

ABSTRACT OF A THESIS

ANNUAL ITINERANT TEACHER TRAINING
PROGRAM FOR NEGRO TRADE AND INDUSTRIAL
TEACHERS OF FLORIDA

Submitted by
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In partial fulfillment of the requirements
for the Degree of Master of Education
Colorado
Agricultural and Mechanical College
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ABSTRACT OF THESIS

Widespread opinion that greater attention should be given to the preparation and improvement of trade and industrial teachers seems to be substantiated by the research findings discussed in this study.

The Smith-Hughes Act makes special provisions for the training and improvement of vocational teachers and places the responsibility for this service on the state supervisors. Many of the nation's leading educators in the field of vocational education have expressed opinions to the effect that the efficient training of teachers is among vocational education's greatest needs. The coming of the war has brought on an even greater need for efficient trade and industrial teaching and therewith a greater need for efficient teacher training.

Need for the Study

Difficulties encountered by the Florida State Department of Education in securing and improving Negro trade and industrial teachers are as follows: (1) Securing teachers who can qualify under the state plan. (2) Delays and postponements in organizing classes. (3) Improvement of teachers who are already employed but are not competent. (4) Very little contribution of

effort to the training of Negro trade and industrial teachers of Florida by state and other institutions.

(5) Ever-changing factors and trends in the industrial field.

These difficulties experienced by the Florida State Department of Education in securing Negro Trade and industrial teachers has given rise to the need for this study.

The problem

An analysis of the difficulties encountered above seemed to evolve into a statement of the problem as follows: What should comprise the annual itinerant teacher training program for Negro trade and industrial teachers of Florida? A study of the major problem brought out the following subordinate questions:

- A. What are the regular duties and responsibilities of the Negro trade and industrial teachers of Florida?
- B. What are the difficulties being encountered in the discharge of these duties?
- C. What are the extra-curricular activities and duties they are called upon to do?
- D. What are the difficulties being encountered in the discharge of these extra-curricular duties?
- E. What professional courses are prescribed in the state plan for trade and industrial

teachers?

- F. What provision should be made in the itinerant teacher trainer's annual program to enable him to help each teacher overcome his difficulties and how should he proceed in carrying out this program?

After a study of the major problem together with its subordinate questions it was realized that certain specific and pertinent information had to be gathered in order to answer these questions completely. It appeared that an analysis of the teachers' job into its various duties and responsibilities would give a kind of job break-down that would form the basis for these complete answers.

Source of Data

It was determined through research findings and opinions of several leaders in the field of trade and industrial education that the trade and industrial teachers, their principals, and local supervisors would be an accurate and reliable source from which to obtain the information needed in formulating the answers to the major problem. The data collected in this study were gathered from 40 teachers, six coordinators, seven principals, and five local supervisors.

Methods and procedure

A series of check sheets was used to collect

the data from the teachers, principals and local supervisors. To facilitate its use, the check sheet was composed of a list of duties and responsibilities of trade and industrial teachers in other states, as determined through research findings. Each teacher was requested to check the items that in his opinion entered his work as a duty or responsibility and add any not listed. The principals and local supervisors were requested to fill out check sheets on each teacher under their supervision, checking the duties and responsibilities and adding any not listed. In addition to checking the items of duties and responsibilities all were requested to check the ones they considered the most important, the ones with which they encountered difficulty, and the ones with which they needed help.

Findings

The first analysis of the data revealed that there were three types of teachers; namely, evening trade extension teachers, day trade teachers, and coordinators of diversified cooperative training. The data were analyzed further to determine (1) the regular duties and responsibilities of each type of teacher, (2) the duties and responsibilities with which they encounter difficulty, (3) the extra-curricular duties and responsibilities, (4) the extra-curricular duties with which they encounter difficulty, (5) the duties they

considered the most important, and (6) the duties and responsibilities with which they need help. These were analyzed and compiled as determined by the teachers, principals, coordinators and local supervisors and the results are shown in the tables.

In Table 3, page 43, are shown 53 duties and responsibilities of the day trade teachers as determined by the teachers, principals, and local supervisors. Lesson plans, related subject content, trade analysis, and demonstrations are the foremost ones listed.

The duties and responsibilities of the evening trade extension teachers are shown in Table 4, page 45. They consist of 24 items with course outlines, lesson plans, demonstrations, and methods and devices as foremost.

The coordinators' duties and responsibilities are shown in Table 5, page 47. They include 17 items all of which were determined here by 75 to 100 per cent of the coordinators, principals, and local supervisors.

The extra-curricular duties of these teachers are shown in Table 6, page 49, together with the time devoted to each. It reveals that there are no difficulties encountered in the performance of these duties.

Trade analysis, methods and devices, course outlines, and related subject content are foremost among the 12 most important duties and responsibilities

of the trade teachers as shown in Table 7, page 50, while surveys, placements, follow up, and related study are first among the 12 most important duties of the coordinators as shown in Table 8.

The difficulties of the teachers are revealed in Table 9, page 53. Eighteen to 23 per cent have difficulty with demonstrations, trade analysis, methods and devices, and learning activities. The largest percentage of the coordinators encounter difficulties in surveys, advisory committee work, and related study, as shown in Table 10, page 54. Tables 11, 12, 13, and 14, Pages 55, 56, 58, and 59 reveal the needs of the day trade teachers and evening trade extension teachers as determined by the teachers, principals, and local supervisors. It appears that trade analysis, related subject content, course outlines, lesson plans, methods and devices, and learning activities are the paramount needs of the teachers.

The needs of the coordinators are shown in Table 15, page 60, and include surveys, advisory committee work, related study, and trainee selection as the greatest.

Discussion and Recommendations

An analysis and consideration of the findings revealed a plan of teacher training for the Negro trade and industrial teachers of Florida which has two main

parts, formal classes and in-service training. It is shown in Tables 16 and 17, pages 73 and 78, that 41 of the duties and responsibilities of the teachers and all of the duties and responsibilities of the coordinators have a definite relation to the prescribed courses in the state plan. It appears feasible to offer these prescribed courses through formal classes under three different plans; namely, summer classes at The Florida Agricultural and Mechanical College, organized extension classes, and the tutorial or workshop plan.

The remaining duties and responsibilities not related to the prescribed courses in the state plan as shown in Table 18, page 80, will form a part of the basis for the in-service training program. A plan of professional improvement adapted from Training Within Industry by the Department of Vocational Education of the Denver Public Schools will serve as a pattern. It includes, knowledge of work, knowledge of responsibility, skill in instructing, skill in cooperating, and skill in planning. The in-service training program will employ four methods or procedures for helping the teachers; namely, special conferences, correspondence service, individual professional improvement, and individual help on the job.

Recommendations

In light of the discussion of the research

findings the following recommendations are made:

1. That a plan of professional improvement involving every teacher be inaugurated, using the plan adapted by the Department of Vocational Education of the Denver Public Schools as a pattern.
2. That formal course offerings be given new emphasis.
3. That formal courses continue to be offered through summer classes held at the Florida Agricultural and Mechanical College.
4. That the tutorial workshop plan, as used by Colorado Agricultural and Mechanical College be adapted.
5. That prescribed courses be offered on extension basis in Jacksonville and Tampa for evening trade extension teachers.
6. That a functual in-service training program be inaugurated.
7. That teachers be required to return to industry for industrial experience during summer vacation every three years.
8. That every effort be made to widen the professional background of each teacher.

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T H E S I S

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Permission to publish this thesis or any part of it must be obtained from the Dean of the Graduate School.

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Chapter I

INTRODUCTION

Many evidences of teacher training as an important factor in the successful operation of programs in trade and industrial education can be enumerated. Chief among them are the provision made in the National Vocational Education Act of 1917 and statements by many of the national leaders in the field of vocational education.

The passage of the National Vocational Education Act marks the beginning of organized training of teachers for vocational education of less than college grade. This act, together with complementary state acts, provides funds specifically approved for the training of teachers in the several fields of vocational education, including trade and industry. Further stipulations of the act definitely place the responsibility of teacher training on the state supervisor of vocational education.

Need for the study

The experiences and opinions of many leading vocational educators support the fact that efficient plans and programs of teacher training are among the

greatest needs of vocational education. That successful vocational education depends upon the possibility of providing teachers, who not only have command of the specific occupational content they are to teach, but who are also trained in the special teaching techniques, is expressed by Prosser and Allen (21:487-8) as follows:

Like any other occupation, teaching is, as one may prefer to call it, a profession, a trade or a job. Training for teaching is vocational education just as much as training for medicine or boiler making. There exist a body of technical knowledge, of auxiliary information, and of what may be called the tools of teaching; and there is need for the intelligent application of this teaching equipment in actual practice. Like any other form of vocational education, a command of this equipment can be secured by pick up methods or through some form of organized training. In either case, to be of social value, there must be developed a doing or teaching ability and not merely information about how to teach or an appreciation of teaching or teaching methods. The socially valuable teacher must be able to teach and teach efficiently. It is the sociological function of teacher training courses to promote desirable social ends--in this case, efficient vocational education--by providing such teachers. The degree to which any training scheme can do this is the measure of its social value to the country.

The importance of teacher training to the efficient operation of vocational programs is again pointed out by Struck (24:132) in his 33 Basic Vocational Education Principles and Concepts. In the second of these basic principles, occupational competence is stressed as a basic requirement for vocational teachers, while in his third basic principle the essentiality of professional training is strongly emphasized as

follows:

THE NEED FOR PROFESSIONAL TRAINING. Professional training (meaning instruction in the arts and sciences of teaching) is as essential for vocational teachers as for those of general education. Although it is true that vocational competence is a fundamental requirement for vocational teachers, it is also a truism that professional training is as greatly needed in the realm of vocational education as in nonvocational fields. It is one thing for a person to be skilled in an occupation and another to teach others what he knows and to do what he can do. Furthermore there are differences in teaching young people of high school age and adults.

In vocational education the teaching content varies constantly because of changes in the occupations. Consequently teachers must be able to analyze their occupations and to develop new instructional material. Course content must be determined; individual instructional sheets need to be developed because the nature of the instruction is such that much of the teaching is best done on an individual basis; and group instruction must be planned.

Prospective vocational teachers are taught how to plan school laboratories, shops, class rooms and elsewhere. Fundamental laws of learning and of teaching are studied, and familiarity with many different ways of teaching is obtained. Teaching methods are teachers tools and a variety is needed.

In Vocational Education Bulletin Number 172 of the United States Office of Education (28) this statement appears by G. D. Whitney, Director of Vocational Teacher Training, University of Pittsburg:

To assure continuous growth in qualifications of teachers in service is a problem which occupies attention in all fields of education. It is realized that no person, however qualified by native ability, training or experience can continue to give high grade service as a teacher indefinitely unless he keeps up in training for improvement and develops with the subject he is

teaching. He must be continuously up to date. Certainly the vocational teacher is no exception to this general rule

The Setting

The Florida State Department of Education has experienced numerous difficulties in securing and improving Negro trade and industrial teachers:

1. Securing teachers who can qualify under the state plan.
2. Delays and postponements in organizing classes.
3. Improvement of teachers who are already employed but are not competent.
4. Very little contribution of effort to the training of Negro trade and industrial teachers of Florida by state and other institutions.
5. Ever-changing factors and trends in the industrial field.
6. Increasing opportunities for the skilled Negro worker due to the impact of the war and consequently a greater need for trade and industrial training.

In light of these difficulties it would seem timely to undertake a study of teacher training for Negro trade and industrial teachers in Florida. Assurance has been given that if a feasible program for

improving these teachers can be developed, it will be adopted by the state department of education.

The Problem and its Analysis

The need for an improved program of teacher training in this area seems to evolve into a statement of the problem as follows:

The Problem

What should comprise the annual itinerant teacher training program for Negro trade and industrial teachers of Florida?

The Problem Analysis

- A. What are the regular duties and responsibilities of the Negro trade and industrial teachers of Florida?
- B. What are the difficulties being encountered in the discharge of these duties?
- C. What are the extra-curricular activities and duties they are called upon to do?
- D. What are the difficulties being encountered in the discharge of these extra-curricular duties?
- E. What are the professional courses prescribed in the state plan for trade and industrial teachers?
 1. For all-day trade teachers?

2. For evening trade extension teachers?
 3. For Coordinators of Diversified cooperative training?
- F. What provision should be made in the itinerant teacher trainer's annual program to enable him to help each teacher overcome his difficulties, and how should he proceed in carrying out this program?

Definitions

The term trade and industrial teachers in this study means all trade shop teachers, day trade related subjects teachers, evening trade extension teachers, war production training teachers, and coordinators of diversified cooperative training.

Delimitations

This study will include the Negro trade and industrial teachers of Florida. Many of the facilities, factors, and fundamentals described may relate to programs in other states. The program recommended by this study pertains only to Florida.

Information contained in the research findings of the following chapter is found to be helpful in answering the subordinate questions to the problem stated above.

Chapter II

REVIEW OF LITERATURE

Many of our leading vocational educators consider the training of teachers an important factor in the efficient operation of trade and industrial programs. Provision was made in the Smith-Hughes Act of 1917 for a special appropriation for teacher training, and likewise state plans for vocational education provide for this service. These facts, together with current difficulties encountered in securing competent trade and industrial teachers, make it essential that any program devised for the preparation of teachers be given thorough study to insure its effectiveness.

The research findings that pertain to question A, "What are the regular duties and responsibilities of the Negro trade and industrial teachers of Florida?" are:

A study made by Welch (31) has some bearing on question A and question B, "What are the difficulties being encountered in the discharge of these duties?". It gives some definite information in determining what the duties and responsibilities of trade and industrial teachers are. He has pooled the

experiences and help of 13 trade and industrial circuit teachers and 10 city directors of trade and industrial education in Wisconsin, for developing an analysis of the occupation of the circuit teacher. He has compiled and presented these findings through various charts and tables. Table A of this study makes this analysis of the circuit teachers' occupation.

1. Travel
2. Supervise apprentice
3. Sign apprentice
4. Make surveys
5. Attend union meetings
6. Attend contractors' meetings
7. Attend advisory meetings
8. Prepare material for course
9. Peace maker
10. Trouble shooter
11. Type lessons
12. Cut stencils
13. Mimeographing
14. Filing
15. Placement
16. Reports
17. Prepare lessons
18. Keep records
19. Sell self to trade people
20. Sell self to directors
21. Sell vocational program
22. Counselling
23. Mail to former students
24. Keep up with new developments
25. Supervise
26. Coordinate
27. Advise
28. Analyze
29. Consultant
30. Maintenance
31. Research
32. Guidance
33. Follow up (31:12)

In Table XVII is developed a list of the circuit teachers' responsibilities as follows:

1. Equipment
2. Supervisory
3. Clerical
4. Teaching
5. Selling school
6. Selling courses
7. Program making
8. Guidance
9. Dissemination of information
10. Accounts
11. Cooperation with school
12. Uphold prestige of school
13. Build new respect for school
14. Prepare course of study
15. Organization of classes
16. Selling trade
17. Reports
18. Coordination
19. Apprenticeship
20. Trade in general
21. Punctuality
22. Interviews
23. Demonstrations
24. Safety (31:108)

This study will prove helpful to the writer in answering questions A and B, inasmuch as it is devoted partly to an analysis of the duties and responsibilities of the circuit teachers of trade and industrial subjects in Wisconsin. While the duties and responsibilities of the circuit teachers of Wisconsin are not parallel to the duties and responsibilities of the trade and industrial teachers of Florida, the methods and procedures by which these duties were determined are applicable. The use of a series of check and summary sheets to gather data from the teachers and directors and the compilation of it for study will be of assistance to the writer in answering questions A and B.

In considering the duties and responsibilities of trade and industrial teachers it may be necessary to enumerate the various types of trade and industrial teachers at present employed in different phases of state and local programs. Findings, contained in a bulletin by Klinefelter (18) of the United States Federal Board of Vocational Education, reveal the following principal types of trade and industrial teachers:

1. Evening -- shop and related
2. Part-time -- shop and related
3. General continuation -- shop, related, academic
4. Coordinators -- trade and general
5. Day trade -- shop and related
6. General industrial -- shop and related
7. Local supervisor
8. Conference leaders in foremanship work (18:19)

Craig (11), in light of a decade or more of experience in working with trade and industrial teachers as assistant director of Dunnwoody Institute, is also able to throw some light on this question. He points out in a recent article some of the factors that must be included in an efficient trade and industrial training program and some of the needs of the teacher to actually do the training job. These factors and needs are imperative to thorough and efficient trade and industrial teaching, and the teacher should be well trained in handling every phase of the training program. Craig has this to say about the work of the trade and industrial instructor:

The instructor in trade and industrial lines is a manager in that he manages people, processes, and procedures. He must therefore be conversant with and observe the basic principles and procedures of management, often termed the 8 m's. (men, machines, materials, methods, money, markets, morale, and management) The procedure must involve additions, changes, and improvements in two important factors: Trade knowledge and trade skill. Or, in broader terms, it should include the big four: trade knowledge, trade skill, reasoning ability, and proper trade attitudes. (11:177)

According to Craigo, an instructor needs to know the following factors that contribute to the effectiveness of his work:

1. To assign the job (orally or by job sheet, blue print, and instruction sheet)
2. To teach the job (by telling, showing, or by providing opportunities for gaining experience)
3. To supervise the student on his job
4. To check his job and his results
5. To dispose of his job (sales)
6. To keep records for comparison
7. First to emphasize workmanship and later on speed, the two elements the employer demands
8. To get the student to build up his two tool kits -- trade skill and trade knowledge
9. To help the student generalize and develop resourcefulness to fit into the commercial job where he must operate other machines, work on other materials, and follow other procedures and processes quite different from those he had in school
10. To store his supplies; jobs in process, and tools
11. To manage his shop efficiently
12. To order stock, store surplus, and to inventory same
13. To plan ahead
14. To change his training program to take care of ever changing needs in his field
15. To place his product (the trained student) and how to profit by his placement contact, so that the next "batch" of trainees will be stepped up in value

16. Two methods of analysis for teaching the trade "The trade analysis into skills" -- the approach often called the Selvidge plan, and the "trade analysis into jobs" -- the approach often called the Allen plan.
17. To use a call staff
18. To use student foreman
19. The concentric method, i.e., job as nucleus with shop knowledge and trade knowledge as concentric circles.

The shop instructor is often called upon to do "non-teaching" jobs, and this is explained in the outline below. The methods, procedures, and objectives vary in each school and in each shop.

<u>Teaching</u>	Teaching jobs Instructing jobs Training jobs Supervising workers Checking
<u>Non-teaching but in department</u>	Equipment maintenance Supplies maintenance Shop maintenance Department records
<u>Out of depart- ment</u>	About building Helping in office General records Trade contacts (11:178)

These factors come up almost daily in the routine of the instructor and he needs and welcomes help in all of them. These citations may serve as a partial answer to question A, as many of the factors pointed out above may also be classed as a duty or responsibility.

Another finding comes from a publication by Struck (23) which will help in a final determination of the duties and responsibilities of the trade and

industrial teachers. These findings will also be helpful in answering question C, "What are the extra-curricular activities they are called upon to do?".

Struck, due to his position as head of the department of trade and industrial education at Pennsylvania State College and his long record as a national figure in vocational education, has been able to make some observations as to evidences of successful trade and industrial teaching. Following is a list of these evidences, and it is believed that most of the items are valid for all day, part-time, and evening classes.

Some evidences of successful teaching

1. Abundant student activity with a minimum of evident control on the teacher's part.
2. An atmosphere of freedom, cooperation, and obvious interest in the work being done.
3. Every thing in its place and a place for every thing.
4. Student participation in shop or class management.
5. Objective testing and measuring of progress and achievement.
6. Adequate but not cumbersome records.
7. Abundant illustrative materials such as charts, models, samples, and specimens.
8. Suitable reference materials such as instruction sheets, drawings, periodicals, and books.
9. A well kept bulletin board.
10. Attractive displays.
11. A high per cent attendance.
12. Equipment in good condition.
13. Students eager to come and remain as long as possible.
14. A radiant, enthusiastic teacher.
15. Evident cooperation between teacher and industry.
16. Friendly relations between teacher and other instructors and school authorities.

Struck also stresses the purpose and meaning of extra-curricular activities in the school. At first the school authorities were afraid to give recognition to these newer activities -- at least as a part of the "regular" school curriculum. So the term "extra-curricular" came into use. It expressed fairly well the attitude then prevailing toward these activities. A condensed list of the types of extra-curricular activities is brought out to indicate the range of extra-curricular interests.

A list of some extra-curricular activities

1. Archery
2. Assemblies
3. Athletics and health
 - a. Baseball
 - b. Basketball
 - c. Boxing
 - d. Fencing
 - e. Football
 - f. Gymnastics
 - g. Handball
 - h. Soccer
 - i. Track
 - j. Wrestling
4. Birds
5. Commercial art
6. Dancing
7. Debating
8. Drama
9. Fine arts
10. Home economics
11. Industrial arts
 - a. Wood
 - b. Metal
 - c. Art metal
 - d. Electric
 - e. Printing
 - f. Leather
 - g. Plastics
 - h. Ceramics
 - i. Textiles
 - j. Home mechanics
12. Literature
13. Mathematics
14. Music
15. Photography
16. Safe motoring
17. Safety and first aid
18. Science
19. Stamps and coins
20. Social sciences

This study proposes to cover also the duties and responsibilities of those trade and industrial teachers employed as coordinators for programs in diversified occupations. Under the direction of E. L. Williams of Texas Agricultural and Mechanical College, a group of experienced coordinators of Texas (25) prepared a handbook for coordinators of diversified occupations and outlined therein the duties and responsibilities of coordinators. The outline of the duties as worked out by this group is as follows:

- A. Sell program to:
 - 1. The school board
 - 2. The superintendent of schools, principal, and teachers
 - 3. The parents
 - 4. The employers
 - 5. The pupils
 - 6. The public
- B. Guidance
- C. Select students
- D. Give occupational information
- E. Find and select training stations
- F. Organize related subjects
- G. Teach and supervise
- H. Check pupils on job
- I. Follow up pupils
- J. Cooperate with:
 - 1. Trade organizations
 - 2. Civic organizations
 - 3. Professional organizations
 - 4. Employers
 - 5. School administration
- K. Organize advisory committees
- L. Make occupational surveys
- M. Organize job training programs
- N. Evaluating, grading, or promoting learners
- O. Select teachers for other types of classes and promote general vocational program for community. (25:32)

These findings have a definite bearing on that part of question A, which has to do with the

duties and responsibilities of coordinators of diversified cooperative training programs.

This question is again partially answered by Cameron (8) in the development of his plan for training trade and industrial teachers for Nevada. As a basis for formulating his plan, he secured information and data from four sources; namely, the state plan and state office of vocational education, two local supervisors and five public school principals, 26 trade and industrial teachers of Nevada, and 48 students in Nevada trade and industrial classes. This information was in relation to the following subjects:

1. Types of trade and industrial classes offered to students.
2. Number of trade and industrial teachers.
3. Annual need for new teachers.
4. Qualifications of new teachers.
5. Specific items of teachers' need.
6. Provisions for teacher training now in effect in Nevada.
7. Difficulties in securing new teachers.
8. a. Minimum requirements of the Office of Education
b. Provisions for teacher training in other states. (8:32)

To facilitate the gathering and compiling of this data, Cameron devised a group of forms or interview guide sheets, one type of form for recording information from teachers, supervisors and principals, and another type of form for information from students. These forms, before being used, were criticized by a group of experienced teachers. Among the findings that may have a bearing on this question was the need for an

in-service training of employed teachers. After some study, the following types of programs or organizations were found to be adaptable to the needs of the teachers:

1. Extension courses
2. Special conferences
3. Correspondence service
4. Individual help on the job
5. Individual professional improvement. (8:93-4)

A compilation of materials from teacher training and trade and industrial courses under the direction of such national figures in vocational education as C. A. Prosser and C. R. Allen (21) will have some bearing on the question and will help form the basis for determining a complete answer to question A, "What are the duties and responsibilities of the Negro trade and industrial teachers of Florida?".

The research findings that pertain to question B, "What are the difficulties being encountered in the discharge of these duties?" are not satisfactory in solving the problem. It is generally agreed that numerous difficulties do exist, but they can be determined only after interviewing the teachers (to find out the nature of these difficulties).

Research findings that pertain to question C, "What extra-curricular activities are they called upon to do?" follow: Extra-curricular activities in the high schools are gradually occupying a large place in the school program. Many studies reveal that a large percentage of the teachers are called upon to supervise

extra-curricular activities for which they have had no training. A study carried out by Schmidt (22) in 1938, which made a thorough investigation of preparing teachers of homemaking for supervision of extra-curricular activities, has a definite bearing on this question. She set out, first, to determine the extra-curricular activities supervised by a group of 70 vocational homemaking teachers in secondary day schools in Kansas. This was facilitated by the use of a check sheet with 46 activities listed. Suggestions regarding this check sheet were solicited from homemaking teachers in four states. When the returns from the first check sheet were received, the various extra-curricular activities were tabulated to learn which ones were common to the greatest number of teachers. Those common to about 20 per cent of the teachers were used as a basis for a second check sheet to determine the method of assigning activities. Part II of the study brings out three reasons why the specific teacher is selected for the supervision of the particular activity:

1. They are selected because the supervision seems to belong to the "job" of a homemaking teacher.
2. They are appointed by the principal or superintendent.
3. They are elected by members of a group of pupils. (22:72)

Of the 592 selections reported by principals and superintendents in her study, more than half were due to the job itself; more than one-third occurred

due to appointment; while the remainder resulted from election by members of a group.

While the extra-curricular activities supervised by the homemaking teacher may vary a great deal from the types of activities the trade and industrial teacher might be called on to supervise, it is felt that the approach made by this study to the preparation of homemaking teachers for the supervision of extra-curricular activities will be a partial guide to the writer in handling that part of his study which deals with the extra-curricular activities of the trade and industrial teachers.

Although most of the above studies are not in the field of trade and industrial education, they have some bearing on the present study, in that they indicate a need for more adequate preparation for the supervision of extra-curricular activities. They also point out to the teacher trainer some of the needs of the teacher for which some help should be provided. These extra-curricular activities may in a measure affect the success of the regular duties of the teacher.

In answer to question E, "What professional courses are prescribed in the State Plan (13) for trade and industrial teachers?" the following courses are required of all shop teachers of day unit trade, part-time trade preparatory, and evening trade extension.

Shop management:

- 1. Planning of shop and equipment
- 2. Arrangement of equipment, fixtures, and tools, and care of same
- 3. Keeping shop inventories and records
- 4. Records of student advancement
- 5. Permanent records and reports
- 6. Discipline--as it affects the work of production
- 7. Assignment of work, and routing of the same
- 8. Securing practical production jobs

Organization and methods:

- 1. Trade analyses
- 2. Job analyses
- 3. Building courses of study
- 4. Instructional methods
- 5. Observation and criticism of actual teaching
- 6. Selection, placement, and follow up of students
- 7. Philosophy of vocational education
- 8. Measuring the efficiency of specific courses of study. (13:53-4)

For coordinators of diversified cooperative training the following group of courses are prescribed:

- 1. Organization and administration of diversified cooperative training
- 2. Related study material for diversified occupations
- 3. Coordination of diversified occupations
- 4. Student selection, guidance, and counselling
- 5. Occupational surveys. (13:55)

Findings contained in a report on Up Grading Teachers in Service by G. D. Whitney to the Committee on Trade and Industrial Teacher-Training of the American Vocational Association and published by the United States Office of Education (28) may serve as a partial answer to question F, "What provisions should be made in the itinerant teacher trainer's annual program to enable him to help each teacher overcome his difficulties and how should he proceed in carrying out

this program?". Data and opinions were solicited from 33 teacher trainers and others responsible for such work in all parts of the United States for the purpose of evaluating current practices which have been adapted in the states for upgrading vocational teachers in service. A summary of replies from 26 persons revealed in substance statements covering opinions, practices, and experiences under the following headings:

1. Summer classes
2. Short intensive conferences
3. Teacher training in institutions within commuting area
4. Itinerant teacher training
5. Correspondence courses from institutions and state departments
6. Training through local supervision
7. Training through state supervisor
8. Training by means of conference leadership programs. (28:20)

Conclusions reached by Whitney as a result of evaluating the opinions and data submitted by those responding to his study under each of the above headings may serve the writer as a partial guide in determining some of the services his annual teacher training program should provide for the Negro trade and industrial teachers of Florida.

These conclusions are as follows:

1. There is no one best way to upgrade teachers in service. Size of community or state, location of institution, and general organization of the work must be taken into consideration.
2. The principle of more and more contact on or near the job is of great importance.

3. Classes at a convenient point geographically are useful in both preemployment and post-employment teacher training but are perhaps more valuable in the former than in the latter.
4. The kind and amount of post employment training will vary with the selection of the teacher and the amount of his preemployment training.
5. No teacher is so well prepared that he does not need further training on the job.
6. The local supervisor, when one exists, is the most important individual in the continued growth of the local teaching staff.
7. The state supervisor or teacher trainer is able to further the growth of teachers in service in certain definite ways, but can neither take the place nor accept the responsibilities of the local supervisor in this respect.
8. The growth of teachers in service involves a return to industry periodically in order to keep up to date.
9. Recognition, such as is involved in a degree, is becoming more and more important, although it should not be allowed to interfere with basic skill on the teaching job. Rather it should be thought of as raising the status of good, well prepared teachers to a higher power.
10. Finally, as the vocational school becomes a more and more important part of the public school program, there will be a demand for objective measures of success. Also the teacher who merely teaches the technic of the trade will be challenged to improve his practice to include training for citizenship and other broad educational objectives, which are now coming to loom so large in the public eye. (28:24)

Suggestions for the organization and operation of efficient teacher training programs made by Klinefelter (18) may be of further help in making final

decisions regarding answers to question F. These suggestions are based on Klinefelter's experience and contacts with programs of trade and industrial education in 25 states over an 11-year period. He has this to say regarding his suggestion:

. . . As the training of teachers for trade and industrial education is one of the most important phases of the entire program of trade and industrial education and present many perplexing problems it is believed that the comments and suggestions here set forth will prove of interest and suggestive value to every one concerned with various phases of the trade and industrial program. . . . (18:VII)

His investigations revealed the following types of teacher training courses being offered:

1. Job or operational analysis
2. The organization of subject material in terms of learning difficulties
3. Methods of teaching
4. The use of auxiliary teaching material
5. Vocational guidance
6. Information courses
7. Shop organization
8. Mental teating
9. Subject matter courses
10. Research work
11. Foremanship work

In Klinefelter's recommendations the following types of organizations are made for teacher training:

1. Extension courses
2. Late afternoon, Saturday, and evening classes
3. Intensive summer courses
4. Special conferences
5. Correspondence courses
6. Individual help on the job
7. Individual professional improvement
8. Courses in residence during regular school year
9. Summer school courses

The study by Holmes (15) of 47 vocational evening schools of Wisconsin to determine the pre-service instruction training for tradesmen employed to teach evening trade extension classes may serve to help answer question F. Through an organized study of the schools, together with several leading private vocational schools, he developed the necessary courses for the pre-service training of evening trade extension teachers of Wisconsin. This study further determined the amount of time to be devoted to each course as follows:

Unit I - Orientation--3 Hours

Number of Sessions		Number of Hours
1	Channels of authority in the school	$1\frac{1}{2}$
<u>1</u>	Forms and reports	<u>$1\frac{1}{2}$</u>
2		3

Unit II - Analysis - $13\frac{1}{2}$ Hours

6	The analysis of trades and jobs	9
<u>3</u>	Forms and reports	<u>$4\frac{1}{2}$</u>
9		$13\frac{1}{2}$

Unit III - Organization of Instructional Materials - $13\frac{1}{2}$ Hours

3	The study of vocational part time philosophy	$4\frac{1}{2}$
3	Formulation of a course of study	$4\frac{1}{2}$
3	Use of job sheets and instructional material	$4\frac{1}{2}$
<u>9</u>		<u>$13\frac{1}{2}$</u>

Unit IV - Methods of Teaching - 13 Hours

Number of Sessions		Number of Hours
3	Study of learning difficulties	4½
4	Methods of instruction	6
1	Explanation of the use of the demonstration	1½
1	Explanation of the use of the illustration	1
<hr style="width: 50px; margin-left: 0;"/> 9		<hr style="width: 50px; margin-left: 0;"/> 13

Prall and Cushman (20) in their study of teacher education in service for the American Council on Education reported on a number of plans and programs employed by various institutions and city school systems to upgrade and improve teachers in service. One report (20:205) covers a comprehensive treatment of teacher training in service by the city of Des Moines, Iowa. The teachers organized a work shop called the problem laboratory. Although this particular work shop was for teachers of general education, the techniques of planning and organization can be followed for a vocational group of teachers and may be helpful in answering question F.

In the following chapter (Chapter III) a description of the methods used to obtain complete answers to the questions is given.

Chapter III

MATERIALS AND METHODS

In order to develop an annual itinerant teacher training program for Negro trade and industrial teachers of Florida, it was necessary that specific essential information be gathered. Information was needed on (1) what comprised both the regular and extra-curricular duties and responsibilities of these teachers, (2) the duties and responsibilities with which they encountered difficulties in performance, (3) the duties and responsibilities with which the itinerant teacher-trainer's help was needed, (4) prescribed courses in the state plan for trade and industrial teachers, (5) and the most effective ways the itinerant teacher-trainer could give this assistance.

Sources of Data

After a study to determine the best sources of information for solutions to the above problems, it was found that the following would prove to be the most accurate and reliable for gathering data on (1), (2), and (3).

1. The trade and industrial teachers.
2. The principals of these teachers.

3. The local supervisors of these teachers.

The trade and industrial teachers referred to above included 21 instructors teaching both day trade and evening trade extension classes, 15 instructors teaching only day trade classes, six instructors teaching only evening trade extension classes, and six coordinators of diversified cooperative training programs. These represented approximately 90 per cent of the Negro trade and industrial teachers employed at present in the state, and must be considered as one of the proper and reliable sources of data.

The seven principals and five local supervisors, due to their administrative and supervisory positions, should possess an awareness of the strong and weak points in the qualifications of these teachers, both individually and collectively, as observed through daily performance. Since one of the primary purposes of this study is to determine the professional needs of these teachers, the administrative and supervisory officials, under whom they work, must be regarded as a valid source of data.

The data on (4), the prescribed teacher training courses in the state plan for trade and industrial teachers, were obtained from the current Florida State Plan for Trade and Industrial Education. This plan is the official organ setting up the program of trade and industrial education in Florida in

cooperation with the United States Office of Education. The approval given this plan by the United States Office of Education attests its validity.

Methods

In order to gather this information a group of check sheets were developed. (Appendix C, D, E, F, G) Due to the obvious difference in the nature of the work of the coordinator of diversified cooperative training and the shop teacher, a separate group of check sheets was developed for determining the coordinator's duties and responsibilities. (Appendix D) Data on devising and using check sheets and survey forms for this type of study were secured from Welch (31) and Cameron (8) in their studies of Training Circuit teachers in Wisconsin and Training Trade and Industrial teachers in Nevada, respectively. To facilitate the gathering of this information, the check sheets were composed of a list of duties and responsibilities of trade and industrial teachers and coordinators in other states as determined through research findings (4) (5) (6) (8) (9) (10) (11) (15) (19) (23) (25) (27) (31).

Special sheets were developed to collect data on the extra-curricular duties and responsibilities of the trade and industrial teachers and coordinators.

The teachers and coordinators receiving these check sheets were requested to check each item that entered their work as a regular duty or responsibility and to add any additional ones, not listed. The principals and supervisors receiving check sheets were likewise requested to check each item that entered into the work of their trade and industrial teachers or coordinators as a duty or responsibility and to add any additional ones not listed. Each recipient of a check sheet was also requested to indicate the following.

1. The 12 duties and responsibilities they considered the most important.
2. The duties and responsibilities in which they (teachers and coordinators) encountered difficulty in carrying out.
3. Duties and responsibilities with which they (teachers and coordinators) needed help.

These check sheets were submitted to the following persons for their comment and criticism before final preparation for use: R. D. Dolley, State Supervisor for Trade and Industrial Education, Florida; R. E. Webber, Professor of Trade and Industrial Education and Supervisor of Vocational Training for War Production Workers, Florida Agricultural and Mechanical College; U. R. Thomas, Principal, Don Thompson Vocational School, Tampa, Florida; B. F. Holmes, Head

of the Carpentry and Woodworking Department, Florida Agricultural and Mechanical College; and Edward Benthone, Coordinator, Diversified Cooperative Training, Stanton High School, Jacksonville, Florida. The check sheets were revised in light of the criticism of these men who expressed an opinion that these check sheets afforded a reliable and accurate method of gathering the needed information.

Procedure

Original plans for gathering the data called for the writer's having a personal interview with the teachers, coordinators, principals, and local supervisors participating in this study. During the interview the check sheets were to be used to record the information desired. Traveling difficulties encountered due to the gasoline rationing necessitated that these check sheets be mailed to those taking part. Each teacher, principal, coordinator, and local supervisor receiving a check sheet also received a personal letter from the writer, as teacher trainer, (Appendix A, B) explaining the nature and purpose of the study and soliciting their cooperation. Responses were received from 40 trade and industrial teachers, six coordinators, seven principals, and five local supervisors.

When the check sheets were returned the data were compiled and recorded in tables. (Tables 1, 2, 3,

4, 5, 6, 7, 9, 10, 11, 12, 13) These data were analyzed and compiled with regard to their relationship to the subordinate questions, as follows:

- | | |
|---|---|
| <p>A. What are the regular duties and responsibilities of the Negro trade and industrial teachers of Florida?</p> | <p>These data were compiled from column A of the check sheets and recorded in Tables 3 and 4 for trade teachers and in Table 5 for coordinators. Items checked by 20 per cent or more of the group were recorded as a duty or responsibility.</p> |
| <p>B. What are the difficulties being encountered in the discharge of these duties?</p> | <p>These data were compiled from column C and recorded in Table 9 for trade teachers and Table 10 for coordinators.</p> |
| <p>C. What are the extra-curricular activities and duties they are called upon to do?</p> | <p>These data were compiled from the special sheets sent out for listing these extra-curricular duties and activities and recorded in Table 6.</p> |
| <p>D. What are the difficulties being encountered in the discharge of these extra-</p> | <p>These data were compiled from column 1 of the special sheet for listing the extra-curricular</p> |

- curricular duties? duties and are indicated in Table 6.
- E. What are the professional courses prescribed in the state plan for trade and industrial teachers? These data were taken from the current Florida State Plan for Trade and Industrial Education.
- F. What provision should be made in the itinerant teacher trainer's annual program to enable him to help each teacher overcome his difficulties, and how should he proceed in carrying out this program? In addition to an analysis and interpretation of the data gathered above, and contained in Tables 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, research findings contained in Chapter II gave sufficient pertinent information to enable the formation of a complete answer to this question.

The findings, as a result of the data gathered through the procedure described above, are presented in the following chapter.

Chapter IV

FINDINGS

The problem of determining what should comprise the itinerant teacher-trainer's annual program for training Negro trade and industrial teachers of Florida, finds its solution in the information obtained through research and the data contained in the check sheets. This chapter covers a report of the data.

The number of respondents to the 92 sets of check sheets sent out are shown in the table below.

Table 1.--NUMBER AND COMPOSITION OF GROUPS RETURNING CHECK SHEETS

Groups	Number receiving check sheets	Number returning check sheets	Per cent returned
1. Trade teachers	64	40	62.5
2. Coordinators	6	6	100.0
3. Principals	11	7	63.6
4. Local Supervisors	11	5	45.4
Totals	92	58	63.0

The distribution of the 46 trade and industrial teachers and coordinators participating in the study in relation to the 12 principals and local supervisors is shown in Table 2.

This table also shows that there are three types of teachers representing three types of class organizations offering training, (1) six evening trade extension teachers, (2) 34 day trade teachers, of whom 19 teach evening trade extension classes in addition to their work in the day schools, and (3) six coordinators of diversified cooperative training programs.

Table 3, which follows, shows the 53 duties and responsibilities of the Negro trade and industrial teachers of day trade classes in Florida, as determined by these teachers, their principals, and local supervisors. The findings reveal that (1) formulating definite plans for putting over lessons, (2) determining related subject content, and (3) making and using trade and job analysis, are considered the foremost duties and responsibilities by these teachers, principals, and local supervisors, while (53), having key men from industry visit class, is indicated as being the least important duty.

Table 2.--NUMBER AND DISTRIBUTION OF TEACHERS TO LOCAL SUPERVISORS AND PRINCIPALS

School	Supervision		Types of Teachers				Total
	Principal	Local Supervisor	Coordinators of Diversified Cooperative Training	Teachers with both day trade and evening trade Extension Classes	Day Trade Teachers Only	Evening Trade Extension Teachers Only	
Number 1	1	1	0	7	6	0	15
2	1	1	1	4	0	6	13
3	1	1	1	5	0	0	8
4	0	1	0	3	1	0	5
5	1	0	0	0	3	0	4
6	1	0	0	0	2	0	3
7	0	0	0	0	2	0	2
8	0	0	0	0	1	0	1
9	1	0	1	0	0	0	2
10	1	1	2	0	0	0	4
11	0	0	1	0	0	0	1
Totals	7	5	6	19	15	6	58

Table 3.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF DAY-TRADE CLASSES OF FLORIDA, AS DETERMINED BY TRADE TEACHERS, PRINCIPALS, AND SUPERVISORS

Duties and Responsibilities	Frequency with which checked					
	By Trade Teachers	per cent	By Principals	per cent	By local super- visors	per cent
1. Formulate definite plans for putting over lesson	40	100	5	100	4	100
2. Determine related subject content	40	100	5	100	4	100
3. Make demonstrations and illustrations	40	100	5	100	4	100
4. Make and use trade and job analysis	40	100	5	100	4	100
5. Make assignments	39	97	5	100	4	100
6. Ask questions and get students' response	39	97	5	100	4	100
7. Give tests and rate students	39	97	5	100	4	100
8. Counsel with students	39	97	4	80	4	100
9. Aid in the selection of students	39	97	4	80	4	100
10. Make and use course outline	38	95	4	80	4	100
11. Make and use job sheets or similar instructional aids	38	95	5	100	4	100
12. Organize teaching content to permit individual instruction	38	95	5	100	4	100
13. Make a written plan	38	95	4	80	4	100
14. Provide suitable teaching methods and devices	38	95	5	100	4	100
15. Provide suitable learning activities	38	95	5	100	4	100
16. Recommend text books, reference books, manufacturers' catalog, etc.	38	95	2	40	4	100
17. Coordinate trade knowledge with shop practice	38	95	4	80	4	100
18. Make recommendations concerning equipment	38	95	2	40	2	50
19. Keep inventory of supplies and equipment	38	95	5	100	4	100
20. Protect supplies from loss and waste	38	95	5	100	4	100
21. Knowledge and understanding of individual differences	38	95	4	80	4	100
22. Exercise patience with students	38	95	5	100	4	100
23. Maintain interest in students	38	95	5	100	4	100
24. Know background of students	38	95	5	100	4	100
25. Develop proper attitude in students	38	95	5	100	4	100
26. Make reports	38	95	5	100	4	100
27. Keep morale of class good	38	95	5	100	4	100
28. Know how workers learn	37	92	5	100	4	100
29. Arrange for repairs and replacements	37	92	5	100	4	100
30. Provide system of checking tools in and out	37	92	5	100	4	100
31. Provide proper storage of supplies	37	92	5	100	4	100
32. Develop proper work habits and skills	37	92	5	100	4	100
33. Protect students' health	37	92	5	100	4	100
34. Supervise students on job	37	92	5	100	4	100
35. Help students get jobs	37	92	3	60	4	100
36. Attend special conferences for teacher improvement	37	92	5	100	4	100
37. Keep up with new developments in trade	37	92	5	100	4	100
38. Regard school rules, regulations, and policies	37	92	5	100	4	100
39. Keep shop or class running smoothly	37	92	5	100	4	100
40. Occasionally revise course outline	36	90	5	100	4	100
41. Give out printed material	36	90	3	60	4	100
42. Work at trade during summer vacation	36	90	2	40	4	100
43. Attend summer school	36	90	4	80	4	100
44. Subscribe to professional and trade literature	36	90	5	100	4	100
45. Follow up graduates	36	90	2	40	4	100
46. Make use of 4-step method in putting over lesson	36	90	2	40	4	100
47. Keep progress charts	36	90	5	100	4	100
48. Keep shop orderly	36	90	5	100	4	100
49. Make safety regulations	35	87	4	80	4	100
50. Provide safety guards for equipment	35	87	5	100	4	100
51. Maintain membership in professional organizations	35	87	5	100	4	100
52. Visit industry and employers	34	85	5	100	4	100
53. Have key men from industry visit class	32	80	3	60	4	100

The regular duties and responsibilities of the Negro trade and industrial teachers of Florida teaching evening trade extension classes are shown in Table 4, which follows. There are 24 of these duties and responsibilities, as determined by six evening trade extension teachers and their local supervisor.

There were duties and responsibilities peculiar to those teachers employed as coordinators of diversified cooperative training programs and different to some extent from the regular duties and responsibilities of the day trade teachers. These duties and responsibilities are shown in Table 5 as determined by the coordinators, principals, and local supervisors.

In many cases the teachers were called upon by their principals, student organizations, or faculty committees to perform certain duties and assume responsibilities in connection with the school's total program, but not directly related to their work as a trade and industrial teacher or coordinator. These were classified as extra-curricular duties and responsibilities and are shown in Table 6, which follows.

The findings show that there were no difficulties encountered by the teachers in the performance of these duties and responsibilities.

Table 4.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA TEACHING EVENING TRADE EXTENSION CLASSES, AS DETERMINED BY THE TEACHER AND LOCAL SUPERVISOR

Duties and Responsibilities	Frequency with which checked			
	Teach-ers	per cent	Local Super-visor	per cent
1. Make and use course outline	6	100	1	100
2. Formulate definite plans for putting over lesson	6	100	1	100
3. Make demonstrations and illustrations	6	100	1	100
4. Make a written plan	6	100	1	100
5. Provide suitable teaching methods and devices	6	100	1	100
6. Maintain interest in students	6	100	1	100
7. Make reports	6	100	1	100
8. Exercise patience with students	6	100	1	100
9. Keep morale of class good	6	100	1	100
10. Make and use trade and job analysis	6	100	1	100
11. Make use of 4-step method in putting over lesson	6	100	1	100
12. Regard school rules, regulations, and policies	6	100	1	100
13. Determine related subject content	5	83	1	100
14. Make assignments	5	83	1	100
15. Provide suitable learning activities	5	83	1	100
16. Knowledge and understanding of individual differences	4	67	1	100

Duties and Responsibilities	Frequency with which checked			
	Teach- ers	per cent	Local Super- visor	Per cent
17. Know how workers learn	4	67	1	100
18. Keep up with new developments in trade	4	67	1	100
19. Subscribe to professional literature			1	100
20. Develop proper work habits and skills			1	100
21. Aid in the selection of students			1	100
22. Counsel with students			1	100
23. Ask questions and get students response			1	100
24. Give tests and rate students			1	100

Table 5.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING IN FLORIDA, AS DETERMINED BY COORDINATORS, PRINCIPALS, AND SUPERVISORS

Duties and Responsibilities	Frequency with which checked					
	By Co-ordinators	per cent	By Principals	per cent	By local Supervisors	per cent
1. Placement on a satisfactory training job	6	100	4	100	4	100
2. Give or arrange to have given organized related training	6	100	4	100	4	100
3. Keep records and reports of progress of students	6	100	4	100	4	100
4. Assist in the selection of trainees	6	100	4	100	4	100
5. Know state and federal requirements	6	100	4	100	4	100
6. Keep inventory of books and supplies	6	100	4	100	4	100
7. Plan each individual related study program	6	100	4	100	4	100
8. Regard school rules and policies	6	100	4	100	4	100
9. Assist in making occupational and trade analysis	6	100	4	100	3	75
10. Follow up after placement	6	100	4	100	4	100
11. Establish cooperative relationship with employer	6	100	4	100	3	75

Duties and Responsibilities	<u>Frequency with which checked</u>					
	By Co-ordinators	per cent	By Principals	per cent	By local Super-visors	per cent
12. Make community survey	6	100	3	75	3	75
13. Assist in organizing and working with advisory committees	5	84	4	100	4	100
14. Establish cooperative relationship with trainee's home	5	84	4	100	4	100
15. Observe new fields to determine new training possibilities	5	84	4	100	4	100
16. Guard against exploitation of students	5	84	4	100	4	100
17. Plan and promote publicity for program	5	84	4	100	4	100

Table 6.--EXTRA-CURRICULAR DUTIES AND RESPONSIBILITIES PERFORMED BY THE TRADE AND INDUSTRIAL TEACHERS, AND COORDINATORS AS DETERMINED BY THE TEACHERS AND COORDINATORS

Extra-curricular Duties and Responsibilities	Number of Teachers Reporting This Duty	Approximate Time Devoted to Performing Duty	Difficulty Encountered if any
1. Supervise lunch room at noon	3	20 minutes daily	None
2. Sell or take tickets at programs or athletic games	16	1½ hours weekly	None
3. Supervise home room group	6	15 minutes daily	None
4. Make and handle scenery for plays	3	18 hours yearly	None
5. Sponsor student clubs	8	1 hour weekly	None
6. Member of school committee	10	1 hour weekly	None

Tables 7 and 8, which follow, list the 12 most important duties and responsibilities of the trade and industrial teachers and coordinators respectively, as determined by the 40 teachers and six coordinators participating in the study.

Table 7.—TWELVE MOST IMPORTANT DUTIES AND RESPONSIBILITIES OF THE NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA, AS DETERMINED BY THE TEACHERS.

Duties and Responsibilities	Frequency with which Checked	Per cent
1. Make and use trade analysis	35	87
2. Provide suitable teaching methods and devices	35	87
3. Make and use course outline	31	77
4. Formulate definite plans for putting over lesson	30	75
5. Coordinate trade knowledge with shop practice	29	72
6. Determine related subject content	29	72
7. Develop proper work habits and skills	29	72
8. Provide suitable learning activities	28	70
9. Make and use job sheets or similar in- structional aids	27	68
10. Organize teaching content to permit individual instruction	27	68
11. Knowledge and understanding of individual differences	27	68
12. Protect students' health	26	65

Table 8.--TWELVE MOST IMPORTANT DUTIES AND RESPONSIBILITIES OF THE NEGRO COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING IN FLORIDA, AS DETERMINED BY THE COORDINATORS

Duties and Responsibilities	Frequency with which Checked by the Coordinators	Per cent
1. Make community survey	6	100
2. Placement on a satisfactory training job	6	100
3. Follow up after placement	6	100
4. Give or arrange to have given organized related training	6	100
5. Plan each individual related study program	6	100
6. Assist in making occupational and trade analysis	5	83
7. Establish cooperative relationship with employer	5	83
8. Observe new fields to determine new training possibilities	5	83
9. Keep progress and employment records of students	5	83
10. Know state and federal requirements	5	83
11. Assist in the selection of trainees	4	67
12. Guard against exploitation of students	4	67

The findings reveal that the teachers and coordinators encountered some difficulties in the effective performance of certain of their respective duties and responsibilities. Tables 9 and 10, which follow, give a complete listing of these duties and responsibilities, as determined by the teachers and coordinators.

(1) Making demonstrations and illustrations, (2) providing suitable learning activities, (3) making and using trade and job analysis, (4) providing suitable teaching methods and devices, are found to give difficulty to 50 per cent or more of the trade and industrial teachers.

(1) Making a community survey, (2) assisting in organizing and working with advisory committees, (3) planning each individual related study program, are found to give difficulty to 83 per cent of the coordinators.

The teacher training needs of the trade and industrial teachers of both the day trade and evening trade extension classes were determined by the teachers themselves and also by their principals and local supervisors. Lists of these needs are shown in Tables 11, 12, 13, and 14, which follow.

The foremost needs of these teachers, as shown by the study, are for help in (1) making and using trade and job analysis, (2) making and using course outlines, (3) providing suitable learning activities, (4) providing suitable teaching methods and devices, and (5) determining related subject content.

The teacher training needs of the coordinators, as determined by the coordinators, principals, and local supervisors are listed in Table 15.

Table 9.--DUTIES AND RESPONSIBILITIES WITH WHICH THE NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA ENCOUNTER DIFFICULTIES AS DETERMINED BY THE TEACHERS

Duties and Responsibilities	Frequency With Which Checked by Trade Teachers	Per cent
1. Make demonstrations and illustrations	23	57
2. Provide suitable learning activities	20	50
3. Make and use trade analysis	20	50
4. Provide suitable teaching methods and devices	18	45
5. Knowledge and understanding of individual differences	18	45
6. Determine related subject content	17	42
7. Organize teaching content to permit individual instruction	16	40
8. Give out printed material	12	30
9. Formulate definite plans for putting over lessons	12	30
10. Make and use job sheets or similar instructional aids	11	27
11. Make use of 4-step method of putting over lesson	11	27
12. Make and use course outline	10	25
13. Give tests and rate students	9	22
14. Know how workers learn	9	22
15. Coordinate trade knowledge with shop practice	8	20
16. Protect supplies from loss and waste	7	17
17. Occasionally revise course outline	3	7

Duties and Responsibilities	Frequency With Which Checked by Trade Teachers	Per cent
18. Help students get jobs	2	5
19. Aid in the selection of students	2	5
20. Make a written plan	2	5
21. Keep up with new developments of trade	2	5
22. Follow up graduates	2	5

Table 10.--DUTIES AND RESPONSIBILITIES WITH WHICH THE NEGRO COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING IN FLORIDA ENCOUNTER DIFFICULTY, AS DETERMINED BY THE COORDINATORS

Duties and Responsibilities	Frequency With Which Checked	Per
1. Make community survey	5	83
2. Assist in organizing and working with advisory committees	5	83
3. Plan each individual related study program	5	83
4. Assist in the selection of trainees	4	67
5. Give or arrange to have given organized related training	3	50
6. Assist in making occupational and trade analysis	2	33
7. Placement on a satisfactory training job	2	33
8. Guard against exploitation of students	2	33
9. Follow up after placement	1	16
10. Establish cooperative relationship with employer	1	16
11. Plan and promote publicity for program	1	16

Table 11.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA, TEACHING BOTH DAY TRADE AND EVENING TRADE EXTENSION CLASSES, FOR WHICH THE ITINERANT TEACHER TRAINER'S HELP IS NEEDED, AS DETERMINED BY TEACHERS

Duties and Responsibilities	Frequency With Which Checked	Per cent
1. Make and use trade analysis	28	70
2. Provide suitable learning activities	28	70
3. Determine related subject content	23	57
4. Make and use course outline	22	55
5. Make demonstrations and illustrations	21	52
6. Formulate definite plans for putting over the lesson	19	47
7. Coordinate trade knowledge with shop practice	19	47
8. Knowledge and understanding of individual differences	19	47
9. Counsel with students	19	47
10. Give out printed material	15	37
11. Help students get jobs	15	37
12. Make and use job sheets or other similar instructional aids	13	32
13. Provide suitable teaching methods and devices	13	32
14. Make use of 4-step method in putting over lesson	13	32
15. Organize teaching content to permit indi- vidual instruction	12	30
16. Know how workers learn	12	30
17. Give tests and rate students	12	30
18. Occasionally revise course outline	4	10
19. Aid in the selection of students	4	10
20. Follow up graduates	4	10
21. Keep up with new developments in trade	4	10
22. Make a written plan	3	7

Duties and Responsibilities	Frequency With Which Checked	Per cent
23. Develop proper work habits and skills	2	5
24. Keep progress charts	2	5

Table 12.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA, TEACHING BOTH DAY TRADE AND EVENING TRADE EXTENSION CLASSES, FOR WHICH THE ITINERANT TEACHER TRAINER'S HELP IS NEEDED, AS DETERMINED BY PRINCIPALS AND SUPERVISORS

Duties and Responsibilities	Frequency with which checked			
	By Principals	Per cent	By Local Supervisors	Per cent
1. Make and use trade analysis	16	40	26	65
2. Make and use course outline	16	40	26	65
3. Protect students health	16	40	26	65
4. Occasionally revise course outline	14	35	26	65
5. Knowledge and understanding of individual differences	14	35	26	65
6. Counsel with students	14	35	26	65
7. Attend summer school	14	35	26	65
8. Attend special conferences for teacher improvement	14	35	26	65
9. Make demonstrations and illustrations	16	40	22	55
10. Organize teaching content to permit individual instruction	10	25	26	65

Duties and Responsibilities	Frequency with which checked			
	By Prin- cipals	Per cent	By Local Super- visors	Per cent
11. Formulate definite plans for putting over lesson	10	25	26	65
12. Provide suitable learning activities	10	25	26	65
13. Know how workers learn	10	25	26	65
14. Aid in the selection of students	10	25	26	65
15. Supervise students on jobs	10	25	26	65
16. Make and use job sheets or similar instructional aids	8	20	26	65
17. Provide suitable teaching methods and devices	8	20	26	65
18. Coordinate trade knowledge with shop practice	8	20	24	60
19. Make and use 4-step method of putting over lesson	8	20	18	45
20. Keep shop orderly	9	20	16	40
21. Determine related subject content	8	20	16	40
22. Make assignments	4	10	20	50
23. Give out printed material	10	25	14	35
24. Give tests and rate students	8	20	14	35
25. Keep shop or class running smoothly	8	20	14	35
26. Ask questions and get students' response	10	25	12	30
27. Visit industry and employers	0	0	20	50
28. Keep up with new developments of trade	6	15	14	35
29. Keep progress charts	0	0	15	37
30. Protect supplies from loss and waste	5	12	10	25
31. Provide system of checking tools in and out	0	0	10	25

Duties and Responsibilities	<u>Frequency with which checked</u>			
	By Prin- cipals	Per cent	By Local Super- visors	Per cent
32. Help students get jobs	8	20	0	0
33. Exercise patience with students	2	5	6	15

Table 13.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA, TEACHING ONLY EVENING TRADE EXTENSION CLASSES, FOR WHICH THE ITINERANT TEACHER TRAINER'S HELP IS NEEDED, AS DETERMINED BY THE TEACHERS.

Duties and Responsibilities	Frequency With Which Checked	Per cent
1. Make and use course outline	6	100
2. Provide suitable teaching methods and devices	6	100
3. Make demonstrations and illustrations	5	83
4. Give out printed material	5	83
5. Formulate definite plans for putting over the lesson	5	83
6. Provide suitable learning activities	5	83
7. Make use of 4-step method in putting over the lesson	5	83
8. Make a written plan	4	67
9. Know how workers learn	4	67
10. Make assignments	3	50
11. Recommend textbooks, reference books, manufacturers catalog	3	50
12. Ask question and get students' response	3	50
13. Make and use trade analysis	3	50
14. Knowledge of individual differences	3	50

Duties and Responsibilities	Frequency With Which Checked	Per cent
15. Keep up with new developments in the trade	3	50
16. Subscribe to professional and trade literature	3	50
17. Keep morale of class good	2	33
18. Have key men from industry visit class	2	33

Table 14.—REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO TRADE AND INDUSTRIAL TEACHERS OF FLORIDA, TEACHING ONLY EVENING TRADE EXTENSION CLASSES, FOR WHICH THE ITINERANT TEACHER TRAINER'S HELP IS NEEDED, AS DETERMINED BY THE SUPERVISOR

Duties and Responsibilities	Frequency With Which Checked	Per cent
1. Make and use trade analysis	6	100
2. Make and use course outline	6	100
3. Make and use job sheets or similar instructional aids	6	100
4. Organize teaching content to permit individual progress	6	100
5. Formulate definite plans for putting over the lesson	4	67
6. Make a written plan	4	67
7. Make use of 4-step method in putting over the lesson	3	50
8. Give tests and rate students	3	50
9. Occasionally revise course outline	3	50
10. Develop proper habits and skills	2	33
11. Aid in the selection of students	2	33
12. Counsel with students	2	33
13. Attend special conferences for teacher improvement	2	33

Table 15.--REGULAR DUTIES AND RESPONSIBILITIES OF NEGRO COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING IN FLORIDA FOR WHICH THE ITINERANT TEACHER TRAINER'S HELP IS NEEDED, AS DETERMINED BY THE COORDINATORS, PRINCIPALS AND LOCAL SUPERVISORS.

Duties and Responsibilities	Frequency with which checked					
	By Co- ordina- tors	Per cent	By Prin- cipals	Per cent	By local Super- visors	Per cent
1. Make community survey	5	83	2	33	4	67
2. Assist in organizing and working with advisory committees	5	83	1	16	4	67
3. Plan each individual related study program	5	83	1	16	4	67
4. Give or arrange to have given organized related training	3	50	3	50	4	67
5. Keep progress and employment records of students	3	50	2	33	2	33
6. Assist in the selection of trainees	3	50	0	0	1	16
7. Assist in making occupational and trade analysis	2	33	2	33	4	67
8. Placement on a satisfactory job	2	33	2	33	0	0
9. Guard against exploitation of students	2	33	1	16	0	0
10. Observe new fields to determine new training possibilities	2	33	0	0	0	0

Frequency with which checked

Duties and Responsibilities

By Co-ordinators Per cent By Principals Per cent By local Supervisors Per cent

11. Plan and promote publicity for program	1	16	1	16	1	16
12. Establish cooperative relationship with employer	0	0	2	33	2	33
13. Follow up after placement	1	16	0	0	0	0
14. Establish cooperative relationship with trainee's home	1	16	0	0	0	0
15. Regard school rules and policies	0	0	0	0	1	16

The findings above will serve as a basis for formulating the annual itinerant teacher training program for Negro trade and industrial teachers in Florida and will be discussed in the following chapter.

Chapter V
DISCUSSION

Some basic requirements of a teacher training program are pointed out by the United States Office of Education in its recent publication, Improvement of Instruction in Trade and Industrial Education (29). It states that "The real needs of teachers can be determined only through careful and objective analysis of the teacher's job." The need was pointed out for analyses in several states covering each type of teaching job in industrial education. These analyses would provide the data for a composite analysis which may serve as an authoritative basis for the construction of functional teacher training curricula.

Duties and Responsibilities

Findings presented in the previous chapters will be discussed here insofar as they may aid materially in forming the basis for an effective teacher training program for Negro trade and industrial teachers of Florida.

The findings show that there are three types of classes taught by these teachers, (1) evening trade extension classes, (2) day trade classes, and (3) di-

versified cooperative training. The number of day trade teachers is greater than the number of evening trade extension teachers or the coordinators of diversified cooperative training. There are, however, 19 of the 34 day trade teachers who are also teaching evening trade extension classes in addition to their regular work in the day trade school. That this may be of importance to the teacher trainer is shown when the biological and mental differences of the day trade student and the adult worker attending evening classes are recognized. A different set of methods and techniques is needed by the teacher to motivate the adult student than those employed in teaching the novice.

It is found that the trade teachers work in 11 different schools or centers. A greater number of them, however, is in three large centers. In center number one there are 13 teachers, in center number two there are 11 teachers, and in center number three there are five teachers. The principals of seven of these schools participated in the study. They are over 43 of the teachers, or 93 per cent, taking a part. Five local supervisors participated. They have supervision over 36 of the teachers, or 78 per cent, taking a part in the study.

Tables 3, 4, and 5, pages 43, 45, 47, show the duties and responsibilities of the Negro trade and industrial teachers of day trade classes, of evening

trade extension classes, and of coordinators of diversified cooperative training in Florida. These duties and responsibilities, as determined by the teachers and coordinators, together with their principals and local supervisors, form a usable analysis of the trade and industrial teachers' job. This comprehensive up-to-date breakdown of what the Negro trade and industrial teachers of Florida do and must know to do a good teaching job will be used as a basis for formulating the answer to the major problem, What should comprise the annual itinerant teacher training program for the Negro trade and industrial teachers of Florida?

The regular duties and responsibilities of the trade and industrial teachers of day trade classes as shown in Table 3, page 43, are in order of frequency with which they were checked by the teachers, the principals, and local supervisors. It is seen that a high percentage of the teachers are in agreement on the duties and responsibilities that constitute their jobs. Thirty-two teachers, or 80 per cent of the group, are the lowest number in agreement on any single item of responsibility. The local supervisors were more in agreement on the total items of duties and responsibilities. The teachers, principals and local supervisors completely agree on lesson planning, trade analysis, demonstrations and related subject content.

There was only one item, recommendations for equipment, in which the disagreement was as low as 50 per cent. This, no doubt, is to be expected, due to the keener insight of the instructors' work the supervisors naturally possess. There were several items, namely, recommendation for books and equipment, with which as low as 40 per cent of the principals were in agreement, but as a whole the items were checked with a high degree of frequency by them.

Table 4, page 45, indicates the specific duties and responsibilities of those trade and industrial teachers of evening trade extension classes, as determined by the teachers and local supervisor. The teachers of this group were all located in one center and under one local supervisor. With these classes meeting in the evening the principal was not familiar with the work of this group and did not participate in this part of the study. Student selection, proper habits and skills, counselling, questioning, and testing were found to be checked by the local supervisor but not checked by the teachers. The significance of this may be attributed to the fact that this group of teachers comes in from industry and has had only a short teacher training course for orientation into the teaching job and has not acquired full knowledge of the responsibilities of the work of teachers.

It will be seen from table 5, page 47, that placement, related training, trainee selection, students' records and reports, together with many others, are checked with a high degree of frequency by the coordinators, principals, and local supervisors. The fact that these programs in diversified cooperative training were recently inaugurated into the schools, and the coordinators were very carefully selected and schooled in their work, may have some bearing on the high percentage of agreement on the things they have to do.

Schmidt's report (22) together with other research findings revealed that many teachers, particularly those of homemaking, are often called upon by their school administrators, student groups and organizations, or school committees to supervise or assume responsibility for some form of extra-curricular activities. It is shown by these studies that these responsibilities may, to a great measure, be along lines for which the teachers have had very little, if any, training or experience, and may have a telling effect upon the efficiency of their performance in their regular duties and responsibilities. The trend in education today of recognizing many of these activities of the school, not as "extra activities", apart from the regular school curriculum, but as a part of the school's broad program for providing more opportunities for student development, gives rise to the need for a

consideration of the extra-curricular duties and responsibilities of these teachers as a part of the basis for formulating a functional teacher training program.

Table 6, page 49, shows that the extra-curricular duties and responsibilities of the Negro trade and industrial teachers of Florida are of a small variety and seem to require a minimum amount of the teachers' time. This varies from 20 minutes a day devoted to supervising lunch periods to 18 hours a year making scenery for school plays. It is noted that 50 per cent of the extra-curricular duties and responsibilities of these teachers is performed at hours coming after the close of the regular school day and those duties and responsibilities performed during the school day require only a minimum amount of the teachers' time. All the teachers reported having no difficulties in the performance of their extra-curricular duties and responsibilities. It may be assumed, that in light of the above facts, the extra-curricular duties and responsibilities of the Negro trade and industrial teachers of Florida are so few in number and variety, and require so little of the time of the teachers' regular school day, that they present no difficulties in the performance of their regular duties and responsibilities and, therefore, should necessitate little consideration in formulating teacher training plans by the itinerant teacher trainer.

Difficulties and Needs

A point worthy of note is brought out in Tables 7 and 8, pages 50 and 51, particularly when studied in their relation to Tables 9 and 10. It is shown that from 65 to 87 per cent of the trade teachers agree that trade analysis, methods and devices, course outlines, lesson plans, coordination of trade knowledge, related subject content, proper habits and skills, learning activities, instructional aids, individual instruction, individual differences, and protection of students' health are their most important duties. The coordinators agree from 67 to 100 per cent that their most important duties are surveys, placement, follow-up, planning related training, giving related training, occupational analysis, obtaining cooperation of employer, finding new training fields, keeping records, meeting state and federal requirements, giving trainee selection, and guarding against student exploitation.

A study of Tables 9 and 10, pages 53 and 54, reveals that a similar percentage of the teachers and coordinators encounter their highest percentage of difficulties in the performance of those duties and responsibilities they consider the most important.

It has been pointed out in Improvement of Instruction in Trade and Industrial Education by the United States Office of Education (29:6) that the only

sound criterion for the evaluation of a teacher training program is the needs of teachers in giving instruction effectively. The data indicate specific items of the Florida Negro trade and industrial teachers' needs. An analysis and interpretation of these needs will assist in the solution of the major problem. The teacher training needs of the day trade teachers, as determined by these teachers, are shown in Table 11, page 55. The needs of these same teachers as determined by their principals and supervisors are shown in Table 12, page 56. The frequency with which the local supervisor checked the teacher training needs of the teachers is greater than that checked by the principals or the teachers. This may be taken as fact that the supervisors are more competent in making critical judgment of the teachers' needs, while the teachers may tend to become more hesitant about listing some of their shortcomings. It is indicated by the teachers, principals, and local supervisors that from 35 to 70 per cent of the teachers need teacher training help in trade analysis, related subject content, course outlines, individual differences, lesson planning, learning activities, and methods and devices.

Teaching methods and devices, trade analysis, instructional aids, course outlines, and lesson plans are the foremost needs of the evening trade extension teachers as determined by these teachers and their

local supervisor and as shown in Tables 13 and 14 on pages 58 and 59.

Table 15, page 60, gives the needs of the coordinators of diversified cooperative training. The items of needs of this group include surveys, advisory committee work, related study material, and trainee selection. These needs were determined by a higher percentage of checking on the part of the coordinators than by the local supervisors.

Thus far, this study has revealed a current break-down of the teacher's job, as determined by the teachers, principals, and local supervisors. The value of the contribution of each of these groups is a point for discussion. It may be said that the principal, who may assume a keen sense of responsibility for the administrative aspects of the trade program, particularly as it relates to the total school program, may not in specific matters be the best judge of the teachers' duties, difficulties and needs. With the teachers themselves, there seem to exist a tendency to become engrossed in the operational aspects of their departments to such an extent that the sight of numerous duties and needs may be lost. The local supervisor, who is charged with the improvement and promotional aspects of the program, is likely to find himself motivated by that objective. He seems to be more sensitive in evaluating teachers' duties, responsibilities, diffi-

culties, and needs than are the others.

In light of the foregoing discussion specific needs for each type of teacher have been revealed. Predominantly among them have been trade analysis, methods and devices, related subject content, course outlines, demonstrations, learning activities, and lesson planning. These needs are basic. The instructional efficiency of any program in trade and industrial education depends upon the degree of skill which the teachers have developed to handle them.

The Florida State Plan for Trade and Industrial Education prescribes the following courses for trade teachers: shop management, trade and job analysis, building courses of study, instructional methods, selection of students, and philosophy of vocational education. For coordinators of diversified cooperative training these courses are prescribed: organization and administration of diversified cooperative training, related study material for diversified occupations, coordination of diversified occupations, student selection, guidance, and counselling, and occupational surveys.

Table 16, page 73, shows the relation of the regular duties and responsibilities of the trade and industrial teachers to the prescribed courses in the state plan.

Table 16.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF TRADE AND INDUSTRIAL TEACHERS TO PRESCRIBED TEACHER-TRAINING COURSES IN THE FLORIDA STATE PLAN

Prescribed Courses	Item number taken from Table 3.	Duties and Responsibilities
Shop Management	18.	Make recommendations concerning equipment
	19.	Keep inventory of supplies and equipment
	20.	Protect supplies from lost and waste
	16.	Recommend text books, reference books, catalogs, etc.
	26.	Make reports
	27.	Keep Morale of class good
	29.	Arrange for repairs and replacements
	30.	Provide system of checking tools in and out
	31.	Provide proper storage of supplies
	33.	Protect students' health
	39.	Keep shop or class running smoothly
	48.	Keep shop orderly

Table 16.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF TRADE AND INDUSTRIAL TEACHERS TO PRESCRIBED TEACHER-TRAINING COURSES IN THE FLORIDA STATE PLAN - continued.

Prescribed Courses	Item number taken from Table 3.	Duties and Responsibilities
Shop Management - con- tinued	49.	Make safety regulations
	50.	Provide safety guards for equipment
Trade and Job Analysis	4.	Make and use trade and job analysis
Building Courses of Study	10.	Make and use course outline
	2.	Determine related subject content
	40.	Occasionally revise course outline
	12.	Organize teaching content to permit individual instruction
Instructional Methods	1.	Formulate definite plans for putting over lesson
	3.	Make demonstrations and illustrations
	5.	Make assignments
	6.	Ask questions and get students' response

Table 16.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF TRADE AND INDUSTRIAL TEACHERS TO PRESCRIBED TEACHER-TRAINING COURSES IN THE FLORIDA STATE PLAN - continued.

Prescribed Courses	Item number taken from Table 3.	Duties and Responsibilities
Instructional Methods	7.	Give tests and rate students
- continued -	11.	Make and use job sheets or similar instructional aids
	13.	Make a written plan
	14.	Provide suitable teaching methods and devices
	15.	Provide suitable learning activities
	17.	Coordinate trade knowledge with shop practice
	32.	Develop proper work habits and skills
	34.	Supervise students on job
	41.	Give out printed material
	47.	Keep progress charts
	46.	Make and use 4-step method in putting over lesson

Table 16.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF TRADE AND INDUSTRIAL TEACHERS TO PRESCRIBED TEACHER-TRAINING COURSES IN THE FLORIDA STATE PLAN - continued.

Prescribed Courses	Item number taken from Table 3.	Duties and Responsibilities
Selection, Placement, and Follow up of Students	8.	Counsel with students
	9.	Aid in the selection of students
	24.	Know background of students
	35.	Help students get jobs
	45.	Follow up graduates
Philosophy of Vocational Education	25.	Develop proper attitudes in students
	28.	Know how workers learn

All the duties and responsibilities of the coordinators of diversified cooperative training, as determined by them, their principals, and local supervisors were found to bear a direct relation to the prescribed courses of the state plan for this group. These are shown in Table 17, page 78.

It was found that all but 12 of the duties and responsibilities of the trade and industrial teachers had a fair degree of relationship with the prescribed courses in the State Plan. These are shown in Table 18, page 80.

Table 17.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF THE COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING TO THE PRESCRIBED COURSES IN THE FLORIDA STATE PLAN - continued

Prescribed Courses	Item number taken from Table 7.	Duties and Responsibilities
Coordination of	1.	Placement on a satisfactory training job
Diversified	10.	Follow up after placement
Occupations	11.	Establish cooperative relationship with employer
	14.	Establish cooperative relationship with trainee's home
	5.	Guard against exploitation of students
Student Selection Guidance and Counseling	4.	Assist in the selection of trainees
Occupational Surveys	12.	Make community survey

Table 17.--RELATIONSHIP OF DUTIES AND RESPONSIBILITIES OF THE COORDINATORS OF DIVERSIFIED COOPERATIVE TRAINING TO THE PRESCRIBED COURSES IN THE FLORIDA STATE PLAN

Prescribed Courses	Item number taken from Table 7.	Duties and Responsibilities
Organization and Administration of	5.	Know State and Federal requirements
	3.	Keep records and reports of progress of students
Diversified Cooperative Training	6.	Keep inventory of books and supplies
	8.	Regard school rules and policies
	13.	Assist in organizing and working with advisory committee
	16.	Observe new fields to determine new training possibilities
	17.	Plan and promote publicity for program
Related Study Material for Diversified	2.	Give or arrange to have given organized related training
	7.	Plan each individual study program
Occupations	9.	Assist in making occupational and trade analysis

Table 18.--DUTIES AND RESPONSIBILITIES OF THE TRADE AND INDUSTRIAL TEACHERS THAT SHOW NO DIRECT RELATIONSHIP TO THE PRESCRIBED COURSES IN THE FLORIDA STATE PLAN

Duties and Responsibilities

37. Keep up with new developments in trade
43. Attend summer school
42. Work at trade during summer vacation
36. Attend special conferences for teacher improvement
38. Regard school rules, regulations, and policies
44. Subscribe to professional and trade literature
53. Have key men from industry visit class
51. Maintain membership in professional organizations
52. Visit industry and employers
21. Knowledge and understanding of individual differences
22. Exercise patience with students
23. Maintain interest in students

A consideration which naturally presents itself at this point is the question of what procedure to follow in order to staff the program and improve state and local cooperation in planning professional improvement of Negro trade and industrial teachers of Florida. The war has increased the needs sharply. It has had a tendency to reveal many technological changes and also the fact that teacher training, like many other aspects of education, should be overhauled.

A report by Whitney (28:20) on Up Grading Teachers in Service and contained in research findings in Chapter II points out a list of current practices and plans adapted for the upgrading of vocational teachers in service as determined by 33 teacher trainers and others responsible for such work in many parts of the United States. The list follows:

1. Summer classes
2. Short intensive conferences
3. Teacher training in institutions within commuting area
4. Itinerant teacher training
5. Correspondence courses from institutions and state departments.
6. Training through local supervisor
7. Training through state supervisor
8. Training by means of conference leadership programs

According to Cameron (8:93-94) the following types of plans or programs were found adaptable to meet the in-service training needs of employed teachers.

1. Extension courses
2. Special conferences

3. Correspondence service
4. Individual help on the job
5. Individual professional improvement

In light of the above research findings there appear to be two ways of doing the job of improving teachers--through formal courses and in-service training.

Formal Courses

A study of the plans and practices for upgrading vocational teachers, as pointed out by Whitney above, shows that summer classes and itinerant teacher training seem adaptable to the formal training of Negro trade and industrial teachers of Florida.

1. Many of the duties and responsibilities of these trade teachers as shown in Tables 16 and 17, pages 73 and 78, have a direct relation to the prescribed courses of the Florida State Plan. It would appear feasible to offer these prescribed courses through formal summer classes at the Florida Agricultural and Mechanical College. Although many evening trade extension teachers could not attend summer school, extension courses, organized by the teacher trainer, may help them.

2. The organization on an extension basis of courses prescribed in the state plan by the itinerant teacher trainer in several convenient centers will give opportunity to many evening trade extension teachers to

meet the course requirements of the state plan.

3. A new development in industrial education summer courses is the tutorial or workshop plan adapted at the Colorado Agricultural and Mechanical College. When a needed course is requested by fewer teachers than are required to make up a class, they are given individual instruction in the subject. Study and work assignments and tests are provided for these students. Their work is examined and consultation is provided for them by the appropriate professor or instructor at designated periods. This plan may lend itself very successfully to conducting the formal courses prescribed in the state plan for coordinators of diversified cooperative training, as this group is comparatively small and the problems and needs are varied.

In-Service Training

It has been pointed out in Chapter II by Whitney (28) that the principle of more and more contact on or near the job is of great importance. The following methods and procedures, as revealed through research findings, seem adaptable for the in-service training of the Negro trade and industrial teachers of Florida.

1. Special conferences
2. Correspondence service
3. Individual professional improvement

4. Individual help on the job.

A plan of professional improvement from Training Within Industry, a service of the War Manpower Commission, and adopted by the Emily Griffith Opportunity School, Denver, Colorado, suggests methods of procedure and organization of materials for the individual improvement planning for the teachers. As shown in Figure 1, page 85, a list of five things the teacher should have is used as the working basis for the plan. They are as follows:

1. Knowledge of work
2. Knowledge of responsibility
3. Skill in instructing
4. Skill in cooperating
5. Skill in planning

It would appear than an organization of the duties, responsibilities, and needs of each teacher under these five headings would evolve into a plan for checking and helping each individual teacher on his job.

1. Through special conferences several days may be devoted to analyzing and discussing specific teacher needs and difficulties. Solutions to many of the difficulties may come through an exchange of ideas and experiences by the teachers. The desire for professional growth may be greatly stimulated by these conferences.

Figure 1.

A PLAN OF PROFESSIONAL IMPROVEMENT OF VOCATIONAL INSTRUCTORS

Adapted from Training Within Industry by Department of Vocational Education, Denver Public Schools

Personnel should have	Why it is needed	How it can be acquired	When it should be used
<u>Knowledge of Work</u> Materials, machines, tools, processes, operations, products	To keep up to date with social, economic, and industrial progress	Reading current literature Participating in conferences Studying formal subjects Working on the job Learning from co-worker	During planning period When instruction begins As instruction proceeds Following experience with unit and prior to a repetition
<u>Knowledge of Responsibilities</u> Policies, rules, regulations, agreements, schedules, interdepartment procedures	To give fair treatment and maximum service	Making plans in terms of guide Handling staff in terms of guide Handling students in terms of guide Handling public in terms of guide	When revising old units When planning new units In emergencies When requests are received When personal problems arise When group problems arise
<u>Skill in Instructing</u> Content and method	To pass the "know how" along	Making instructional analysis Organizing instructional materials Using individual instructing process	When revising old units When building new units When teaching students When co-worker needs help When industrial worker or outsider seeks help

Figure 1. - continued

A PLAN OF PROFESSIONAL IMPROVEMENT OF VOCATIONAL INSTRUCTORS

Adapted from Training Within Industry by Department of Vocational Education, Denver Public Schools

Personnel should have	Why it is needed	How it can be acquired	When it should be used
<u>Skill in Cooperating</u> Understanding individuals Sizing up situations Working with people	To be a good team member and to promote team play	Applying foundation points and using Problem Solv- ing Method in handling students, staff, and public	When working with stu- dents, staff, and pub- lic.
<u>Skill in Planning</u> Space, materials, machines, tools, procedures, man- power	To free more time by e- liminating and recog- nizing nonessentials and reorganizing essen- tials for quick easy performance	Making detail analysis, Planning Reorganization Getting approvals Making applications	When time is too short When budget is too small When detail is too great When outside individuals and groups seek help on similar problems

2. A correspondence service organized between the teacher trainer's office and the teachers throughout the state may prove helpful to both the teacher trainer and the teachers. Ideas and items of information may be exchanged not only between the teacher trainer and teacher, but also between all of the teachers by using the teacher trainer's office as a kind of clearing house. The success of one teacher in providing suitable learning activities for his students may be passed on to another teacher in another locality by reporting the details to the office of the teacher trainer. Through a correspondence service with the teachers, the teacher trainer may be able to determine better some of the needs of the teachers he is planning to visit on his itinerary prior to his leaving his office.

3. The teacher trainer may assist teachers, individually, in formulating plans, methods and procedures for their own professional improvement. Here are a few things that he may do.

- a. Identify needs to teacher
- b. Recommend professional improvement courses
- c. Help him plan his summer school work early
- d. Help him arrange for refreshing industrial experience

- e. Encourage membership in professional organizations
- f. Encourage subscription to professional and trade literature.

4. A systematic way may be devised of helping each individual teacher on his job with the problem or difficulty that is confronting him at that time. It would seem such a plan would make provisions for the following:

- a. Some scheme of determining each teacher's problem and recording and checking on it until it has been solved.
- b. A plan of close cooperation with the local supervisor and the teacher trainer.
- c. Some teaching standards and a criterion for checking them.

The research findings and information brought out in this discussion give promise of specific ideas, plans, and procedures to follow in formulating a functional teacher training program for Negro trade and industrial teachers in Florida.

The formal courses prescribed in Florida State Plan cover 41 of the duties and responsibilities of the Negro trade and industrial teachers and all of the duties and responsibilities of the coordinators in Florida as shown in Tables 16 and 17, pages 73 and 78.

It would seem feasible that this formal training should be made available to these groups of teachers through three ways, (1) summer classes at the state institution for Negroes, (2) extension classes organized and carried on by the itinerant teacher trainer, and (3) tutorial or workshop plan, whereby small numbers of teachers desiring subjects not being offered in formal classes may work on an individual basis on a specific problem under the advisement of a designated instructor.

The remaining 12 duties and responsibilities of the trade and industrial teachers, not related to any of the formal courses, as shown in Table 18, page 80, should be covered by in-service training through four methods, (1) special conferences, (2) correspondence service, (3) individual professional improvement, and (4) individual help on the job.

The War Man Power Commission's plan of professional improvement as adopted by the Denver Public Schools suggests a means of evaluating teacher training needs and a plan for upgrading teachers through formal courses and in-service training.

Improve job Skills and Techniques

Evidences seem to show that many of the shop teachers tend to fall behind the standards of industry in regards to their knowledge of the work. This may mean knowledge of machines, tools, materials, and meth-

ods or the manual and mental skills necessary to perform the jobs of their trades efficiently.

Research findings show that the development of proper work habits and skills was determined, by the teachers, to be one of their 12 most important responsibilities. This realization, on the part of 85 per cent of the teachers, is an encouraging sign. A study of the content of the prescribed courses of the state plan reveals no provision for teaching and improving job skills. Although the state plan makes minimum requirements of trade experience for shop teachers, many of them enter the profession lacking in the perfection of certain skills, while others have the tendency to grow stale and fall behind industry through their years in the school shops. It would appear that if these teachers should make regular returns to industry during their summer vacations at certain intervals they would receive refreshing industrial experiences that would improve their efficiency as trade teachers.

It is recommended that the Florida State Department of Education make this a point of consideration when revising teacher training requirements for trade and industrial teachers.

Recommendations

In light of the discussion of the research findings in their relation to the major and subordinate

questions the following recommendations are made:

1. That a plan of professional improvement involving every teacher be devised and inaugurated. Using the plan adapted, from Training Within Industry, by the Vocational Education Department of the Denver Public Schools, Figure 1, page 85, as a pattern, the form for the evaluation of the instructor was made. Figure 2, page 92. This form presents a break-down of the duties and responsibilities of the teachers in relation to the following five classifications: knowledge of work, knowledge of responsibility, skill in instructing, skill in cooperating, and skill in planning. The teacher trainer, working with the local supervisor and teacher, will determine the needs of the teacher during his initial visit. These needs will be indicated on the form and appropriate statements will be made under the column headings. Under the column headed, "What is needed," will be a brief statement of the help or things the instructor needs. Under the column headed, "How can it be acquired?", will be a statement of the methods or procedures the instructor may employ to accomplish his needs. Under the heading, "When and where can it be secured?", will be placed the time, date, or place which the teacher may

Figure 2.

Name _____

Date _____

Class or Shop _____

School _____

PLAN OF PROFESSIONAL IMPROVEMENT FOR THE INSTRUCTOR

Personnel should know	Duties and Responsibilities	What is needed	How it can be acquired	When and where it can be secured
<u>Knowledge of Work</u>	Recommend equipment, books, catalogs, etc. Repairs and replacements. Check tools in and out. Storage of supplies. Proper habits and skills. New trade developments. Follow trade in summer. Attend summer school. Take professional literature. Join professional organizations.			
<u>Knowledge of Responsibility</u>	Counsel students. Select students. Coordinate shop practice with related knowledge. Inventory. Protect supplies. Use patience with students. Keep interest in students. Know student background. Proper student attitude. Make reports. Morale of class. Protect students' health. Get jobs for students. Run shop smoothly. Follow up. Keep progress chart. Keep shop orderly. Safety regulations. Safety guards.			
<u>Skill in Instructing</u>	Make demonstrations. Trade analysis. Make assignments. Ask questions. Give tests. Use instructional aids. Individual instruction. Methods and devices. Learning activities. Individual differences. Supervise student work. Give out printed material. 4-step method.			
<u>Skill in Cooperating</u>	Attend special conferences. Regard school regulations. Visit industry and employers. Have key men from industry visit class.			
<u>Skill in Planning</u>	Lesson planning. Related subject content. Course outline. Written plans. Revise course outline.			

secure the things needed. A copy will be given to the teacher. This will be his plan of improvement for the year. From this point he and the teacher trainer can work together toward accomplishing its objective.

2. That the formal course offerings receive new emphasis in terms of the duties and responsibilities which were found related to them.
3. That the formal course offerings continue to be made available to the teachers through summer classes held at the Florida Agricultural and Mechanical College.
4. That the tutorial or workshop plan that has been in operation at the Colorado Agricultural and Mechanical College for several years be adapted for giving the prescribed courses to teachers when the number desiring certain courses is too small to organize a formal class.
5. That the prescribed courses be offered for the evening trade extension teachers on an organized extension basis in the Jacksonville and Tampa centers.
6. That a functional in-service teacher training program be inaugurated employing these four

methods of giving assistance to the teachers: special conferences, correspondence service, individual professional improvement, and individual help on the job.

7. That an endeavor be made to keep each day trade teacher job competent by insisting on acquiring new skills and techniques as well as perfect old ones through regular returns to industry during the summer vacation at intervals of three years.
8. That every effort be made to widen the professional background of each individual teacher by encouraging subscriptions to trade and professional literature, membership in professional organizations, pursue professional improvement courses at summer school, and visit industry and other schools.

Chapter VI

SUMMARY

Widespread opinion that greater attention should be given to the preparation and improvement of trade and industrial teachers seems to be substantiated by the research findings discussed in this study.

Need for the Study

Difficulties encountered by the Florida State Department of Education in securing and improving Negro trade and industrial teachers are as follows: (1) securing qualified teachers, (2) delays in organizing classes, (3) improvement of employed teachers who are incompetent, (4) very little contribution made to the training of Negro trade and industrial teachers of Florida, and (5) ever-changing factors in the industrial field. These difficulties have given rise to the need for this study.

The Problem

An analysis of the difficulties encountered above seemed to evolve into a statement of the problem as follows: What should comprise the annual itinerant teacher training program for Negro trade and industrial teachers of Florida?

A study of the major problem brought out the following subordinate questions.

- A. What are the regular duties and responsibilities of the Negro trade and industrial teachers of Florida?
- B. What are the difficulties being encountered in the discharge of these duties?
- C. What are the extra-curricular activities and duties they are called upon to do?
- D. What are the difficulties being encountered in the discharge of these extra-curricular duties?
- E. What professional courses are prescribed in the state plan for trade and industrial teachers?
- F. What provision should be made in the itinerant teacher trainer's annual program to enable him to help each teacher overcome his difficulties and how should he proceed in carrying out this program?

It was realized that certain specific and pertinent information had to be gathered in order to answer these questions completely. It appeared that an analysis of the teachers' job into its various duties and responsibilities would give a kind of job breakdown that would form the basis for these complete answers.

Source of Data

The data collected in this study were gathered from 40 trade teachers, six coordinators, seven principals, and five local supervisors.

Methods and Procedure

A series of check sheets was used to collect the data from the teachers, principals and local supervisors. Each teacher was requested to check the items on the check sheet that, in his opinion, entered his work as a duty or responsibility and was told to add any not listed. The principals and local supervisors were requested to fill out similar check sheets on each teacher under their supervision. In addition, all were requested to check the ones they considered the most important, the ones with which they encountered difficulty, and the ones with which they needed help.

Findings

After the data were compiled the following information was revealed. There were found to be three types of teachers: evening trade extension teachers, day trade teachers, and coordinators of diversified cooperative training.

The duties and responsibilities of the evening trade extension teachers consisted of making course outlines, lesson plans, demonstrations, and methods and devices. The coordinators duties and responsibili-

ties are shown in Table 5, page 47. Table 6, page 49, showed that the extra-curricular duties of these teachers presented no difficulties. Trade analysis, methods and devices, course outlines, and related subject content were foremost among the 12 most important duties and responsibilities of the trade teachers as shown in Table 7, page 50, while surveys, placements, follow up, and related study are first among the 12 most important duties and responsibilities of the coordinators as shown in Table 8, page 51.

The largest percentage of difficulties of the teachers are revealed in Table 9, page 53, and were found to be demonstrations, trade analysis, methods and devices, and learning activities. The largest percentage of the coordinators encountered difficulties in surveys, advisory committee work, and related study, as shown in Table 10, page 54.

Tables 11, 12, 13, and 14, pages 55, 56, 58, and 59, reveal the needs of the day trade teachers and evening trade extension teachers. It appears that trade analysis, related subject content, course outlines, lesson plans, methods and devices, and learning activities are the paramount needs of the teachers. The needs of the coordinators are shown in Table 15, page 60, to include surveys, advisory committee work, related study, and trainee selection as the greatest.

Recommendations

An analysis and consideration of the findings revealed a plan of teacher training for the Negro trade and industrial teachers of Florida which has two main parts, formal classes and in-service training. It is shown that 41 duties and responsibilities of the teachers and all the duties and responsibilities of the coordinators have a definite relation to the prescribed courses in the state plan. It appears feasible to offer these prescribed courses to the teachers through formal classes under three different plans; namely, summer classes, organized extension classes, and the tutorial or workshop plan.

The remaining duties and responsibilities will form a part of the basis for the in-service training program. A plan of professional improvement adapted from Training Within Industry by the Department of Vocational Education of the Denver Public Schools will serve as a pattern. The in-service training program will employ four methods or procedures; namely, special conferences, correspondence service, individual professional improvement, and individual help on the job.

In light of the discussion of the research findings the following recommendations were made:

1. That a plan of professional improvement for all teachers be set up.

2. That formal course offerings be given new emphasis.
3. That formal courses continue to be offered during the summer at the Florida Agricultural and Mechanical College.
4. That the tutorial or workshop plan be adopted.
5. That extension classes in prescribed courses be offered in Jacksonville and Tampa.
6. That teachers work at their trade every three years during the summer.
7. That a functional in-service training program be inaugurated.
8. That professional background of teachers be broadened.

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Appendix A

MECHANIC ARTS DIVISION
FLORIDA A & M COLLEGE
Tallahassee, Fla.

April 27, 1945

OFFICE:

State Itinerant
Teacher-Trainer

Mr. B. F. Holmes, Carpentry Instructor
Florida A & M College
Tallahassee, Florida

Dear Mr. Holmes:

In compliance with plans for my study of the duties and responsibilities of the Negro trade and industrial teachers of Florida, I am writing to ask for your cooperation.

This study has as its objective a determination of the duties and responsibilities of these teachers and the difficulties they are encountering in discharging them. It is hoped that this study will lead to a feasible plan of improving the work in trade and industrial education.

I shall appreciate it if you will check the items on the enclosed form as indicated and return to me not later than Wednesday, May 2, 1945.

Yours very truly,

M. S. Thomas
State Itinerant Teacher Trainer
Trade and Industrial Education

Appendix B

MECHANIC ARTS DIVISION
FLORIDA A & M COLLEGE
Tallahassee, Fla.

April 27, 1945

OFFICE:

State Itinerant
Teacher-Trainer

Mr. A. Quinn Jones, Principal
Lincoln High School
Gainesville, Florida

Dear Sir:

In compliance with plans for my study of the duties and responsibilities of the Negro trade and industrial teachers of Florida, I am writing to ask for your cooperation.

This study has as its objective a determination of the duties and responsibilities of these teachers and the difficulties they are encountering in discharging them. It is hoped that this study will lead to a feasible plan of improving the work in trade and industrial education.

I shall appreciate it if you will check the items on the enclosed form as indicated and return to me not later than May 4, 1945.

Yours very truly,

M. S. Thomas
State Itinerant Teacher Trainer
Trade and Industrial Education

Appendix C

INTERVIEW CHECK SHEET

(Teachers' Estimate of their Duties and Responsibilities)

TeacherDate.....

School.....Address.....

Type of teacher: (check)

Day trade shop _____	Related subj. _____
Eve. trade ext. _____	Gen. Indust. _____

NOTE:

Please check in column (A) those items below that are included in your regular work as a trade and industrial teacher, as a duty and responsibility. Add any duty or responsibility not listed. Check in column (B) the 12 items you consider most important. Check in column (C) those items with which you have the most difficulty. Check in column (D) those items with which you would like to have help. Explain on back of sheet reasons or causes of difficulty with items checked in (C).

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
<u>Instruction</u> (Planning)				
1. Make and use trade analysis.....				
2. Make and use course outline.....				
3. Occasionally revise course outline...				
4. Make and use job sheets or similar instructional aids.....				
5. Organize teaching content to permit individual instruction & progress...				
6. Formulate definite plans for putting over lesson.....				
7. Make a written plan.....				
8. Provide suitable teaching methods and devices.....				
9. Provide suitable learning activities.				
10. Know how workers learn.....				
11. Make assignments.....				
12. Recommend textbooks, reference books, manufacturer's catalogs, etc.....				
13. Determine related subject content....				
14. Make use of (4) step method in putting over lesson.....				
15. Ask questions and get student response				
16. Make demonstrations and illustrations				
17. Give tests and rate students.....				
18. Coordinate trade knowledge with shop practice.....				

Appendix C - continued

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
19. Give out printed material.....				
<u>Equipment and Supplies</u>				
20. Make safety regulations (for shop)....				
21. Provide safety guards for equipment...				
22. Arrange for repairs and replacements..				
23. Make recommendations concerning equip- ment.....				
24. Keep inventory of supplies and equipment.....				
25. Provide system of checking tools in and out.....				
26. Protect supplies from lost and waste..				
27. Provide proper storage of supplies....				
<u>Student</u>				
28. Knowledge and understanding of in- dividual differences.....				
29. Develop proper work habits and skills.				
30. Protect students' health.....				
31. Exercise patience with students.....				
32. Maintain interest in students.....				
33. Counsel with students.....				
34. Know background of students.....				
35. Aid in the selection of students.....				
36. Develop proper attitude in students...				
37. Supervise students on job.....				
38. Help students get jobs.....				
<u>Self</u>				
39. Work at trade during summer vacation..				
40. Attend summer school.....				
41. Attend special conferences for teacher improvement.....				
42. Keep up with new developments in trade				
43. Maintain membership in professional organizations.....				
44. Subscribe to professional and trade literature.....				
45. Visit industry and employers.....				
46. Regard school rules, regulations, and policies.....				
<u>Organization</u>				
47. Make reports.....				
48. Keep morale of class good.....				

Appendix C - continued

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
<u>Organization</u>				
49. Follow up graduates.....				
50. Have key men from industry visit class				
51. Keep shop or class running smoothly...				
52. Keep progress chart.....				
53. Keep shop orderly.....				

Appendix D

INTERVIEW CHECK SHEET

Coordinators' Estimate of their Duties and Responsibilities

Coordinator.....Date.....

School.....Address.....

NOTE:

Please check in column (A) those items below that are included in your regular work as a coordinator of Diversified Cooperative Training Programs, as a duty or responsibility. Add any duty or responsibility not listed. Check in column (B) the 12 items you consider the most important. Check in column (C) those items with which you have the most difficulty. Check in column (D) those items with which you would like to have help. Explain on back of sheet reasons or causes of difficulty with items checked in column (C).

Regular Duties and Responsibilities of Coordinators of Diversified Cooperative Training	A	B	C	D
1. Make community survey.....				
2. Assist in making occupational and trade analysis.....				
3. Placement on satisfactory training job.				
4. Follow up after placement.....				
5. Make contact with employers to establish cooperative relationship.....				
6. Give or arrange to have given organized related training.....				
7. Assist in organizing and working with advisory committees.....				
8. Make contacts and establish cooperative relationship with trainees' home.....				
9. Observe new fields to determine new training possibilities.....				
10. Keep records and reports to show progress and employability of students in training program.....				
11. Guard against exploitation of trainees.				
12. Assist in the selection of trainees....				
13. Know state and federal requirements....				
14. Keep inventory of books and supplies...				
15. Plan each individual program.....				
16. Plan and promote publicity for programs				
17. Regard school rules and policies.....				
18. _____				
19. _____				
20. _____				
21. _____				

Appendix D - continued

Regular Duties and Responsibilities of Coordinators of Diversified Cooperative Training	A	B	C	D
23. _____				
24. _____				
25. _____				
26. _____				
27. _____				

Appendix E

INTERVIEW CHECK SHEET

(Teachers' and coordinators' estimate of their extra-curricular duties and responsibilities)

Teacher

Coordinator.. Date.....

School.....Address.....

NOTE: List only those extra-curricular duties you are regularly called upon to do.

Extra-curricular Duties and Responsibilities of trade and industrial teachers and coordinators	How or why were you given this responsibility	What help do you need, if any, from teacher trainer	How much time is devoted to duty?
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			
13. _____			
14. _____			
15. _____			
16. _____			
17. _____			
18. _____			
19. _____			

Appendix F

INTERVIEW CHECK SHEET

(For determining duties and responsibilities of trade and industrial teachers by principals and local supervisors)

Center.....Date.....

Person interviewed.....Position.....

Teacher discussed.....Type.....

School.....Address.....

NOTE: Please place a check () in column (A) for those items in your opinion come in the trade teachers regular work as a duty or responsibility. Give appropriate answers in other columns to questions checked in column (A).

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
<u>Instruction</u> (Planning)				
1. Does he make and use trade and job analysis?.....				
2. Does he make and use course outline?....				
3. Does he occasionally revise course outline?.....				
4. Does he make and use job sheets or similar instructional aids?.....				
5. Does he organize teaching content to permit individual instruction?.....				
6. Does he formulate definite plans for putting over lesson?.....				
7. Does he make a written plan?.....				
8. Does he provide suitable teaching methods and devices?.....				
9. Does he provide suitable learning activities?.....				
10. Does he know how workers learn?.....				
11. Does he make assignments?.....				
12. Does he recommend textbooks, reference books, catalogs, etc.?.....				
13. Does he determine related subject content?.....				
14. Does he make use of (4) step method in putting over lesson?.....				
15. Does he ask questions and get student response?.....				

Appendix F - continued

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
<u>Instruction (Planning)</u>				
16. Does he make demonstrations and illustrations?.....				
17. Does he give tests and rate students?...				
18. Does he coordinate trade knowledge with shop practice?.....				
19. Does he give out printed material?.....				
<u>Equipment and Supplies</u>				
20. Does he make safety regulations? (for shop).....				
21. Does he provide safety guards for equipment?.....				
22. Does he arrange for repairs and replacements?.....				
23. Does he make recommendations concerning equipment?.....				
24. Does he keep inventory of supplies and equipment?.....				
25. Does he provide system of checking tools in and out?.....				
26. Does he protect supplies from lost and waste?.....				
27. Does he provide proper storage of supplies?.....				
<u>Student</u>				
28. Does he have knowledge and understanding of individual differences?.....				
29. Does he develop proper work habits and skills?.....				
30. Does he protect students' health?.....				
31. Does he exercise patience with students?				
32. Does he maintain interest in students?..				
33. Does he counsel with students?.....				
34. Does he know background of students?....				
35. Does he aid in the selection of students?				
36. Does he develop proper attitude in students?.....				
37. Does he supervise students on job?.....				
38. Does he help students get jobs?.....				

Appendix F - continued

Regular Duties and Responsibilities of trade and industrial teachers	A	B	C	D
<u>Self</u>				
39. Does he work at trade during summer vacation?.....				
40. Does he attend summer school?.....				
41. Does he attend special conferences for teacher improvement?.....				
42. Does he keep up with new developments in trade?.....				
43. Does he maintain membership in pro- fessional organizations?.....				
44. Does he subscribe to professional and trade literature?.....				
45. Does he visit industry and employers?...				
46. Does he regard school rules, regulations, and policies?.....				
<u>Organization</u>				
47. Does he make reports?.....				
48. Does he keep morale of class good?.....				
49. Does he follow up graduates?.....				
50. Does he have key men from industry visit class?.....				
51. Does he keep shop or class running smoothly?.....				
52. Does he keep progress chart?.....				
53. Does he keep shop orderly?.....				

Appendix G

INTERVIEW CHECK SHEET

(For determining duties and responsibilities of coordinators of diversified cooperative training programs by principals and local supervisors)

Center.....Date.....

Person Interviewed.....Position.....

Coordinator discussed.....

School.....Address.....

NOTE: Please place a check () in column (A) for those items in your opinion come in the coordinators' regular work as a duty or responsibility. Give appropriate answers in other columns to questions checked in column (A).

Regular Duties and Responsibilities of the coordinators	A	Yes	No	Satisfac'y	Need Help
<u>Coordinators</u>					
1. Does he make community survey?....					
2. Does he assist in making trade and occupational analysis?.....					
3. Does he place students on training jobs?.....					
4. Does he follow up after placements?.....					
5. Does he make contacts with employers to establish cooperative relationships?.....					
6. Does he give or arrange to have given organized related training?					
7. Does he work with advisory committee?.....					
8. Does he make contacts with trainees' homes?.....					
9. Does he observe new fields to determine training possibilities?					
10. Does he make reports and keep proper records?.....					
11. Does he assist in selection of students?.....					
12. Does he know and carry out state and federal policies?.....					

Appendix G - continued

Regular Duties and Responsibilities of the coordinators	A	Yes	No	Satisfac'ry	Need Help
<u>Coordinators</u>					
13. Does he carry out school policies and rules?.....					
14. Does he keep inventory of books, materials, and supplies?.....					
15. Does he plan each individual trainee's work schedule and daily study program?.....					
16. Does he keep program running smoothly?.....					
17. Does he handle publicity for program?.....					
(Add and check any others not listed that in your opinion are his duties and responsibilities)					
18. _____					
19. _____					
20. _____					
21. _____					
22. _____					
23. _____					

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