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A Study Of Selling Competencies And Their Priorities For Inclusion In The Distributive Education Curriculum.

Teddy B. Palmore

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This dissertation, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of The University of New Mexico in partial fulfillment of the requirements for the degree of Doctor of Philosophy

A STUDY OF SELLING COMPETENCIES
AND THEIR PRIORITIES FOR INCLUSION IN THE
DISTRIBUTIVE EDUCATION CURRICULUM

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1972

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DISTRIBUTIVE EDUCATION CURRICULUM

By

Teddy B. Palmore

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Philosophy in Curriculum and Instruction
in the Graduate School of
The University of New Mexico
Albuquerque, New Mexico
May, 1972

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ABSTRACT OF DISSERTATION

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ABSTRACT

Statement of Problem. The purpose of this study was twofold: (1) to analyze those competencies needed for selling which should be included in a distributive education curriculum and (2) to ascertain what relationships may exist between the perceptions of the student-learners, employers, and distributive education teacher-coordinators in regard to the instructional content which is believed necessary to be taught in distributive education programs.

Procedure. Q-sort decks containing 75 competencies of Knowledges and Understandings, Skills, and Attitudes which are needed in sales-related occupations were sorted by distributive education teacher-coordinators, student-learners, and employers into the following categories: (1) Quite Important, (2) Somewhat Important, (3) Neutral, (4) Somewhat Unimportant, and (5) Quite Unimportant. The scores obtained from the participants' reactions were statistically analyzed using Spearman's rank order correlation coefficient to determine the agreement between paired groups and the t test was used to ascertain the significance of the correlations. As a measure of over-all agreement among the three groups of respondents, Kendall's coefficient of concordance was computed and the chi-square formula was used to test for significance.

Results. The data collected for this investigation enabled the researcher to rank in descending order the

competencies within the categories of Knowledges and Understandings, Skills, and Attitudes. When disagreement existed among the three groups concerning the importance of competencies, the preference of the employers was used in determining the new priority so that the recommended curriculum content might be correlated with the needs of the jobs.

The relationships among the perceptions of the respondents were statistically significant at the .05 level which was established as acceptable for this study. Kendall's coefficient of concordance for Knowledges and Understandings, Skills, and Attitudes were .73, .69, and .70, respectively, indicating a moderately strong agreement among the respondents. When the Spearman's rank order coefficients were obtained for paired groups, there was stronger agreement between the student-learners and employers and student-learners and distributive education teacher-coordinators than between the teacher-coordinators and the employers on each of the three categories of competencies.

The Knowledges and Understandings which were ranked highest were those which pertained to: (1) making change, (2) friendly service, (3) product information, (4) store procedures, and (5) operating a cash register. Skill competencies which were ranked highest included: (1) courtesy to customers, (2) determining correct change and following company sales procedures, (3) service to customers according

to management desires, (4) use of tact in dealing with customers, and (5) coordinating merchandise in related sales. The Attitude competencies which received the highest rankings were the following: (1) giving the best service to customers, (2) keeping promises made to customers, (3) possessing a high interest in the merchandise or service being sold, (4) being enthusiastic toward merchandise when making a sale, and (5) overcoming objections.

Conclusions and Recommendations. A discrepancy existed between the perceptions of the distributive education teacher-coordinators and the employers as to the priorities of competencies needed in selling. All of the competencies in the research instrument should be included in the distributive education program; however, since some of the competencies are more important than others, each should be introduced in the curriculum according to its position of priority in the new rank order. It is recommended that each of the 75 competencies be included, according to priority, in one of the following distributive education instructional units which pertain to selling: (1) The Cash Register, (2) Customer Relations, (3) Salesmanship Techniques, (4) Store Management Procedures, and (5) Merchandise Display Fundamentals. The competencies which are recommended for each unit have been listed in priorities one, two, and three as to the degree of importance for inclusion in the distributive education curriculum.

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CHAPTER I

THE PROBLEM AND ORGANIZATION OF THE STUDY

I. BACKGROUND OF THE PROBLEM

Federal aid to education in the United States began in 1862 when Congress passed the first Morrill Act which appropriated government land to each state for the support of colleges of agriculture and mechanical arts. Although this Act did not exclude the arts and sciences, it specified instruction for developing leaders in agriculture, mechanical arts and military science.¹ The first example of continued Federal aid to education was the Morrill Act of 1890 which provided for an annual appropriation to each land-grant college.²

The Hatch Act of 1887 and the Adams Act of 1906 allocated aid to agricultural experiment stations and in 1914, the Smith-Lever Act expanded the support of extension programs.³ The latter Act rounded out the government's participation in vocational education at the college level and focused

¹Charles A. Prosser and Thomas H. Quigley, Vocational Education In A Democracy (Chicago: American Technical Society, 1963), p. 524.

²Carter V. Good, ed., Dictionary of Education (New York: McGraw-Hill Book Company, Inc., 1959), p. 353.

³Marvin Lazerson, "Vocational Education: History," The Encyclopedia of Education, Vol. 9 (New York: The Macmillan Company and the Free Press, 1971), p. 477.

attention more clearly upon the need for similar education at the secondary level.⁴

In 1914, the National Society for the Promotion of Industrial Education requested Congress to create a nine-member Commission on National Aid to Vocational Education and to be responsible for making recommendations for improving vocational training. The request, in the form of a resolution, was passed by Congress and signed by the President. The newly formed commission contained four Congressional members who had previously spoken for Federal aid to vocational education, and the remaining five appointees were all members of the National Society for the Promotion of Industrial Education with Dr. Charles A. Prosser becoming the commission's chairman. The commission made its report to Congress in less than one year and legislation was proposed in 1915 by Senator Hoke Smith and Representative Dudley M. Hughes of Georgia and was approved as the Smith-Hughes Act in February, 1917.⁵ According to Good, this Act established:

. . . the principles of Federal financial aid and cooperation with the states in promoting public

⁴Mayor D. Mobley and Melvin L. Barlow, "Impact of Federal Legislation and Policies Upon Vocational Education," Vocational Education, Sixty-Fourth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 1965, p. 186.

⁵Ibid., p. 478.

vocational education of less than college grade in agriculture, trades and industries, and home economics for persons 14 years of age or over.⁶

The Smith-Hughes legislation authorized the appropriation of \$1,666,000 for reimbursement to the states for one-half of the salaries paid to teachers, supervisors, and teacher-educators in home economics, trade, and industrial education. The amounts were gradually increased each year until a total of \$9,167,000 was granted for these purposes in 1926.⁷

The George-Reed Act (1929), followed by the George-Ellzey Act (1934), and George-Deen Act (1936), increased authorizations for vocational education in agriculture and home economics and, by 1936, expanded to include trades and industry, distributive education, and teacher training.⁸

Roberts noted that the George-Deen Act authorized the appropriation of \$2.2 million for distributive education and teacher training to be allotted to the states and distributed according to population. According to Roberts,

A sliding scale of matching Federal funds was provided with half of the Federal appropriations matched for the first five years and an increase in amounts matched by 10 per cent per year for the next five years until all Federal funds were matched for the fiscal year beginning

⁶Good, op. cit., p. 505.

⁷Gordon I. Swanson, "The World of Work," Education in the States: Nationwide Development Since 1900 (Washington: National Education Association, 1971), p. 296.

⁸Mobley and Barlow, op. cit., p. 187.

July 1, 1946, and thereafter. Reimbursement for distributive education was limited to part-time and evening classes.⁹

The George-Barden Act of 1946 authorized increased appropriations and provided greater flexibility to the states in the use of vocational funds. The \$20.5 million in vocational funds granted to the states at this time was used for teacher training, vocational guidance, salary and travel expense of state directors of vocational education and supervisors of vocational youth organizations, and for the purchase or rent of needed vocational equipment.¹⁰

The National Defense Education Act of 1958 contained legislation which related to vocational education and was implemented under Title VIII of NDEA and Title III of the George-Barden Act. The Area Redevelopment Act of 1961 authorized Federal funds for training and retraining workers in the redevelopment areas identified by the Secretary of Commerce, and by 1965 the combined expenditures rose to \$19.5 million in the above-mentioned categories.¹¹

⁹Roy W. Roberts, Vocational and Practical Arts Education (second edition: New York: Harper and Row, 1965), p. 135.

¹⁰Ibid., p. 136.

¹¹U. S. Department of Health, Education, and Welfare, Office of Education, Education for A Changing World of Work, Report of the Panel of Consultants of Vocational Education Prepared at the Request of the President of the United States (Washington: Government Printing Office, 1963), p. 25.

On February 20, 1961, President John F. Kennedy made the following statement in his message to Congress on American education:

The National Vocational Educational Acts, first enacted by the Congress in 1917 and subsequently amended, have provided a program of training for industry, agriculture, and other occupational areas. The basic purpose of our vocational education effort is sound and sufficiently broad to provide a basis for meeting future needs. However, the technological changes which have occurred in all occupations call for a review and re-evaluation of these acts, with a view toward their modernization.

To that end, I am requesting the Secretary of Health, Education, and Welfare to convene an advisory body drawn from the educational profession, labor, industry, and agriculture, as well as the lay public, together with representatives from the Departments of Agriculture and Labor, to be charged with the responsibility of reviewing and evaluating the current National Vocational Education Acts, and making recommendations for improving and redirecting the program.¹²

As a result of the President's action, a Panel of Consultants on Vocational Education was appointed on October 5, 1961, to seek the advice, suggestions, and recommendations of American citizens. Their report, Education for A Changing World, was completed and forwarded to the Secretary of Health, Education, and Welfare on November 27, 1962.¹³

The Manpower Development and Training Act of 1962 authorized expenditures of \$419 million during the following

¹²Ibid., p. v.

¹³Ibid.

three years for training and skill development programs in economically distressed areas of the United States.¹⁴ Other legislation passed during the same year included the Trade Extension Act, which authorized the training of displaced workers, and the Public Welfare Amendments Act, which authorized training of welfare recipients under the supervision of welfare agencies and state vocational organizations.

Education for A Changing World became the basis for legislation known as the Vocational Act of 1963. Mobley and Barlow observed that:

The report of the Panel of Consultants on Vocational Education bears the same relationship to the Vocational Education Act of 1963 that the report of the Commission on National Aid to Vocational Education does to the Vocational Education Act of 1917. Each of these legislative milestones in vocational education (the Acts of 1917 and 1963) was preceded by intensive study of certain needs of the society. In 1917, the task was to construct a program for vocational education which would provide an educated labor force. In 1963, the task was to review the past achievements and to modernize and redirect the program in terms of the extraordinary developments in technology and in terms of a variety of social and economic needs.¹⁵

The 1963 Vocational Act provided for services to people without predetermining occupational groupings, such as agriculture and trade and industry education, which had been included in previous vocational legislation. With the

¹⁴Ibid., pp. 26-28.

¹⁵Mobley and Barlow, op. cit., pp. 198-199.

exception of occupations designated as professional or requiring a baccalaureate degree, Congress wanted to provide vocational education for all persons of all occupations, but until the passage of this legislation, vocational education had never been charged with such broad responsibility.

According to the U. S. Department of Health, Education, and Welfare, the 1963 Vocational Act provided for the use of Federal funds for the following six purposes:

(1) Vocational education for persons attending high school; (2) vocational education for persons who have completed or left high school and who are available for full-time study in preparation for entering the labor market; (3) vocational education for persons who have already entered the labor market and who need training or retraining to achieve stability or advancement in employment; (4) vocational education for persons who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the regular vocational education program; (5) construction of area vocational education school facilities; and (6) ancillary services and activities to assure quality in all vocational education programs such as teacher training and supervision, program evaluation, special demonstration and experimental programs, development of instructional materials, State administration and leadership, and periodic evaluation of State and local vocational education programs and services in light of information regarding projected manpower needs and job opportunities.¹⁶

Although the Vocational Act of 1963 did not repeal the Smith-Hughes or the George-Barden Act, it did permit state boards of vocational education, with the approval of

¹⁶U. S. Department of Health, Education, and Welfare, Office of Education, The Bridge Between Man and His Work (Washington: Government Printing Office, 1968), p. 9.

the U. S. Commissioner of Education, to transfer funds from one category to another to give more flexibility in the use of Federal funds. The new Act brought many changes to vocational education such as the following provisions: an advisory committee to recommend courses of action to the Commissioner of Education; a council on vocational education to review programs and recommend improvements; the use of funds for vocational research; and the use of George-Barden distributive education funds for pre-employment training in sales and marketing in which students were no longer required to be employed part-time in order to enroll in distributive education or other cooperative programs. Appropriations authorized under the Vocational Education Act of 1963 and the fiscal years which followed included \$60 million, 1964; \$118.5 million, 1965; \$177.5 million, 1966; and \$225 million for 1967 and each year thereafter.¹⁷

In 1968 Congress amended the Vocational Education Act of 1963 and greatly expanded Federal support of vocational education by increasing the level of appropriations to \$355 million in fiscal year 1969, \$565 million in 1970, \$675 million in 1971 and 1972, and \$565 million for fiscal year 1973 and each succeeding fiscal year. The programs

¹⁷U. S. Congress, Vocational Education Act of 1963, Public Law 88-210, H.R. 4955, 88th. Cong., 1st Session (Washington: Government Printing Office, 1963), p. 1-18.

supported by the funds are: residential education programs for youth 15 to 21 years of age; Federal funds for use in constructing residential vocational schools and dormitories; programs of consumer and homemaking education; programs for cooperative vocational education through work-study arrangements; and programs to disseminate vocational education curriculum materials.¹⁸

It has been noted that since 1862, Federal legislation has been enacted for the purpose of promoting the national welfare of the United States through the training of unskilled and semi-skilled workers. According to Mobley and Barlow, as a result of such legislation, standards in vocational education have been developed; administration and supervision of programs in the states have both been improved; attention has been given to vocational teacher education; evaluation of programs has been required to insure acceptable quality; and a national consciousness of vocational education has been developed.¹⁹

Because of the matching funds aspect of the legislation, a financial partnership was developed among Federal, state and local governments to promote enrollments in vocational education. As an example, a total of 5,941,000

¹⁸Swanson, op. cit., p. 298.

¹⁹Mobley and Barlow, op. cit., pp. 193-196.

students were enrolled in vocational distributive education during the period of 1938 to 1962. It is estimated that the sources of funds for implementing these distributive education programs were as follows: Federal, 28 per cent; state, 35 per cent; and local, 37 per cent.²⁰ The availability of Federal funds stimulated and encouraged more participation by states and local governments.

As a distributive education teacher-coordinator, the writer of this study was closely associated with the expansion of vocational distributive education as a result of Federal funds made available to the State of New Mexico. Since the expenditures have had such a direct effect on the increase of distributive education programs in all the States, it was important to review the legislation which influenced this program's growth and development.

Cooperative training in retail selling was offered in 43 public secondary schools throughout the United States in 1933 with an enrollment of 9,500 students. However, it was not until 1938, when funds were made available under the George-Deen Act, that rapid development occurred in these programs.²¹

It will be noted in Table I that between 1938-1968 the increases or decreases in enrollment in distributive

²⁰Roberts, op. cit., pp. 209-210.

²¹Ibid., p. 205.

TABLE I
ENROLLMENT IN VOCATIONAL DISTRIBUTIVE
OCCUPATIONS

Year	Total	Year	Total
1938	36,008	1954	220,619
1939	88,429	1955	235,355
1940	129,433	1956	257,025
1941	156,617	1957	279,903
1942	215,049	1958	282,558
1943	297,534	1959	310,591
1944	181,509	1960	303,784
1945	152,781	1961	306,083
1946	174,672	1962	321,065 ^a
1947	235,141	1963	309,593
1948	292,936	1964	334,126
1949	313,475	1965	335,342 ^b
1950	364,670	1966	420,426 ^b
1951	341,440	1967	481,034 ^c
1952	234,984	1968	574,785 ^d
1953	209,012		

^aRoberts, op. cit., p. 557.

^bVocational Education, The Bridge Between Man and His Work, op. cit., p. 16.

^cU.S. Department of Health, Education, and Welfare, Vocational and Technical Education Annual Report, 1967 (Washington: Government Printing Office, 1969), p. 142.

^dU.S. Department of Health, Education, and Welfare, Vocational and Technical Education Annual Report, 1968 (Washington: Government Printing Office, 1970), p. 130.

education, in both secondary and post-secondary classes, reflected the corresponding increases or decreases in the amount of Federal funds appropriated for supporting distributive occupational programs.

The Vocational Education Act of 1963 and its amendments of 1968 contained a declaration of purpose stating that:

. . . persons of all ages in all communities of the State . . . will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.²²

In keeping with the spirit and intent of Federal legislation, the distributive education curriculum should fulfill the purpose declared above by emphasizing a program of high quality which is realistic and which relates the students' course content to employment opportunities. The distributive education program involves varying combinations of the following:

- (1) classroom instruction in marketing and distribution;
- (2) practical or simulated occupationally oriented experiences;
- (3) individual studies related to a learner's career interest;
- (4) experiences involving development of basic and personal skills;
- (5) career counseling

²²U. S. Congress, Public Law 90-576, H.R. 18366, 90th Cong., October 16, 1968, p. 1.

and occupational guidance and (6) supervised on-the-job instruction.²³

The classroom instruction in marketing and distribution includes those activities which direct the flow of goods and services from the producer to the consumer, such as buying, selling, transporting, storing, promoting, financing, marketing research, and management.²⁴ Students enroll in the program to prepare themselves for entry into a sales-related occupation through the development of those knowledges and understandings, skills, and attitudes which are needed by personnel in marketing, merchandising, and management.²⁵ Selling is the dominant subject in the curriculum because all marketing or distributing activities are related to either retail, wholesale, service, industrial, direct, or export sales. The adopted textbooks for use by students in classroom instruction offer a wide variety of subjects which may be included for study; however, selling is emphasized in many of the selected topics. As an example, one textbook contains units on the following: (1) The Exciting World of Retailing, (2) The New Store, (3) Buying

²³Harland E. Samson, "The Teaching of Distributive Education," Contributions of Research to Business Education (Washington: National Business Education Association, 1971) p. 78.

²⁴Ibid.

²⁵U. S. Department of Health, Education, and Welfare, Vocational Education and Occupations (Washington: Government Printing Office, 1969), p. 19.

for Resale, (4) Selling and Promotion, (5) Controlling the Store, and (6) The Challenge of Retailing.²⁶

Another standard textbook contains units such as:

(1) Marketing in Our Economy, (2) The Changing Retail Scene, (3) Retail Distribution, (4) The Customer in Retailing, (5) Readyng Merchandise for Sale, (6) Retail Selling, (7) Completing the Sale, (8) Promotion Through Visual Merchandising, (9) Advertising and Sales Promotion, (10) Consumer Credit Management, (11) Starting a Business, (12) Buying and Merchandise Control, (13) Pricing for Profit, and (14) Your Career in Retailing.²⁷

From the state-adopted textbooks and curriculum guides which are available in some states, the distributive education teacher-coordinators must decide what content is both appropriate for the classroom and complementary to student learning experiences on the job. Deciding what to teach in distributive occupations has been a problem for teachers as early as 1910 when vocational work experience programs in which students were employed part time and

²⁶John W. Wingate and J. Dana Weiner, Retail Merchandising (sixth edition; Cincinnati: South-Western Publishing Company (1963), pp. 1-620.

²⁷Henry Richert, Warren G. Meyer, and Peter G. Haines, Retailing Principles and Practices (New York: Gregg Division/McGraw-Hill Book Company, 1968), pp. 1-581.

attended school part time were begun in the United States.²⁸

Steadman has pointed out that:

In the past, there has been a tendency for teachers to use their own occupational background as a basis for teaching. Although this background is important to the teacher, the students are denied when the subject presentations are narrow in scope.²⁹

Therefore, as the distributive education teacher-coordinators decide on the curriculum content, they must establish priorities on the basis of: (1) what a distributive education student must know; (2) what a distributive education student should know, and (3) what would be nice for a distributive education student to know.³⁰

The United States Department of Labor estimates that the number of sales workers will increase 30 per cent from the 4.6 million in 1968 to approximately 6.0 million in 1980.³¹ Because of the anticipated increase in sales workers, it is imperative that the priorities for curriculum content in distributive education be established through

²⁸ Wilson H. Ivins and William B. Runge, Work Experience in High School (New York: The Ronald Press Company, 1951), p. 59.

²⁹ Charles W. Steadman, Distributive Education Curriculum for High School Programs (Harrisburgh: Department of Public Instruction, Pennsylvania, 1967), p. viii.

³⁰ Ibid.

³¹ U. S. Department of Labor, U. S. Manpower in the 1970's, Opportunity and Challenge (Washington: Government Printing Office, 1970), p. 13.

research involving employers who already know what competencies are needed by student-learners for employment in distributive occupations.

II. STATEMENT OF THE PROBLEM

The purpose of this study was twofold: (1) to analyze those competencies needed for selling which should be included in a distributive education curriculum, and (2) to ascertain what relationships may exist between the perceptions of the student-learners, employers, and distributive education teacher-coordinators in regard to instructional content which is believed necessary to be taught in distributive education programs.

Answers were sought in this study to the following questions concerning distributive education students:

(1) what knowledges and understandings are needed, (2) what skills are needed, and (3) what attitudes are necessary for successful careers in selling?

III. HYPOTHESES TO BE TESTED

The null hypotheses for this study were:

1. The rankings of Crawford's 25 statements of selling competencies in category one, Knowledges

and Understandings,³² by the three groups of respondents (student-learners, employers and distributive education teacher-coordinators) are not related, as measured by Kendall's Coefficient of Concordance.

2. The rankings of Crawford's 25 statements of selling competencies in category two, Skills,³³ by the three groups of respondents (student-learners, employers and distributive education teacher-coordinators) are not related, as measured by Kendall's Coefficient of Concordance.
3. The rankings of Crawford's 25 statements in category three, Attitudes,³⁴ by the three groups of respondents (student-learners, employers and distributive education teacher-coordinators) are not related, as measured by Kendall's Coefficient of Concordance.

IV. DELIMITATION OF THE STUDY

The participants in this study were limited to the eight distributive education teacher-coordinators in the

³²Lucy C. Crawford, A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education, Volume II (Blacksburg: Virginia Polytechnic Institute, 1967), pp. 465-568.

³³Ibid., pp. 468-471.

³⁴Ibid., pp. 471-474.

Albuquerque Public Schools, the 56 employers providing training stations for senior distributive education students, and the 95 senior student-learners participating in the eight cooperative distributive education programs. The study was further limited to the second semester of the 1970-1971 school year and included only the perceptions of those employers and student-learners who were directly involved in sales, as indicated on the Distributive Education Semester Report for the period ending in June, 1971.

V. SIGNIFICANCE OF THE STUDY

It has been stated by some critics that the schools are not teaching what students need to know in order to possess salable skills upon graduation from high school. In some cases, the high school curriculum is not relevant to the job requirements in the distributive areas of business. This study sought answers to the following: (1) what does the teacher-coordinator think that his students ought to be taught in the selling portion of the distributive education curriculum, (2) what does the employer think that his student-learner employees ought to know about selling, and (3) what do the student-learners think that they ought to know in order to accomplish their distributive duties more effectively at their training stations?

This study shows the relationships among the perceptions of the three groups pertaining to the 75 competencies

believed to be needed by distributive employees in selling. These competencies are listed in three groups under the categories of Knowledges and Understandings, Skills, and Attitudes. A rank ordering of importance given these needed competencies was established. It may be assumed that if the teacher-coordinator is informed of the importance attached to individual selling competencies, he may change the distributive education curriculum in order that it might be more responsive to the needs of the business community. At the same time, an improved curriculum may assist the student-learners in achieving success in their chosen employment.

The findings of this study should be useful to distributive education curriculum planners on the local and state levels throughout the United States and to authors of textbooks on distributive education and other related business courses, such as salesmanship, who may find the results of this study to be helpful to them in designing appropriate sequences of study for students.

VI. DEFINITIONS OF TERMS USED

Competencies:

Knowledge. The recall of specifics and universals, the recall of a pattern, methods and processes as they relate to the function of selling goods and services.

Understanding. The power to make experience intelligible by applying concepts and theories; the comprehension of ideas and the ability to use abstractions in particular and concrete situations as they relate to the function of selling goods and services.

Attitude. A mental position, a feeling or an emotion toward a fact or state; a predisposition to act in a certain way; a state of readiness that influences a person to act in a given manner in relation to the function of selling goods and services.³⁵

Cooperative. Refers to a program of instruction that involves a learning experience outside the classroom. Most cooperative programs require on-the-job training for the student. "Cooperative" refers to the mutual agreement between the training station (business enterprise) and the school to train the student.³⁶

Distributive Education. A program of education to provide instruction in merchandising, marketing and management. It is vocational because provision is made for instruction which contributes to the knowledges, skills and

³⁵Ibid., pp. 3-4.

³⁶Robert R. Luter, The Use of Behavioral Objectives in the Pre-Employment Laboratory Curriculum of Distributive Education (Austin: The University of Texas, 1970), p. 1.

attitudes required by those engaged in distributive occupations.³⁷

Kendall's Coefficient of Concordance (W). A measure of the degree of agreement among m sets of n ranks. If we have a group of n objects ranked by each of m judges, W provides information concerning the degree to which the m sets of ranks are in agreement. The coefficient of concordance can only be positive in sign and ranges in value from zero to one. A coefficient near +1.00 reflects a strong positive relationship and a coefficient near zero reflects little or no relationship. Kendall's W was used in this study to indicate the agreement among the three groups of respondents toward the competencies in selling.³⁸

Level of Confidence or Level of Probability. The significance of a research finding is often referred to as a level of confidence or probability. If the probability that a statistic of a given size will result from chance alone is only five chances out of a hundred, the finding may be reported as significant at the .05 level.³⁹

³⁷United States Department of Health, Education, and Welfare, A Study of Curriculum Development in the High School Cooperative Program, Distributive Education Series No. 28 (Washington: Government Printing Office, 1960), p. 2.

³⁸Allen L. Edwards, Statistical Methods (New York: Holt, Rinehart and Winston, Inc., 1967), pp. 344-345.

³⁹Tyrus Hillway, Handbook of Educational Research (New York: Houghton Mifflin Company, 1969), pp. 54-55.

Q-Sort. A rating technique in which the rater is given a series of cards on each of which a single statement describing the behavior is written. The rater is then required to sort the cards into a series of piles according to the extent to which the statements are descriptive of the person being rated.⁴⁰ In the study by Crawford, a variation of the Q-Sort technique was used.

Spearman Rank Order Correlation (r_s) (ρ). A non-parametric statistical design used to determine the degree of relationship between ordinally measured variables. It was used in this study to determine intercorrelations among the three groups of respondents and the three categories of competencies.⁴¹

Student-learner. A student enrolled in distributive education who attends classes at school for a part of the school day and continues learning activities on-the-job at his place of employment for the remainder of the school day.

Teacher-coordinator. A member of the school staff who teaches the related and technical subject matter involved in cooperative distributive education programs and

⁴⁰G. C. Helmstadter, Principles of Psychological Measurement (New York: Appleton-Century-Crofts, 1964), pp. 189-190.

⁴¹W. James Popham, Educational Statistics Use and Interpretation (New York: Harper and Rowe, 1967), p. 315.

coordinates the classroom instruction with the activities of the student in his work.

Training sponsor. Usually the immediate supervisor of the cooperative distributive education student.

Training station. The place of employment where the cooperative distributive education student goes after classes at school to continue his education in the distributive occupational areas.

Vocational education. Those systematic learning experiences that have been designed primarily to fit individuals for gainful employment in recognized occupations and which are offered in schools or in classes under public supervision.⁴²

VII. DESIGN AND DATA ANALYSIS

This study was based in part on a four-volume report of the research project, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education" by Lucy C. Crawford, Virginia Polytechnic Institute, Blacksburg, Virginia, which was funded by a grant from the Office of Education, United States Department of Health, Education, and Welfare. Volume I includes a Philosophy of Distributive Education, the Critical Tasks of High School Distributive

⁴²United States Congress, Public Law 88-210, op. cit., p. 6.

Education Teacher-Coordination, the Professional Competencies Needed to Perform the Critical Tasks, the Technical Competencies Needed to Develop Identified Competencies of Selected Distributive Workers and a Cross-Tabulation of Competencies Needed by Selected Distributive Workers. Volumes II, III and IV include the Critical Tasks of Selected Distributive Workers, Competencies Needed to Perform the Tasks, and a Cross-Tabulation of Competencies Needed by Workers in Selected Categories of Business.

Crawford developed lists of competencies needed by distributive personnel in department stores, variety stores, food stores, service stations, wholesaling, hotels or motels and restaurants. Her competency statements were drawn from the literature, from personal experiences of the investigator, and from interviews with workers and supervisors in 76 distributive businesses. The tentative lists of competencies needed to perform critical tasks in distributive occupations were organized into the following nine areas: advertising, communications, display, human relations, mathematics, merchandising, operations and management, product and service technology, and selling. Competencies for each of these areas were then evaluated by a team of paired specialists who represented distributive businesses and university distributive teacher-educators. Subsequently, the lists of competencies were revised according to the

recommendations of the distributive education specialists and were accepted for use in the Crawford study.

The first study to be based on Crawford's work was a doctoral dissertation by Kinzer (1969) at the University of Arizona in which he compared her 96 statements of distributive education philosophy with the philosophies of national leaders in distributive education and the philosophies of New Mexico distributive education and office education teacher-coordinators. He found that there was a high degree of agreement among the three groups toward the philosophy statements developed by Crawford.

The present study, based on another area of Crawford's work, was concerned only with competencies in selling. Twenty-five competencies were selected for each of the three areas related to selling: (1) Knowledges and Understandings, (2) Skills, and (3) Attitudes. Crawford and Kinzer used the Q-sort in their studies and a variation of Q-methodology was used in this research by typewriting each competency on a separate card for sorting by the respondents into the following rating categories: (1) Quite Important, (2) Somewhat Important, (3) Neutral, (4) Somewhat Unimportant, and (5) Quite Unimportant.

In the interest of learning the relative degree of agreement among the three groups of respondents (teacher-coordinators, student-learners and employers), Spearman's

rank order correlation coefficient, corrected for tied ranks, was used to compare the groups by pairs. Kendall's coefficient of concordance was used as a measure of the over-all agreement of the three groups studied. Finally, a rank ordering was made showing the importance attached to each competency.

VIII. ORGANIZATION OF THE STUDY

The remainder of the study is organized in the following order: Chapter II reviews the literature which relates to establishing competencies in various occupations. Special emphasis is given to literature which is related to the identification of knowledges and understandings, skills, and attitudes and to literature which pertained to the Q-sort as a research tool.

The methods and procedures followed in the study are described in Chapter III. In Chapter IV, the statistical and descriptive analyses of data are presented in both table and narrative form. Chapter V contains a summary of the study, conclusions which are based on the findings, and recommendations, by priorities, of the competencies in selling which should be included in the distributive education curriculum. Additional recommendations are made for the improvement of local distributive education programs and for other investigations which are related to the present study.

CHAPTER II

REVIEW OF THE LITERATURE

A review of the literature reveals that a new look is being taken at the needs of students in vocational education programs as they relate to the requirements of employers. There is a strong implication that a sound vocational education program is constantly in tune with the needs of students, the community and society.

Venn has pointed out that there is a lag between what is taught in the school and what is actually practiced in industry.¹ For example, a school may invest heavily in shop and laboratory equipment in order to duplicate industrial conditions and the equipment may become obsolete as new developments are made in technology; similarly, the distributive education curriculum may become obsolete unless it changes with the needs of employers in the community. It is with these facts in mind that this survey of literature has emphasized those studies involving employers, studies which were concerned with occupational or job analysis as a source of curriculum content, and studies which identified vocational competencies of knowledges and understandings, skills,

¹Grant Venn, Man, Education and Work (Washington: The American Council on Education, 1969), p. 33.

and attitudes. Finally, studies were reviewed which used the Q-Sort technique as a research tool in vocational education.

Swanson, Nelson and Meyer have provided an influential framework for this study. They listed the following eight imperatives which are crucial in interpreting and implementing the present concept of vocational education:

(1) that educational programs make provision for occupational instruction for all students; (2) that the first goal of vocational programs should be to equip students with salable skills, intellectual and manipulative, and to give them a base of occupational experience that will add relevance and adaptability to their vocational goal achievement; (3) that maximum effort be given to curriculum development which can accelerate the rate of skill achievement and retard the rate of skill obsolescence; (4) that vocational education provide experiences which will help the student to identify his talents, to relate these talents to the world of work, to identify an occupational interest, and to develop such talents as will widen his choices and improve the skills required for success; (5) that curriculum innovators determine what and how much generalized vocational preparation and specialized preparation will make a graduate employable in the current and future job market; (6) that competence to enter the job be held as the minimum requisite for graduation and that eligibility for placement be regarded as the minimum completion requirement; (7) that the vocational curriculum satisfy the needs of learners in their vocational development as well as the needs of employers with the ultimate goal of producing competent, well-adjusted workers and citizens; and (8) that curriculum developers engage in research to determine the most effective and efficient programs for preparing individuals for occupational employment.²

²Gordon I. Swanson, Howard F. Nelson and Warren G. Meyer, "A Conceptual Framework," American Vocational Journal (March, 1969), pp. 22-24.

I. THE ROLE OF ANALYSIS

The literature indicates that curriculum builders in vocational and technical education are looking with renewed emphasis to job analysis and task analysis. Drawbough, in emphasizing that job analysis is one of the best means of obtaining occupational training information, explains that when complete job-analysis data are utilized to write a training course, the course is orientated toward occupational training objectives rather than toward the traditional subject matter.³ He suggests that courses which are aimed at preparing persons for specialized occupations should undergo continuous examination to learn whether or not the content is current in light of requirements for entry and advancement.⁴

Haines expresses the need for analysis in business education when he states:

Teacher-coordinators of cooperative office and distributive programs know that the educational base of their programs rests in the instruction which is given both in school and on the job and upon the degree to which the two are correlated. Analysis of each job becomes a necessity if this correlation is to occur and if the instruction is to be individualized as it must

³Charles Drawbough, "Base Occupational Courses on Job Analysis," Agricultural Education Magazine, XXXIX (July, 1966), p. 10.

⁴Ibid.

because each firm, each job, and each cooperative trainee is different in some degree.⁵

After a job analysis has been completed, it is then possible to evaluate the curriculum and determine a rank ordering of "that which is necessary to job effectiveness, that which is desirable to know, and that which is nice to know."⁶

Shartle developed a concise procedure for occupational analysis which includes examining methods of analysis and devising methods of determining the procedures for occupational grouping. Such an analysis provides a list of task descriptions to be used in developing a curriculum which is focused on those competencies required for employment.⁷

Altman sought to develop and verify the methods of deriving capabilities from job information involving thirty-one occupations which were selected because of anticipated major employment opportunities during the coming decade. A random sample of task behavior was drawn for each occupation and each selected behavior was translated into a multiple-choice questionnaire. The findings of his study indicate

⁵Peter G. Haines, "The Occupational Analysis in Business Education," National Business Education Quarterly, Vol. 35, No. 2 (December, 1966), p. 40.

⁶Ibid.

⁷Carroll L. Shartle, "Occupational Analysis, Worker Characteristics, and Occupational Classification Systems," Man in a World at Work, Henry Borow, editor (Boston: Houghton Mifflin Company, 1964), pp. 285-309.

that there is a definable and well-structured domain of vocational capabilities which has not been previously defined and which is not being taught systematically at our educational institutions.⁸

Concerning analysis techniques, Fryklund has compared the making of an analysis of an occupation with making an inventory of merchandise. He stated that:

Just as a list is made of all the goods in the store, so a list is made of all the teaching units of the occupation. The instructional units thus obtained can be used for training purposes in school or out of school.⁹

Analysis is useful in discovering and listing both fundamental elements in an occupation and commonalities between various occupations. Fryklund pointed out that there are essential elements in selling that the salesman should know and that the selling of an article to a customer is a problem-solving venture in which fundamental competencies are involved.¹⁰

Gray has stated that course content in home economics is determined by a job analysis to determine what the worker

⁸James W. Altman, Research on General Vocational Capabilities--Skills and Knowledges. A Study Conducted Under a Grant from the Ford Foundation (Pittsburgh: American Institute for Research, 1966).

⁹Verne C. Fryklund, Analysis Technique for Instructors, (Milwaukee: The Bruce Publishing Company, 1965), p. 11.

¹⁰Ibid., p. 121.

must know and be able to do to succeed in the chosen occupation.¹¹ The need for using job analysis has been pointed out by Knouse in his research in which he sought to find those aspects of distributive teacher-education which need to be improved. He stated that:

(1) There should be more emphasis on accepted vocational principles; (2) More attention should be given to occupational analysis as a basic tool in planning instructional programs; and (3) The body of knowledge in distributive education should be clearly defined.¹²

II. IDENTIFYING COMPETENCIES

As vocational legislation was implemented, more research studies for the purpose of identifying occupational competencies were supported by Federal funds and grants from private organizations and universities. Among the studies pertaining to competencies in agricultural vocations, Fiscus found 38 instructional units needed to teach prospective workers the knowledges required in farming, operating the

¹¹Dorothy D. Gray, "Job Analysis Technique for Home Economics Gainful Employment," Mississippi Vocational News, ILVIII (February, 1967), 2-3.

¹²Reno S. Knouse, Needed Improvements in Distributive Teacher Education, Council for Distributive Education, Professional Bulletin Number 1 (East Lansing: Michigan State University, 1964).

grain elevator, and working in agricultural equipment businesses.¹³

The Coupland study (1962) was concerned with the relative importance of units of technical agriculture proposed for a high school instructional program; and, by use of a rating scale, the vocational agriculture teachers involved in the study determined a rank ordering of the importance attached to each content area.¹⁴

By the use of two questionnaires, designed to determine activities and competencies of technicians in the field of agricultural engineering, Halterman reported that the following subjects were most important: communicative skills (English composition, speech and reading); elementary mechanics; technical drawing; personnel management; electricity; magnetism and electronics; and psychology.¹⁵

Dillon studied the competencies needed by workers in licensed nurseries and licensed ornamental horticulture

¹³Keith E. Fiscus, "A Comparison of Certain Knowledges in Agriculture Needed by Workers in Farming, in Grain Elevator Businesses, and in Agriculture Equipment Businesses" (unpublished Doctoral thesis, University of Illinois, Urbana, 1965), pp. 1-349.

¹⁴Joe Coupland, "Importance of Units of Instruction in the High School Vocational Agricultural Curriculum" (unpublished Doctoral thesis, Ohio State University, Columbus, 1962), pp. 1-274.

¹⁵Jerry J. Halterman, Technicians in Agriculture: A Research Project in Agriculture Technology (Sacramento: California State Department of Education, 1962), pp. 1-50.

businesses to determine if separate and specialized agriculture courses were needed. As a result of his study, he recommended the content for 13 basic units for persons preparing to enter horticultural jobs as well as the content for 10 specialized units of instruction for other workers.¹⁶

Albracht (1966) sought to demonstrate a process for determining vocational competencies which are needed for the performance of the sales function of the feed industry. His interview instrument contained 40 competencies which appeared to be important for the performance of nine essential feed sales activities and was judged by a team of 24 members who were experienced in the performance of the sales function of the feed industry or in conducting occupational research. The results of the study indicated that 21 of the 40 competencies were essential for the performance of the nine feed sales activities.¹⁷

¹⁶Roy D. Dillon, "Comparison of Certain Abilities Needed by Workers in Licensed Nurseries and Licensed Ornamental Horticulture Businesses" (unpublished Doctoral thesis, University of Illinois, Urbana, 1965), p. 17.

¹⁷James J. Albracht, "A Process for Determining Vocational Competencies for the Performance of Nine Essential Activities for Sales Personnel in the Feed Industry, and the Loci at Which the Competencies Could be Taught" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1966), pp. 1-152.

III. FAMILY OR CLUSTER OF OCCUPATIONS

Several studies used the family of occupations or cluster approach in their efforts to determine occupations requiring similar kinds of knowledges and skills. The basic idea was to prepare individuals for a family or cluster of occupations instead of a single occupation so that the worker may adjust to subsequent technological developments which affect his occupational field.

Sjogren and Sahl (1966) have said that the vocational curriculum cannot be developed for every occupation; however, two alternatives are available to the curriculum planner. The first alternative would be to develop the curriculum on the basis of specific occupations. The other alternative would be to plan the curriculum so that students would learn skills, knowledges and understandings of relevance to a number of similar occupations. The latter approach would be efficient when the individual is forced to change jobs because it could be expected that the generalized approach would reduce subsequent retraining needs.¹⁸

A cluster concept program was designed by Maley and Mietus (1968) to prepare youth for entry level capability

¹⁸Douglas Sjogren and Robert Sahl, Interim Report, Review of Research on Common Job Behaviors (Washington: U. S. Department of Health, Education, and Welfare, 1966), p. 1.

in a variety of related occupations rather than in a specific occupation.¹⁹

Perkins and Byrd (1966) developed a model to identify and correlate major tasks of office workers and major knowledges required for performance of those tasks. The essential combinations of task-knowledge clusters were used in developing instructional programs and materials for the office education curriculum.²⁰

Gardner (1964) developed a questionnaire containing 129 statements which was used to identify certain competencies needed by dairy farm equipment workers. The instrument was administered to a panel of 11 authorities within the dairy industry, who indicated the value and importance that they attached to each competency, and to 88 Michigan vocational agriculture teachers who indicated which of the competencies had been taught in the vocational curriculums. Clusters of knowledge and skill competencies were identified in the areas of farming, human relations, salesmanship, and

¹⁹Donald Maley and Walter S. Mietus, The Implementation and Further Development of Experimental Cluster Concept Programs Through Actual Field Testing and Evaluation at the Secondary School Level. The Cluster Concept Project. (Washington: Office of Education, 1968, ERIC ED 022 965).

²⁰Edward A. Perkins, Jr. and F. Ross Byrd, A Research Model for Identification of Task and Knowledge Clusters Associated With Performance of Major Types of Office Employees' Work, Project No. ERD-257-65 (Washington: U. S. Department of Health, Education, and Welfare, 1966).

mechanics; but, the responses of the teachers indicated that few of the competencies identified by the panel members as important were actually being taught in local programs of vocational agriculture. The researcher recommended that if persons are to be prepared for initial employment in the dairy farm equipment business through programs of vocational agriculture, then programs must be modified extensively by emphasizing the identified competencies in the curriculum.²¹

A survey instrument for identifying clusters of competencies associated with the performance of food service work was developed by Rahmlow, Johnson and Cavanagh (1966) for the purposes of: (1) obtaining data that would provide up-to-date facts about combinations of work done by various categories of food service workers; (2) providing a base for identification of clusters of knowledges and competencies essential for effective performance of those tasks; and (3) ascertaining the degrees to which such knowledges and competencies are congruent with those essential for work in other non-professional occupations.²²

²¹Harrison Gardner, "Determining Competencies for Initial Employment in the Dairy Farm Equipment Business" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1964), pp. 1-238.

²²Harold F. Rahmlow, LeRoy Johnson and Catherine Cavanagh, A Study Instrument for Identifying Clusters of Knowledge and Competencies Associated With Performance of Food Service Work, Project No. ERD-257-65 (Washington: U. S. Department of Health, Education, and Welfare, 1966), pp. 2-5.

A questionnaire was developed by Mills (1966) which listed 643 knowledges from textbooks, curriculum guides and courses of study, and the instrument was administered to a sample of 154 workers in 64 industries which were broadly representative of the national pattern of electronic jobs available. The data identified specific knowledges and clusters of knowledge which were essential in work commonly done by electronic technicians whose principal tasks were classified as (1) diagnosing trouble in systems, (2) adjusting and operating, (3) servicing, (4) assembling, (5) installing, (6) designing and computing, (7) application, distribution, and sales in electronics, and (8) quality control and testing.²³

Ertel (1966) identified major tasks performed by employees in department stores, variety stores and general merchandise stores through the use of questionnaires which were completed by supervisory and non-supervisory personnel in the following categories of work: selling, stockkeeping, checkstand operation, receiving and marking merchandise, delivery, keeping records, computing, display, advertising, buying, pricing, and merchandise control. The percentages of employees performing each category of work were

²³Boyd C. Mills, Major Task and Knowledges Clusters Involved in Performance of Electronic Technicians' Work (Washington: U. S. Department of Health, Education, and Welfare, 1966), pp. 1-7.

determined from the collected data and clusters of knowledge were identified which were associated with performing the various kinds of work.²⁴

Two years later, Ertel (1968) developed materials to teach non-college-bound youth the competencies which are necessary for entry level employment in the general merchandise retail field. The following nine sub-systems of instruction were developed: (1) Salesperson's Job, (2) Qualities of a Salesperson, (3) Customer's Buying Motives, (4) Selling Process, (5) Merchandise Information, (6) Cash Register Operation, (7) Stockkeeping Tasks, (8) Retail Recordkeeping, and (9) Working With People. All of the materials were written in a programmed instruction format and were prepared for use in conjunction with sound and slide presentations.²⁵ This study appears to be one of the first to identify competencies in distributive areas and to plan a curriculum for teaching those competencies.

²⁴Kenneth A. Ertel, Identification of Major Tasks Performed by Merchandising Employees Working in Three Standard Industrial Classifications of Retail Establishments, Contract Number OE-5-85-109, Report No. 6 (Washington: U. S. Department of Health, Education, and Welfare, 1966), p. 49.

²⁵Kenneth A. Ertel, Development of a Retailing Instructional System for Distributive Education, Final Report No. 26, USOE Project No. 7-0031 (Washington: U. S. Department of Health, Education, and Welfare, 1968), pp. 1-49.

In a report of a panel of consultants on vocational education, appointed by the Secretary of Health, Education, and Welfare, the cluster concept in curriculum planning was recommended. They stated that:

Basic vocational education programs should be designed to provide education in skills and concepts common to clusters of closely related occupations. The curriculum should be derived from analysis of the common features of the occupation included.²⁶

IV. OTHER RELATED RESEARCH ON KNOWLEDGES, SKILLS, AND ATTITUDES

In a survey of the knowledges and other competencies which are needed by teachers of distributive education, Haines (1964) analyzed course syllabi, textbooks and other instructional materials to determine the common content which was taught in distributive education classes. It was found that this procedure was effective as an initial step toward improving existing distributive education programs. By identifying common knowledges required because of course content, Haines suggested that the program may be improved through adding or deleting certain content.²⁷

²⁶U. S. Department of Health, Education, and Welfare, Office of Education, Education for a Changing World of Work (Washington: Government Printing Office, 1964), p. 227.

²⁷Peter G. Haines et al., "Technical Content Competencies Needed by Teachers of Distributive Subjects," National Business Education Quarterly, XXXII (Winter, 1964-65), pp. 38-50.

Walsh and Selden (1965) have recommended that more research be done to determine what knowledges are needed. Since all aspects of the occupational area cannot be included in the curriculum, it is necessary to teach, as a minimum requirement, those knowledges and skills which form the core of the occupation.²⁸

Whitmarsh (1966) attempted to define other knowledges needed by mothers and workers in occupations related to child care by administering a questionnaire to 110 individuals who were mothers of pre-school children, college child development specialists, day care foster mothers, social workers, and day care center directors. An analysis of data revealed that there were no statistically significant differences between the assessment of professionals and practitioners concerning the depth of understanding in child development and guidance needed by mothers and employees in three of the occupations related to child care. The study identified a large core of knowledges which were needed by both the mothers and the child care workers.²⁹

²⁸John P. Walsh and William Selden, "Vocational Education in the Secondary School," Vocational Education, Sixty-Fourth Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1965), pp. 91-92.

²⁹Ruth Johnson Whitmarsh, "An Exploratory Study of Knowledges in Child Development and Guidance Needed by Mothers and Workers in Occupations Related to Child Care" (unpublished Doctoral thesis, University of Illinois, Urbana, 1966), pp. 1-136.

In selected areas of Illinois, Erwin (1963) investigated business and industrial employment needs in relation to educational and vocational preparation. He found that one of the major desires of employers was that prospective employees possess a skill and a good general educational background necessary to make effective use of that skill. Emphasis was placed on work experience, in conjunction with specific vocational instruction, in order that the students might practice the skills and knowledges gained. It was concluded that the holding power of schools could be improved by organizing programs of study which would be adapted to the needs and interests of students in relation to the needs of employers.³⁰

Kirchner (1965) investigated the relationships between general attitudes toward work and objective measures of job performance and found a significant correlation between favorable job performance and favorable job attitudes. He noted that favorable attitudes toward one aspect of work were usually associated with attitudes toward other aspects, and that attitudes of advertising salesmen toward

³⁰Clifford H. Erwin, "An Investigation of Business and Industrial Employment Needs in Relation to Educational and Vocational Preparation in Selected Areas of Illinois" (unpublished Doctoral thesis, Indiana University, Bloomington, 1963), pp. 1-141.

supervision were directly related to production on the job.³¹

V. CONTRIBUTIONS OF Q-SORT METHODOLOGY TO OCCUPATIONAL RESEARCH

The Q-technique was devised by William Stephenson for the study of intrapersonal relations; whereas, R-methodology is used primarily to correlate scores by large numbers of persons using only one or a few instruments. Stephenson wrote that the technique was useful in that a person can be made to "give away" certain habitual modes of behavior and may then be subjected to experimental study and all the procedures of sound scientific method.³² Sax has described the Q-sort technique and its value to research as follows:

Q-Technique has its greatest appeal when a researcher must work intensively with few persons. It makes use of the correlation between persons rather than the correlation between tests.

The application of Q-methodology begins with the development of items which originate out of some theoretical formulation. Each statement is printed on a separate card and presented to the respondents who are asked to sort them into piles. . . . The Q-technique requires each respondent to sort his deck of cards into

³¹Wayne K. Kirchner, "Relationship Between General and Specific Attitudes Toward Work and Objective Job Performance for Outdoor Advertising Salesmen," Journal of Applied Psychology, XLIX (June, 1965), pp. 455-457.

³²William Stephenson, The Study of Behavior, Q-Technique and Its Methodology (Chicago: The University of Chicago Press, 1953), p. 22.

a symmetrical distribution with the number of cards to be sorted into each pile fixed by the investigator. Once the sorting has been accomplished, each statement is simply accorded the score corresponding to the pile into which it is placed. For example, if statement 24 is placed in pile 8, it is accorded a score of 8. If a number of individuals are involved in a study using just one sort, the correlation between the individuals for each item or statement can be computed.³³

Q-methodology has been applied to several different types of problems in education. In 1956, Revie reported a study in which he correlated the attitude of the teacher and the school psychologist toward pupils.³⁴ Kerlinger and Kaya (1939) used the Q-technique to demonstrate that progressivism and traditionalism are relatively independent factors.³⁵ Sheldon and Sorenson (1960) reported that they had used the Q-technique for several purposes. Two purposes were to determine changes in philosophical positions after students took course work and to evaluate counseling interviews by correlating an ideal interview with a

³³Gilbert Sax, Empirical Foundations of Educational Research (Englewood Cliffs: Prentice-Hall, Inc., 1968), p. 267.

³⁴V. A. Revie, "The Effect of Psychological Case Work on the Teacher's Concept of the Pupil," Journal of Counseling Psychology, III, No. 2 (1956), pp. 125-129.

³⁵Fred N. Kerlinger and Esin Kaya, "The Construction and Factor Analytic Validation of Scales to Measure Attitudes Toward Education," Educational and Psychological Measurement, XIX, No. 1 (1959), pp. 13-29.

role-playing interview.³⁶ It was reported by Englander (1961) that elementary education majors perceived themselves as possessing personal traits which were characteristic of elementary school teachers to a greater degree than those students who were secondary education or non-education majors.³⁷

Smith (1962) sought to determine if a valid measure of a student's concept of his own writing competence could be determined by means of a Q-sort design of 48 statements with values ranging from zero to nine. The purpose of the research was to provide a basis for improving techniques in teaching business writing, and the findings supported the Q-sort design as a valid measure of a student's self-concept of his writing competence.³⁸

A Q-sort analysis was used by Urich (1967) to determine the perceptions of school board members and teachers,

³⁶M. Stephen Sheldon and A. Garth Sorenson, "On the Use of Q-Technique in Educational Evaluation and Research," Journal of Experimental Education, XXIX, No. 2 (December, 1960), pp. 143-151.

³⁷Meryl E. Englander, "Q-Sort: A Means to Explore Vocational Choice," Educational and Psychological Measurement, XXI, No. 3 (1961), pp. 597-605.

³⁸Charles B. Smith, "The Development of a Q-Sort to Measure Self-Concept of Writing Competence" (unpublished Doctoral thesis, Colorado State College, Greeley, 1962).

from selected rural, urban, and central city districts, of the role of the superintendent in collective negotiations.³⁹

Talkington (1962) compared the Q-sort responses of the industrial arts teachers in the public schools of Colorado with the Q-sort responses of 35 selected prominent persons in industrial arts to determine whether there was unity of direction as to the priority of industrial arts objectives on a state and on a national level. The participants were asked to sort 54 statements of industrial arts behavioral objectives into an order of importance. The result of the study indicated that the Q-sort made the necessary discriminations which were wanted in the study of course objectives.⁴⁰

Ford and Patterson (1967) used the Q-sort to determine the most characteristic problems of student teachers in business education as viewed by student teachers, general supervisors, special supervisors, and co-operating teachers and designed the study to measure the degree of agreement of the rankings of problem areas and to measure the degree of

³⁹Ted R. Urich, "A Q-Sort Analysis of the Role of the Superintendent in Collective Negotiations as Perceived by School Personnel" (unpublished Doctoral thesis, University of Iowa, Iowa City, 1967), pp. 1-176.

⁴⁰Joe E. Talkington, "An Analysis of Industrial Arts Objectives as Determined by Q-Technique" (unpublished Doctoral thesis, Colorado State College, Colorado Springs, 1962), pp. 1-299.

association of the opinions among the groups involved in the student teaching activity. The Q-sort technique led the authors to conclude that:

(1) general supervisors experience difficulty in understanding the problems of student teachers and in communicating with co-operating teachers; (2) special methods courses apparently are not meeting the needs of the student teachers in the problem area of motivation in preparing them for their student teaching experience; (3) the greatest agreement regarding characteristic problems of student teachers in business education exists between student teachers and co-operating teachers; (4) college supervisors and co-operating teachers indicated methods and techniques as a problem area of major concern while the student teachers indicated little concern with the area and (5) student teachers indicated the problem area of assignments as one of great concern while co-operating teachers and supervisors did not indicate the area as one of concern.⁴¹

This study is an excellent example of the kinds of information which the Q-technique may provide the researcher for use in improving various curriculums.

Schill (1961) used the Q-sort technique to determine the necessary mathematics content for students studying electronics in California schools,⁴² and he later (1965) used the Q-sort technique in an examination of technical

⁴¹Wynnie S. Ford and Herman F. Patterson, "The Development and Use of a Q-Sort for Determining the Most Characteristic Problems of Student Teachers in Business Education" (unpublished Doctoral thesis, Colorado State College, Colorado Springs, 1967), pp. 1-181.

⁴²William J. Schill, "The Use of the Q-Technique in Determining Curriculum Content," California Journal of Educational Research, XII (September, 1961), pp. 178-184.

education knowledges by asking his respondents to sort cards bearing descriptions of subject matter which were similar to course descriptions and to identify those descriptions which related to their work. Through using a factor analysis, a core program was identified in electronic, electro-mechanical, mechanical, chemical-mechanical, chemical, and electro-chemical technologies.⁴³

The most comprehensive research in which competencies have been determined through using the Q-technique has been the work by Lucy C. Crawford which was funded under Section 4(c) of the Vocational Education Act of 1963 and was begun in 1965. The first step in her study, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education," was to construct a philosophy of distributive education; therefore, Crawford used a variation of Q-sort methodology while using statements of basic beliefs about distributive education which were carefully structured by the researcher and reviewed repeatedly by a Committee of Consultants composed of eight nationally recognized experts in the field of distributive education, distribution, and school administration. The final basic beliefs Q-sort contained

⁴³William J. Schill, Curricula Content for Technical Education, College of Education, University of Illinois, and U. S. Office of Education, Cooperative Research Project 2048 (Washington: U. S. Department of Health, Education, and Welfare, 1965).

96 statements or hypotheses to be tested and where disagreement occurred among respondents on basic beliefs, the statements were revised. The resulting high degree of agreement on basic beliefs made it possible to construct a philosophy which reflected the deliberative opinions of the leadership in distributive education throughout the nation.⁴⁴

Crawford made the following statement regarding the implications which her research has for future studies:

These findings have implications for all phases of the distributive education program and should have a bearing on other vocational education fields as well. The fact that the vast majority of the leadership in distributive education has agreed upon definitions, aims and objectives, curriculum, guidance, coordination, administration and teacher education as applied to this field indicates that the philosophy of distributive education expressed in these findings can serve as a theoretical structure on which not only this research, but related research, can be erected.⁴⁵

Using Crawford's basic beliefs about distributive education as a resource instrument, Kinzer compared the philosophies of distributive education teacher-coordinators and business and office education teacher-coordinators in New Mexico. Another purpose of his study was to compare the philosophies of the New Mexico groups with those of the

⁴⁴Lucy C. Crawford, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Final Report of Research Project supported by U. S. Office of Education Grant OE-6-85-044 (Washington: U. S. Department of Health, Education, and Welfare, Vol. I, 1967), p. 31.

⁴⁵Ibid.

national leaders in distributive education who were included in Crawford's study. Kinzer also used a variation of Q-methodology and found that there was a high degree of agreement on philosophy among distributive education teacher-coordinators in New Mexico and the national leaders, and that New Mexico teacher-coordinators in the two business-related areas have similar philosophies.⁴⁶

While the first volume of Crawford's extensive study included a philosophy of distributive education, the next three volumes included "the Critical Tasks of Selected Distributive Workers, Competencies Needed to Perform the Tasks, and a Cross-Tabulation of Competencies Needed by Workers in Selected Categories of Business."⁴⁷ The categories of business which Crawford used were department stores, variety stores, food stores, service stations, wholesaling, hotels and motels, and restaurants. For each business, she identified related competencies which are needed to perform critical tasks in nine areas: advertising, communications, display, human relations, mathematics, merchandising, operations and management, product and service

⁴⁶Lowry G. Kinzer, "The Philosophy of Distributive Education Teacher-Coordinators as Compared to Business and Office Education Teacher-Coordinators in New Mexico" (unpublished Doctoral thesis, Arizona State University, Tempe, 1969), pp. 1-155.

⁴⁷Crawford, op. cit., p. i.

technology, and selling. The present study is primarily concerned with selling in distributive occupations and is based on the Crawford instrument of competencies.

VI. SUMMARY

The Texas Education Agency has stated its hopes and expectations of distributive education when it said:

Instruction shall be based upon a job analysis of the occupations taught and the knowledges and skills required for performance of jobs or operations in accordance with accepted procedures and standards of the occupation. Instruction will include the knowledges and skills in selected occupations and will be conducted through classroom and laboratory experience. Included will be the latest information necessary for competencies required in the occupation or occupations for which training is being conducted.⁴⁸ [*italics added*]

A review of the literature related to this study has shown the need for job analysis in vocational education, the necessity of identifying competencies which are required in occupations, and the role of Q-methodology in occupational research. It was with these needs in mind that the writer designed and pursued this investigation.

⁴⁸ Guide for Public Schools in Planning Programs of Vocational Education for In-School Students (Austin: Texas Education Agency, 1965), p. 63.

CHAPTER III

METHODS AND PROCEDURES

I. THE PARTICIPANTS

The participants for this study were residents of Albuquerque, New Mexico, who represented the following groups: (1) 1971 graduates of high school cooperative distributive education classes; (2) distributive education teacher-coordinators from the eight Albuquerque Public High Schools; and (3) employers from the various retail businesses who furnished training stations for distributive education students during the previous year.

The population was determined in June, 1971, when a copy of the semi-annual "Distributive Education Semester Report, Employment Record and Enrollment" was secured from each of the eight distributive education teacher-coordinators. Although the reports listed the names of students who were enrolled in cooperative distributive education programs during the spring semester, February through May, 1971, the names of certain students were deleted from the original population because they were either not employed or they were not employed in work which was recognized as distributive or marketing occupations. A total of 95 student-learners participated in the study

along with 56 employers and eight distributive education teacher-coordinators.

II. INSTRUMENT

The instrument of primary resource was "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education"¹ by Lucy C. Crawford and the method of Q-technique, which she used to correlate the responses of her participants in developing a philosophy of distributive education, was also an integral part of the instrument used in this study. Through her study, Crawford sought "to determine technical teaching competencies needed by the distributive education teacher-coordinator in order to develop competencies needed by workers to enter and advance in a distributive occupation."² In regard to the design of the study on competencies, Crawford stated that:

It was assumed that basic concepts concerning marketing and economics would provide the theoretical structure for the determination of technical competencies. A list of concepts and generalizations was drawn from the literature and evaluated by selected members of the Committee of Consultants.

¹Lucy C. Crawford, "A Competency Pattern Approach To Curriculum Construction in Distributive Teacher Education." Final Report of Research Project supported by United States Office of Education Grant OE-6-85-044 (Washington: U. S. Department of Health, Education, and Welfare, Vol. I, 1967), pp. 1-335.

²Ibid., p. 82.

The technical subject matter competencies needed by the distributive education teacher-coordinator depend on the competencies he is expected to develop in distributive education high school trainees. To determine what competencies the distributive education high school trainee should have in order to enter and advance in two steps of a possible career continuum, structured interviews were held with full-time employees at entry, career and specialist levels in selected distributive businesses. The purpose of the interviews was to determine the critical tasks of each job at each level of responsibility and to gain some clues as to needed competencies.

A tentative list of technical competencies needed to perform the identified tasks was drawn from the literature, from personal experience of the investigators and from conversations with business people. This data proved helpful in determining competencies needed by workers in specific jobs.

The competencies were then evaluated by specialists in the distributive field. The specialists . . . included one member from each of the six distributive advisory committees and one distributive teacher educator for each category of distributive business.

A list of technical teaching competencies based upon the competencies needed by workers in the seven categories of distributive business included in this study was developed. The list of technical teaching competencies was then evaluated by the distributive teacher educators who assisted in evaluating the competencies needed by distributive workers.³

Although Crawford identified job tasks and competencies needed in nine aspects of distributive businesses, this study was based on those competencies which she identified as necessary in selling. From her list of competencies, an instrument was constructed using 25 knowledges and understandings, 25 skills, and 25 attitudes needed in selling.

³Ibid.

Each competency statement was printed on a separate four-inch by six-inch card and placed in numerical sequence, 1-75, for Q-sorting by participants in the study. The designated categories were as follows: (1) Quite Important, (2) Somewhat Important, (3) Neutral, (4) Somewhat Unimportant, and (5) Quite Unimportant. A copy of the competency statements may be found in Appendix A.

III. RELIABILITY AND VALIDITY

The reliability and validity of this study was based on the reliability of Lucy C. Crawford's method and the validity of her results. She described her study, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education," in the following manner:

This report represents the thoughtful and creative reactions of distributive education state supervisory and teacher education personnel from the several states; the reactions of a purposive sample of distributive education teacher-coordinators, teacher educators and state supervisors; the views of selected distributive employees, supervisors and managers; and the careful deliberations of a Committee of Consultants and a Distributive Advisory Committee.⁴

Crawford used a variation of Q-methodology when she determined the basic beliefs of distributive education state supervisors, assistant supervisors and teacher educators toward a philosophy of distributive education. She expected that there would be a high degree of agreement among the

⁴Ibid., p. 7.

three groups. After obtaining the Q-sort data, she used the Spearman rank-order correlation which confirmed her expectation that there was high agreement among the three participating groups. Kendall's coefficient of concordance was used as a measure of the over-all agreement among the three groups.

A review of literature pertaining to the use of the Q-technique as a research tool was discussed in Chapter II. Several examples were given as to the reliability of the method and to the validity of the results. Crawford believed it to be the best way to accomplish her objectives. The results of her completed research is evidence that she was justified in her choice of research design. Because of the similarity of the present study problem to problems of other researchers who sought to determine if agreement existed among groups of people, it seemed that the Q-technique would provide the reliability and validity which were necessary for this investigation.

Spearman's rank-order correlation was used to determine the correlation among the three groups of participants in this study. Although Pearson's product-moment coefficient is the standard index of the amount of correlation between two variables, there are instances in which other procedures are more practical. Guilford has stated that "when samples are small, a common procedure applied to regular data in

place of the product-moment method is Spearman's rank order method. It is conveniently applied as a quick substitute when the number of pairs, or N, is less than 30."⁵

Since the Spearman rank order correlation is ordinarily computed in small samples, its chief use is to test the hypothesis of zero correlation. If the correlations are high, according to Guilford, we may have almost as much confidence in Spearman's rank order correlation for indicating the amount of correlation as we have in Pearson's product-moment correlation if applied to samples of the same size.⁶ The use of Spearman's rank order was justified since each of the three categories in this study contains less than 30 pairs.

Kendall's coefficient of concordance was used as a measure of over-all agreement among the three groups of participants. Siegal has stated that:

The Kendall coefficient of concordance W measures the extent of association among several (k) sets of rankings of N entities. It is useful in determining the agreement among several judges or the association among three or more variables. It has special applications in

⁵J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, 1965), p. 305.

⁶Ibid.

agreed to participate, without any further explanation, he was asked to read the letter of instruction (Appendix B) and to sort the statements of competencies in selling according to individual opinions. Each person was asked if he had any questions regarding the clarity of the letter of instructions or the competency statements and since there were none, it was decided to proceed with the collection of data.

A card-sort deck, letter of instruction, and a stamped envelope for return of materials was sent to 156 former distributive education student-learners of the eight high schools in Albuquerque, New Mexico on July 12, 1971. A majority of student-learners completed and returned the card-sorts during the first two weeks and the remaining ones were returned by the cut-off date of October 1, 1971. Thirty-one student-learners could not be located; however, 76 per cent of the remaining 125 student-learners responded.

Q-sorts were administered to eight distributive education teacher-coordinators and 56 employers individually. The distributive education teacher-coordinators and employers completed the Q-sort at the conclusion of the interviews or were given stamped envelopes for returning the data on a mutually agreed date. The number of employers participating was less than the number of student-learners because each employer furnished from one to six training stations for distributive education students; however, these employers

represented each occupational area in which the student-learners were employed in Albuquerque, New Mexico.

V. SUMMARY

The participants in this study were 95 graduates of cooperative distributive education programs, 56 employers and eight distributive education teacher-coordinators in Albuquerque, New Mexico.

A four-volume report of research entitled "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education" by Lucy C. Crawford was the primary resource for the Q-sort instrument which included only those competencies needed in the selling occupations.

The reliability and validity of the Q-technique as a research tool were shown by reference to Crawford's study and other pertinent statements by researchers who have proved its value. Spearman's rank order correlation and Kendall's coefficient of correlation were discussed since these statistical methods were used in the analyses of the collected data.

Q-sort decks containing 75 competencies were sorted by the participants into five categories as follows:

- (1) Quite Important, (2) Somewhat Important, (3) Neutral, (4) Somewhat Unimportant, and (5) Quite Unimportant. The

scores which were obtained from the reactions of the participants became the raw data for this study.

CHAPTER IV

FINDINGS

The purpose of this study was twofold: (1) to analyze those competencies needed for selling which should be included in a distributive education curriculum and (2) to ascertain what relationships may exist between the perceptions of the student-learners, employers, and distributive education teacher-coordinators in regard to instructional content which is believed necessary to be taught in distributive education programs.

The data collected for this study were obtained by ranking the relative importance of 75 statements of competencies needed by workers in sales-related occupations. Three categories of competencies were included: (1) Knowledges and Understandings, (2) Skills, and (3) Attitudes. The competency statements were ranked as to importance by student-learners, employers, and distributive education teacher-coordinators.

Before comparisons could be made, the medians and rank orders were computed for each of the three categories of competencies. Since the distribution of responses to

most statements was markedly skewed, the medians were used because they were more representative than the means.

The next step was to determine numerically the degree of agreement among the three rating groups. Spearman's rank order correlation coefficient, corrected for tied ranks, was used for the computation. Kendall's coefficient of concordance was used as an over-all measure of agreement among the three groups of respondents. The .05 value was established as a minimum acceptable level of significance.

I. KNOWLEDGES AND UNDERSTANDINGS

Table II shows the rank ordering of Knowledges and Understandings by the three ranking groups. On a rating scale of 1 to 5, the medians ranged from 1.1 to 3.0. This indicated that the group tendency was to view all the listed knowledges and understandings as being important; however, each viewed some competencies as being more important than others.

When ranking the 25 knowledges and understandings items, the student-learners and D. E. teacher-coordinators ranked competency number 2 in first place. It was:

Knowledge of the ways to demonstrate merchandise to create interest and desire in customers.

However, the employers ranked the same competency in place 15.5. Their choice for first place was number 11 which was:

Knowledge of how to make change and count it back to the customer.

TABLE II

THE RANK ORDERING OF KNOWLEDGES AND UNDERSTANDINGS
BY THE THREE RANKING GROUPS

Knowledges and Understandings	Student Learners		Employers		D. E. Teacher- Coordinators	
	Median	Rank	Median	Rank	Median	Rank
1	1.3	1.5	1.5	7.5	1.5	9.0
2	1.3	1.5	1.8	15.5	1.1	1.0
3	1.7	8.0	1.8	15.5	1.5	9.0
4	1.4	4.0	1.5	7.5	1.5	9.0
5	2.0	15.0	1.4	5.5	1.3	4.0
6	1.6	6.5	1.6	9.5	1.5	9.0
7	2.0	15.0	1.6	9.5	1.3	4.0
8	2.2	18.0	1.9	19.0	2.3	22.5
9	1.4	4.0	1.4	5.5	1.5	9.0
10	2.0	15.0	1.4	5.5	2.2	20.0
11	1.4	4.0	1.2	1.0	1.3	4.0
12	1.8	9.5	1.8	15.5	2.0	17.0
13	1.6	6.5	1.7	12.0	1.2	2.0
14	2.4	22.5	2.2	23.0	2.3	22.5
15	2.2	18.0	1.9	19.0	1.8	13.5
16	1.9	12.0	1.8	15.5	2.2	20.0
17	1.8	12.0	1.4	5.5	1.5	9.0
18	1.8	9.5	1.3	2.0	1.8	13.5
19	2.3	20.0	1.7	12.0	2.1	18.0
20	1.9	12.0	1.7	12.0	2.2	20.0
21	2.4	22.5	2.1	22.0	1.9	15.5
22	2.3	20.5	2.3	24.0	1.9	15.5
23	2.6	24.0	2.0	21.0	2.5	24.0
24	2.9	25.0	3.0	25.0	3.0	25.0
25	2.2	18.0	1.9	19.0	1.5	9.0

Card number 11 was also important to the students and coordinators since these groups placed it in rank 4 which was a tie for second place by the students and third place for the coordinators.

The employers ranked competency number 18 in position 2 which was:

Understanding that customer loyalty can be built with timely merchandise and friendly service.

The students placed this statement in position 9.5 and the coordinators placed it in position 13.5. This may point out the possibility that employers may be more interested in building customer loyalty and lasting business than in non-regular sales.

Number 13 was chosen for position 2 by the teacher-coordinators. It was:

Knowledge of the ways to determine how and when to close a sale.

Evidently, the techniques of selling rated a high priority with the coordinators and the students who also ranked it high at 6.5. However, employers ranked the same competency in position 12, indicating less relative importance.

The teacher-coordinators and employers ranked number 5 in positions 4 and 5.5, respectively, and the students ranked it in position 15. Number 5 was.

Knowledge of how to suggest related items, accessory items or larger quantities to customers in order to increase the amount of the sale.

Competency statement number 10 shows that the D. E. teacher-coordinator and students have similar views on some items while differing greatly with the employer. Statement 10 was:

Knowledge of the store's procedures for handling merchandise being returned by the customer for exchange, cash refund or charge credit.

This statement was ranked in position 5 by employers and in positions 15 and 20 by students and coordinators.

Competency number 14 received near agreement by students, employers and coordinators with the respective ranks of 22.5, 23, and 22.5. However, it should be noted that even though each group of respondents ranked this item low in importance relative to the other items, the median rating of the item was between 2.2 and 2.4 for the groups. This indicated that the groups did feel that the item represented a fairly important competency. Number 14 was:

Knowledge of the housekeeping duties which must be performed in connection with proper care.

All three groups agreed that competency 24 should rank last. It was:

Knowledge of how to make minor repairs to merchandise in order that it might be returned to a selling condition.

Kendall's Coefficient of Concordance (W)

Kendall's coefficient of concordance (W) was used as a measure of over-all agreement among the three groups for

the 25 Knowledges and Understandings. The computations were as follows:

Let k = number of sets of rankings = 3
 N = number of items ranked = 25
 s = sum of squared deviations of ranks
 from mean of ranks

$$\text{Kendall's } W = \frac{s}{\frac{1}{12} k^2 (N^3 - N)}$$

$$W = \frac{8557.56}{\frac{1}{12} (3^2) (25^3 - 25)} = \frac{8557.56}{11700.00}$$

$$W = .731$$

On a scale of 0.00 to +1.00, $W = .731$ which indicates a moderately strong degree of agreement among the student-learners, employers and D. E. teacher-coordinators in ranking the 25 knowledges and understandings items as to their relative value.

Chi-square is the appropriate test of significance for Kendall's W . According to the following formula:

$$X^2 = k(N-1)W$$

$$X^2 = 3(25-1) (.731)$$

$$X^2 = 52.632$$

The chi-square table for 24 df at the .001 level of significance is 51.2; therefore, since the obtained chi-square of 52.632 was higher than 51.2, there was a statistically significant positive correlation among the three ranking groups for the 25 Knowledges and Understandings.

Spearman's Rank Order Correlation

Table III shows Spearman's rank order correlations for relationships between paired rankings of the knowledges and understandings by the three groups. The following are computations for the paired groups:

Student-learners and employers

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(805.5)}{25^3 - 25}$$

$$r_s = 1 - .3098$$

$$r_s = .6902$$

On a scale from 0.00 to +1.00, .6902 indicates a moderately strong degree of agreement between the students and employers as to their rankings of 25 competencies of Knowledges and Understandings.

The appropriate test of significance for Spearman's rank order correlation is the t test. According to the formula:

$$t = r_s / \frac{N-2}{1-r_s^2}$$

$$t = .6902 / \frac{25-2}{1-.6902^2}$$

$$t = .6902 / \sqrt{42.925}$$

$$t = .6902 (6.63)$$

$$t = 4.576$$

TABLE III

SPEARMAN'S RANK ORDER CORRELATIONS FOR RELATIONSHIPS
BETWEEN PAIRED RANKINGS OF THE KNOWLEDGES AND
UNDERSTANDINGS BY STUDENTS, EMPLOYERS
AND D. E. COORDINATORS

Rank Order Correlation Coefficient, r_s		
Student-Learners and Employers	Student-Learners and D. E. Teacher- Coordinators	Employers and D. E. Teacher- Coordinators
.69***	.70***	.56**

***Statistically significant at the .001 level.

**Statistically significant at the .01 level.

Table t on 23 df at .001 level of significance = 3.767. Since the obtained t test results of 4.576 were greater than 3.767, the rank order correlation coefficient was significant.

Student-learners and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(788.75)}{25^3 - 25}$$

$$r_s = 1 - .3034$$

$$r_s = .6966 \text{ or } .70$$

On a scale of 0.00 to +1.00, .70 indicates a moderately strong degree of agreement between the student-learners and the D. E. teacher-coordinators as to the ranks of 25 Knowledges and Understandings.

The t test of significance was computed as follows:

$$t = .6966 / \frac{25-2}{1-.6966^2}$$

$$t = .6966 / \sqrt{44.682}$$

$$t = 4.656$$

Table t 23 df (.001) = 3.767. Since the obtained t of 4.656 was greater than 3.767, the correlation was significant.

Employers and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

$$\text{Spearman's } r_s = 1 - \frac{6(1154.4)}{25^3 - 25}$$

$$r_s = 1 - .4440$$

$$r_s = .5560$$

On a scale of 0.00 to +1.00, .5560 or .56 indicates a fair degree of agreement between the employers and D. E. teacher-coordinators as to the ranking of 25 Knowledges and Understandings.

According to the t test of significance:

$$t = .5560 / \frac{\sqrt{25-2}}{1-.556^2}$$

$$t = .5560 / \sqrt{33.2916}$$

$$t = .5560 (5.77)$$

$$t = 3.208$$

Table t 23 df (.01) = 2.807. Since the obtained t was 3.208 and greater than 2.807, the correlation was significant.

From the Spearman's rank order coefficients one may see that there was stronger agreement between the student-learners and employers and student-learners and D. E. teacher-coordinators than between the D. E. teacher-coordinators and the employers.

Testing Hypothesis 1

Null hypothesis 1 was stated as follows:

The rankings of Crawford's 25 statements of selling competencies in category one, Knowledges and Understandings,

by the three groups of respondents (student-learners, employer and distributive education teacher-coordinators) are not related, as measured by Kendall's coefficient of concordance. The coefficient of concordance, .73, yielded chi-square (X^2) equal to 52.6 which was greater than the .001 table value, 51.2. The degree of agreement was statistically significant well beyond the .05 level of significance which was defined as the minimum acceptable level for this study. Thus, the above-stated null hypothesis was rejected.

II. SKILLS

Table IV shows the rank ordering of Skills when ranked by student-learners, employers and D. E. teacher-coordinators.

The three ranking groups differed quite often on their opinions toward skill competencies which are needed in selling. It was also evident that the groups had similar views at times. For example, all three groups thought that competency number 39 should rank in either first or second place. Number 39 was:

Ability to treat customers with courtesy even though they do not purchase merchandise.

It was also agreed by the three groups that competency number 28 should be ranked last in the list of 25 skills.

Number 28 was:

TABLE IV
THE RANK ORDERING OF SKILLS BY THE
THREE RANKING GROUPS

Skills	Student-Learners		Employers		D. E. Teacher- Coordinators	
	Median	Rank	Median	Rank	Median	Rank
26	2.2	19.5	1.9	16.0	2.2	22.5
27	2.6	24.0	2.2	23.5	2.0	20.0
28	2.7	25.0	2.1	21.5	3.0	25.0
29	1.6	6.0	2.0	19.5	1.7	16.5
30	1.7	9.0	1.5	6.0	1.3	5.5
31	1.4	2.0	1.7	9.0	1.3	5.5
32	2.1	15.5	1.7	9.0	1.5	5.5
33	2.2	19.5	2.2	23.5	1.8	12.0
34	2.1	15.5	2.1	21.5	1.5	18.0
35	1.7	9.0	1.6	7.0	1.5	12.0
36	2.3	21.5	2.4	25.0	1.3	12.5
37	2.4	23.0	2.0	19.5	2.8	22.0
38	2.3	21.5	1.8	12.0	2.2	24.0
39	2.4	2.0	1.2	1.5	1.3	5.5
40	2.1	15.5	1.4	4.5	1.7	16.0
41	2.1	15.5	1.9	16.0	2.0	20.0
42	1.9	12.0	1.7	9.0	1.5	12.5
43	1.8	11.0	1.8	12.0	1.3	5.5
44	1.6	6.0	1.8	16.0	1.3	5.5
45	1.6	6.0	1.8	12.0	1.5	12.0
46	1.7	9.0	1.9	16.0	1.2	5.5
47	1.5	4.0	1.2	1.5	1.5	1.0
48	1.4	2.0	1.4	4.5	1.3	5.5
49	2.1	15.5	1.9	16.0	1.5	12.5
50	2.1	15.5	1.3	3.0	2.0	20.0

Skill in remembering personal information about individual customers.

As it was pointed out earlier in the study, the three groups agreed that all competencies were important, but some were more important than others. Number 28 was considered relatively important as indicated by a median rating which varied between 2.1 and 3.0 for the groups, although all other skills were given higher priorities.

Skill number 46 was ranked in position 1 by the D. E. teacher-coordinators, position 9 by the student-learners, and position 16 by the employers. Number 46 was:

Skill in determining when and how to close a sale. It appeared unusual that employers would rate this one so low in comparison to the other groups.

The employers rated competency statements 39 (previously discussed) and number 47 at the top of their lists. Number 47 was:

Ability to determine the correct change and count it back to a customer during a cash sale according to company procedures.

A related statement in the Knowledges and Understandings category also gave making correct change the number 1 position in needed competencies. The employers rated courtesy to customers as equally important.

The student-learners also chose number 39 regarding courtesy to customers as their choice for position 1. They

added numbers 31 and 48 to make a three-way tie for the top rank. Item 31 was:

Skill in determining customers' wants and desires during a sale.

Competency statement 48 was:

Ability to tactfully handle difficult customers.

From these choices, it would appear that students are concerned about skills in human relations. This statement was reinforced by their choice of competency 29 for position number 3 which was:

Skill in determining when to approach a customer to open a sale.

Interestingly enough, the employers and coordinators ranked skill number 29 in positions 19.5 and 16.5 respectively.

In one competency, number 40, the employers differed markedly from the other groups. The employers ranked it as 4.5 while the student-learners and teacher-coordinators ranked the competency at positions 15.5 and 16.5 respectively. Number 40 was:

Skill in coordinating merchandise with related items in an attempt to increase the amount of the sale.

Kendall's Coefficient of Concordance (W)

Kendall's coefficient of concordance (W) was used as a measure of over-all agreement among the three groups for the 25 skills needed in sales-related occupations. The computation was as follows:

$$W = \frac{8072.34}{\frac{1}{12} (3^2) (25^3 - 25)}$$

$$W = \frac{8072.34}{11700.00}$$

$$W = .6899$$

On a scale of 0.00 to +1.00, $W = .6899$ which indicated a moderately strong degree of agreement among the student-learners, employers and D. E. teacher-coordinators in ranking 25 skills as to their relative value.

Using the chi-square test of significance, the computations were as follows:

$$X^2 = k(N-1)W$$

$$X^2 = 3(25-1) (.6899)$$

$$X^2 = 49.673$$

The chi-square table 24 df (.005) = 45.6. Since the obtained chi-square computation was higher than 45.6, the correlation was significant among the three ranking groups for the 25 skills.

Spearman's Rank Order Correlation

Table V shows Spearman's rank order correlations for relationships between paired rankings of skills by student-learners, employers and D. E. teacher-coordinators. The following are the computations for the paired groups:

Student-learners and employers

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

TABLE V

SPEARMAN'S RANK ORDER CORRELATIONS FOR RELATIONSHIPS
 BETWEEN PAIRED RANKINGS OF SKILLS
 BY STUDENTS, EMPLOYERS AND
 D. E. COORDINATORS

Rank Order Correlation Coefficients, r_s		
Student-Learners and Employers	Student-Learners and D. E. Teacher- Coordinators	Employers and D. E. Teacher- Coordinators
.65***	.75***	.38+

***Statistically significant at the .001 level.

+Statistically significant at the .10 level.

$$r_s = 1 - \frac{6(921.5)}{25^3 - 25}$$

$$r_s = 1 - .3544$$

$$r_s = .6456$$

On a scale from 0.00 to +1.00, .6456 indicates a moderately strong degree of agreement between the students and employers as to their rankings of 25 Skills.

Applying the t test as the test of significance for the Spearman rank order correlations, the following computations were made:

$$t = r_s / \frac{N-2}{1-r_s^2}$$

$$t = .6456 / \frac{25-2}{1-.6456^2}$$

$$t = .6456 / 39.4375$$

$$t = .6456 (6.28)$$

$$t = 4.054$$

Table t_{23} df (.001) = 3.767. Since the obtained t of 4.054 was greater than 3.767, the correlation was significant.

Student-learners and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(661.75)}{25^3 - 25}$$

$$r_s = 1 - .2545$$

$$r_s = .7455$$

On a scale from 0.00 to +1.00, .7455 or .75 indicated a fairly strong degree of agreement between the student-learners and the D. E. teacher-coordinators as to their rankings of skills.

Using the t test as the test of significance, the following was obtained:

$$t = .7445 / \frac{25 - 2}{1 - .7455^2}$$

$$t = .7445 / \sqrt{51.775}$$

$$t = .7445 (7.19)$$

$$t = 5.36$$

Table t 23 df (.001) = 3.767. Since the t of 5.36 was greater than 3.767, the correlation was significant.

Employers and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(1620.5)}{25^3 - 25}$$

$$r_s = 1 - .6234$$

$$r_s = .3766$$

On a scale from 0.00 to +1.00, .3766 or .38 indicated a small degree of agreement between the employers and the distributive education teacher-coordinators as to their rankings of 25 Skills.

When the t test of significance was computed using the Spearman rank order correlation, the following was obtained:

$$t = r_s \sqrt{\frac{N-2}{1-r_s^2}}$$

$$t = .3766 \sqrt{\frac{25-2}{1-.3766^2}}$$

$$t = .3766 \sqrt{26.801}$$

$$t = .3766 (5.177)$$

$$t = 1.90$$

This obtained t-value exceeded the table value only at the .10 level. This would occur by chance approximately 10 times out of 100. Since the .05 level was selected as the minimum level of significance for this study, the $r_s = .38$ was not considered statistically significant in this investigation even though it would occur relatively infrequently merely because of chance.

Testing Hypothesis 2

Null hypothesis 2 was stated as follows:

The rankings of Crawford's 25 statements of selling competencies in category two, Skills, by the three groups of respondents (student-learners, employers and distributive education teacher-coordinators) are not related, as measured by Kendall's coefficient of concordance. The coefficient of concordance, .69 yielded chi-square (X^2) equal to 49.7 which

was greater than the .005 table value of 45.6. The degree of agreement was significant well beyond the .05 level of significance which was established for this study.

Kendall's coefficient of concordance indicated that agreement among all groups considered collectively was statistically significant at the .005 level. Spearman's rank order correlation indicated two groups were statistically significant at the .001 level: student-learners and employers and student-learners and D. E. teacher-coordinators. When the employers and D. E. teacher-coordinators were compared, they could only be considered statistically significant at the .10 level. Thus, the significant relationship indicated in the Kendall's coefficient was probably reflective of the relationships between student-learners with employers and student-learners with D. E. teacher-coordinators.

III. ATTITUDES

Table VI shows the rank ordering of Attitudes by the three ranking groups of student-learners, employers and D. E. teacher-coordinators.

The student-learners and employers agreed on competency statements more often than did the combination of any other groups. They agreed that competency 75 should be ranked in position 1 while the D. E. teacher-coordinators

TABLE VI
THE RANK ORDERING OF ATTITUDES BY THE
THREE RANKING GROUPS

Attitudes	Student-Learners		Employers		D. E. Teacher- Coordinators	
	Median	Rank	Median	Rank	Median	Rank
51	2.1	23.0	1.9	21.0	1.9	17.0
52	1.9	18.5	1.5	17.0	1.2	7.0
53	1.2	24.0	2.2	24.0	1.3	10.5
54	1.5	5.5	1.3	6.5	1.1	2.5
55	1.5	5.5	1.3	6.5	1.1	2.5
56	1.7	13.0	1.3	6.5	1.1	15.0
57	1.9	18.5	1.3	6.5	1.7	18.5
58	1.6	10.5	1.5	17.0	2.0	15.0
59	1.9	18.5	1.3	6.5	1.7	15.0
60	1.6	10.5	1.4	12.0	1.2	7.0
61	1.8	14.5	1.5	12.0	2.3	22.0
62	1.5	5.5	1.4	17.0	2.5	24.5
63	1.9	18.5	1.5	12.0	2.5	24.5
64	1.4	3.0	1.3	6.5	1.1	2.5
65	1.6	10.5	1.3	6.5	1.5	12.5
66	1.9	18.5	1.3	6.5	1.5	12.5
67	1.5	5.5	1.3	6.5	1.2	7.0
68	1.3	2.0	1.2	23.0	1.1	2.5
69	1.6	10.5	1.5	17.0	1.2	7.0
70	1.9	18.5	2.0	17.0	2.3	22.0
71	1.8	14.5	1.7	22.0	2.2	20.0
72	1.8	14.5	2.7	25.0	2.0	18.5
73	1.0	5.5	1.4	12.0	2.3	22.0
74	1.6	10.5	1.5	17.0	1.2	7.0
75	1.2	1.0	1.1	1.0	1.3	10.5

placed it in a tied position of 3 with a rank of 10.5.

Competency 75 was:

Attitude that one should give the best customer service with the customer always first in mind.

All three groups had near agreement on competency statement number 68. The D. E. teacher-coordinators had ranked it in position 1 and the other groups had ranked it in position 2. The competency follows:

A belief that one should live up to promises made to customers.

The groups also agreed that statement 64 was rated in the top three positions. It was:

A feeling of pride in being a salesperson.

The D. E. teacher-coordinators also ranked competency statement number 53 in position 3 as to importance. However, the student-learners and employers agreed that it belonged in position 24 out of the possible 25 positions. Number 53 was:

A belief that the job of selling contributes to the well-being of customers.

The employers differed greatly from the other groups' ranking of statement number 57. The employers ranked it in tied position 3 while the other groups ranked it in position 18.5. The competency was:

Attitude that a customer's complaint is an excellent opportunity to build goodwill.

There was near agreement that competency statement number 71 should be ranked last or 25. It was:

Attitude that in selling, one is appealing to such fundamental human wants as security, love and power.

Kendall's Coefficient of Concordance (W)

Kendall's coefficient of concordance was used as a measure of over-all agreement among the three groups for the 25 Attitudes. The computations were as follows:

$$\text{Kendall's } W = \frac{s}{\frac{1}{12} k^2 (N^2 - N)}$$

$$W = \frac{8183.50}{\frac{1}{12} (3^2) (25^3 - 25)}$$

$$W = \frac{8183.50}{11700.00}$$

$$W = .6994$$

On a scale of 0.00 to +1.00, $W = .6994$ or .70 which indicated a moderately strong degree of agreement among the student-learners, employers, and D. E. teacher-coordinators in ranking the 25 Attitudes as to their relative value.

Using the chi-square formula as the appropriate test of significance, the following computations were made:

$$X^2 = k(N-1)W$$

$$X^2 = 3(25-1) (.6994)$$

$$X^2 = 50.357$$

Chi-square table 24 df (.005) = 45.6. Since the obtained chi-square computation was higher than the table value at the .005 level, the correlation was significant among the three ranking groups for the 25 Attitudes.

Spearman's Rank Order Correlation

Table VII shows the Spearman's rank order correlations between paired rankings of attitudes by student-learners, employers, and D. E. teacher-coordinators. The following were the computations for the paired groups:

Student-learners and employers

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(629.5)}{25^3 - 25}$$

$$r_s = 1 - .2421$$

$$r_s = .7579$$

On a scale from 0.00 to +1.00, .7579 indicated a moderately strong degree of agreement between the student-learners and employers as to their rankings of 25 Attitudes.

To test for significance, the t test was used as follows:

$$t = r_s \frac{\sqrt{N-2}}{1-r_s^2}$$

$$t = .7579 \frac{\sqrt{25-2}}{1-.7579^2}$$

TABLE VII

SPEARMAN'S RANK ORDER CORRELATIONS FOR RELATIONSHIPS
 BETWEEN PAIRED RANKINGS OF ATTITUDES
 BY STUDENTS, EMPLOYERS AND
 D. E. COORDINATORS

Rank Order Correlation Coefficients, r_s		
Student-Learners and Employers	Student-Learners and D. E. Teacher- Coordinators	Employers and D. E. Teacher- Coordinators
.76***	.59**	.44*

***Statistically significant at the .001 level.

**Statistically significant at the .01 level.

*Statistically significant at the .05 level.

$$t = .7579 / \sqrt{54.0429}$$

$$t = .7579 (7.351)$$

$$t = 5.571$$

Table t 23 df (.001) = 3.767. Since the results of the t test were larger than 3.767, the correlation was significant at the .001 level.

Student-learners and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(1078.5)}{25^3 - 25}$$

$$r_s = .5852$$

On a scale from 0.00 to +1.00, .5852 or .59 indicated a fair degree of agreement between the student-learners and D. E. coordinators as to their rankings of Attitudes.

When the t test was computed for significance, the results were as follows:

$$t = r_s / \frac{\sqrt{N-2}}{1-r_s^2}$$

$$t = .5852 / \frac{\sqrt{25-2}}{1-.5852^2}$$

$$t = .5852 / \sqrt{34.9788}$$

$$t = .5852 / \sqrt{5.915}$$

$$t = 3.461$$

Table t 23 df (.01) = 2.807. The correlation was significant at the .01 level.

Employers and D. E. teacher-coordinators

$$\text{Spearman's } r_s = 1 - \frac{6 \sum d^2}{n^3 - n}$$

$$r_s = 1 - \frac{6(1466.5)}{25^3 - 25}$$

$$r_s = 1 - .5640$$

$$r_s = .4360$$

On a scale from 0.00 to +1.00, .4360 or .44 indicated a slight degree of agreement between the employers and D. E. teacher-coordinators as to their rankings of 25 Attitudes which are needed in sales-related occupations.

The t test as a test of significance was computed as follows:

$$t = r_s / \frac{\sqrt{N - 2}}{1 - r_s}$$

$$t = .4360 / \frac{\sqrt{25-2}}{1-.4360^2}$$

$$t = .4360 / \sqrt{28.3984}$$

$$t = .4360 (5.33)$$

$$t = 2.324$$

Table t 23 df (.05) = 2.069. The t test showed that the correlation was significant at the .05 level.

Testing Hypothesis 3

Null hypothesis 3 was stated as follows:

The rankings of Crawford's 25 statements of selling competencies in category three, Attitudes, by the three

groups of respondents (student-learners, employers and distributive education teacher-coordinators) are not related, as measured by Kendall's coefficient of concordance. The coefficient of concordance, .70, yielded chi-square equal to 50.4 which was greater than the .005 table value of 45.6. The degree of agreement was significant beyond the minimum .05 level of significance which was established for this study.

IV. SUMMARY

All three of the null hypotheses stated in Chapter I were rejected as a result of the computations made from the collected data. The median and rank order of each of the 75 statements of competencies needed in selling occupations were recorded in Tables II, IV, and VI. Spearman's rank order correlations for relationships between paired rankings of student-learners, employers, and D. E. teacher-coordinators for Knowledges and Understandings, Skills, and Attitudes were shown in Tables III, V, and VII which also indicated the statistical level of significance for the correlation of each paired group. These values were used to indicate the degree of agreement among the three pairs of groups on the three categories of competencies. The t test of significance was used for the Spearman rank order correlations.

Kendall's coefficient of concordance (W) was used as a measure of over-all agreement among the three groups, collectively, on the ranking of Knowledges and Understandings, Skills, and Attitudes. Kendall's (W) was also used to reject or not to reject the null hypotheses. The chi-square test of significance was used to test the significance of Kendall's (W) by comparing chi-square computations to chi-square tables at .05 or higher levels of significance. If the table values were less than the computed chi-square values, the correlations were significant. In this case, the table values showed that all of the correlations were statistically significant at the .05 level established for this study.

An analysis of the data in category one, Knowledges and Understandings, revealed that although the student-learners and D. E. teacher-coordinators agreed on their rankings of several competencies, they did not view certain aspects of selling in the same way. There was evidence that these two groups placed more emphasis on the professional techniques of selling while employers emphasized that student-learners should be courteous to customers and make correct change in sales operations.

Employers ranked high those competencies which would tend to improve good public relations and increase sales to regular customers. As an example, they displayed a

management point of view by encouraging employees to promote customer loyalty and to increase sales by suggesting other related items when making sales. Student-learners and teacher-coordinators did not rank these competencies very high in comparison to rankings given by the employers.

In one instance, the employers and D. E. teacher-coordinators agreed and the student-learners did not. More often, it was the teacher-coordinator who had dissimilar views from the employer and student-learner. This lack of agreement indicated that there is a need for better rapport between the teacher-coordinators and employers in order to correlate the curriculum more with the needs of workers in distributive occupations. Spearman's rank order correlations substantiated this point. For example, the groups had the following correlations: student-learners and employers, .69; student-learners and teacher-coordinators, .70; and employers and teacher-coordinators, .56.

The correlation between the two adult groups would have been greater if the coordinators had been better informed as to employer rankings of the competencies. Employers ranked those competencies highest which pertained to: (1) making change, (2) friendly service, (3) product information, (4) store procedures, (5) operating a cash register, (6) suggesting related items to increase sales, (7) displaying merchandise, and (8) techniques of

salesmanship. The competencies rated lowest were those which related to: (1) making minor repairs to merchandise, (2) arranging stock in a department, (3) credit as a selling tool, (4) inventory procedures, (5) housekeeping duties related to stock care, (6) involving the customer in sales presentations, (7) translating product knowledge into customer benefits, and (8) procedures for charge sales.

The null hypothesis that the rankings of Crawford's 25 competencies in category one, Knowledges and Understandings, by the three groups of respondents are not related, as measured by Kendall's coefficient of concordance, was rejected.

An analysis of category two, Skills, revealed that the concerns of student-learners and D. E. teacher-coordinators were quite different from that of the employers. The data revealed that employers were more concerned that students should demonstrate basic skills in public relations with customers and correctly handle money rather than display techniques of salesmanship. A similar view was expressed in the category of Knowledges and Understandings. Most students expressed the concern for improving their abilities to deal appropriately with customers under varying circumstances while the employers and distributive education coordinators did not rank this point highly. It is possible that the adults were assuming that the student-learners

already possessed these skills and did not need further emphasis on them. The data also indicated that some skills would not be emphasized in the classroom unless the teacher-coordinator had previous experiences in a sales occupation. The teacher-coordinator who has had business experience is more likely to understand the employers who think that a greater emphasis should be given to increased sales by employees through suggesting related items to customers.

When the Spearman rank order correlations were computed for the Skills category, only the correlation on rankings by employers and teacher-coordinators was not considered statistically significant according to the .05 level of significance which was acceptable for this study. The three Kendall coefficients of concordance were significant beyond the .05 level, but this was true only because of the relatively higher correlations of the other paired groups. The paired groups and their correlations were as follows: student-learners and employers, .65; student-learners and teacher-coordinators, .75; and employers and teacher-coordinators, .38. This suggested that the teacher-coordinators should go beyond the normal tasks of helping students get jobs and be apprised of internal problems and concerns of the employers. For instance, the employers rated highest those competencies in the Skills category pertaining to: (1) courtesy to customers, (2) determining

correct change and following company sales procedures, (3) service to customers according to management desires, (4) use of tact in dealing with customers, (5) coordinating merchandise in related sales, (6) opening a sales conversation, (7) handling objections, and (8) determining customer wants and desires. Competencies rated lowest were related to: (1) closing the sale with an appropriate statement, (2) obtaining the prices a customer wants to pay, (3) distinguishing a customer's personal characteristics, (4) relating merchandise benefits to a customer's needs, (5) remembering personal information about a customer, (6) suggesting other merchandise which might satisfy a customer's needs, (7) approaching a customer to open a sale, and (8) writing out saleschecks.

The null hypothesis that Crawford's 25 statements of selling competencies in category two, Skills, by the three groups of respondents, are not related, as measured by Kendall's coefficient of concordance, was rejected.

In an analysis of category three, Attitudes, the data revealed that student-learners and their D. E. teacher-coordinators need to have a better understanding of the attitudes of management toward operating businesses. As an example, employers were more concerned with the techniques of handling customer complaints than were the student-learners or the teacher-coordinators. The ranking groups

and their correlations were as follows: student-learners and employers, .76; student-learners and teacher-coordinators, .59; and employers and teacher-coordinators, .44. The .76 correlation between the student-learners and the employers was the highest degree of agreement among the three groups.

In their rankings of Attitude competencies, the employers rated highest those competencies which pertained to: (1) giving the best service to customers, (2) keeping promises made to customers, (3) possessing a high interest in the merchandise or service being sold, (4) being enthusiastic toward merchandise when making a sale, (5) overcoming objections, (6) handling customer complaints, (7) suggesting merchandise as a service to to increase sales, and (8) having a feeling of pride as a salesperson.

Employers rated lowest those competencies which pertained to: (1) fundamental human wants such as security, love, and power, (2) contributing to the well-being of customers through selling, (3) being familiar with interior and window displays, (4) meeting a sales quota, (5) customers needing the products or services offered, (6) successful selling being dependent on product information, customer's understanding, and salesperson's personality, (7) handling merchandise carefully to reduce markdowns, and (8) taking advantage of sales training opportunities.

The null hypothesis that Crawford's 25 statements of selling competencies in category three, Attitudes, by the three respondents are not related, as measured by Kendall's coefficient of concordance, was rejected. The study showed that there was a significant degree of agreement among the three groups well beyond the .05 level.

It has been shown that all of the null hypotheses were rejected. The study revealed that there was a significant agreement among the three groups of respondents in all of the categories of Knowledges and Understandings, Skills, and Attitudes; however, the points of agreement were not the same among the groups. The agreement was significantly higher between the student-learners and teacher-coordinators and student-learners and employers than between the employers and teacher-coordinators. A diminutive agreement between the employers and teacher-coordinators indicates that these two groups have not established similar priorities for competencies which are needed in selling occupations.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purposes of this chapter are to summarize the study, to present conclusions, and to recommend curriculum changes and additional research which are based on the findings of this study.

I. SUMMARY

Rationale for the Study

A review of literature suggested that there is a discrepancy between what is taught in school and what is practiced in business and industry. It has been noted that an effective vocational curriculum must be in tune with the needs of students and employers and that occupational or job analysis should be used in identifying knowledges and understandings, skills, and attitudes which are needed for various occupational competencies. In developing a competency pattern approach to curriculum construction, Lucy C. Crawford used job analysis in identifying the competencies needed by distributive workers in selected categories of business.¹ The initial competencies, identified by Crawford

¹Lucy C. Crawford, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Final Report of Research Project supported by U. S. Office of Education Grant OE-6-85-044 (Washington: U.S. Department of Health, Education, and Welfare, Vol. I, 1967).

as those needed by workers in selling occupations, have been used as the theoretical framework for this investigation.

Specific Purpose of This Study

The purpose of this study was twofold: (1) to analyze those competencies needed for selling which should be included in a distributive education curriculum, and (2) to ascertain what relationships may exist between the perceptions of the student-learners, employers, and distributive education teacher-coordinators in regard to instructional content which is believed necessary to be taught in distributive education programs.

Findings

The findings of this study revealed that nearly all of the 75 competencies listed in the instrument (see Appendix A) were considered important in the selling occupations by student-learners, employers, and distributive education teacher-coordinators. Using a ranking system of 1 to 5 (quite important to quite unimportant), the medians of the three groups ranged as follows: student-learners, 1.2 to 2.9; employers, 1.1 to 3.0; and teacher-coordinators, 1.1 to 3.0. Competency numbers 24 and 28 were the only ones which were rated 3.0 or "neutral" by teacher-coordinators. Item number 24 was "Knowledge of how to make minor repairs to merchandise in order that it might be returned to a selling

condition" and number 28 referred to "Skill in remembering personal information about individual customers." Employers gave the 3.0 rating only to competency number 24, indicating that all other competencies were deemed "Quite Important" or "Somewhat Important."

One of the desired outcomes of this study was to improve the distributive education curriculum area of selling by correlating the classroom content with the needs of the job, as indicated by employer rankings of competencies shown in Tables II, IV, and VI. According to the employers, the competencies were ranked, by category, in descending order of importance as follows:

Knowledges and Understandings

1. Competency 11. Knowledge of how to make change and count it back to the customer.
2. Competency 18. Understanding that customer loyalty can be built with timely merchandise and friendly service.
3. Competency 17. Knowledge of the selling features of products and/or services.
4. Competency 10. Knowledge of the store's procedures for handling merchandise being returned by the customer for exchange, cash refund or charge credit.

5. Competency 9. Knowledge of how to operate a cash register correctly.
6. Competency 5. Knowledge of how to suggest related items, accessory items or larger quantities to customers in order to increase the amount of the sale.
7. Competency 1. Knowledge of the ways to show or display merchandise to create interest and desire in customers.
8. Competency 4. Knowledge of how to provide information about merchandise which will create desire or interest in customers.
9. Competency 6. Knowledge of how to handle individual differences in customers.
10. Competency 7. Knowledge of the ways to help a customer make a buying decision.
11. Competency 13. Knowledge of the ways to determine how and when to close a sale.
12. Competency 19. Understanding that stock shortages and overages are created by ringing an incorrect amount for a sale on the cash register or ringing the sale onto the wrong department key.
13. Competency 20. Knowledge of how to process checks received in payment for merchandise purchased.

14. Competency 2. Knowledge of the ways to demonstrate merchandise to create interest and desire in customers.
15. Competency 3. Knowledge of how to get merchandise into the customer's hands to create desire and attachment to the item.
16. Competency 12. Knowledge of the procedures to use when writing out saleschecks.
17. Competency 16. Knowledge of the ways to handle customer complaints according to store policy.
18. Competency 8. Knowledge of the procedures for conducting a charge sale transaction.
19. Competency 15. Knowledge of how to translate product knowledge into customer benefits.
20. Competency 25. Understanding that a combination of seeing, hearing and participation on the part of the customer helps strengthen a sales presentation.
21. Competency 23. Knowledge of the housekeeping duties which must be performed in connection with proper stock care.
22. Competency 21. Knowledge of how to prepare or organize stock for accurate and fast counting during an inventory.

23. Competency 14. Knowledge of the importance of credit as a selling tool.
24. Competency 22. Knowledge of how to arrange stock in a selling department by color, size, style and price.
25. Competency 24. Knowledge of how to make minor repairs to merchandise in order that it might be returned to a selling condition.

Skills

1. Competency 39. Ability to treat customers with courtesy even though they do not purchase merchandise.
2. Competency 47. Ability to determine the correct change and count it back to a customer during a cash sale according to company procedures.
3. Competency 50. Ability to serve customers in the manner or style that management desires.
4. Competency 48. Ability to tactfully handle difficult customers.
5. Competency 40. Skill in coordinating merchandise with related items in an attempt to increase the amount of the sale.
6. Competency 30. Skill in opening a sales conversation with a suitable statement or remark.

7. Competency 35. Skill in sensing a customer's objections and handling them as effectively as possible.
8. Competency 31. Skill in determining customers' wants and desires during a sale.
9. Competency 32. Skill in suggesting to customers items of merchandise or services which can be substituted for the unavailable or desired ones.
10. Competency 42. Ability to question, observe and listen in order to complete a successful sale.
11. Competency 38. Ability to determine how to handle individual situations in which merchandise is being returned for exchange, cash refund or charge credit.
12. Competency 43. Skill in helping a customer make a buying decision.
13. Competency 45. Skill in showing or displaying merchandise in a way that creates interest and desire in customers.
14. Competency 26. Skill in remembering customers' names when serving them.
15. Competency 41. Ability to determine the buying motives of customers and then appeal to them.
16. Competency 44. Skill in demonstrating merchandise in the ways it may be used by the customer.

17. Competency 46. Skill in determining when and how to close a sale.
18. Competency 49. Skill in properly writing out saleschecks.
19. Competency 29. Skill in determining when to approach a customer to open a sale.
20. Competency 37. Ability to effectively suggest advertised merchandise from one's own department or other departments in the store that might satisfy the needs of the customer.
21. Competency 28. Skill in remembering personal information about individual customers.
22. Competency 34. Skill in relating merchandise benefits to a customer's needs.
23. Competency 27. Skill in distinguishing a customer's personal characteristics while talking to him.
24. Competency 33. Skill in listening for indications regarding the prices a customer wants to pay during a sale.
25. Competency 36. Skill in closing a sale with a statement appropriate to the occasion or the season.

Attitudes

1. Competency 75. Attitude that one should give the best customer service with the customer always first in mind.
2. Competency 68. A belief that one should live up to promises made to customers.
3. Competency 54. A strong interest in the merchandise or service being sold.
4. Competency 55. A feeling that genuine enthusiasm for merchandise during a sale will help create desire or interest in the customer.
5. Competency 56. Attitude that customers' objections must be handled and overcome with respect.
6. Competency 57. Attitude that a customer's complaint is an excellent opportunity to build goodwill.
7. Competency 59. Attitude that suggestion selling is a service to the customer and also increases volume and profits.
8. Competency 64. A feeling of pride in being a salesperson.
9. Competency 65. Attitude that stocks which are kept fresh and tidy are a true asset during a sale.

10. Competency 67. Attitude that customers should be approached promptly and not be kept waiting.
11. Competency 60. Attitude that basic product information is necessary to demonstrate good selling practices.
12. Competency 62. Attitude that today's customer chooses the store where shopping conditions are most pleasant.
13. Competency 72. Attitude that the buyer or department manager must be promptly informed of items not in stock for which customers ask.
14. Competency 52. A feeling of sincere interest in customers and their problems.
15. Competency 58. Attitude that good display of merchandise is a prime factor in developing a customer's interest.
16. Competency 61. Attitude that sufficient understanding of a firm's policies is necessary to truly represent the viewpoint of management to customers.
17. Competency 63. Attitude that the customer, by his very act of complaining, is giving the store an opportunity to correct a possible fault in its operation.

18. Competency 69. A belief that one should take advantage of sales training opportunities.
19. Competency 73. Attitude that merchandise must be carefully handled to reduce markdowns.
20. Competency 74. An awareness that successful selling hinges on adequate product information, the customer's understanding and the salesperson's personality.
21. Competency 51. A feeling that the customer needs the service or product being offered.
22. Competency 70. An awareness that each salesperson should attempt to meet his sales quota in order to meet established job performance.
23. Competency 66. A belief that one must know the merchandise being featured in interior and window displays in order to do an adequate selling job.
24. Competency 53. A belief that the job of selling contributes to the well-being of customers.
25. Competency 71. Attitude that in selling, one is appealing to such fundamental human wants as security, love and power.

Procedure

A Q-sort instrument consisting of 75 statements of competencies, previously identified by Lucy C. Crawford as needed in selling occupations, was administered to 95

teacher-coordinators and the employers on each of the three categories of competencies.

II. CONCLUSIONS

An analysis of the rankings of competencies listed in the research instrument used in this study indicated that 73 of the 75 statements were judged as "Quite Important" or "Somewhat Important" by all three groups of respondents. The remaining two competencies, numbers 24 and 28, were not rejected as unnecessary in sales-related occupations; but, they received lower ratings than did the other competencies. It may be concluded that all 75 of the competencies were approved for inclusion in a distributive education curriculum and that each has an established order or importance within the categories of Knowledges and Understandings, Skills, and Attitudes as shown in the summary of this chapter.

The statistical analysis of the collected data, using Kendall's coefficient of concordance, indicated that there was a moderately strong agreement among student-learners, distributive education teacher-coordinators, and employers concerning their perceptions of the instructional content which should be taught in distributive education classes. However, when the Spearman rank order correlations were determined for the paired ranking of employers and teacher-coordinators, student-learners and teacher-coordinators, and

(3) Salesmanship Techniques, (4) Store Management Procedures, and (5) Merchandise Display Fundamentals. These units are listed below in three priorities of importance. The needed competencies are listed, also, in the order of importance, under each unit of instruction, and the numbers which follow unit titles refer to competencies listed in the recommended units and in the research instrument. (See Appendix A.)

Priority 1

1. The Cash Register (11, 47, 5)
 - a. Knowledge and ability to determine the correct change and count it back to a customer during a cash sale according to company procedures.
 - b. Knowledge of how to operate a cash register correctly.
2. Customer Relations (18, 6, 39, 50, 48, 35, 32, 75, 68, 56, 57, 59)
 - a. Understanding that customer loyalty can be built with timely merchandise and friendly service.
 - b. Knowledge of how to handle individual differences in customers.
 - c. Ability to treat customers with courtesy even though they do not purchase merchandise.
 - d. Ability to serve customers in the manner or style that management desires.
 - e. Ability to tactfully handle difficult customers.
 - f. Skill in sensing a customer's objections and handling them as effectively as possible.

- g. Skill in suggesting to customers items of merchandise or services which can be substituted for the unavailable or desired ones.
 - h. Attitude that one should give the best customer service with the customer always first in mind.
 - i. A belief that one should live up to promises made to customers.
 - j. Attitude that customers' objections must be handled and overcome with respect.
 - k. Attitude that a customer's complaint is an excellent opportunity to build goodwill.
 - l. Attitude that suggestion selling is a service to the customer and also increases volume and profits.
3. Salesmanship Techniques (17, 5, 4, 40, 30, 31, 32, 54, 55, 59, 64)
- a. Knowledge of the selling features of products and/or services.
 - b. Knowledge of how to suggest related items, accessory items or larger quantities to customers in order to increase the amount of the sale.
 - c. Knowledge of how to provide information about merchandise which will create desire or interest in customers.
 - d. Skill in coordinating merchandise with related items in an attempt to increase the amount of the sale.
 - e. Skill in opening a sales conversation with a suitable statement or remark.
 - f. Skill in determining customers' wants and desires during a sale.
 - g. Skill in suggesting to customers items of merchandise or services which can be substituted for the unavailable or desired ones.

2. Customer Relations (16, 43, 26, 67, 12, 72, 52, 63)

- a. Knowledge of the ways to handle customer complaints according to store policy.
- b. Skill in helping a customer make a buying decision.
- c. Skill in remembering customers' names when serving them.
- d. Attitude that customers should be approached promptly and not be kept waiting.
- e. Attitude that today's customer chooses the store where shopping conditions are most pleasant.
- f. Attitude that the buyer or department manager must be promptly informed of items not in stock for which customers ask.
- g. A feeling of sincere interest in customers and their problems.
- h. Attitude that the customer, by his very act of complaining, is giving the store an opportunity to correct a possible fault in its operation.

3. Salesmanship Techniques (7, 13, 2, 3, 42, 43, 41, 44, 46, 60)

- a. Knowledge of the ways to help a customer make a buying decision.
- b. Knowledge of the ways to determine how and when to close a sale.
- c. Knowledge of the ways to demonstrate merchandise to create interest and desire in customers.
- d. Knowledge of how to get merchandise into the customer's hands to create desire and attachment to the item.
- e. Ability to question, observe and listen in order to complete a successful sale.

- f. Skill in helping a customer make a buying decision.
- g. Ability to determine the buying motives of customers and then appeal to them.
- h. Skill in demonstrating merchandise in the ways it may be used by the customer.
- i. Skill in determining when and how to close a sale.
- j. Attitude that basic product information is necessary to demonstrate good selling practices.

4. Store Management Procedures (20, 12, 38, 61)

- a. Knowledge of how to process checks received in payment for merchandise purchased.
- b. Knowledge of the procedures to use when writing out saleschecks.
- c. Ability to determine how to handle individual situations in which merchandise is being returned for exchange, cash refund or charge credit.
- d. Attitude that sufficient understanding of a firm's policies is necessary to truly represent the viewpoint of management to customers.

5. Display Fundamentals (45, 58)

- a. Skill in showing or displaying merchandise in a way that creates interest and desire in customers.
- b. Attitude that good display of merchandise is a prime factor in developing a customer's interest.

Priority 3

1. Customer Relations (38, 53)
 - a. Skill in remembering personal information about individual customers.
 - b. A belief that the job of selling contributes to the well-being of customers.
2. Salesmanship Techniques (15, 25, 29, 37, 34, 27, 33, 36, 69, 74, 51, 66, 71)
 - a. Knowledge of how to translate product knowledge into customer benefits.
 - b. Understanding that a combination of seeing, hearing and participation on the part of the customer helps strengthen a sales presentation.
 - c. Skill in determining when to approach a customer to open a sale.
 - d. Ability to effectively suggest advertised merchandise from one's own department or other departments in the store that might satisfy the needs of the customer.
 - e. Skill in relating merchandise benefits to a customer's needs.
 - f. Skill in distinguishing a customer's personal characteristics while talking to him.
 - g. Skill in listening for indications regarding the prices a customer wants to pay during a sale.
 - h. Skill in closing a sale with a statement appropriate to the occasion or the season.
 - i. A belief that one should take advantage of sales training opportunities.
 - j. An awareness that successful selling hinges on adequate product information, the customer's understanding and the salesperson's personality.

- k. A feeling that the customer needs the service or product being offered.
 - l. A belief that one must know the merchandise being featured in interior and window displays in order to do an adequate selling job.
 - m. Attitude that in selling, one is appealing to such fundamental human wants as security, love and power.
3. Store Management Procedures (8, 49, 23, 21, 14, 24, 73, 70)
- a. Knowledge of the procedures for conducting a charge sale transaction.
 - b. Skill in properly writing out saleschecks.
 - c. Knowledge of the housekeeping duties which must be performed in connection with proper stock care.
 - d. Knowledge of how to prepare or organize stock for accurate and fast counting during an inventory.
 - e. Knowledge of the importance of credit as a selling tool.
 - f. Knowledge of how to make minor repairs to merchandise in order that it might be returned to a selling condition.
 - g. Attitude that merchandise must be carefully handled to reduce markdowns.
 - h. An awareness that each salesperson should attempt to meet his sales quota in order to meet established job performance.
4. Display Fundamentals (22)
- a. Knowledge of how to arrange stock in a selling department by color, size, style and price.

In addition to implementing the priorities of teaching competencies which were outlined above, the distributive

education teacher-coordinator should: (1) Develop rapport with store managers, personnel managers, and distributive education training sponsors in order to correlate learning experiences on the job with those in the classroom, and (2) Study the planned sequence of training activities which training coordinators of large department stores use for orientation and in-service training of employees in order that new methods and content may be introduced to class instruction.

Finally, it is recommended that other writers and researchers:

1. Replicate this study in other areas of the nation in order that comparisons of findings may be made.
2. Revise distributive education textbooks by incorporating units of instruction which use the priorities established in this study.
3. Revise salesmanship courses to include the competencies, by priorities, which have been recommended by this investigator.
4. Identify knowledges and understandings, skills, and attitudes which are needed by workers in advertising, communications, display, human relations, mathematics, merchandising, operations and management, and product and service technology

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Appendix

Appendix A

COMPETENCIES NEEDED BY DISTRIBUTIVE
EMPLOYEES IN SELLING

Knowledges and Understandings

1. Knowledge of the ways to show or display merchandise to create interest and desire in customers.
2. Knowledge of the ways to demonstrate merchandise to create interest and desire in customers.
3. Knowledge of how to get merchandise into the customer's hands to create desire and attachment to the item.
4. Knowledge of how to provide information about merchandise which will create desire or interest in customers.
5. Knowledge of how to suggest related items, accessory items or larger quantities to customers in order to increase the amount of the sale.
6. Knowledge of how to handle individual differences in customers.
7. Knowledge of the ways to help a customer make a buying decision.
8. Knowledge of the procedures for conducting a charge sale transaction.
9. Knowledge of how to operate a cash register correctly.
10. Knowledge of the store's procedures for handling merchandise being returned by the customer for exchange, cash refund or charge credit.
11. Knowledge of how to make change and count it back to the customer.
12. Knowledge of the procedures to use when writing out saleschecks.
13. Knowledge of the ways to determine how and when to close a sale.
14. Knowledge of the importance of credit as a selling tool.
15. Knowledge of how to translate product knowledge into customer benefits.

16. Knowledge of the ways to handle customer complaints according to store policy.
17. Knowledge of the selling features of products and/or services.
18. Understanding that customer loyalty can be built with timely merchandise and friendly service.
19. Understanding that stock shortages and overages are created by ringing an incorrect amount for a sale on the cash register or ringing the sale onto the wrong department key.
20. Knowledge of how to process checks received in payment for merchandise purchased.
21. Knowledge of how to prepare or organize stock for accurate and fast counting during an inventory.
22. Knowledge of how to arrange stock in a selling department by color, size, style and price.
23. Knowledge of the housekeeping duties which must be performed in connection with proper stock care.
24. Knowledge of how to make minor repairs to merchandise in order that it might be returned to a selling condition.
25. Understanding that a combination of seeing, hearing and participation on the part of the customer helps strengthen a sales presentation.

Skills

26. Skill in remembering customers' names when serving them.
27. Skill in distinguishing a customer's personal characteristics while talking to him.
28. Skill in remembering personal information about individual customers.
29. Skill in determining when to approach a customer to open a sale.
30. Skill in opening a sales conversation with a suitable statement or remark.

31. Skill in determining customers' wants and desires during a sale.
32. Skill in suggesting to customers items of merchandise or services which can be substituted for the unavailable or desired ones.
33. Skill in listening for indications regarding the prices a customer wants to pay during a sale.
34. Skill in relating merchandise benefits to a customer's needs.
35. Skill in sensing a customer's objections and handling them as effectively as possible.
36. Skill in closing a sale with a statement appropriate to the occasion or the season.
37. Ability to effectively suggest advertised merchandise from one's own department or other departments in the store that might satisfy the needs of the customer.
38. Ability to determine how to handle individual situations in which merchandise is being returned for exchange, cash refund or charge credit.
39. Ability to treat customers with courtesy even though they do not purchase merchandise.
40. Skill in coordinating merchandise with related items in an attempt to increase the amount of the sale.
41. Ability to determine the buying motives of customers and then appeal to them.
42. Ability to question, observe and listen in order to complete a successful sale.
43. Skill in helping a customer make a buying decision.
44. Skill in demonstrating merchandise in the ways it may be used by the customer.
45. Skill in showing or displaying merchandise in a way that creates interest and desire in customers.
46. Skill in determining when and how to close a sale.

47. Ability to determine the correct change and count it back to a customer during a cash sale according to company procedures.
48. Ability to tactfully handle difficult customers.
49. Skill in properly writing out saleschecks.
50. Ability to serve customers in the manner or style that management desires.

Attitudes

51. A feeling that the customer needs the service or product being offered.
52. A feeling of sincere interest in customers and their problems.
53. A belief that the job of selling contributes to the well-being of customers.
54. A strong interest in the merchandise or service being sold.
55. A feeling that genuine enthusiasm for merchandise during a sale will help create desire or interest in the customer.
56. Attitude that customers' objections must be handled and overcome with respect.
57. Attitude that a customer's complaint is an excellent opportunity to build goodwill.
58. Attitude that good display of merchandise is a prime factor in developing a customer's interest.
59. Attitude that suggestion selling is a service to the customer and also increases volume and profits.
60. Attitude that basic product information is necessary to demonstrate good selling practices.
61. Attitude that sufficient understanding of a firm's policies is necessary to truly represent the viewpoint of management to customers.

62. Attitude that today's customer chooses the store where shopping conditions are most pleasant.
63. Attitude that the customer, by his very act of complaining is giving the store an opportunity to correct a possible fault in its operation.
64. A feeling of pride in being a salesperson.
65. Attitude that stocks which are kept fresh and tidy are a true asset during a sale.
66. A belief that one must know the merchandise being featured in interior and window displays in order to do an adequate selling job.
67. Attitude that customers should be approached promptly and not be kept waiting.
68. A belief that one should live up to promises made to customers.
69. A belief that one should take advantage of sales training opportunities.
70. An awareness that each salesperson should attempt to meet his sales quota in order to meet established job performance.
71. Attitude that in selling, one is appealing to such fundamental human wants as security, love and power.
72. Attitude that the buyer or department manager must be promptly informed of items not in stock for which customers ask.
73. Attitude that merchandise must be carefully handled to reduce markdowns.
74. An awareness that successful selling hinges on adequate product information, the customer's understanding and the salesperson's personality.
75. Attitude that one should give the best customer service with the customer always first in mind.

APPENDIX B

Distributive Education
Sandia High School
Albuquerque Public Schools
Albuquerque, New Mexico 87110

July, 1971

Dear Distributive Education Graduate:

I need your help in a study aimed toward improving the curriculum in Distributive Education. The participants in the study are the teacher-coordinators, employers and cooperative (only those who worked) Distributive Education students in the eight high schools having D. E. programs in the Albuquerque Public Schools. Your opinions are valuable to me. It will take only 10 to 15 minutes of your time and I think you will find the method to be interesting. Please follow the instructions listed below:

1. On a table in front of you, lay out the five card sort cards in front of you, from left to right as follows:

#1	#2	#3	#4	#5
QUITE	SOMEWHAT	NEUTRAL	SOMEWHAT	QUITE
IMPORTANT	IMPORTANT		UNIMPORTANT	UNIMPORTANT

2. Now, think of the work you did last year on-the-job and in the Distributive Education classroom. As you carefully read the statements on cards 1 to 75, place each card in a category on Card Sort cards numbers 1, 2, 3, 4 or 5 according to the importance you feel that each deserves.
3. You may feel that all of the statements are important; however, some may be more important than others. Based on your personal experiences, decide what emphasis should be given to these competencies in the classroom in order that D. E. students may be more successful in their places of employment.
4. After your decisions have been made, place each stack of cards behind the individual Card Sort cards and place them in the enclosed stamped envelope for returning them to me. Please place them in the mail today. Your help is sincerely appreciated.
5. If you have any questions, please call me at 344-6933.

Teddy B. Palmore
Teacher-Coordinator

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the

I.

Copy

APPENDIX C

II.

III.

