13. The critic teachers have at least three years of successful teaching experience on an elementary or secondary school level.....				
14. The critic teachers have at least five years of successful teaching experience on an elementary or secondary school level.....				
15. The critic teacher is a member of the college faculty.....				

ADMINISTRATIVE PRACTICES REGARDING ORGANIZATION OF THE STUDENT-TEACHING PROGRAMS

	Practiced		Degree	Value
	Yes	No		
16. The critic teacher is a part-time teacher on the college staff.....				
17. Qualifications for the critic teacher are set up by the state board of education.....				
18. There are no specific qualifications for the critic teacher.....				
19. The supervisor of student teaching is a full-time member of the college staff.....				
20. The supervisor of student teaching must meet certain requirements set up by the state board of education....				
21. (Other, describe) _____				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE REQUIREMENTS FOR THE STUDENT TEACHER

1. Eligibility for student teaching is dependent upon the demonstrated readiness of the student.....				
2. Eligibility for student teaching is based upon the completion of a given number of semester hours.....				
3. Eligibility for student teaching is based upon the student's attainment of a certain scholastic average above the passing grade.....				
4. A health examination is required prior to admission to student teaching.....				
5. An oral examination is required prior to admission to student teaching.....				
6. A written examination is required for admission to student teaching.....				
7. A written application for student teaching is made by the student.....				
8. A review of the student's cumulative record is made by the college authorities prior to acceptance for student teaching.....				
9. A review of the student's cumulative record is used to assist in placement in a student teaching position.....				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE REQUIREMENTS FOR THE STUDENT TEACHER

	Practiced		Degree	Value
	Yes	No		
10. The student is admitted to student teaching after a review of observation and participation experiences.....				
11. (Other, describe) _____				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SUPERVISION OF STUDENT TEACHING

1. Supervision of the student teacher is totally the responsibility of the critic teacher.....				
2. Supervision of the student teacher is the joint responsibility of the critic teacher and the supervisor of student teaching.....				
3. The student holds daily conferences with the critic teacher.....				
4. The student holds conferences with the critic teacher as the need arises.....				
5. The student teacher has a conference every week with the supervisor of student teaching.....				
6. The student teacher has a conference with the supervisor of student teaching at least three times (or _____ times) during the student-teaching period.....				
7. Conferences with all the student teachers together and the supervisor are held weekly.....				
8. Conferences with all the student teachers together and the supervisor are held two or more times during the student-teaching period.....				
9. There are scheduled meetings at which all the student teachers, supervisor(s), and faculty members attend.....				
10. College faculty members (not supervisors) make two or more student-teacher visitations during each student-teaching period.....				
11. The supervisor of student teaching visits each student three or more times in a student-teaching period.....				
12. The supervisor of student teaching visits the student teacher as the supervisor deems necessary or is informed of the need for such a visit.....				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SUPERVISION OF STUDENT TEACHING

	Practiced		Degree	Value
	Yes	No		
13. The critic teacher and the student teacher are given advance notice of the supervisor's visits.....				
14. (Other, describe) _____				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE STARTING OF THE PROGRAM

1. The student teacher reports to the school at the same time as the regular teacher prior to the beginning of the school term.....				
2. The student teacher is present for the first day of school even though the college program does not begin until a later date.....				
3. The student teacher is present for the last day of school even though the college program has terminated at a prior date.....				
4. The student teaching experience is placed at least one semester before the end of the student's under-graduate career.....				
5. The student teaching experience is at least eight weeks long with teaching done on a full-day basis.....				
6. The student-teaching experience is at least twelve weeks long with teaching done on a full-day basis.....				
7. Student-teaching assignments are made at least one month, (or _____) before the beginning of student teaching.....				
8. The prospective student teacher is notified of the location of his student teaching experience at least one month prior to the beginning of student teaching.....				
9. The prospective student teacher is notified of the location of his student teaching experience at least one week prior to the beginning of student teaching.....				
10. There is a program of conferences between the teacher-education personnel and the critic teachers for the purpose of greater coordination and correlation of the program.....				
11. The student teacher is looked upon as another professional person on the staff of the school in which practice teaching is done.....				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE STARTING OF THE PROGRAM

	Practiced		Degree	Value
	Yes	No		
12. The student teacher is introduced to the student body as an assistant to the regular teacher.....				
13. The teaching load of the critic teacher is lessened sufficiently to permit time for conferences and student-teacher planning and guidance.....				
14. The student-teacher load of the critic teacher does not exceed one full-time student teacher for any single period of time.....				
15. The critic teacher is reimbursed by the teacher-education institution for services rendered.....				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SELECTION OF STUDENT TEACHING LOCATIONS

1. Student-teaching assignments are based on the demonstrated abilities, special interests, inadequacies and potentialities of the individual who is to do the student teaching.....				
2. The student teaching location is selected because of its facilities and environment being typical of situations in which the student may choose to teach upon graduation.....				
3. Selection of student teaching locations is based upon a careful consideration of:				
a. Cooperative attitude of teachers and principal.....				
b. Progressive philosophy and practice.....				
c. A good building with adequate equipment.....				
d. Freedom in teaching permitted student teachers.....				
e. The school being the center of community life.....				
f. Professional preparation of teaching personnel.....				
g. Extra-school activities.....				
h. Community and environment.....				
i. Nature of the shop program.....				
4. Two or more visits by college faculty members and student-teaching supervisor(s) precede acceptance of a situation as a location for student teaching.....				
5. Student-teaching locations are selected because of their convenience to the student teacher.....				
6. Student-teaching locations are selected because of their nearness to the college.....				

ADMINISTRATIVE PRACTICES WITH REGARD TO THE SELECTION OF STUDENT TEACHING LOCATIONS

	Practiced		Degree	Value
	Yes	No		
7. Selection of a student teaching location is based upon the recommendations of an appraisal committee at the college specifically set up for such selection activity.....				
8. Selection of student-teaching locations are based upon recommendations by superintendents of schools, supervisors (state, county, city, local) principals, etc.....				
9. (Other, describe) _____				

APPENDIX F

April 11, 1949

Dear Sir:

I am in the process of making a study of practice or student teaching programs in Industrial Arts teacher education. The study has progressed to the point where fourteen institutions have been chosen as having superior programs. Your program is among the fourteen.

It is my intention to make a careful study of these fourteen programs. Due to the great distances that one would have to travel in order to study some of the programs close up, it is proposed that some programs will have to be studied by means of written reactions. It is by this technique that I would like to study your program.

The forms are detailed and extensive in nature, and will take approximately three to four hours to complete. It is preferable that the information be provided by the supervisor of student teaching in Industrial Arts, or the head of the Industrial Arts department. The forms would be mailed within ten days and to be returned within twenty-one days thereafter.

Would you please indicate on the form enclosed with the self-addressed envelope, if you will participate in this study?

Your kind consideration and assistance will be greatly appreciated.

Sincerely yours,

Donald Maley
Industrial Education Dept.
University of Maryland
College Park, Maryland

APPENDIX G

STUDY PARTICIPATION REPORT FORM

(Check one of the following and return in the enclosed self-addressed envelope.)

- () I will participate in your study of student-teaching programs in Industrial Arts education.
- () I will not be able to participate in your study of student-teaching programs in Industrial Arts education.

Signed _____

Position _____

APPENDIX H

College Park, Maryland

Date

Dear Sir:

I am in the process of making a study of practice or student teaching programs in Industrial Arts teacher education. The study has progressed to the point where fourteen institutions have been chosen as having superior programs. Your program is among the fourteen.

It is my intention to make a careful study of these fourteen programs. Four of the fourteen programs are in the New York-New England area, and it is proposed to study these programs by means of a personal visit. The information about your program would be obtained through the use of prepared forms listing the topics on which information is desired. My visit will serve to facilitate the use of the forms as well as provide me with a closer view of the school.

The forms are detailed and extensive in nature, and will take approximately three to four hours to complete. It is preferred that the information be provided by the supervisor of student teaching in Industrial Arts, or the head of the Industrial Arts department.

I would like to visit your program for the above purposes on at , May , 1949. If this time and date is suitable to you, would you please indicate it on the enclosed form together with the name of the person with whom I shall work?

Your complying with this request will greatly assist in the scheduling of my other visits that are being made on this same trip.

I thank you for your help in this matter.

Sincerely yours,

Donald Maley

APPENDIX I

PERSONAL VISIT REPORT FORM

DIRECTIONS: Check one of the following statements and return in the attached envelope.

- () The time and date as requested for your visit to our department is satisfactory. You will contact Mr. _____ upon arrival at the college.

- () The time and date as requested for your visit to our department will not be satisfactory.

Signed _____

Position _____

APPENDIX J

April 19, 1949

Dear Sir:

Enclosed you will find information forms pertaining to a study of student teaching programs about which I wrote you a short while ago.

There are instructions preceding the data forms which I am sure you will find sufficient and self-explanatory. If at all possible, I would like to have the forms completed and returned in approximately twenty-one days.

I wish to thank you for your willingness to participate in this study, and for giving your valuable time and knowledge.

Sincerely yours,

Donald Maley