

DOCUMENT RESUME

ED 061 445

VT 014 986

AUTHOR Wray, Ralph D.
TITLE Roles and Program Content for Recruiting Distributive Education Teacher-Coordinators.
INSTITUTION Council for Distributive Teacher Education.; Illinois State Univ., Normal. Dept. of Business Education.
REPORT NO CDTE-Prof-Bull-Ser-22
PUB DATE 71
NOTE 49p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Distributive Education; *Instructor Coordinators; *Program Content; Program Development; Responsibility; *Role Perception; State Supervisors; Teacher Educators; *Teacher Recruitment; Teacher Role

ABSTRACT

Guidelines for a program for recruiting distributive education teacher-coordinators are developed in this study. In determining the content of the recruiting program, the study focused on the roles and responsibilities of the various participants in the process: local teacher-coordinators, teacher educators, and state supervisory staff. A questionnaire survey of these three groups as they are found in Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) provided data which revealed that the distributive education personnel were in agreement concerning six areas of responsibility that should be assumed by teacher-coordinators, four that should be assumed by teacher educators, and three that should be assumed by state supervisors. There was also agreement concerning 10 types of information that should be included in the recruitment program content. The study offers eight recommendations for the recruitment of DE teacher coordinators, including the need for on-campus "open-houses" to be held periodically to which teachers in the field may bring interested students. (JS)

ED 061 445



**COUNCIL FOR DISTRIBUTIVE TEACHER
EDUCATION
PROFESSIONAL BULLETIN SERIES
NUMBER 22**

**ROLES
and
PROGRAM CONTENT**

**for
RECRUITING DISTRIBUTIVE EDUCATION
TEACHER-COORDINATORS**

**Ralph D. Wray
Illinois State University**

This bulletin was produced and distributed by
**DEPARTMENT OF BUSINESS EDUCATION
COLLEGE OF BUSINESS
ILLINOIS STATE UNIVERSITY**

**Normal
1971**

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY.

VT014386

ER EDUCATION

by
ON

FOREWORD

The Council for Distributive Teacher Education was organized in 1961. Membership in the organization consists of teacher educators and other distributive education personnel with an interest in advancing distributive teacher education. The primary interests of the Council are research and publication.

This bulletin is the report of a study on the roles and responsibilities of local teacher-coordinators, teacher educators, and state supervisory staff in recruiting distributive teacher-coordinators including guidelines for the development of the content of a recruitment program. Because of the necessity to maintain a consistent program, the study on the Role and Content for Recruiting Distributive Education Teacher-Coordinators is especially important at this time in the development and advancement of the distributive education program on the local, state, regional, and national levels.

The study revealed that distributive education personnel were in agreement concerning six areas of responsibility that should be assumed by teacher-coordinators, four areas of responsibility that should be assumed by teacher educators, and three areas of responsibility that should be assumed by state supervisors. There was also agreement concerning ten types of information that should be included in the recruitment program content. In addition, the study offers eight recommendations

for the improvement of distributive education teacher coordinators.

The study has significant implications for distributive education personnel on all levels in the secondary, post secondary, and adult programs. As such, it should be valuable in an immediate action program to maintain and advance high standards in the over-all program.

The study was completed by Dr. Ralph D. Wray, Assistant Professor, Department of Business Education, College of Business, Illinois State University. It was published and distributed through the courtesy of the Department of Business Education, College of Education, Illinois State University, Normal, Illinois. Requests for copies should be addressed to Dr. Wray.

Reno S. Knouse, Chairman
Research and Publications Committee
Council for Distributive Teacher
Education
State Teacher Educator for
Distributive Education
School of Education
State University of New York
at Albany

April 1971

CONTENTS

Chapter	Page
I. INTRODUCTION	1
Problem	2
Hypotheses	3
Delimitation of the Study	5
Definition of Terms	6
Value of the Study	7
II. RELATED LITERATURE	10
III. DESIGN AND METHODS OF PROCEDURE	14
The Instrument	14
The Jury	16
The Population	17
The Response	19
Treatment of the Data	20
IV. PRESENTATION AND ANALYSIS OF FINDINGS	24
Roles and Responsibilities	24
Recruitment Program Content	29
V. CONCLUSIONS AND RECOMMENDATIONS	33
Conclusions	33
Recommendations	35
Appendixes	37
BIBLIOGRAPHY	43

CHAPTER I

INTRODUCTION

Staffing the American public schools with high quality vocational teachers in sufficient numbers is a task of such immediate urgency, and requiring political and fiscal decisions of such magnitude, that it demands the thought and action of all Americans.

Programs of skill development are rapidly becoming an important part of the educational offerings in communities seeking quality educational programs. In such a program, vocational education has a major contribution to make; but its maximum potential, either in the number of young people served or the number of communities assisted, is yet to be reached. Concern about the shortage and the threat of greater future shortage of vocational education teachers is particularly acute.

It is significant that Congress recognized the need for teacher training at the time the Smith-Hughes Act was passed, and that succeeding Acts have also contained sections providing for training and development programs for vocational education personnel. However, a shortage of qualified vocational education teachers exist in each of the federally-aided vocational areas.

A study conducted by Hensel at Ohio State University reveals that the single most critical problem that states are facing as they attempt to achieve the purposes of the Vocational Act of 1963 is the shortage of qualified instructors.¹ Through a national survey of State Directors of Vocational Education, he found that shortages were reported in each area of vocational education; however, the greatest percentage increases needed in high school vocational teachers were reported to be in the area of distributive education.

At the post-secondary level, distributive education was reported to be second in percentage of vocational teacher increases needed. Thus, the need to attract and train additional distributive education teacher-coordinators becomes apparent.

Although succeeding legislation and other events have stimulated the growth of distributive education, program expansion is still hampered by the lack of a sufficient number of teacher-coordinators. In too many cases, distributive education program development has been stymied because of the lack of qualified teachers. The need to attract capable young persons to train for careers in the teaching and coordination of distributive education, therefore, becomes the first step in alleviating the shortage of distributive education teachers which has existed in many states for several years.

Problem

In carrying out the study, the problem was divided into two major parts.

They were:

1. To what extent is there agreement of local distributive education teacher-coordinators, teacher educators, and state supervisory staffs concerning what roles and responsibilities for recruiting prospective distributive education teacher-coordinator candidates should be assumed by each of the following:
 - a) local distributive education teacher-coordinators?
 - b) distributive education teacher educators?
 - c) state supervisors of distributive education?
2. To what extent is there agreement of local distributive education teacher-coordinators, teacher educators, and state supervisory staffs concerning what information should be included in the recruitment program content that is designed to stimulate interests of potential distributive education teacher-coordinators?

Hypotheses

A questionnaire was utilized in obtaining the necessary data. The first 15 items appearing on the survey form were designed to elicit opinions needed to test the following null hypotheses.

There is no significant difference among opinions of local teacher-coordinators, teacher educators, and state supervisory staffs concerning the assumption of responsibility for:

- 1) acquainting high school and post-secondary students to the distributive education teacher training program.
- 2) familiarizing high school counselors with the distributive education teacher-coordinator training program.
- 3) making annual studies of supply and demand of distributive education teacher-coordinators.
- 4) acquainting high school and post-secondary students to teaching as a profession or career.
- 5) providing prospective teacher-coordinator candidates with pamphlets and booklets that may induce these people to enter a distributive education teacher training program.
- 6) sending personalized letters to prospective teacher-coordinator candidates.
- 7) initially interviewing prospective distributive education teacher-coordinator candidates.
- 8) developing display and bulletin board materials designed to motivate high school and post-secondary students to consider enrolling in a distributive education teacher training program.
- 9) encouraging college graduates not qualified as distributive education teacher-coordinators to take the necessary additional courses needed for certification.
- 10) initiating scholarships and other financial aids for the training of prospective distributive education teacher-coordinators.
- 11) arranging "career day" programs designed to provide information and answer questions which high school students may have about distributive education teacher training programs.

- 12) publicizing the distributive education teacher training programs and providing information about opportunities for teacher-coordinators through the mass-media.
- 13) actively seeking to recruit prospective distributive education teacher-coordinators from distribution and marketing occupations.
- 14) arranging orientation trips to teacher training institutions for high school and post-secondary students interested in distributive education teacher training.
- 15) encouraging local newspapers to run editorials promoting distributive education teacher training programs.

Items 16 through 29 appearing on the survey form were designed to elicit opinions needed to test the following group of null hypotheses. This group of hypotheses was concerned with the agreement of opinions in the recruitment program content.

There is no significant difference among opinions of local teacher-coordinators, teacher educators, and state supervisory staffs concerning the inclusion of:

- 16) information about college training and qualifications necessary for certification in the recruitment program content.
- 17) occupational information in the recruitment program content.
- 18) information about college admission requirements in the recruitment program content.
- 19) information about collegiate life in the recruitment program content.
- 20) information about opportunities for advancement by distributive education teacher-coordinators in the recruitment program content.
- 21) information about alternative marketing and distribution opportunities outside the field of education in the recruitment program content.
- 22) information about the various types of distributive education programs in the recruitment program content.

- 23) the history of distributive education as included in the Federal Acts pertaining to distributive education in the recruitment program content.
- 24) a description of the personal attributes desirable in teacher-coordinator prospects in the recruitment program content.
- 25) information about any additional requirements for graduate study after initial certification in the recruitment program content.
- 26) the future of distributive education, as forecast by experts, in the recruitment program content.
- 27) information about difficulties and limitations encountered in the teaching profession in the recruitment program content.
- 28) information about the satisfactions and advantages of teaching in general in the recruitment program content.
- 29) a description of the fringe benefits usually provided for teachers in the recruitment program content.

Delimitations of the Study

Although research for recruitment programs in all areas of vocational education, as well as other disciplines in education is needed, this study applied only to distributive education. Furthermore, this study was concerned only with the recruitment program and not final selection of teacher-coordinators. No attempt was made to identify characteristics of prospective teacher-coordinators.

Distributive education personnel are employed in various state supervisory and city or county supervisory positions; however, this study was confined to the recruitment of teacher-coordinators for the secondary and post-secondary programs.

Since certain beliefs and opinions were secured from local teacher-coordinators, teacher educators, and state supervisory staffs in six states, it was recognized that limitations may be placed on the generalizations and conclusions deduced from this study. Other persons, such as university administrators in the schools of education, superintendents of school districts, vocational directors within the public schools, as well as other teachers, might have made a contribution to the problem. However, local distributive education teacher-coordinators, teacher educators, and state supervisory staffs were in an excellent position to provide the best informed sources of opinions necessary for this study.

Definition of Terms

Although most of the terms used in the study are commonly understood by educators, the following seven terms are defined since some variation in terminology does occur among states.

"Distributive education" is a program in marketing, merchandising, related management, and personal development that may involve secondary, post secondary, and adult programs.

The "distributive education teacher-coordinator" has the responsibility for teaching distributive education high school or post-secondary classes and correlates the work of the classroom with the instruction and experiences offered at the work-experience training station.

"Recruitment" refers to the organized, planned programs and activities designed to induce students to make application for admission to teacher education training programs.

"Recruitment program content" refers to information, either written or verbal, directed toward the prospective candidate encouraging this person to consider seeking admission to a teacher education training program.

"State supervisory staff" refers to state employed professional personnel in charge of administering distributive education. This includes the state supervisor of distributive education, assistant or area supervisors, or a supporting staff position with responsibilities for curriculum or Distributive Education Clubs of America.

"Teacher education" refers to the program of activities and experiences developed by teacher training institutions for the preparation and growth of individuals who are preparing for service in the educational profession.

The term "teacher training institutions" denotes all institutions of higher education which are empowered to confer academic degrees, and which maintain a teacher education curriculum in distributive education enabling students to qualify for standard certificates issued to teachers according to the requirements of the state in which the institution is located. The terms "colleges" and "universities" are used synonymously with teacher training institutions unless specifically designated.

Value of the Study

Distributive education, as a discipline, is still young. Agreement on general goals and directions should be considered essential, although the ways of achieving them may differ. While the need for additional personnel has generally been recognized, answers to the questions stated in the problem

have been needed to provide direction in determining the roles and responsibilities to be assumed by personnel involved in recruitment activities and for guidance in the formulation of effective recruitment program content.

FOOTNOTES

¹Hensel, J. W., The Demand For and Selected Sources of Teachers in Vocational and Technical Education, The Ohio State University, Center for Vocational and Technical Education, Columbus, 1967, p. 1.

Chapter II

RELATED LITERATURE

A survey of literature and statistics in the field, although indicating the dire need for recruitment, reveals little in the area of possible sources of teachers and even less information concerning methods for recruiting teachers. These documents will only be mentioned here to call the reader's attention to their impact on the study.

Page suggested in 1959 that the responsibility for recruitment activities be fixed.¹ However, the survey of literature does not yield evidence that the assignment of roles and responsibilities has been forthcoming. While relatively little has been done, in a systematic manner, to interest outstanding students in preparing for teaching, Richey sees increased supply coming only as a result of concentrated effort on the part of the teaching profession.²

Mills conducted a study that describes the operation of the existing teacher recruitment program for distributive education and some methods employed.³

Jahrman, in a 1964 doctoral dissertation study, explored devices and content to be used by teacher education institutions for recruiting students for another area of vocational education.⁴ However, this study has implications for distributive education as well as for other disciplines.

A descriptive-study type study conducted by Walters, was designed to determine and evaluate the policies and practices of teacher education institutions with regard for recruitment, admissions, and retention in the teacher education programs.⁵

Ferguson explored possible sources of additional distributive education teachers and suggested areas of responsibility for recruitment activities that can be assumed by distributive education teacher-coordinators, teacher educators, and state distributive education personnel.⁶

Kilzer interviewed deans, directors of teacher placement, and many others in departments, divisions, and colleges of education and observed a number of approaches utilized in an effort to increase the supply of teachers.⁷

A study concerned with recruiting students for industrial education, conducted by Ressler, examines influential agents for effective recruitment.⁸ An innovative approach to the teacher recruitment program was launched by the industrial education department at Camelback High School in Phoenix, Arizona.⁹ This project seems to point to some success in developing more favorable attitudes and better understanding of the profession.

Page, in a survey report of emerging patterns of organization for teacher recruitment at the state and national levels, suggests specific criteria to be followed in recruitment programs.¹⁰ He also identifies a range of influences, direct and indirect, modifiable and determined, which he feels affects choice of teaching as a career.

Since current teacher training efforts may fall short of needs by an average of 15,000 vocational teachers a year, Loomis projects a national shortage of as many as 75,000 vocational teachers by 1975.¹¹

Distributive education, as a part of vocational education, must receive prompt attention in the area of recruiting teacher-coordinators if the program is to reach students who need, want, and can profit by instruction and training.

FOOTNOTES

¹Page, Jerome M., "Organization for Teacher Recruitment," Journal of Teacher Education, vol. 10, no. 2, June, 1959, p. 136.

²Richey, Robert, Planning for Teaching, McGraw-Hill Book Company, Inc., New York, 1963, p. 243.

³Mills, Chester O., Sources and Recruitment of Distributive Education Teachers, Council For Distributive Teacher Education, Professional Bulletin, Series Number 9, 1967, pp. 1-22.

⁴Jahrman, Quain Kenneth, Recruiting Prospective Teachers of Industrial Education, Unpublished doctor's thesis, University of Arkansas, Fayetteville, 1964.

⁵Walters, Charles Dorsey, A Study of Certain Aspects of Recruitment, Admissions, and Retention of Students in Virginia Institutions Offering Undergraduate Programs in Teacher Education, Unpublished doctor's thesis, George Washington University, Washington, D.C., 1968.

⁶Ferguson, Edward T., "More Teacher Recruitment--A Must for Growing Distributive Education," American Vocational Journal, vol. 39, no. 9, December, 1964, pp. 24-25.

⁷Kilzer, L. R., "Some Devices Used to Recruit Teachers," Phi Delta Kappan, vol. 38, no. 7, April, 1957, pp. 275-276.

⁸Ressler, Ralph, "Recruitment of Students for Industrial Teacher Preparation," Journal of Industrial Teacher Education, vol. 4, no. 2, December, 1966, pp. 21-32.

⁹Anderson, William J., "Teacher Recruitment Program" School Shop, vol. 26, no.4, December, 1966, pp. 34-35.

¹⁰Page, Op. Cit., p. 136.

¹¹Vo-Ed Teacher Shortage Demands Prompt Attention," American Vocational Journal, vol. 44, no. 9, December, 1969, p. 70.

CHAPTER III

DESIGN AND METHODS OF PROCEDURE

The Instrument

A questionnaire was mailed to each member of the population. Although other data collection procedures were considered, opinions were required from a sizeable number of respondents in six states and it was determined that the questionnaire would be the most feasible method of obtaining the desired data.

Subject matter and construction of the statements included in the questionnaire were based on the investigator's knowledge of opinions of authorities in the areas of teacher recruitment. This familiarity and understanding was the result of a comprehensive examination of journal articles, research studies, and textbooks. The design of the instrument was also influenced by the procedures followed in the treatment of the data.

The fact that the questionnaire was sent to teacher-coordinators, teacher educators, and state supervisory staff members who were already busy with the duties and obligations of their respective offices made it essential to construct a form that would elicit the necessary information, but would involve only a minimum of the respondent's time.

Part I of the questionnaire was designed to elicit opinions relative to the assumption of roles and responsibilities for recruitment activities.

More specifically, the instrument was used to determine if agreement exists between distributive education teacher-coordinators, teacher educators, and state supervisory staffs as to whether various activities should be assumed by teacher-coordinators, teacher educators, or state supervisors. The fifteen items appearing in Part I of the questionnaire utilized the closed-form offering a choice of the three possible answers.

Fixed alternative responses may make respondents take a stand upon issues about which they have no crystallized opinion or may force them to give answers that do not accurately express their ideas. Precautions against these inherent weaknesses were taken by listing the following directions for the respondents:

There are three possible responses--local teacher-coordinators, teacher educators, and state supervisors. In the event that you believe the responsibility should be shared, place an X in the column which represents the individual that you believe should assume the major portion of the responsibility. If you believe the responsibility should be assumed by personnel not listed, place an X in the column which represents the individual that you believe should initiate the activity of at least become involved in the activity.

Part II of the questionnaire was designed to determine if agreement exists between distributive education teacher-coordinators, teacher educators, and state supervisory staffs as to what should be included in the recruitment program content. This section of the investigating instrument utilized the summated scale often referred to as a Likert-type scale.¹ In a scale of this type, the subjects are asked to respond to a collection of item statements about a condition or situation.

A Likert-type scale is assumed to be an interval scale which makes it possible to sum individual ratings in terms of the favorableness of their attitudes toward a given situation.

A copy of the instrument is included in the appendix of this study.

The Jury

Having completed development of the instrument, a jury of five distributive education teacher-coordinators was selected. Two major objectives were inherent in this action: (1) a trial for the instrument per se, and (2) determination of the most effective manner for its administration. Because it was essential that considerable thought be devoted to these issues and because it was realized that constructive criticism would demand both time and energy expenditures, five distributive education teacher-coordinators in Indiana were asked to serve in the capacity of subjects composing the jury. Furthermore, no raw data for use in the present study were collected from the jury. Rather, emphasis was placed upon integral elements of the instrument: (1) ease of interpretation, (2) lack of ambiguities, (3) relevance of content, (4) freedom from inherent subtleties attaching favor or stigma to a particular response, and (5) conciseness, preciseness, and accuracy of semantics.

Both major objectives of utilizing the jury were accomplished, and necessary revisions were made accordingly.

The Population

Three major groups which are involved in distributive education programs are local teacher-coordinators, teacher educators, and state supervisory staffs. The members of these groups have knowledge and interest concerning the roles and responsibilities for recruitment activities and the content for recruitment programs. Therefore, they were able to express opinions about the roles and responsibilities that should be assumed by the personnel involved and the content that is desirable in an effective recruitment program.

Members of these three groups consisted of personnel from Region V. Region V, as established by the United States Office of Education effective July 1, 1970, consists of six mid-western states including Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. These states contain a wide diversity of distributive education programs at both the high school and post-secondary levels. The selected states also have varying teacher certification requirements which may be typical of those found in other states. In addition, the selected states have varying economic bases which was also a desirable characteristic of the population.

The distributive education teacher educators included in the study were identified by consulting the Directory of Teacher Educators for Distributive Education, 1969.² Thirty-seven of the thirty-eight teacher educators in Region V were asked to respond to the questionnaire. One teacher educator served as director of this study.

State supervisory staffs for distributive education were identified by consulting the Directory of State Supervisors for Distributive Education, 1969.³ State supervisors, assistant supervisors, and supporting staff members with responsibilities for curriculum and Distributive Education Clubs of America comprised the twenty-two members included in the population. Staff members listed with responsibilities for adult distributive education programs were not included.

In each of the six states represented in this study, the State President of the Distributive Education Teachers' Association was asked to identify ten local teacher-coordinators based on the following criteria:

1. The teacher-coordinators should be fully certified to teach distributive education and should be well-informed in the program area of distributive education.
2. The teacher-coordinators may be employed at either the high school or post-secondary levels and should possess at least two years of experience as a distributive education teacher-coordinator.
3. The teacher-coordinators should be individuals that are cooperative, interested in the expansion of distributive education programs, and active in their state's distributive education program.

The rationale for using this method of selecting local teacher-coordinators is indicated in the following statements.

1. It was believed that the population selected would likely be composed of individuals operating outstanding programs in each state. Identifying additional respondents, based on the specified criteria, would have become more difficult.
2. An equal number of respondents from each state alleviated the possibility of the aggregate response being biased because of practices utilized within a state that employed a large number of distributive education teacher-coordinators.

3. Because of the method of selection, it was believed that the response would lend more validity to the study than a random selection of participants which might have included individuals who did not meet the requirements of the specified criteria.
4. The population of local teacher-coordinators represented roughly fifteen percent of the total number of teacher-coordinators found within the six states.

In summary, the sources of data consists of three groups: those opinions, beliefs, or points of view expressed by local distributive education teacher-coordinators, those opinions, beliefs, or points of view expressed by distributive education teacher educators, and those opinions, beliefs, or points of view expressed by distributive education state supervisory staffs.

The Response

The package of materials mailed to each member of the population included: (1) a cover letter which served to introduce the subject of the study to the reader; (2) a revised survey form which contained concise directions and the importance of the reader's response; and (3) a stamped envelope addressed to the investigator.

A copy of the cover letter is included in the appendix of this study.

The package of data collection materials was mailed to each member of the population. Following the initial mailing, 90 completed questionnaires were received. This represented 75.62 percent of the total instruments mailed.

A follow-up mailing was then completed. A follow-up letter accompanied another copy of the instrument and a stamped envelope addressed to the investigator.

A copy of the follow-up letter is included in the appendix of this study.

Following the second mailing, 12 more questionnaires were received. Thus, the percentage return of all distributive education personnel was 85.71 percent. Percentage returns by groups were:

- (1) the total percentage return of the group of local teacher-coordinators was 85 percent;
- (2) the total percentage return of the group of teacher educators was 91.89 percent; and
- (3) the total percentage return of the group of state supervisory staff members was 77.27 percent.

All questionnaires were useable; however, some items on a few of the instruments were improperly marked. Therefore, the improperly marked responses were not included in the data taken from these questionnaires.

Treatment of the Data

As each completed questionnaire was removed from the envelope, a six-digit number was written on the first page. The first digit indicated the state from which the response was received; the second digit was used to indicate the group of which the respondent was a member; and, the third digit was used to identify whether the response was received from the initial mailing or the follow-up mailing. Finally, the last three digits were used to identify the respondent. It should be noted, however, that the procedure of assigning an identification number did not identify any individual by name. All respondents continued to remain anonymous. Each item response to the questionnaire was then coded using the following procedure. Part I of the instrument, which contained items 1 through

15 and was designed to elicit opinions concerning the assumption of roles and responsibilities for recruitment activities, was coded:

- 0 local teacher-coordinators
- 1 teacher educators
- 2 state supervisors

Part II of the instrument, containing items 16 through 29 and designed to determine the agreement of groups concerning the recruitment program content, was coded:

- 4 strongly agree
- 3 agree
- 2 undecided
- 1 disagree
- 0 strongly disagree

The instruments were taken to the Indiana University Research Computing Center where the data were punched into IBM cards. Each card was subsequently verified to identify any errors in the original punching.

Programs were arranged in consultation with a programmer for the Indiana University Research Computing Center. The basic computer programs selected were CZU1V and BMD01V.

The statistical model used to test the hypotheses concerned with the agreement of opinions among the groups with regard to the responsibilities and roles to be assumed for recruitment activities was chi-square. Chi-square is a statistical method for determining the probability of obtaining differences between actual and expected frequencies as a result of sampling fluctuation.⁴

The statistical model used to test the hypotheses concerned with the agreement of opinions among the groups regarding recruitment program content was analysis of variance for one-way design. Analysis of

variance is a statistical technique used to determine if the means of two or more groups differ significantly. This method breaks down the variation into two components--the variation between the groups and the variation within the groups.⁵

With both Part I and Part II of the instrument, the .05 level was used to test the significance of the hypotheses.

FOOTNOTES

¹Likert, R., "A Technique for the Measurement of Attitudes," Archives of Psychology, (No. 140) 22:1-55, June, 1932.

²Office of Education, Directory of Teacher Educators for Distributive Education, United States Department of Health, Education, and Welfare, Washington, D.C., 1969.

³Office of Education, Directory of State Supervisors for Distributive Education, United States Department of Health, Education, and Welfare, Washington, D.C., 1969.

⁴Eaton, Merrill T., Methods of Educational Research, Indiana University, Bloomington, 1963, p. 56.

⁵Ibid., p. 57.

CHAPTER IV

PRESENTATION AND ANALYSIS OF FINDINGS

A presentation of the data and the information relative to the testing of each of the twenty-nine null hypotheses is contained in this chapter. Two major topical divisions are used.

Roles and Responsibilities

The first fifteen items on the questionnaire were concerned with the roles and responsibilities to be assumed by the various groups studied. Fifteen hypotheses to be tested were generated from these items.

The three-by-three contingency table has four degrees of freedom and a chi-square value of 9.488 was needed to have a significant difference between the three groups.

$$\chi^2_{0.05} = 9.488$$

$$P(\chi^2 < 9.488) = 0.95$$

TABLE I

TOTAL RESPONSES, FREQUENCIES AND PERCENTAGES OF RATERS' RESPONSES CONCERNING THE ASSUMPTION OF RESPONSIBILITY FOR RECRUITMENT ROLES AND ACTIVITIES

Statement	Raters	Responses	
The primary responsibility for . . .	Teacher Coordinators	Teacher Educators	State Supervisors

TABLE 1 (Continued)

Statement	Raters	Responses		
		Teacher Coordinators	Teacher Educators	State Supervisors
(1) acquainting high school and post-secondary students to the distributive education program through presentations at group meetings should be assumed by:	TC	26 (52.0%)	20 (40.0%)	4 (8.0%)
	TE	14 (41.2%)	19 (55.9%)	1 (2.9%)
	SS	8 (47.1%)	9 (52.9%)	0 (0.0%)
	Chi-square 3.76			
(2) for familiarizing high school counselors with the distributive education teacher training program should be assumed by:	TC	36 (72.0%)	13 (26.0%)	1 (2.0%)
	TE	21 (61.8%)	11 (32.4%)	2 (5.9%)
	SS	15 (71.3%)	1 (5.9%)	1 (5.9%)
Chi-square 5.35				
(3) making annual studies of supply and demand of distributive education teacher-coordinators should be assumed by:	TC	0 (0.0%)	15 (30.0%)	35 (70.0%)
	TE	0 (0.0%)	3 (8.8%)	31 (91.2%)
	SS	0 (0.0%)	3 (17.6%)	14 (82.4%)
Chi-square 5.63				
(4) acquainting high school and post-secondary students with the teaching profession should be assumed by:	TC	30 (61.2%)	14 (28.6%)	5 (10.2%)
	TE	16 (47.1%)	13 (38.2%)	5 (14.7%)
	SS	9 (52.9%)	7 (41.2%)	1 (5.9%)
Chi-square 2.47				

TABLE 1 (Continued)

Statement	Raters	Responses		
		Teacher Coordinators	Teacher Educators	State Supervisors
(5) providing prospective teacher-coordinator candidates with pamphlets and booklets that may induce these people to become teacher-coordinators should be assumed by:	TC	8 (16.0%)	33 (66.0%)	9 (18.0%)
	TE	4 (11.8%)	24 (70.6%)	6 (17.6%)
	SS	1 (5.9%)	13 (76.5%)	3 (17.6%)
	Chi-square 1.27			
(6) sending personalized letters to prospective distributive education teacher-coordinator candidates should be assumed by:	TC	1 (2.0%)	33 (66.0%)	16 (32.0%)
	TE	0 (0.0%)	30 (88.2%)	4 (11.8%)
	SS	0 (0.0%)	12 (70.6%)	5 (29.4%)
	Chi-square 5.93			
(7) initially interviewing prospective distributive education teacher-coordinator candidates should be assumed by:	TC	8 (16.3%)	38 (77.6%)	3 (6.1%)
	TE	3 (8.8%)	28 (82.4%)	3 (8.8%)
	SS	3 (17.6%)	12 (70.6%)	2 (11.8%)
	Chi-square 1.75			

TABLE 1 (Continued)

Statement	Raters	Responses		
		Teacher Coordinators	Teacher Educators	State Supervisors
(8) developing display and bulletin board materials designed to motivate high school and post-secondary students to enroll in distributive education teacher training programs should be assumed by:	TC	31 (63.3%)	12 (24.5%)	6 (12.2%)
	TE	21 (61.8%)	8 (23.5%)	5 (14.7%)
	SS	9 (52.9%)	7 (41.2%)	1 (5.9%)
Chi-square 2.50				
(9) encouraging college graduates not qualified as distributive education teacher-coordinators to take the necessary additional courses needed for certification should be assumed by:	TC	2 (3.9%)	38 (74.5%)	11 (21.6%)
	TE	1 (2.9%)	24 (70.6%)	9 (26.5%)
	SS	1 (5.9%)	14 (82.4%)	2 (11.8%)
Chi-square 1.60				
(10) arranging "career day" programs in high schools designed to provide information and answer questions which high school students may have concerning distributive education teacher training programs should be assumed by:	TC	35 (70.0%)	11 (22.0%)	4 (8.0%)
	TE	28 (82.4%)	5 (14.7%)	1 (2.9%)
	SS	16 (94.1%)	1 (5.9%)	0 (0.0%)
Chi-square 5.21				

TABLE 1 (Continued)

Statement	Raters	Responses		
		Teacher Coordinators	Teacher Educators	State Supervisors
(11) initiating scholarships and other financial awards for the training of prospective distributive education teacher-coordinators should be assumed by:	TC	2 (4.3%)	17 (36.2%)	28 (59.6%)
	TE	1 (2.9%)	11 (32.4%)	22 (64.7%)
	SS	0 (0.0%)	9 (52.9%)	8 (47.1%)
	Chi-square 2.67			
(12) publicizing the distributive education teacher training programs and providing information about opportunities for teacher-coordinators through the mass media should be assumed by:	TC	0 (0.0%)	24 (48.0%)	26 (52.0%)
	TE	2 (5.9%)	16 (47.1%)	16 (47.1%)
	SS	0 (0.0%)	8 (47.1%)	9 (52.9%)
	Chi-square 4.07			
(13) actively seeking to recruit prospective distributive education teacher-coordinators from distributive and marketing occupations should be assumed by:	TC	14 (28.6%)	11 (22.4%)	24 (49.0%)
	TE	6 (17.6%)	13 (38.2%)	15 (44.1%)
	SS	7 (41.2%)	3 (17.6%)	7 (41.2%)
	Chi-square 5.13			
(14) arranging orientation trips to teacher training institutions for high school and post-secondary students interested in distributive education teacher training should be assumed by:	TC	27 (52.9%)	22 (43.1%)	2 (3.9%)
	TE	21 (61.8%)	12 (35.3%)	1 (2.9%)
	SS	11 (64.7%)	6 (35.3%)	0 (0.0%)
	Chi-square 1.51			

TABLE 1 (Continued)

Statement	Raters	Responses		
		Teacher Coordinators	Teacher Educators	State Supervisors
(15) encouraging local newspapers to run editorials promoting the distributive education teacher training programs should be assumed by:	TC	25 (50.0%)	12 (24.0%)	13 (26.0%)
	TE	18 (52.9%)	11 (32.4%)	5 (14.7%)
	SS	10 (58.8%)	5 (29.4%)	2 (11.8%)
		Chi-square 2.69		

*TC Teacher-Coordinaors
 *TE Teacher Educators
 *SS State Supervisory Staff

No statistical significant difference at the .05 level was noted among the opinions of local teacher-coordinators, teacher educators, and state supervisory staffs concerning the assumption of roles and responsibilities for recruitment activities. Therefore, the groups were judged to be statistically homogenous.

Recruitment Program Content

For this investigation, data were obtained from the responses of the final 14 items appearing on the Likert-type questionnaire.

To facilitate analysis of the data, measures of central tendency were compared for each group in the population studied. The arithmetic mean score represented the point on the scale around which the scores balanced. In order to determine the point, the sum of individual scores was divided by the number of individuals.

The mean distribution, shown in Table 2, was computed for the three groups combined and also for each group studied.

TABLE 2

MEAN DISTRIBUTION OF RATERS' RESPONSES INDICATING THE DEGREE OF AGREEMENT OR DISAGREEMENT CONCERNING THE INCLUSION OF VARIOUS RECRUITMENT PROGRAM CONTENT INFORMATION

Questionnaire Items	Combined groups	Teacher-coordinators	Teacher educators	State supervisory staff members
16. Admission requirements	3.04	3.12	3.15	2.59
17. Certification requirements	3.50	3.41	3.62	3.53
18. Collegiate life	2.87	3.00	2.91	2.41
19. Occupational information	3.32	3.33	3.41	3.12
20. Advancement opportunities	3.09	3.00	3.26	3.00
21. Other opportunities	2.75	2.76	2.79	2.65
22. Various programs	2.73	2.76	2.82	2.41
23. History of program	1.39	1.69	1.03	1.24
24. Personal attributes	3.05	3.10	3.12	2.76
25. Graduate requirements	2.37	2.57	2.44	1.65
26. Future trends	3.16	3.14	3.26	3.00
27. Satisfactions	2.89	2.82	2.97	2.94
28. Problems	1.79	2.10	1.68	1.12
29. Fringe benefits	2.26	2.41	2.24	1.88

Value assigned to scale: 4.00 = Strongly agree
 3.00 = Agree
 2.00 = Undecided
 1.00 = Disagree
 0.00 = Strongly disagree

Analysis of variance procedures are designed to test for differences among several groups simultaneously. Each of the interaction sums of squares was calculated by the use of a computer allowing one degree of freedom for each interaction being considered. The mean square was obtained by multiplying the between treatment sum of squares by the degree of freedom. The values of F were found by dividing each mean square by the within treatment mean square. Thus, each F value was based on 2 and 99 degrees of freedom. A standard table of F values showed that an F ratio of 3.098 was needed for significance at the .05 level using the appropriate degrees of freedom.

A significant difference at the .05 level was recorded among the opinions of local teacher-coordinators, teacher educators, and state supervisory staffs concerning three of the items dealing with recruitment program content.

Sixty-four percent of all raters indicated disagreement concerning the inclusion of the history of distributive education and the content of Federal Acts pertaining to distributive education in the recruitment program content. However, the computations for analysis of variance produced a significant ratio. The t-test was employed to identify significant differences among rater classification categories. Results from the test revealed that the significant difference occurred between the teacher-coordinator group and the teacher educator group. An examination of the mean scores for the two groups revealed that the teacher-coordinator group was undecided and the teacher educator group expressed disagreement.

Fifty-five percent of all raters indicated agreement concerning the inclusion of information about graduate requirements in the recruitment program content. Nineteen percent expressed indecision and the remaining 26 percent reported disagreement. Insomuch as the computations for analysis of variance produced a significant F ratio, the t-test was employed to identify significant differences among rater classification categories. Results from the test revealed that a significant difference occurred between each group studied. State supervisory staffs expressed mild disagreement with a mean score of 1.65 recorded, while members of the teacher-educator group produced a mean score of 2.44 indicating indecision. Teacher-coordinators reported mild agreement with a mean score of 2.57.

Forty-seven percent of the combined three groups expressed disagreement concerning the inclusion of a description of the difficulties and limitations encountered in the teaching profession in the recruitment program content. Thirty-three percent of all respondents felt that the description should be included, and 20 percent were undecided. A significant F ratio was computed as the result of the analysis of variance statistical treatment. The t-test was used to identify significant differences among rater classification categories. The results of this test showed that a significant difference occurred between the responses of teacher-coordinators and state supervisory staffs, and also between teacher educators and state supervisory staffs. An examination of the mean scores recorded by each group showed that teacher-coordinators and teacher educators indicated indecision, while state supervisory staffs

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Within the limits of the investigation, the following conclusions appear to be justified.

1. In general, local teacher-coordinators, teacher educators, and state supervisory staffs were in agreement concerning the assumption of roles and responsibilities.

2. According to the majority of the three groups, teacher-coordinators should assume the following responsibilities: (a) familiarizing high school counselors with the distributive education teacher training program; (b) acquainting high school and post-secondary students with the teaching profession; (c) developing display and bulletin board materials designed to motivate high school and post-secondary students to enroll in distributive education teacher training programs; (d) arranging "career day" programs in high schools designed to provide information and answer questions which high school students have concerning distributive education teacher training programs; (e) arranging orientation trips to teacher training institutions for high school and post-secondary students interested in distributive education teacher training; and (f) encouraging local newspapers to run editorials promoting the distributive education teacher training programs.

3. According to the majority of the three groups, teacher educators should assume the following responsibilities: (a) providing prospective teacher-coordinators with pamphlets and booklets that may induce these

people to become teacher-coordinators; (b) sending personalized letters to prospective distributive education teacher-coordinator candidates; (c) initially interviewing prospective distributive education teacher-coordinator candidates; and (d) encouraging college graduates not qualified as distributive education teacher-coordinators to take the necessary additional courses needed for certification.

4. According to the majority of the three groups, state supervisors should assume the following responsibilities: (a) making annual studies of supply and demand of distributive education teacher-coordinators; (b) Publicizing the distributive education teacher training programs and providing information about opportunities for teacher-coordinators through the mass media; and (c) actively seeking to recruit prospective distributive education teacher-coordinators from distributive and marketing occupations.

5. In general, local teacher-coordinators, teacher educators, and state supervisory staffs were in agreement concerning the inclusion of information in the recruitment program content.

6. According to the majority of the three groups, each of the following areas of information should be included in the recruitment program content: (a) college admission requirements; (b) teacher-coordinator certification requirements; (c) information about collegiate life; (d) occupational information; (e) advancement opportunities; (f) opportunities outside of education requiring a similar training background; (g) information concerning the various types of distributive education programs and methods of organization; (h) personal attributes desirable; (i) future trends of distributive education; and (j) satisfactions of teaching.

Recommendations

Consistent with the findings of the study, the following recommendations are offered for consideration.

1. Each state organization of distributive education personnel should make efforts to establish a cooperative recruitment program. Assigned tasks for distributive education teacher education departments, distributive education state supervisory staffs, and distributive education teacher-coordinators should be an integral part of the recruitment program.
2. The distributive education teacher-coordinator should be made aware of his obligation in reference to recruitment.
3. Effective channels of communication between distributive education state supervisory staffs, teacher training institutions, and high schools, as well as junior colleges, should become a priority objective in carrying out recruitment responsibilities and determining recruitment program content.
4. Packets of recruitment materials should be assembled and given to prospective candidates for distributive education teacher training.
5. On-campus "open-houses" should be held periodically and teachers in the field should be invited to bring interested students.
6. A study of recruitment program activities and content based on students' opinions should be completed. Such a study would ascertain what information prospective candidates feel should be included in the recruitment program content.
7. A study of the effectiveness of various recruitment activities and recruitment program content should be completed.

8. A study designed to determine reasons why distributive education personnel may not be assuming roles and responsibilities for recruitment activities should be completed.

APPENDIX A

INTRODUCTORY LETTER TO TEACHER-COORDINATORS, TEACHER
EDUCATORS AND STATE SUPERVISORY PERSONNEL

February 19, 1970

A nationally recognized concern in distributive education is the continued shortage of teacher-coordinators. An aspect of the problem is the need to identify personnel that should assume the various recruitment responsibilities and to determine what should be included in the recruitment program content.

A well-informed group of distributive education personnel from Region V has been selected to express their opinions. The word selected is to be emphasized since it indicates the importance of a response from you. The design of the study necessitates a small select group of respondents and, therefore, it is necessary that we receive a very high percentage of returns.

The procedure for determining the personnel that should assume the various roles and responsibilities for recruitment activities, and the content for an effective recruitment program, will begin with you registering your opinion to the enclosed list of statements. The list of items has been structured so as to provide clarity and ease of response. A stamped, self-addressed envelope is also enclosed. The receipt of your completed questionnaire by February 28, 1970, will be appreciated.

Yours truly,

Ralph D. Wray

Enclosure

APPENDIX B

FOLLOW-UP LETTER TO TEACHER COORDINATORS, TEACHER
EDUCATORS AND STATE SUPERVISORY PERSONNEL

March 5, 1970

Two weeks ago we mailed you a questionnaire form relative to the roles and responsibilities for recruiting distributive education teacher-coordinators and the nature of the recruitment program content. Your response has not yet been received.

I realize this is a particularly busy time of the year for distributive education personnel; nevertheless, we need your help since you are a member of the very select group we originally chose to express opinions. Because of the size of the group, each completed form is of utmost importance.

In case you may have misplaced the original form, a second copy is enclosed for your convenience. Will you please complete and return it by March 15, 1970, if it is at all possible?

Your cooperation will certainly be appreciated.

Yours truly,

Ralph D. Wray

Enclosure

APPENDIX C
THE QUESTIONNAIRE

GENERAL INFORMATION FOR THE SURVEY FORM

DIRECTIONS

THE
PROBLEM

The fact that additional distributive education teacher-coordinators are needed in virtually every state is widely accepted. This survey form is designed to elicit opinions that should be useful in determining guidelines for establishing roles and responsibilities for distributive education personnel to assume in recruitment activities. Guidelines which indicate what should be included in the recruitment program content are essential for a successful distributive education recruiting program.

THE
IMPORTANCE
OF
YOUR
RESPONSE

You are one of the selected list of informed persons on the subject of distributive education. As such, you provide a source of authoritative information for establishing the guidelines. It is important, therefore, that each person on the list respond.

Your procedure for registering your opinion to questions 1 thru 15 is as follows:

1. Each statement is to be answered by placing an X in the column which best represents your opinion of the statement. Only one answer should be recorded in response to each item.
2. There are three possible responses--local teacher-coordinators, teacher educators, and state supervisors. In the event that you believe the responsibility should be shared, place an X in the column which represents the individual that you believe should assume the major portion of the responsibility. If you believe the responsibility should be assumed by personnel not listed, place an X in the column which represents the individual that you believe should initiate the activity or at least become involved in the activity.

HOW
TO
INDICATE
YOUR
RESPONSE

Your procedure for registering your opinion to questions 16 thru 29 is as follows:

1. Each statement or question is to be answered by placing an X in the column which best represents your opinion of the statement.
2. There are five columns with five possible responses--strongly agree (SA), agree (A), undecided (U), disagree (D), and strongly disagree (SD).

Keep in mind that it is your opinion that is sought; there are no right and wrong responses.

Respond according to your present relationship with the program (e.g. teacher educator, state supervisor, local teacher-coordinator).

11. The primary responsibility for initiating scholarships and other financial awards for the training of prospective distributive education teacher-coordinators should be assumed by:
12. The primary responsibility for publicizing the distributive education teacher training programs and providing information about opportunities for teacher-coordinators through the mass media should be assumed by:
13. The primary responsibility for actively seeking to recruit prospective distributive education teacher-coordinators from distribution and marketing occupations (i.e. retail stores, wholesale firms, etc.) should be assumed by:
14. The primary responsibility for arranging orientation trips to teacher training institutions for high school and post-secondary students interested in distributive education teacher training should be assumed by:
15. The primary responsibility for encouraging local newspapers to run editorials promoting the distributive education teacher training programs should be assumed by:

	Local teacher-coordinators	Teacher educators	State supervisors

Part II Recruitment Program Content

16. College admission requirements should be included in the recruitment program content.
17. Recruitment program content should include information about college training and qualifications necessary for certification (i.e. program of studies, work experience requirements, and the length of time required for certification).
18. The recruitment program content should include information concerning collegiate life (i.e. costs, housing, opportunities for social interaction, etc.).
19. Occupational information should be included in the recruitment program content (i.e. number of job openings, nature of duties, salary, and conditions of employment).

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	SA	A	U	D	SD
	SA	A	U	D	SD
	SA	A	U	D	SD
	SA	A	U	D	SD

(Continued on next page)

BIBLIOGRAPHY

- Anderson, William J., "Teacher Recruitment Programs," School Shop, vol. 26, no. 4, December, 1966, pp. 34-35.
- Best, John W., Research in Education, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1959.
- Caress, C. W., "Pirating and Professionalism," American School Board Journal, vol. 155, no. 9, March, 1968, pp. 12-13.
- Crank, Doris H., and Crank, Floyd L., editors, New Perspectives in Education for Business, National Business Education Association, Washington, D.C., 1963.
- Dixon, W. J., editor, BMD Biomedical Computer Programs, University of California Press, Berkeley, 1968.
- Eaton, Merrill T., Methods of Educational Research, Indiana University, Bloomington, 1963.
- Ferguson, Edward T., "More Teacher Recruitment--A Must for D.E.," American Vocational Journal, vol. 39, no. 9, December, 1964, pp. 24-25.
- Ferguson, George A., Statistical Analysis in Psychology and Education, McGraw-Hill Book Company, Inc., New York, 1966.
- Good, C. V., and Scates, D. C., Methods of Research, Appleton-Century-Crofts, Inc., New York, 1954.
- Hensel, James W., The Demand for and Selected Sources of Teachers in Vocational and Technical Education, The Ohio State University Center for Vocational and Technical Education, Columbus, 1967.
- Jahrman, Quain Kenneth, Recruiting Prospective Teachers of Industrial Education, Unpublished doctoral thesis, University of Arkansas, Fayetteville, 1964.
- Kilzer, L. R., "Some Devices Used to Recruit Teachers," Phi Delta Kappan, vol. 38, no. 7, April, 1957, pp. 275-276.
- Likert, R., "A Technique for the Measurement of Attitudes," Archives of Psychology, (No. 140) 22:1-55, June, 1932.
- Mills, Chester O., Sources and Recruitment of Distributive Education Teachers, Council for Distributive Teacher Education, Professional Bulletin, Series Number 9, 1967.

- National Advisory Council on Vocational Education, Vocational Education: The Bridge Between Man and His Work, United States Government Printing Office, Washington, D.C., 1968.
- Office of Education, Directory of State Supervisors for Distributive Education, United States Department of Health, Education, and Welfare, Washington, D.C., 1969.
- Office of Education, Directory of Teacher Educators for Distributive Education, United States Department of Health, Education, and Welfare, Washington, D.C., 1969.
- Page, Jerome M., "Organization for Teacher Recruitment," Journal of Teacher Education, vol. 10, no. 2, June, 1959, p. 136.
- President's Panel of Consultants on Vocational Education, Education for A Changing World of Work, United States Department of Health, Education, and Welfare, Washington, D.C., 1964.
- Richey, Robert, Planning for Teaching, McGraw-Hill Book Company, Inc., New York, 1963.
- Ressler, Ralph, "Recruitment of Students for Industrial Teacher Preparation," Journal of Industrial Teacher Education, vol. 4, no. 2, December, 1966, pp. 21-32.
- Selltiz, Claire, and others, Research Methods in Social Relations, Holt, Rinehart and Winston, New York, 1967.
- Simandle, Sidney, A Cooperative Effort to Improve Admission and Retention of Teacher Candidates in A State, Unpublished doctoral thesis, University of Kentucky, Lexington, 1963.
- United States Office of Education, Projections of Educational Statistics to 1976-77, United States Government Printing Office, Washington, D.C., 1968.
- Van Dalen, Deobold B., Understanding Educational Research, McGraw-Hill Book Company, Inc., 1962.
- "Vo-Ed Teacher Shortage Demands Prompt Attention," American Vocational Journal, vol. 44, no. 9, December, 1963, p. 70.
- Walters, Charles Dorset, A Study of Certain Aspects of Recruitment, Admissions and Retention of Students in Virginia Institutions Offering Undergraduate Programs in Teacher Education, Unpublished doctoral thesis, George Washington University, Washington, D.C., 1968.

White, Thomas R., A Study of the Values and Attitudes of Distributive Education Teacher-Coordinator as Compared to Two Groups of Potential Teacher-Coordinator, Unpublished doctoral thesis, The Ohio State University, Columbus, 1968.

Willis, Benjamin C., Awareness and Action for Programs in Distributive Education, American Vocational Association, Washington, D.C., 1962.