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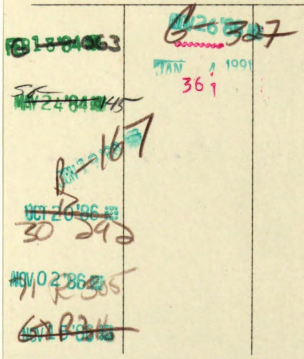

THE RELATIONSHIP BETWEEN SELECTED PROCESS VARIABLES AND RELATED JOB PLACEMENT AND JOB SATISFACTION RATES FOR GENERAL MERCHANDISING PROGRAMS DURING THE 1978-79 SCHOOL YEAR

By

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ABSTRACT

THE RELATIONSHIP BETWEEN SELECTED PROCESS VARIABLES AND RELATED JOB PLACEMENT AND JOB SATISFACTION RATES FOR GENERAL MERCHANDISING PROGRAMS DURING THE 1978-79 SCHOOL YEAR

by

Carl Andrew Woloszyk

Statement of the Problem

The problem of this study was to identify selected planning and operational variables which were related to job placement and job satisfaction rates for general merchandising programs in the state of Michigan. In addition, the predictive nature of the combined variables upon individual related job placement and job satisfaction rates for general merchandising programs was identified.

Research Procedures

The population of this study consisted of 5,701 program completers, who responded to the 1979 Follow-Up Survey from 265 general merchandising programs.

A complete descriptive analysis of the total population and the group under study was compiled.

Pearson Product-Moment Correlation coefficients were derived for each independent variable when compared with the dependent measures of job placement and job satisfaction for programs with eleven or more respondents. Correlation coefficients were obtained between the various independent variables and between each of the dependent measures. The strength, direction, and significance of the coefficients was identified.

The predictive nature of the selected independent variables on the dependent measures of job placement and job satisfaction was computed by using a stepwise multiple regression analysis.

Major Findings of the Study

DECA and the percentage of female completers were found to have a statistically significant positive relationship at the ($p < .05$) level to related job placement. Other learner planning and process variables were found to have no satistically significant positive relationship to job placement rates for general merchandising programs.

It was found that related job placement rates have a statistically significant positive relationship at the ($p < .01$) level to job satisfaction rates.

Projected regional job openings and the percentage of female completers were found to have a statistically significant negative relationship at the ($p < .05$) level on job satisfaction rates. Projected job openings were found to have a statistically significant negative relationship at the ($p < .01$) level to related job placement rates.

The regression analysis indicated that 13 percent of the variability between related job placement rates for individual programs and 10 percent of the variability between job satisfaction rates for individual programs could be accounted for by the combination of the selected independent variables.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

PROBLEM

Introduction

The primary goal of vocational education is preparation for employment. The Smith-Hughes Act of 1917 provided federal funds for secondary vocational education programs. The Smith-Hughes Act was also the nation's first attempt to measure the adequacy of vocational education programs.

Subsequent federal laws and the passage of the Vocational Education Act of 1963 greatly expanded federal vocational education policy. Under the Act the government reaffirmed that vocational education is designed to prepare all individuals for gainful employment.

The Vocational Education Act of 1963 also described the functions of state and local evaluations for vocational education programs and services. The Act declared that states were to follow policies and procedures that insure that due consideration would be given to the results of periodic evaluations of state and local vocational education programs. The periodic evaluations were "to occur in light of information regarding current and projected manpower needs and job opportunities. . ."[1]

The current Vocational Education Amendments of 1976 further require that each state evaluate, by using wherever possible, statistically valid sampling techniques, each program within a state which purports to impart entry level job skills according to which program completers and leavers:

(i) find employment in occupations related to their training, and

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[1]U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Occupational and Adult Education, The Handbook: A Vocational Education Legislative Reference (Washington, D.C.: Government Printing Office, 1978), p. 41.

(ii) are considered by their employers to be well trained and prepared for employment, except that in no case can pursuit of additional education or training by program completers or leavers be considered negatively in these evaluations.[2]

By requiring states to conduct program outcome evaluations, the Amendments of 1976 attempted to link vocational programming to employment needs and job opportunities.

The rules and regulations for the 1976 Amendments state that program evaluations should be taken in terms of the following general areas: (1) planning and operational processes; (2) results of student achievement; (3) results of student employment success; and (4) services to special populations.

A large number of criteria are specified. These criteria state that:

> The State board shall, during the five-year period of the State plan, evaluate in quantitative terms the effectiveness of each formally organized program or project supported by federal, state, and local funds. These evaluations shall be in terms of:
>
> (a) Planning and operational processes, such as:
>
> (1) Quality and availability of instructional offerings;
> (2) Guidance, counseling, and placement and follow-up services;
> (3) Capacity and condition of facilities and equipment;
> (4) Employer participation in cooperative programs of vocational education;
> (5) Teacher/pupil ratios; and
> (6) Teacher qualifications.
>
> (b) Results of student achievement as measured, for example, by:
>
> (1) Standard occupational proficiency measures;
> (2) Criterion-referenced tests; and
> (3) Other examinations of students' skills, knowledge, attitudes, and readiness for entering employment successfully.

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[2] Ibid., p. 98.

(c) Results of student employment success as measured, for example, by:

(1) Rates of employment and unemployment;
(2) Wate rates;
(3) Duration of employment; and
(4) Employment satisfaction with performance of vocational education students as compared with performance of persons who have not had vocational education.

(d) The results of additional services, as measured by the suggested criteria under paragraphs (a), (b), and (c) of this section, that the state provides under the Act to these special populations:

(1) Women;
(2) Members of minority groups;
(3) Handicapped persons;
(4) Disadvantaged persons; and
(5) Persons of limited English-speaking ability.[3]

Of the four general areas specified for evaluation in the regulations, the evaluation area of planning and operational processes and the area of student employment success are given the most attention by states.

The criteria for evaluating planning and operational process involves resource factors and are commonly referred to as input variables. The criteria for student employment success are outcome measures and often deal with job placement and job satisfaction rates.

The listed criteria in the regulations are suggestive rather than mandatory which allows each state to develop unique evaluation criteria and procedures.

In Michigan, the requirement of statewide evaluation of vocational education program effectiveness is achieved through an annual follow-up survey of program completers.

This study examined selected planning and operational process variables. The variables were measured for their relationship to the student success

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[3] Ibid.

measures of related job placement and job satisfaction. Further, this study examined the predictive nature of the selected variables on job placement and job satisfaction rates for general merchandising programs.

Statement of the Problem

The problem of this study was to identify selected planning and operational variables which were positively or negatively related to job placement and job satisfaction rates for general merchandising programs.

An additional aspect of the study was to describe and explain the predictive nature of the combined variables upon individual program placement and job satisfaction rates.

This survey obtained information from former high school students, who had completed general merchandising programs within the state. The information provided by the program completers was used to answer the following research questions about general merchandising programs:

1. What is the relationship between the percentage of female completers and the related placement and job satisfaction rates for general merchandising programs?

2. What is the relationship between the percentage of minority completers and the related job placement and job satisfaction rates for general merchandising programs?

3. What is the relationship between the type of school and the related job placement and job satisfaction rates for general merchandising programs?

4. What is the relationship between type of facility (classroom only; classroom with school store) and the related job placement and job satisfaction rates for general merchandising programs?

5. What is the relationship between size of facility (square footage available for instruction) and the related job placement and job satisfaction rates for general merchandising programs?

6. What is the relationship between the presence of a DECA chapter and the related job placement and job satisfaction rates for general merchandising programs?

7. What is the relationship between the length of the instructional program and the related job placement and job satisfaction rates for general merchandising programs?

8. What is the relationship between pupil/teacher ratios and related job placement and job satisfaction rates for general merchandising programs?

9. What is the relationship between projected regional job openings and related job placement and job satisfaction rates for general merchandising programs?

10. What are the relationships between the selected process variables for general merchandising programs?

11. What is the relationship between related job placement and job satisfaction rates for general merchandising programs?

12. What is the overall affect of the combined process variables on related job placement and job satisfaction rates for general merchandising programs?

Purpose of the Study

The purpose of this study was to provide information which could lead to more efficient and effective general merchandising programs. Vocational education programs are being evaluated, specifically, by how well program completers and leavers find employment related to their training and more generally, by the results of student employment success. The identification of program variables that are significantly related to employment success should be promoted by the state and local educational agencies.

Need for the Study

The purpose of state evaluations, as stated in the 1976 Amendments, is "to assist vocational education agencies . . . in operating the best possible programs of vocational education."[4]

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[4]Ibid., p. 97.

The Vocational-Technical Education Service (V-TES) is the service area of the Michigan Department of Education charged with the administration of vocational-technical education programs. The Vocational-Technical Education Service has developed and is currently piloting a planning process for determining program viability. The planning process identifies principal factors to be employed in deciding whether or not a local school district should offer; and V-TES should approve a new or on-going vocational education program. In concept, program viability would be tested in terms of employment potential and program placement results.

In addition, to the program viability planning process, the Vocational-Technical Education Service in 1974 established program standards of quality. The program standards of quality are designed to assist local school districts in the planning and operation of vocational education programs. The program standards of quality closely parallel the planning and operational processes identified in the Vocational Education Amendments of 1976. Program standards of quality have identified and assigned input variables such as length of program, facility size requirements, and teacher/pupil ratios to every vocational education program in Michigan. This study examined the program standards of quality for the vocational program area of general merchandising.

General merchandising is a vocational program designed specifically to meet the needs of persons, who have entered or are preparing to enter a marketing and distributive occupation. General merchandising programs offer instruction in marketing, merchandising and management.

The primary objective of general merchandising programs is to prepare individuals for entry, adjustment, and advancement. Periodic follow-up studies of general merchandising completers are essential to the evaluation of program effectiveness.

Periodic program evaluations through the use of student follow-up data is an effective tool to insure program quality and effective instruction in general merchandising.

In addition, federal and state mandates clearly identify the need for periodic evaluations in vocational education that are based on related job placement. It is essential, therefore, that planning and operational processes be examined to determined their contribution to the enhancement of student employment success. Variables, which significantly affect related job placement and job satisfaction rates, should be identified. Significant variables should be incorporated into local general merchandising programs to assist in providing students with excellent training and rewarding job opportunities.

Additionally, the identification of program variables should provide the necessary information for state level policy-makers on the effectiveness of present general merchandising programs and established program standards of quality. The assessment of the program variables should assist with future policy and funding decisions. The assessment should also provide a delivery system in general merchandising programs which can contribute to high program related placement and job satisfaction rates.

Delimitations

The Federal Vocational Education Amendments of 1976 require overall program evaluations based on two outcomes:

1. related employment success of program completers and
2. employer satisfaction with the training received by program completers.

However, no attempt was made to determine the degree of employer satisfaction with the training received by general merchandising program completers.

Instead, this study concentrated on the first outcome of related job placement and student success on the job.

The review of the literature revealed that a number of factors may affect the related job placement and job satisfaction rates of general merchandising programs. Some of these factors include learner characteristics, social-economic conditions, environment and teacher characteristics. This study was concerned with program variables that can be manipulated by local and state educational agencies to affect related job placement and job satisfaction rates. Accordingly, this study selected planning and operational variables that can be changed by the local or state agency; such as length of program, capacity of laboratory, type of laboratory, teacher/pupil ratios and use of DECA in general merchandising programs.

The remaining variables of sex, racial/ethnic classification, size of school and annual projected job openings, were also included in the study. These variables are fixed and generally are not subject to change by an educational agency. However, they were examined, since the program approval process by the state agency includes an analysis of student enrollment potential (size of school) and labor market demand. Further, federal laws prohibit discrimination on the basis of sex and race in programs of vocational education.

Limitations

Because this study dealt with existing independent variables for individual programs no attempt was made to measure the subjective quality of each general merchandising program. All independent variables, therefore, reflect objective measures rather than subjective judgments, as to the strengths and/or weaknesses of individual programs.

The quality dimension, thus, was missing from the DECA variable, since only the presence of a chapter rather than the extent of student involvement was measured. Likewise, the type and size of facility was limited to the presence of a school store laboratory and size of the laboratory area, rather than effective use and condition of the laboratory.

Additional limitations apply to the data used to measure the pupil/teacher ratio and length of program, since the accuracy of this data depended on the accuracy of the reporting school districts. Further limitations affecting the independent variables of sex, racial/ethnic classification and the dependent measures of related job placement and job satisfaction relate to the respondent's answers to the Follow-Up Survey.

Glossary of Terms

Completer - A student who finishes a planned sequence of courses, services or activities designed to meet an occupational objective which purports to teach entry-level job skills. For purposes of this study a completer is any student who was enrolled in a reimbursed secondary general merchandising vocational program and who was reported as a completer on the VE-430I form entitled "Secondary Vocational Enrollment and Termination Report for the School Year ending June 30, 1979."

DECA - Distributive Education Clubs of America, a national vocational student organization for students enrolled in marketing and distributive education programs.

Follow-Up Survey - A survey made of the experiences and status of former pupils, either for the purpose of assisting them in further adjustment or for securing information to help improve instruction or guidance for those still in school. In vocational education, this term refers to a research

activity designed to determine what occupations are pursued by graduates and/or former pupils in occupational programs and how effective was their preparation in relationship to job requirements.

General Merchandising - Organized subject matter and learning experiences related to the various marketing functions and tasks performed by employees, including management personnel, in typically large retail stores engaged in merchandising a number of lines of merchandise, such as department stores, variety and general merchandise stores and multi-line drug stores. As a reporting convenience, the Vocational-Technical Education Service reports all marketing and distributive education programs with the exception of selected specialized programs, i.e., warehousing under this program definition.

Leavers - Persons who leave the program voluntarily before its formal completion because they have acquired sufficient entry-level job skills to work in the field and who have taken a job related to their field of training.

Marketing and Distribution - A summary of groups of instructional programs that prepare individuals for occupations directed toward the flow of industrial and consumer goods in channels of trade, or the provision of services to consumers or users. These programs are concerned with marketing, sales, distribution, merchandising, and management, including ownership and management of enterprises engaged in marketing. Instructional programs prepare individuals to perform one or more of the marketing functions, such as selling, buying, pricing, promoting, financing, transporting, storing, market research, and marketing management. In addition, instructional programs include varying emphases on technical

knowledge of products of services marketed, related communication and computation skills, and abilities and attitudes associated with human relations and private enterprises.

Program Standards of Quality - Planning and operational processes, such as length of instructional programs, instructional square footage requirements, pupil/teacher ratios, etc., established by the Michigan Department of Education, Vocational-Technical Education Service to approve and fund vocational programs.

Program Viability - A proposed vocational education program approval process to determine which programs are to be funded on the basis of employment results and labor market demand.

Respondents - Identified program completers who answered and returned the annual vocational education follow-up survey.

School Store - A marketing and distributive education laboratory that serves as an actual business operation. The students actually operate and manage the school store, which is designed to provide merchandise and services to students, faculty, and the community.

Vocational Education Data System - A national accounting and data collection system established by Section 161 of the Education Amendments of 1976 to evaluate the effectiveness of vocational education programs and services.

Vocational-Technical Education Service (V-TES) - The service area within the Michigan Department of Education charged with the administration of vocational-technical education in Michigan.

CHAPTER II

REVIEW OF THE LITERATURE

Background and Perspective

Vocational education is a human service program which has been evaluated on the basis of many different criteria. Darcy[1] identifies six different evaluation criteria which include: (1) the context in which vocational education operates; (2) characteristics of the students enrolled in vocational programs; (3) the quantity and quality of resources used in vocational education; (4) program goals and objectives; (5) processes utilized for instruction and related activities; and (6) the consequences or outcomes of the overall vocational program.

This study attempted to identify variables which were positively or negatively related to job placement and job satisfaction. An additional aspect of the study was to provide information, as to how selected learner characteristics and program variables influenced job placement and job satisfaction rates for general merchandising programs.

Essentially, then, are there variables present in general merchandising programs that have the most influence in assuring that general merchandising program completers are successfully employed in a related job and are satisfied with the job?

The need for an investigation of this nature is expressed by Little. He states that "it is vital, therefore, that educational planners examine

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[1]Robert L. Darcy, Vocational Education Outcomes: Perspective for Evaluation Research and Development Series No. 163 (Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979), p. 7.

carefully the basic relationship of school programs to the needs of all individuals for occupational preparation, and to the nature of the preparation schools should and can provide."[2]

Sharp and Krasnegor report on the use of follow-up studies for evaluating vocational education programs. They conclude that "there is a continuing need for intensive, small-scale studies of particular areas, programs and factors and a need to learn more about the role of specific institutional factors for decision-making."[3]

Unfortunately, the evaluation studies of marketing and distributive education programs using student success measures in the research design are limited.

According to Farley[4] there are at least two basic reasons for the lack of a large number of clearly articulated and testable hypotheses concerning vocational education, generally, and marketing and distributive education in particular. They are:

1. The empirical investigations of vocational education outcomes that have been conducted have been relatively narrow and limited in scope. Only a few vocational education outcomes usually perceived, as goals or intended outcomes, have been studied. Such investigations usually fall into the area

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[2]Kenneth J. Little, The Review and Snythesis of Research on the Placement and Follow-Up of Vocational Education Students Series No. 49 (Columbus: ERIC Clearinghouse of Vocational and Technical Education. The Center for Vocational and Technical Education, The Ohio State University, 1970), p. 3.

[3]Laura M. Sharp and Rebecca Krasnegor, The Use of Follow-up Studies in the Evaluation of Vocational Education (Washington: Bureau of Social Science Research, 1966), p. 21.

[4]Joanne Farley, Vocational Education Outcomes: A Thesaurus of Outcome Questions, Research and Development Series No. 170 (Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979), pp. 7-8.

of follow-up studies of vocational students. The empirical work done with follow-up studies has had difficulties in operationalizing, measuring, and testing outcome hypotheses. There have been problems in defining terms such as "training-relatedness" and "vocational education" and applying the terms to a distinctive educational treatment.

2. There has been the lack of attention paid to the validation of standards which have been established to provide models whereby student success can be measured.

Institutional standards are often established and implemented through procedures of accreditation with tests of accountability applied at the state and local levels. The National Study of School Evaluation[5] has, for example, established standards for secondary distributive education, which are applied at the local level. Lucas and Miles[6] have also established standards for distributive education programs, which have been accepted by the national marketing and distributive education professional community.

The establishment of program standards is an attempt to demonstrate a principled approach to serving students and the public interest, but there is little empirical evidence that standards lead to anticipated success.

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[5]The National Study of School Evaluation, Distributive Education Evaluative Criteria Section 4-4, 5th edition (Arlington; National Study of School Evaluation, 1978), pp. 77-88.

[6]Steven R. Lucas and Benton E. Miles, The Development of Standards for Secondary Distributive Education Programs (Washington: The American Vocational Association, 1978), pp. 1-30.

The review of literature examined significant research studies on learner characteristics and program variables (standards) which were related to job placement and job satisfaction.

A review of the literature concerning the following learner characteristics and process variables was undertaken:

Learner Characteristics

1. Sex of the Student
2. Racial/Ethnic Background of the Student

Process Variables

1. Type of School
2. Length of Program
3. Distributive Education Clubs of America (DECA)
4. Pupil/Teacher Ratio
5. Type of Facility
6. Size of Facility
7. Regional Job Openings

Studies Undertaken on Learner Characteristics Related to Job Placement and Job Satisfaction

Crawford[7] found that professionals in marketing and distributive education indicated that the program should serve people of diverse talents, abilities, interests, and backgrounds, who want and could benefit from the instruction. Learner characteristics, such as sex and racial/ethnic background, have been used to classify learners by attitudes, beliefs, and

[7]Lucy C. Crawford, A Philosophy of Distributive Education (Blacksburg: Virginia Polytechnic Institute and State University, 1975).

competencies. However, few investigators have concentrated on these variables, as predictors for job placement and job satisfaction after completion of a marketing and distributive education program.

Sex of the Student

Hlebichuk[8] studied a variety of program characteristics, as they related to job placement status after graduation, for 387 students in the state of Montana. One of the major findings of the study was that more female than male graduates were likely to become initially employed in distributive occupations.

Cushman[9] conducted a similar investigation in which data was collected before and after graduation from 387 students in an attempt to establish relationships between selected program variables and entry into distributive occupations. Cushman found that being female was correlated with entry into a related distributive job or college curriculum.

Gleason[10] also found that females tended to pursue occupations more closely related to the training received in marketing and distributive education than did males. Gleason, however, further cautions that

> One can hardly conclude that a cause and effect relationship exists for the sex variable, since

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[8]Joseph F. Hlebichuk, "The Relationship of Selected Teacher-Coordinator Program, and Student Variables to the Placement Status of the 1970 Secondary Cooperative Distributive Education Graduates in the State of Montana" (Ed.D. dissertation, Bozeman: Montana State University, 1971).

[9]Ronald A. Cushman, "The Relationship Between Selected Characteristics of Secondary Distributive Education Programs and Initial Job Placement or College Entrance" (Ed.D. dissertation, Philadelphia: Temple University, 1973).

[10]James R. Gleason, "The Relationship of Sex and Selected Distributive Education Program Variables with Entry into Distributive Occupations After High School Graduation" (Ph.D. dissertation, Columbus: The Ohio State University, 1979).

> distributive education programs in Ohio have been traditionally retail-oriented and retail occupations at the entry-level tend to be female-oriented.[11]

In a study by Mott et al[12] additional research supports Gleason's contention that women plan careers in traditional female positions and, as a result, continue to occupy lower paying positions than those occupied by men. Additional findings in this study indicated that parental factors directly affect a young woman's educational experiences and have a significant affect on the type of career path taken. Further, evidence was found that women committed to the labor force are willing to accept low initial wages as a price for job training that might promise higher lifetime earnings.

Mondart et al[13] found that girls develop occupational interests earlier, more of them exercise choices and fewer are uncertain about their occupational outlook.

One study conducted by Righthand[14] on Connecticut distributive education graduates of 1965, 1968, and 1971 did indicate that males were more apt to be found working in the field for which they were trained. Thus, it appears that related placement results and the sex variable are inconclusive. Although a majority of studies indicated that females tend to enter related distributive occupations more than males, it is unclear as to the cause.

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[11] Ibid., p. 163.

[12] Frank L. Mott et al., Years for Decision: A longitudinal Study of the Educational and Labor Market Experience of Young Women. Volume 4 (Columbus: Center for Human Resource Research, The Ohio State University, 1977).

[13] C. L. Mondart, C.M. Curtis, and L. H. Dobbins, Educational and Occupational Aspirations and Expectations of High School Youth (Baton Rouge: Louisiana State University, College of Agriculture, 1970).

[14] Herbert Righthand, A Follow-Up Study of Connecticut Distributive Education Graduates of the Classes of 1965-1968-1971 (Hartford: Connecticut State Department of Education, Division of Vocational Education, 1977).

One measure of the effectiveness of occupational training is the degree to which a trainee enters an occupational field and finds satisfying progression in an occupational career.

In a study done by Eninger[15] of trade and industrial graduates, higher degrees of satisfaction with jobs was reported by vocational graduates placed in jobs related to their training. Kaufman and Lewis[16] report that both male and female graduates were "less than completely satisfied with the pay and opportunities for promotion in their first jobs." They also found that females, in particular, were dissatisfied with opportunities for promotion.

Righthand[17] found that there were no significant differences in job satisfaction rates between male and female graduates from Connecticut distributive education programs in his 1977 study.

Racial/Ethnic Background of the Student

Righthand[18] also found that there were no significant differences in income, unemployment and job satisfaction between racial or ethnic groups in his longitudinal study of distributive education graduates.

Kaufman, Schaefer et al report that "even though differences in job types and compensation were revealed, there were no substantial differences

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[15] Max U. Eninger, The Process and Product of Trade and Industry High School Level Vocational Education in the United States (Pittsburgh: Educational Systems Research Institute, 1965).

[16] Jacob J. Kaufman and Morgan V. Lewis, The Potential of Vocational Education: Observations and Conclusions (University Park: Institute for Research on Human Resources, Pennsylvania State University, 1968), p. 98.

[17] Righthand, A Follow-Up Study of Connecticut Distributive Education Graduates of the Classes of 1965-1968-1971.

[18] Ibid.

between Negroes and whites in job satisfaction expressed by either the employees or the employers."[19]

The attitudes of students toward retailing were studied by Bennett.[20] Bennett compared urban disadvantaged youth with urban non-disadvantaged youth regarding their perceptions of employment in retailing. He found highly significant differences of opinion between the two groups. The attitudes of the non-disadvantaged were more positive toward employment.

Studies Undertaken on Selected Process Variables Related to Job Placement and Job Satisfaction

Type of School

An early federal publication identifies the "public high school as a legitimate setting for instruction in agriculture, home economics and distributive education."[21]

After the passage of the Vocational Education Act of 1963, federal funds were made available to states for the construction of area vocational schools. Several states began to use the federal funds to offer distributive education programs in area vocational schools. Area vocational schools in Michigan are shared-time schools. Vocational education is offered for a 1/2 day at the area vocational education center and the remainder of the day is spent in a student's home high school where academic instruction is provided.

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[19] Jacob J. Kaufman, Carl J. Schaefer, Morgan V. Lewis, David W. Stevens and Elaine W. House, The Preparation of Youth for Effective Occupational Utilization, The Role of the Secondary School in the Preparation of Youth for Employment (University Park: Institute for Research on Human Resources, Pennsylvania State University, 1967), Chapter 12, p. 10.

[20] James Bennett, Disadvantaged and Non-Disadvantaged Urban High School Students' Work Within General Merchandising Retail Stores (New Brunswick: Rutgers - The State University Graduate School of Education, 1971).

[21] Administration of Vocational Education, Vocational Education Bulletin No. 1 (Washington, 1948), p. vii.

During the 1978-79 school year high school marketing and distributive education programs in Michigan were offered in 242 comprehensive high schools and 23 area vocational education centers.

Limited research has been conducted concerning type of school and job placement and job satisfaction of distributive education completers.

In a study of the trade and industrial programs Eninger concludes that "vocational schools appear to have a decided edge in placing graduates into the fields for which trained than comprehensive schools."[22]

Gleason found that "graduates of vocational schools who chose to further their education were enrolled in courses of study more closely related to field trained then were their comprehensive school counterparts."[23] No significant differences were discovered for type of school attended and related job placement in his marketing and distributive education study.

Lamuth[24] studied the perceptions of distributive education coordinators and students in two types of programs in Pennsylvania. One type was a comprehensive high school and the other was an area vocational-technical school. The respondents were asked to describe their concepts of philosophy, organization, and curriculum. Lamuth found that the two types of settings were essentially viewed the same with respect to the factors studied.

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[22]Eninger, The Process and Product of Trade and Industrial High School Level Vocational Education in the United States, Chapter 12, p. 11.

[23]Gleason, "The Relationship of Sex and Selected Distributive Education Program Variables with Entry into Distributive Occupations After High School Graduation," p. 159.

[24]D. Lamuth, "A Comparative Analysis of Distributive Education Programs in High Schools and Area Vocational-Technical Schools in the Commonwealth of Pennsylvania" (Ph.D. dissertation, Pittsburgh: University of Pittsburgh, 1975).

Length of Program

There is a large body of research supporting the notion that the more time a student spends on a task the greater the achievement level. Instructional time appears to be one of the most significant variables that relates to achievement in math and reading levels.

Studies done by Frederick et al[25], Brookover et al[26], Gettinger[27], Ebmeier et al[28], and Bloom[29] indicate that as time on task increases so does academic achievement in math and reading.

Few studies in marketing and distributive education have focused on length of program and time spent in training and its affect on future job placement and satisfaction rates in marketing and distributive occupations.

Gleason[30] did not find any significant differences between completers from one or two year distributive education programs.

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[25]W.C. Frederick, H.J. Walberg and S.P. Rasher, "Time, Teacher Comments and Achievements in Urban High Schools," Journal of Education Research (1973), pp. 63-65.

[26]Wilbur Brookover, John Schweitzer, Charles Beady, and Patricia Flood, Elementary School Climate and School Achievement (East Lansing: College of Urban Development, Michigan State University, 1976).

[27]M. Gettinger and M.A. White, "Which is the Strong Correlate of School Learning? Time to Learn or Measured Intelligence?", Journal of Educational Psychology (1979), pp. 405-412.

[28]H. Ebmeier and T. Good, "Effects of Instructing Teachers About Good Teaching on the Mathematics Achievement of 4th Grade Students," American Education Research Journal (1979), pp. 1-16.

[29]Benjamin S. Bloom, "Time and Learning," American Psychologist (1974), pp. 682-688.

[30]Gleason, "The Relationship of Sex and Selected Distributive Education Program Variables with Entry into Distributive Occupations After High School Graduation."

Righthand[31] in a 1977 study of Connecticut distributive education graduates found that graduates of a two year program tended to remain in the field of distribution longer than those with only one year of study. There were no other significant differences found between the two groups in post high school training activities, formal achievement in the job, salary, unemployment, or job satisfaction.

Lundell[32] in a study of 1968 Minnesota distributive education graduates discovered that enrollment in an eleventh grade sales and marketing class was not significantly related to employment after graduation. However, when he compared the job satisfaction of the employed distributive education graduates with that of the general worker population he found that distributive education graduates had significantly more intrinsic job satisfaction. Therefore, Lundell concluded that the program characteristics of distributive education, including length of program, helped the graduates become employed and find job satisfaction in related or unrelated occupations.

In summary, the review of the literature concerning program length and its relation to related placement and job satisfaction, provided few definitive answers. The effect of time spent in training for distributive careers at the entry level remain unclear for job placement and job satisfaction.

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[31] Righthand, A Follow-UP Study of Connecticut Distributive Education Graduates of the Classes of 1965-1968-1971.

[32] William R. Lundell, "The Relationships of Selected Characteristics and Program Experiences of Minnesota Distributive Education High School Graduates to Their Post High School Occupational and Education Status Five Years Later" (Ph.D. disseration, Minneapolis: University of Minnesota, 1975).

Distributive Education Clubs of America (DECA)

Several research studies have been conducted in relation to the Distributive Education Clubs of America (DECA). DECA is a vocational student organization for students who are preparing for careers in marketing, merchandising, and management.

Crawford found agreement among distributive education supervisors and teacher-educators that "DECA, ... should be co-curricular in that it should provide opportunities to further develop competencies normally learned in the classroom and on the job."[33]

The Administrative Guide for Vocational-Technical Education in Michigan[34] authorizes programs of instruction, which include activities of vocational student organizations. DECA, as an integral part of the regular instructional program is designed to provide students with opportunities for the development of leadership, civic consciousness, social intelligence, and vocational understanding.

Gleason[35] found that when students actively participated in DECA they were likely to enter a related field of employment.

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[33]Lucy Crawford, A Competency Pattern Approach to Curriculum Construction in Distributive Education Teacher-Education, Volume 1 (Blacksburg: Virginia Polytechnic Institute and State University, 1967), p. 25.

[34]The Administrative Guide for Vocational-Technical Education in Michigan (Lansing: Michigan Department of Education, Vocational-Technical Education Service, 1978), Section M.

[35]Gleason, "The Relationship of Sex and Selected Distributive Education Program Variables with Entry into Distributive Occupations After High School Graduation."

Cushman[36] found that DECA membership correlated with entry into a related job or a related college curriculum in his 1973 study of secondary distributive education programs in New York.

Righthand in a 1977 follow-up study of Connecticut distributive education students who graduated in 1965, 1968, and 1971 found that "only 18 percent judged DECA to be of little value or no value while 49 percent judged it to be somewhat valuable."[37]

Buckner and Gildan[38] also found that the 1971 and 1972 high school distributive education graduates found DECA competition to be useful in a career.

Holt[39] surveyed high school students in Louisiana. He found that distributive education classroom instruction combined with DECA gave increased scope and depth to the total distributive education program. DECA also provided students with learning experiences that contributed to personal growth.

One study conducted by Connell[40] studied the relationship of membership in DECA and career maturity. DECA members were found to be more mature related

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[36]Cushman, "The Relationship Between Selected Characteristics of Secondary Distributive Education Programs and Initial Job Placement or College Entrance."

[37]Righthand, A Follow-Up Study of Connecticut Distributive Education Graduates of the Classes of 1965-1968-1971.

[38]LeRoy Buckner and Kathleen Gildan, A Follow-Up Study of the 1971 and 1972 High School Distributive Education Students in Florida (Boca Rotan: Florida Atlantic University, 1978), p. 4.

[39]D. Holt, Perceptions of Students, Teacher-Coordinators, and Training Station Employers Regarding the Effectiveness of Distributive Education Clubs of America (Commerce: East Texas State University, 1978).

[40]William Connell, "The Relationship of DECA Membership and Career Maturity" (Ed.D. dissertation, New Brunswick: Rutgers - The State University, 1977).

to career selection, knew more about the world of work and did better at job selection, which was consistent with their interests and abilities.

The review of the literature did not find any studies that compared DECA membership to job satisfaction after graduation. The review of the literature found, however, that DECA participation can enhance self-image, attitudes, and sharpen decision-making skills which ultimately can impact on job satisfaction.

Pupil/Teacher Ratio

Lucas and Miles state "because of the individualized instruction and the nature of the outcomes desired, the size of the distributive education class is an important factor in program administration."[41] The criteria for compliance with this standard indicates that average section enrollment in each distributive education class should not exceed 25 students or the maximum set by the appropriate state vocational education agency, whichever is lower.

The Michigan Department of Education, Vocational-Technical Education Service, encourages a pupil/teacher ratio of 22 students to 1 instructor by reimbursing all vocational sections to a maximum of 22 students/section.

School districts are eligible to charge off a percentage of added cost reimbursement for a program section average, which falls below the school district's average secondary pupil/teacher ratio. There is, however, no funding penalty instituted for exceeding the state ratio of 22 to 1; and with increasing financial constraints at the local district level, larger program section enrollments are often reported.

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[41] Lucas and Miles, The Development of Standards for Secondary Distributive Education Programs, p. 16.

Vocational section enrollments are established by state departments of education to provide for the safety of both students and teachers. In addition, lower section sizes are often required to meet the needs of the handicapped who are required by federal and state laws to receive vocational education. The nature of vocational education programs, which concentrate on extensive individualized instruction and demonstration techniques cannot adequately be accomplished in excessively large classes.

Because the nature of vocational education requires hands on training by using potentially hazardous equipment, pupil/teacher ratios are established for vocational education programs.

Although, it could be implied that better instruction and training occur when there are lower pupil/teacher ratios, no empirical evidence could be found that indicated program enrollments impact on related job placement and/or job satisfaction.

Type of Facility

Vocational education programs require facilities, which simulate business and industry in a safe environment. To provide for proper teaching methodology, demonstration, safety zones, tool, equipment and supply storage needs, more space is required in vocational education programs than academic programs.

Marketing and distributive education facilities in Michigan are typically housed in two types of facilities -- the classroom and the medium laboratory. The classroom type is a facility with an area specifically designed for lecture and discussion. No simulated or student-run school store is present. The medium laboratory type is a combination classroom for lecture and laboratory area for demonstration. The physical circulation is heavy, but the equipment

requirements are minimal. Programs of this type include an in-school laboratory that can be organized into a simulated or actual student run and operated school store.

There continues to be little research done on marketing and distributive education facilities and size in relation to job placement and satisfaction. This finding seems rather surprising in light of an apparent trend toward school store operations and entrepreneurial activities occurring nationally in the field of marketing and distributive education.

Cushman[42] in his 1973 study found that a school store experience was related to entry into a related job or college curriculum. No other reported studies were found in the review of the literature which attempted to address school store participation with related job placement and satisfaction.

Banister[43] evaluated facilities and equipment in the state of Arkansas. He concludes that equipment for distributive education programs should include merchandising equipment, display units, mirrors and trapezoid tables. He also concluded that new program planning should take into consideration minimum and maximum classroom floor space, instructional, office, and storage space.

Size of Facility

Haug[44] studied to what extent operational school stores were being used by teachers in the state of Minnesota. He concluded that total store hours

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[42]Cushman, "The Relationship Between Selected Characteristics of Secondary Distributive Education Programs and Initial Job Placement or College Entrance."

[43]Talmage E. Banister, "Evaluation of Facilities, Equipment and Instructional Resources in Distributive Education Programs in Arkansas" (Ed.D. dissertation, Fayetteville: University of Arkansas, 1969).

[44]James K. Haug, A Report of Practices, Procedures and Opinions Regarding High School Operational School Stores in the State of Minnesota During 1973-1974 (M.A. thesis, Minneapolis: University of Minnesota, 1974).

of two to three hours/day was sufficient for a hands on experience and that an area of 1000 to 1300 square feet, excluding storage areas appeared to be adequate for student run school stores. Haug's findings are consistent with the student/space established by the Michigan Department of Education, Vocational-Technical Education Service,[45] which requires a minimum of 80 square feet/student for all new program approvals in marketing and distributive education in Michigan.

Instructional square footage for Michigan marketing and distributive education laboratories includes the classroom, school store, stockroom, work and display areas, which are used for instructional purposes within the distributive education laboratory.

Further, while not identifying specific space and facility requirements The National Study of School Evaluation recognizes "the need for facilities that are comparable to business and industry."[46] Facilities with adequate square footage for storage, clean-up and supportive facilities should be provided.

Lucas and Miles in their 1978 study found that "specially designed classroom facilities were highly desirable for in-school distributive education programs,"[47] because school stores enhanced instruction through the use of simulation and laboratory assignments. While there seems to be widespread consensus that specially designed facilities are high desirable aspects for marketing and distributive education programs, more research needs to be

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[45] Standards for Secondary Marketing and Distributive Education (Lansing: Michigan Department of Education, Vocational-Technical Education Service, 1978), Section M.

[46] The National Study of School Evaluation, p. 82.

[47] Lucas and Miles, The Development of Standards for Secondary Distributive Education Programs, p. 26.

conducted in relation to the superiority of specialized laboratories versus the traditional classroom-only approach, as a predictor of future job placement and satisfaction after program completion.

Employment Region Data

The earliest and most widely accepted objective of vocational education was "to provide a mechanism for meeting the needs of the local community for skilled workers."[48]

The Educational Amendments of 1976 require that local program applications for vocational education address labor market demand before program approval. The Amendments further require local program advisory committees to help plan programs based on local employment region data.

Lucas and Miles indicate that "the primary goal of the distributive education program is to prepare individuals for entry, adjustment and advancement in distributive occupations."[49] Further, The National Study of School Evaluation also states that "instruction should be based primarily on local concerns in marketing and distributive education; however, area, state and national trends should also be considered."[50]

The Michigan legislature[51] established provisions to reimburse school districts for vocational education on an "added cost" basis, which are linked to both state and local area labor market demand.

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[48]Rupert N. Evans and Edwin L. Herr, Foundations of Vocational Education (Columbus: Charles E. Merrill Publishing Company, 1978), p. 9.

[49]Lucas and Miles, The Development of Standards of Secondary Distributive Education Programs, p. 12.

[50]The National Study of School Evaluation, p. 79.

[51]Michigan State Legislature, An Act to Amend P.A. 312 of 1957, School Aid Act, P.A. 100, 1970.

The added costs of a vocational program area measured by calculating the differences between the average cost of a vocational program and the average cost of a non-vocational program. The added cost is the differential between the two programs. Some of the factors influencing the higher cost of vocational programs are (1) lower pupil/teacher ratios; (2) equipment; (3) laboratories; and (4) supplies and materials.

To address the statewide employment and training needs of the state, funding priority is given to those programs that have been determined by the Michigan Employment Security Commission (MESC) to be highest in state labor market demand. The funding priority is designed to encourage local agencies to establish programs, such as marketing and distributive education, which have a high probability of job placement upon completion. Consideration is also given for regional employment data by allowing Career Education Planning Districts (CEPDs) the option to fund programs that have high regional demand.

A nationwide and statewide consensus appears to exist for programming on the basis of employment demand in vocational education. However, few studies were found within the distributive education field that assessed employment data in program development. No studies were found that used labor market demand as a predictor of future job placement success.

A significant original effort by Crawford[52] and Williams and Heath-Sipos[53] attempted to identify the skills or competencies needed for successful employment in marketing and distributive occupations.

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[52]Lucy Crawford, A Philosophy of Distributive Education: A Report of the First Step in the Research Project to Identify a Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education, Volume 2 (Blacksburg: Virginia Polytechnic Institute and State University, 1967).

[53]Terry Williams and Betty Heath-Sipos, Task Validation of 16 General Merchandising Department Store Occupations (Washington: United States Office of Education, 1979).

Samson[54] examined the employment data for department store middle managers in the North Central United States and discovered that 68 percent of the middle managers were recruited from internal sources.

Eggland[55] identified a model for relating post-secondary program development in Nebraska to anticipated employment needs by collecting employment predictions from Nebraska business people, high school seniors, distributive education teachers, a state distributive education consultant, the Nebraska Department of Labor, and the U.S. Bureau of Labor Statistics. No studies were found that utilized projected employment demand in distributive occupations with related job placement and job satisfaction at the secondary level.

In conclusion, there is a major emphasis within the total vocational education philosophy and a specific emphasis identified in marketing and distributive education program standards on the need to analyze employment data for program decision-making purposes. However, there is little empirical evidence to substantiate the use of labor market data for program development.

Summary of Related Research

A total of 33 research studies and several books, articles and publications were reviewed in an attempt to identify significant factors that affect related job placement rates and job satisfaction rates of former students of marketing and distributive education programs at the secondary level.

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[54]Harland Samson, The Nature and Characteristics of Middle Management in Retail Department Stores (Madison: The University of Wisconsin, School of Education, 1969).

[55]Steven Eggland, The Development of a Hierarchy of Need for Specialized Distributive Education Programs in Post-Secondary Schools in Nebraska (Lincoln: University of Nebraska, 1974).

The identification of variables that affect job placement and job satisfaction are critical questions facing local school districts, as they plan for new and attempt to improve existing programs.

Certain variables such as sex, type of school and DECA have been studied more indepth than other independent variables selected in this study.

Much more research needs to be done on program variables such as type of facility, pupil/teacher ratios and length of program and their affect on placement and job satisfaction rates.

Research pertaining to program planning in relation to labor market demand has virtually been ignored.

CHAPTER III

RESEARCH PROCEDURES

The 1979 Follow-Up Survey developed by the Michigan Department of Education, Vocational-Technical Education Service, was the primary data source for the present study. The Follow-Up Survey provided information on individual program completers from general merchandising programs approved and funded by the Michigan Department of Education, Vocational-Technical Education Service (V-TES) during the 1978-79 school year. The survey also provided the necessary information to determine the job placement and job satisfaction rates for each general merchandising program. The remaining required information for this study was obtained from other Vocational-Technical Education Service reports.

Instrument Design

The annual Follow-Up Survey and the survey process, itself, was established in 1973 by the Michigan Department of Education, Vocational-Technical Education Service. The 1979 Follow-Up Survey was modified in both survey form and process by an ad hoc advisory committee (Appendix A). The survey form was a fifteen item self-reporting instrument. The survey was sent to all program completers and program leavers, who had completed more than 50% of a program and had also left high school. Under the federal Vocational Education Data System (VEDS), all program completers were included in the Follow-Up Survey for the 1978-79 school year.

Program completers from every vocational education program were identified on V-TES enrollment reports, which were completed by local educational agencies in July, 1979

General items asked on the 1979 Follow-Up Survey included the following:

General Identification Data

1. Present status (check all that apply)

   A. Employed-Hours per week
   B. Unemployed
   C. Looking for a job
   D. Full time - Part time student
   E. Homemaker
   F. Military Service

2. Evaluation of high school (and area vocational education center) courses in terms of preparation for present activity.

3. Sex

4. Racial - Ethnic Group

5. Youth Organization Member

Employment Data

Name of Employer and Job Title

6. Use of school training on present job

7. Degree of job satisfaction

8. Hourly rate of pay

9. Specific employment assistance given to respondent by school

10. All who helped respondent obtain employment

Unemployment Data

11. All who have been asked for assistance in finding employment

Post-Secondary Education Data

Name of School, Training, or Apprenticeship Program (For Local Use)

12. Type of school or training program

13. Major area of study or training (For Local Use)

14. Use of school training in major area of study or training

15. All who helped respondent into present educational program

The Follow-Up Survey (Form VE-4045A) is found in Appendix B.

Survey Procedures

The Follow-Up Survey conducted in 1979 was initiated to gather data about all approved vocational education programs operated by local educational agencies within the state. Local educational agencies were required to report follow-up data on vocational program completers to the Michigan Department of Education. Further, the Michigan Department of Education was required to transmit and report aggregate statewide follow-up information to the United States Department of Education.

The 1979 Follow-Up Survey was administered approximately nine months after high school graduation to program completers from vocational education programs. Statewide in-service activities were conducted in January - February, 1980 for local and intermediate school district personnel. The Michigan Department of Education, Vocational-Technical Education Service distributed instructions and survey forms in February, 1980. Each survey form was coded by a six-digit U.S. Department of Education vocational program code and identified by name and a program serial number. Local school districts provided the public relations effort required to achieve a high response rate. A cover letter explained the purposes and uses of

the Follow-Up Survey. The cover letter was sent to each program completer (Appendix C). The Follow-Up Surveys were completed during the March - April, 1980 period and returned to local educational agencies.

Non-respondents to the Survey were identified through the recording process and subsequent follow-up letters and additional forms were sent. Local survey results were then prepared by local school district staff. The local survey results indicated the total number of program completers surveyed and the number of surveys returned. The results were then forwarded to the Genesee Intermediate School District for keypunching. After keypunching the follow-up data was forwarded to the Michigan Department of Education, Vocational-Technical Education Service in May, 1980. The Vocational-Technical Education Service prepared school district-wide continuing education and job placement program profiles. The school district program profiles were distributed to local school district personnel in September, 1980.

Design of the Study

A Follow-Up Survey item analysis at the building level was prepared by the Vocational-Technical Education Service (V-TES), Management Information and Finance Unit.

The item analysis (T-1608) was completed in March, 1981 and detailed the total responses for all fifteen survey items. An item analysis for an individual program is shown in Appendix D. The analysis was completed at the building level for all school districts, which operated approved general merchandising programs during the 1978-79 school year. The analysis at the building level was required, because many school districts operate several general merchandising programs at different high schools within the

district. The building analysis enabled the identification of selected independent variables unique to each program within the district. The item analysis provided the necessary data on the independent variables of sex and racial/ethnic classification. The total number of responses to the dependent measures of job relatedness and job satisfaction were also obtained from the building analysis. The remaining independent variables, which included type of school, pupil/teacher ratio, size, type of laboratory, length of program, DECA, and projected job openings, were obtained from other V-TES source documents.

After the item analysis was completed for each general merchandising program, the data were coded and transferred to computer cards.

Population

The population in this study included 5,701 program completers, who had left high school and who had responded to the Follow-Up Survey. The program completers were previously enrolled in general merchandising programs approved and funded by the Michigan Department of Education, Vocational-Technical Education Service during the 1978-79 school year.

The population was composed of 3,234 females (56.7%) and 2,467 males (43.3%) from 265 general merchandising programs. General merchandising programs were located in comprehensive high schools and area vocational education centers throughout the state.

Group Size and Selection

The Statistical Package for the Social Sciences (SPSS) was used to further analyze the frequency of survey responses to the job placement and job satisfaction items for each of the 265 general merchandising programs. The analysis was done on these items because the study attempted

to measure the relationships and to predict the overall affect of the various independent variables on the dependent measures of job placement and satisfaction. The analysis indicated that the median response for the 265 general merchandising programs was eleven responses. All 141 programs with eleven or more respondents to the job placement and job satisfaction survey items were included in a group for further study. The identification of general merchandising programs with eleven or more responses provided a more accurate program job placement and job satisfaction rate than programs with limited responses.

The group of selected programs included 4,490 program completers from 141 general merchandising programs. This group included comprehensive high schools and area vocational centers as was composed of 2,511 females (55.9%) and 1,979 males (44.1%).

Independent Variables

The problem of this study was to identify selected planning and operational variables which were positively or negatively related to job placement and job satisfaction rates for general merchandising programs.

An additional aspect of the study was to describe and explain the predictive affect of the variables upon job placement and job satisfaction rates. A description of how each variable was obtained for use in this study follows.

Sex of Student

The independent variable of sex was self-reported for all respondents to the Follow-Up Survey. The survey item for sex of student is shown in Appendix B.

Racial/Ethnic Classification

The independent variable of racial/ethnic classification was also self-reported and obtained from the responses to the Follow-Up Survey. The survey item for racial/ethnic classification is shown in Appendix B.

Type of School

Secondary schools with general merchandising programs were classified, as either a comprehensive high school or an area vocational education center. An area vocational education center is a specialized high school used exclusively or principally for the provision of vocational education. An area center is established for persons preparing to enter the labor market. A comprehensive high school is an academic institution, which provides vocational education programs, within a department of the school.

A school classification assignment was given to every building where a general merchandising program operated during the 1978-79 school year. This assignment identified a separate classification for area centers. All comprehensive high schools were classified by size using the Michigan High School Athletic Association classified list of Michigan high schools with 1978-79 enrollments. The classification included: Class A, 1,420 or more students, 9-12; Class B, 704 - 1,419 students, 9-12; Class C 362 - 703 students, 9-12; and Class D, less than 362 students, 9-12. All 265 high school buildings with general merchandising programs were classified by using the above classification system.

Type of Facility

The type of laboratory used for general merchandising programs was identified as being a classroom only instructional laboratory or a classroom with a school store facility. The V-TES Report X-1401 entitled "Room Number and Facility Space Roster" was used to identify the type of laboratory used in each general merchandising program (Appendix E).

Size of Facility

The independent variable of size of laboratory was based on the reported instructional square footage for each general mechandising program. The V-TES Report X-1401 entitled "Room Number and Facility Space Roster" was also used to identify the instructional square footage for each general merchandising program (Appendix E).

DECA

Vocational student organizations are co-curricular in nature with activities directly linked to classroom/laboratory participation and instruction. The existence of a DECA chapter can provide enrolled students with opportunities for developing leadership, vocational skills, civic consciousness and social understandings through chapter sponsored activities. Since individual participation in any chapter activity varied, no attempt was made to identify the degree of participation for individual students. The existence of a DECA chapter and the co-curricular aspects of chapter activities were identified, as applicable to all students. Programs which had a DECA chapter

for the 1978-79 school year were identified from the Michigan Association of DECA chapter rosters (Appendix F).

Length of Program

A vocational program is a planned sequence of courses, services and other educational activities designed to meet specific vocational objectives. Only V-TES approved general merchandising programs were studied. Program completers were those students who completed all the requirements for a vocational program from an institution and were identified on printout VE-4301 entitled, "Secondary Vocational Enrollment and Termination Report" (Appendix G). The length of instructional time for general merchandising programs varied between institutions. All sections and courses offered by a local district were identified from V-TES report X-0108 entitled "1978-79 Reimbursable Vocational Education Programs" (Appendix H). Since all completers were surveyed and identified by school district personnel, as having completed a course or a sequence of courses designed to meet an occupational objective, minutes/weeks of instructional time were assigned to each program.

Pupil/Teacher Ratio

The pupil/teacher ratio represented the average section enrollment reported for individual programs within the state. Student enrollment data was obtained from Fourth Friday (official date of enrollment) data reported by school districts. This data was also obtained from the V-TES Report X-0108 entitled "The 1978-70 Reimbursable Vocational Education Program" reported for each building location (see Appendix H). State

reimbursement was received for section enrollment up to a maximum of 22 students/section. However, section enrollment often exceeded the 22 to one ratio. The average section enrollment for each program was identified and used in the study.

Employment Region Data

The federal Vocational Education Act of 1976 requires approval of annual program applications based on labor market supply and demand data.

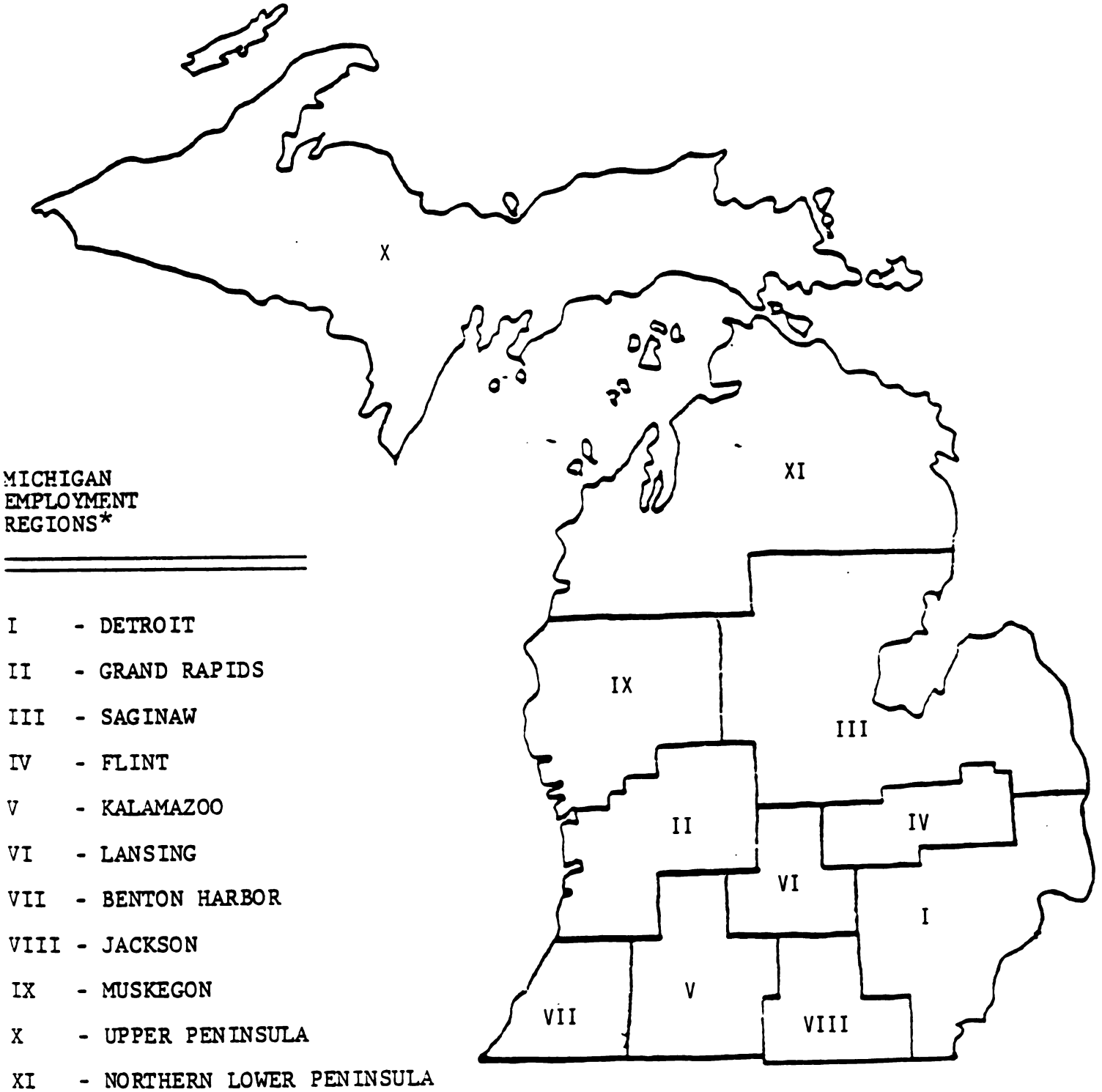
Current employment, projected expansion and replacement needs for general merchandising were based on projections developed by the U.S. Department of Labor, Bureau of Labor Statistics. The 1970 census served as the source of employment region data for this study. The employment region data projected for general merchandising represented employment from growth-created openings plus openings from labor force separations on an annual basis.

The Michigan Employment Regions are shown on Figure 1. The employment region data is identified for general merchandising programs for the 11 Michigan labor market areas and is shown on Table 1 on page 43. Job opening data for individual programs were based on the Michigan employment region data for where the program was located.

Dependent Measures

The dependent measures of related job placement and job satisfaction for each program were based on the Follow-Up Survey responses.

MICHIGAN EMPLOYMENT REGIONS



MICHIGAN EMPLOYMENT REGIONS*

I - DETROIT
II - GRAND RAPIDS
III - SAGINAW
IV - FLINT
V - KALAMAZOO
VI - LANSING
VII - BENTON HARBOR
VIII - JACKSON
IX - MUSKEGON
X - UPPER PENINSULA
XI - NORTHERN LOWER PENINSULA

*Regions are Ranked by Total Employment

Source: U.S. Department of Labor, Bureau of Labor Statistics, Michigan Occupational Outlook, 1980.

Table 1 -- Michigan Employment Region Project Annual Job Openings

Michigan Employment Region	Projected Annual Job Openings
I - Detroit	6,730
II - Grand Rapids	960
III - Saginaw	810
IV - Flint	710
V - Kalamazoo	600
VI - Lansing	590
VII - Benton Harbor	210
VIII - Jackson	310
IX - Muskegon	280
X - Upper Peninsula	340
XI - Northern Lower Peninsula	290
TOTAL	11,900

Source: U.S. Department of Labor, Bureau of Labor Statistics "Current Employment and Projected Expansion and Replacement Needs," State of Michigan, 1980.

Related Job Placement

The job placement dependent measure was determined by a students' self-perception of whether the vocational training received in high school or at an area vocational center was used on the present job. The wording for this survey item is shown on Table 2 on page 45.

A job placement rate for each program was determined by adding the sum of the A Lot and Some response items and dividing the sum by the total responses for job relatedness.

Table 2 -- 1979 Follow-Up Survey (VE-4045-A) Related Job Placement Item

Answer these questions ONLY if you are working full-time or part-time.	
On your present job, how much do you use the vocational training you received in your high school or area vocational center? (Check only ONE.)	☐ A lot ☐ Some ☐ Hardly Any ☐ None

Job Satisfaction

The job satisfaction dependent measure was based on responses received for the survey item shown on Table 3. A job satisfaction rate for each program was computed by adding the sume of the Very Satisfied and Somewhat Satisfied response items and dividing the sum by the total responses for job satisfaction.

Table 3 -- 1979 Follow-Up Survey (VE-4045-A) Job Satisfaction Item

Answer these questions ONLY if you are working full-time or part-time.	
Overall, how satisfied are you with your present job? (Check only ONE.)	☐ Very Satisfied ☐ Somewhat Satisfied ☐ Not Very Satisfied ☐ Not at All Satisfied

Measurement of the Variables

The independent variables of sex, existence of a DECA chapter and school store was categorical and dichotomous. Racial/ethnic classification and type of school classification were categorical.

The remaining independent variables of pupil/teacher ratios, size of laboratory, length of program, and regional job openings were non-categorical and continuous.

The dependent measures of program placement and job satisfaction rates were also continuous in nature.

The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. A complete set of descriptive information was tabulated for the total population of programs and the selected group of programs.

The Pearson Product-Moment Correlation Coefficient was used to compare the selected independent variables with the dependent measures of job placement and job satisfaction. This procedure was used to identify strong associations between an independent variable and the dependent measures which could be used in prediction of job placement and job satisfaction program rates. Correlation coefficients were then computed for all combinations of independent variables with the dependent measures within the selected group of general merchandising programs. After correlation coefficients were calculated, it was determined that there was no single independent variable strongly correlated with either of the dependent measures. Therefore, the raw data for all the independent variables was placed into a stepwise multiple regression analysis. All categorical variables were assigned a zero or one value, so that they could be placed into the regression analysis.

The multiple regression analysis was used to predict the percent of variance accounted for in each of the dependent measures by the selected independent variables.

CHAPTER IV

FINDINGS

This chapter presents descriptive information on general merchandising programs which were operated during the 1978-79 school year. The descriptive data is based upon information supplied by program completers who responded to the 1979 Follow-Up Survey.

This chapter also details the correlation coefficients obtained between the selected independent variables and the dependent measures of job placement and satisfaction in the selected group of general merchandising programs. Further, correlation coefficients are presented for the relationships between and among the independent variables and the dependent measures.

Data regarding the independent variables and the dependent measures were placed into a multiple regression analysis. The stepwise multiple regression analysis predicted the variance accounted for in the program job placement and satisfaction rates by the selected independent variables.

Population Information

Sex of the Population

The population consisted of 5,701 program completers who responded to the 1979 Follow-Up Survey from 265 general merchandising programs. A majority of the program completers were female (56.7%). Table 4 on the following page details the sex of the population.

Racial/Ethnic Classification of the Population

All racial/ethnic classifications were represented in the population. However, the number of respondents for the American Indian, Asian, and Latino

Table 4 -- Sex of the Population (N - 5,701)

Sex of the Population	Number of Respondents	Percent (%) of Total
Male	2,467	43.3
Female	3,234	56.7
Total	5,701	100.0

classifications were insignificant for further analysis. The largest racial/ethnic classification for the population was white (90%) with 5,134 respondents. The largest minority classification for the population was black (6.4%) with 360 respondents. The black minority classification was included for further study. The racial/ethnic classification of the population and the number of respondents found in each classication are shown on Table 5.

Table 5 -- Racial/Ethnic Classification Within the Population (N - 5,701)

Racial/Ethnic Classification	Number of Respondents	Percent (%) of Total
American Indian	31	0.5
Asian	11	0.1
Black	360	6.4
Latino	56	0.9
White	5,134	90.0
Not Identified	109	2.0
Total	5,701	100.0

Type of School

The classification of school sizes was based on the Michigan High School Athletic Association list of Michigan high schools, 1978-79. The 23 area vocational centers were treated as a separate category. A separate category was given to area centers, because they are specialized vocational training facilities, which offer no athletic programs and are not classified by the Association.

During the 1978-79 school year approximately half (50.9%) or 135 general merchandising programs were housed in Class A schools. Only three genreal merchandising programs were housed in Class D schools. There were 29 general merchandising programs in Class C schools and a total of 75 general merchandising programs in Class B high schools. General merchandising programs were offered in 23 area centers during the 1978-79 school year. The classification of school size and number of schools offering general merchandising programs are shown on Table 6.

Table 6 -- Classification of School Size Offering General Merchandising Programs During 1978-79 (N - 265)

Classification of School Size	Number of Programs	Percent (%) of Total
Class A	135	50.9
Class B	75	28.3
Class C	29	10.9
Class D	3	1.1
Area Center	23	8.7
Total	265	100.0

Type of Facility

Approximately one-half (49.8%) or 132 general merchandising programs had school stores. Table 7 identifies the type of facility classification in general merchandising programs during the 1978-79 school year.

Table 7 -- Type of Facility Classification in General Merchandising Programs During 1978-79 (N - 265)

Type of Facility Classification	Number of Programs	Percent (%) of Total
School Store	132	49.8
No School Store	133	50.2
Total	265	100.0

Size of Facility

The reported instructional square footage for general merchandising programs varied from a low of 428 square feet to a high of 3000 square feet. The wide range of instructional square footage between programs was caused by a "grandfathering" of some approved programs. Those programs approved prior to 1970 are not required to meet the current Vocational-Technical Education Service (V-TES) space standard of 80 square feet/student. Therefore, programs approved after 1970 are larger than those with prior state approval. The mean laboratory size for all 265 general merchandising programs was 1,315 square feet and the median laboratory size was 1,212 square feet. A total of 348,328 square feet were reported being used for instruction in general merchandising. Table 8 summarizes the instructional square footage of general merchandising facilities during the 1978-79 school year.

Table 8 -- Instructional Square Footage of General Merchandising Facilities During 1978-79 (N - 265)

Instructional Square Footage of General Merchandising Facilities	Number of Programs	Percent (%) of Total
under - 1000	92	34.7
1001 - 1400	67	25.3
1401 - 1800	62	23.4
1801 - above	44	16.6
Total	265	100.0

Distributive Education Clubs of America (DECA)

A majority (68.3%) or 181 general merchandising programs did not have DECA chapters, while 84 programs or (31.7%) reported DECA chapters as part of the instructional program. The DECA chapter distribution present in general merchandising programs is shown on Table 9.

Table 9 -- DECA Chapter Distribution in General Merchandising Programs During 1978-79 (N - 265)

DECA Chapter Distribution	Number of Programs	Percent (%) of Total
DECA Chapter	84	31.7
No DECA Chapter	181	68.3
Total	265	100.0

Length of Program

Program length was determined by the total instructional time in minutes needed to complete a general merchandising program. Instructional time was

calculated by using the V-TES report X-0108 entitled "1978-79 Reimbursable Vocational Education Programs" (Appendix H). Instructional time was measured by minutes/week for a school year. General merchandising programs in Michigan were found to be one, two, and three years in length. Therefore, the total amount of instructional minutes reported represents the total amount of time spent per week over the length of a particular program. The largest number of programs (40.0%) or 106 programs were reported in the 280-550 minute category over the length of the program. The data indicated that a majority of 158 programs or (59.6%) offered programs of instruction equal to or less than 550 minutes/week over the length of program. The most typical program was found to be two-year program with 275 minutes of instructional time/week offered during each year. The range of instructional time varied from a low of 120 minutes/week for a one-year program to a high of 1,650 total minutes for a three year program of instruction. The computed mean for all programs was 600 minutes of instructional time and the median was 550 minutes. A distribution of instructional time required to complete general merchandising programs over the length of the program and the number of programs in each category for the 1978-79 school year is shown on Table 10.

Pupil/Teacher Ratio

The average program pupil/teacher ratio was calculated by using the X-0108 report (Appendix H). Pupil/teacher ratios varied from a low of 5 students/teacher to a high of 41 students/teacher. V-TES funding policy reimbursed section enrollment within a program to a maximum of 22 students during the 1978-79 school year. The mean program teacher/pupil ratio was 22.0 and the median teacher/pupil ratio was also 22.0. A detailed description of the number of general merchandising programs found within identified pupil/teacher ranges is shown on Table 11.

Table 10 -- Instructional Time Required to Complete a General Merchandising Program During 1978-79 (N - 265)

Instructional Time	Number of Programs	Percent (%) of Total
under - 275	52	19.6
280 - 550	106	40.0
560 - 825	61	23.0
830 - 1650	46	17.4
Total	265	100.0

Table 11 -- Pupil/Teacher Ranges for General Merchandising Programs During 1978-79 (N - 265)

Pupil/Teacher Ranges	Number of Programs	Percent (%) of Total
under - 20/1	78	29.4
21 - 24/1	102	38.4
25 - 29/1	63	23.8
30 - 41/1	22	8.4
Total	265	100.0

Employment Region Data

Approximately one-half (50.2%) or 133 programs were found in Employment Region I - Detroit. Region I - Detroit encompasses the tri-county area of Wayne, Oakland, and Macomb counties. The employment region with the least number of general merchandising programs was found in Michigan Employment Region VIII - Jackson. A total of 11,900 annual job openings was projected for the state in general merchandising. The location and distribution of projected

job openings by region and number of programs found within each region is shown in Table 12.

Table 12 -- Location by Michigan Employment Region with Annual Projected Job Openings for General Merchandising During 1978-79 (N - 265)

Location	Michigan Employment Region	Annual Projected Job Openings	Number of Programs	Percent (%) of Total
Detroit	I	6,730	133	50.2
Grand Rapids	II	960	21	7.9
Saginaw	III	880	18	6.8
Flint	IV	710	22	8.3
Kalamazoo	V	600	12	4.5
Lansing	VI	590	12	4.5
Benton Harbor	VII	210	10	3.8
Jackson	VIII	310	5	1.9
Muskegon	IX	280	12	4.5
Upper Peninsula	X	340	9	3.4
Northern Lower Peninsula	XI	290	11	4.2
Total		11,900	265	100.0

Placement Data

A related job placement rate was determined for each program by the responses to the Follow-Up Survey question entitled "On your present job, how much do you use the vocational training you received in your high school or area vocational center?" The number of program completers employed in related occupations was determined for each program by totalling the sum of the respondents who answered A Lot and Some degree of relatedness to the

question. Respondents who answered Hardly Any and None were considered to be employed in a non-related occupation (Appendix B). A related job placement rate for each program was calculated by totalling the sum of the related responses (A Lot and Some) and dividing the sum by the total responses for job relatedness. The related job placement rate for the entire population of programs under the study was calculated in a similar manner. An aggregate related job placement rate of 63.6% was computed for all 265 general merchandsing programs. The total number of respondents for the job placement survey item are displayed on Table 13.

Table 13 -- Job Placement Survey Item and Number of Respondents for Population (n - 3,761)

Job Placement Survey Item	Number of Respondents	Percent (%) of Total
High Job Relatedness	858	22.8*
Some Job Relatedness	1,535	40.8*
Hardly Any Job Relatedness	717	19.1
No Job Relatedness	651	17.3
Total	3,761	100.0

*Related Job Placement Rate - 63.6

Job Satisfaction Data

A job satisfaction rate for each program was determined by the responses to the Follow-Up Survey question entitled "Overall, how satisfied are you with your present job?" The number of program completers who were satisfied with their job, was determined for each program by totalling the sum of respondents who answered Very Satisfied and Somewhat Satisfied to the question.

Respondents who answered Not Very Satisfied and Not At All Satisfied were considered not satisfied with their present employment (Appendix B). A job satisfaction rate was then calculated for each program by totalling the sum of the favorable responses (Very Satisfied and Somewhat Satisfied) and dividing the sum by the total responses for job satisfaction. The job satisfaction rate for the entire population of programs under study was calculated in a similar manner. An aggregate job satisfaction rate of 85.3% was computed for all 265 general merchandising programs. The total number of respondents for the job satisfaction survey item are shown on Table 14.

Table 14 -- Job Satisfaction Survey Item and Number of Respondents for Population (N - 3,768)

Job Satisfaction Survey Item	Number of Respondents	Percent (%) of Total
High Job Satisfaction	1,586	42.1*
Some Job Satisfaction	1,626	43.2*
Little Job Satisfaction	399	10.6
No Job Satisfaction	157	4.1
Total	3,768	100.0

*Job Satisfaction Rate - 85.3

Group Information

An analysis of the total responses to the job placement and job satisfaction Follow-Up Survey items was completed for all 265 general merchandising programs. The analysis indicated that the median response to these survey items was eleven program completers. Accordingly, all programs with eleven

or more respondents to the job placement and job satisfaction survey items were included in a group for further analysis. The selection of eleven or more respondents allowed for a greater degree of reliability in calculating program job placement and job satisfaction rates, since programs with limited responses were eliminated from further study.

Sex of the Group

The group of programs with eleven or more respondents included a total of 4,480 program completers from 141 programs. A majority (56.0%) of the completers in the group were female. The sex and total number of respondents in the group is shown on Table 15.

Table 15 -- Sex of the Group (n - 4,480)

Sex of the Group	Number of Respondents	Percent (%) of Total
Male	1,979	44.0
Female	2,511	56.0
Total	4,480	100.0

Racial/Ethnic Classification of the Group

The largest racial/ethnic classification in the group under study was white. The white classification totalled 4,085 respondents or 91.2% of the total. The largest minority classification was black with 227 respondents or 5.1% of the total. The racial/ethnic classification of the group and the number of respondents for each classification are shown on Table 16.

Type of School

A total of 141 programs were included in the group under study. A majority of 85 programs or 60.3% of the total number of programs were housed

Table 16 -- Racial/Ethnic Classification Within the Group (n - 4,480)

Racial/Ethnic Classification	Number of Respondents	Percent (%) of Total
American Indian	24	0.5
Asian	9	0.2
Black	227	5.1
Latino	46	1.0
White	4,085	91.2
Not Identified	89	2.0
Total	4,480	100.0

in Class A high schools. No general merchandising programs were found in Class D classification and 9 programs or 6.4% of the total were found in area vocational education centers. A complete listing of programs by type of school classification is shown on Table 17.

Table 17 -- Classification of School Size Offering General Merchandising Program Within the Group During 1978-79 (n - 141)

Classification of School Size	Number of Programs	Percent (%) of Total
Class A	85	60.3
Class B	35	24.8
Class C	12	8.5
Class D	0	0.0
Area Center	9	6.4
Total	141	100.0

Type of Facility

A majority of the 141 general merchandising programs in the group had no school store laboratory. A total of 83 programs or 58.9% of the total group did not have the school stores. The number of general merchandising programs with school store laboratories for the group is shown on Table 18.

Table 18 -- Type of Facility Classification in General Merchandising Programs Within the Group During 1978-79 (n - 141)

Type of Facility Classification	Number of Programs	Percent (%) of Total
School Store	58	41.1
No School Store	83	58.9
Total	141	100.0

Size of Facility

A total of 71 general merchandising programs or 50.3% had instructional square footage of 1,400 square feet or less. Only 27 programs or 19.2% of the total met the V-TES space standard of 80 square/feet per student and exceeded 1,800 square feet. A total of 194,309 square feet was being used for instructional purposes within the 141 programs. The mean laboratory size was 1,378 square feet and the median laboratory size was 1,391 square feet. Table 19 describes the instructional square footage distribution for programs within the group.

Distributive Education Clubs of America (DECA)

A majority of 95 programs or 67.4% did not have DECA chapters, as part of the instructional program. The total DECA chapter distribution for the group is shown on Table 20.

Table 19 -- Instructional Square Footage of General Merchandising Facilities Within the Group During 1978-79 (n - 141)

Instructional Square Footage of General Merchandising Facilities	Number of Programs	Percent (%) of Total
under - 1000	44	31.2
1001 - 1400	27	19.1
1401 - 1800	43	30.5
1801 - above	27	19.2
Total	141	100.0

Table 20 -- DECA Chapter Distribution in General Merchandising Programs Within the Group During 1978-79 (n - 141)

DECA Chapter Distribution	Number of Programs	Percent (%)
DECA Chapter	46	32.6
No DECA Chapter	95	67.4
Total	141	100.0

Length of Program

Total instructional time reported to complete a program ranged from a low of 260 minutes/week for a one year program to a high of 1,500 minutes for a two year program. There were 64 programs or 45.4% reported in the 280-551 minute category. The data indicated that a majority of 79 programs of 56.0% were equal or less then 550 minutes over the program duration. The computed mean for the group was 613 minutes of instructional time and the computed median was 551 minutes. The most frequently occurring program was a two year program offering 275 minutes/week of instruction during each year

for a total of 550 minutes. A distribution of instructional time required to complete general merchandising programs and the number of programs in each category is shown on Table 21.

Table 21 -- Instructional Time Required to Complete General Merchandising Programs Within the Group During 1978-79 (n - 141)

Instructional Time	Number of Programs	Percent (%) of Total
under - 275	15	10.6
280 - 550	64	45.4
560 - 825	41	29.1
830 - 1650	21	14.9
Total	141	100.0

Pupil/Teacher Ratio

The pupil/teacher ratio for programs in the group ranged from a low of 12 students/teacher to a high of 41 students/teacher. The mean pupil/teacher ratio was 22.7, the median 22.5, and the most frequently occurring pupil/teacher ratio was 23.0 students/teacher. Pupil/teacher ranges for programs in the group can be found on Table 22.

Employment Region Data

A slight majority 52.5% or 74 programs in the group were found in Employment Region I - Detroit. The group contained programs from all employment regions with the smallest representation from Region VIII - Jackson, IX - Msukegon, and X - Upper Peninsula. The location and distribution of projected job openings by region and the number of programs found within each region is shown on Table 23.

Table 22 -- Pupil/Teacher Ranges for General Merchandising Programs Within the Group During 1978-79 (n - 141)

Pupil/Teacher Ranges	Number of Programs	Percent (%) of Total
under - 20/1	43	30.5
21 - 24/1	51	36.2
25 - 29/1	37	26.2
30 - 41/1	10	7.1
Total	141	100.0

Table 23 -- Location by Michigan Employment Region with Annual Projected Job Openings for General Merchandising Within the Group During 1978-79 (n - 141)

Location	Michigan Employment Region	Annual Projected Job Openings	Number of Programs	Percent (%) of Total
Detroit	I	6,730	74	52.5
Grand Rapids	II	960	14	9.9
Saginaw	III	880	8	5.7
Flint	IV	710	14	9.9
Kalamazoo	V	600	9	6.4
Lansing	VI	590	6	4.3
Benton Harbor	VII	210	6	4.3
Jackson	VIII	310	2	1.4
Muskegon	IX	280	2	1.4
Upper Peninsula	X	340	2	1.4
Northern Lower Peninsula	XI	290	4	2.8
Total		11,900	141	100.0

Placement Data

A related job placement rate was determined for the group by computing the sum of follow-up responses indicating job relatedness and by dividing the sum by total responses for job placement. The related job placement rate for the group was 64.5%. The related placement rate closely paralleled the related placement rate of 63.7% for the total population of general merchandising program completers. The largest response category for related job placement was Some Job Relatedness (42.3%). The total number of respondents for the job placement survey item are displayed on Table 24.

Table 24 -- Job Placement Survey Item and Number of Respondents Within the Group (n - 3,071)

Job Placement Survey Item	Number of Respondents	Percent (%)
High Job Relatedness	682	22.2*
Some Job Relatedness	1,299	42.3*
Hardly Any Job Relatedness	579	18.9
No Job Relatedness	511	16.6
Total	3,071	100.0

*Related Job Placement Rate - 64.5

Job Satisfaction Data

The job satisfaction rate was determined by computing the sum of responses indicating favorable job satisfaction and by dividing the sum by total responses to the job satisfaction item on the Follow-Up Survey. A total job satisfaction rate of 85.5% was calculated for the 141 general merchandising programs. The job satisfaction rate for the group was nearly identical to the total population rate of 85.3%. An approximately equal distribution of

responses to the categories of High Job Satisfaction and Some Job Satisfaction was found. The total number of respondents to the job satisfaction survey item are shown on Table 25.

Table 25 -- Job Satisfaction Survey Item and Number of Respondents Within the Group (n - 3,071

Job Satisfaction Survey Item	Number of Respondents	Percent (%) of Total
High Job Satisfaction	1,307	42.6*
Some Job Satisfaction	1,316	42.9*
Little Job Satisfaction	320	10.4
No Job Satisfaction	128	4.1
Total	3,071	100.0

*Job Satisfaction Rate - 85.5%

Pearson Correlation Coefficients

The product moment coefficient of correlation, the Pearson r, was the correlation index used to measure the degree of relationship between the selected independent variables and the dependent measures of related job placement and job satisfaction. Correlation coefficients were also computed between the selected independent variables themselves and between the two dependent measures.

The Pearson r correlation was used to measure the degree of relationship between the independent variables and the dependent measures to determine whether a statistically significant correlation existed. Statistical significance is related to both the strength of the observed

correlation and to the number of paired comparisons. With the reasonably large number of programs contained in the selected group of 141 programs, a coefficient of correlation often found to be low in value was statistically significant.

Sex of the Group

The percentage of female completers was calculated for each of the 141 programs and compared against the dependent measures of job placement and satisfaction. The findings indicated that a negative relationship existed between program job satisfaction rates and the percentage of females completing the program at a ($p < .05$) significance level. A positive relationship was observed between program related job placement rates and the percentage of females completing the program at a ($p < .05$) significance level. See Table 26.

Racial/Ethnic Classification of the Group

The percentage of white and black program completers for each program was calculated and compared against the dependent measures of job placement and satisfaction. A negative correlation for black completers at the ($p < .10$) significance level was obtained for job satisfaction in the group of 141 programs. Negative correlations were observed for related job placement program rates and the percentage of black completers, but failed to reach significance. See Table 26.

Among the independent variables the percentage of whites was positively related to length of program at the ($p < .05$) level; school stores at the ($p < .05$) level and regional job openings ($p < .10$). The strength, direction, and significance level of the correlation coefficents for female, white and

black completers compared with the dependent measures and independent variables is shown on Table 26.

Table 26 -- Pearson Correlation Coefficients Within the Group for Percentage of Female, White, and Black Completers Compared with Type of Dependent Measure or Independent Variable (n - 141)

Type of Dependent Measure or Independent Variable	% Female Completers	% White Completers	% Black Completers
Job Satisfaction	-.1694 P = .022	.0968 P = .127	-.1159 P = .086
Job Relatedness	.1372 P = .052	.0314 P = .356	-.0330 P - .349
Type of School	.0901 P = .144	-.0098 P = .454	-.0225 P = .395
Length of Program	.0103 P = .439	.1510 P = .037	-.1500 P = .038
DECA Chapter	.1373 P = .052	.0250 P = .384	.0023 P = .489
Type of Facility	-.0165 P = .423	.2472 P = .002	-.2448 P = .002
Pupil/Teacher Ratio	.0662 P = .218	-.0412 P = .314	.0424 P = .309
Size of Facility	-.0203 P = .406	.0687 P = .209	-.0751 P = .185
Regional Job Openings	-.0282 P = .370	.1281 P = .065	-.1212 P = .076

Type of School

No statistically significant correlation coefficients were found between the type of school attended and job satisfaction and job relatedness in the group of 141 programs. See Table 27.

Among the independent variables length of program has a positive relationship at the ($p<.01$) level with type of school attended. A negative relationship was found between type of school and the existence of a school store at the ($p<.01$) level. See Table 27.

Type of Facility

No statistically significant relationships were observed for type of facility (classroom without a store laboratory vs. classroom with store laboratory) when compared with the dependent measures of job satisfaction or job relatedness. See Table 27.

Positive relationships between this variable and the percentage of white completers ($p<.01$); length of program ($p<.01$); DECA ($p<.01$); size of laboratory ($p<.01$); and regional job openings ($p<.01$) were found to be highly statistically significant. See Table 27.

A negative correlation at the ($p<.01$) significant level was found for type of school. See Table 27.

Size of Laboratory

No significant correlation coefficients were found for size of laboratory when compared with the related job placement and job satisfaction for each program. See Table 27.

Positive and highly significant correlation coefficients were discovered between the independent variables of length of program ($p<.01$) and DECA ($p<.01$). See Table 27.

The strength and direction of the correlation coefficients for type of school, type of facility, and size of laboratory compared with the dependent measures and independent variables are shown on Table 27.

Table 27 -- Pearson Correlation Coefficients Within the Group for Type of School, Type of Facility and Size of Facility Compared with Type of Dependent Measure or Independent Variable (n - 141)

Type of Dependent Measure or Independent Variable	Type of School	Type of Facility	Size of Facility
Job Satisfaction	.0411 P = .314	-.0511 P = .274	-.0655 P = .220
Job Relatedness	.1009 P = .117	.0698 P = .205	.0642 P = .225
% Female	.0901 P = .144	-.0165 P = .423	-.0203 P = .405
% White	-.0098 P = .454	.2472 P = .002	.0687 P = .209
% Black	-.0225 P = .395	-.2448 P = .002	-.0763 P = .185
Length of Program	.4208 P = .001	.3409 P = .001	.4069 P = .001
Student Organization	.0142 P = .434	.2435 P = .002	.1951 P = .010
Pupil/Teacher Ratio	-.0772 P = .181	-.0758 P = .186	-.1784 P = .017
Regional Job Openings	-.4329 P = .001	.2763 P = .001	.0573 P = .250
Type of Facility	-.2000 P = .009	1.0000 P = xxxx	.5672 P = .001
Size of Facility	-.0043 P = .466	.5672 P = .001	1.0000 P = xxxx

Length of Program

No statistically significant relationships were found between the length of program and either of the dependent measures of job placement and job satisfaction. See Table 28.

Among the independent variables positive correlations were observed between length of program and percentage of whites ($p<.05$); type of school ($p<.01$); DECA ($p<.01$); school store ($p<.01$); and size of laboratory ($p<.01$). See Table 28.

Negative correlations were also observed for percentage of black completers between length of programs and pupil/teacher ratios at the ($p<.05$); level. See Table 28.

DECA

The DECA independent variable was shown to have positive relationship to the related job placement dependent measures at the ($p<.05$) significance level in the group of 141 programs. No significant relationships were observed for the job satisfaction measure. See Table 28.

The correlations between the independent variables and DECA were shown to have a positive relationship to percentage of females ($p<.05$); length of program ($p<.01$); school store ($p<.01$); and size of laboratory ($p<.01$). See Table 28.

Pupil/Teacher Ratio

No statistically significant relationships were found for the pupil/teacher ratio variable and the dependent measures of related job placement and job satisfaction. However a negative relationship was observed but failed to reach significance on the job relatedness measure. See Table 28.

The results for the other independent variables showed no other statistically significant relationships. The strength, direction, and significance levels for length of program, DECA, and pupil/teacher ratio is shown on Table 28.

Table 28 -- Pearson Correlation Coefficients Within the Group for Length of Program, DECA, and Pupil/Teacher Ratio Compared with the Type of Dependent Measure or Independent Variable (n - 141)

Type of Dependent Measure or Independent Variable	Type of School	Type of Facility	Size of Facility
Job Satisfaction	-.0865 P = .154	-.0630 P = .229	.0560 P = .255
Job Relatedness	.0234 P = .391	.1618 P = .028	-.0750 P = .189
% Female	.0130 P = .439	.1373 P = .052	.0662 P = .218
% White	.1510 P = .037	.0250 P = .384	-.0418 P = .314
% Black	-.1500 P = .038	.0023 P = .489	.0424 P = .309
Type of School	.4208 P = .001	.0142 P = .434	-.0772 P = .181
School Store	.3406 P = .001	.2435 P = .002	-.0758 P = .186
Size of Laboratory	.4069 P = .001	.1951 P = .010	-.1784 P = .017
Regional Job Openings	-.1021 P = .114	.0266 P = .377	.1374 P = .052
Length of Program	1.0000 P = xxxx	.2478 P = .002	-.2158 P = .005
Pupil/Teacher Ratio	-.2158 P = .005	-.0543 P = .261	1.0000 P = xxxx

Employment Region

The remaining independent variable of regional job openings was compared to the dependent measures of related job placement and job satisfaction. A negative relationship was observed for job satisfaction at the ($p < .05$) significance level and for job relatedness at the ($p < .01$) level. See Table 29.

Dependent Measures

After all the independent variables were compared, the dependent measures of related job placement and job satisfaction were compared with each other.

There was found to be a strong positive correlation between related job placement and job satisfaction and the ($p < .01$) significance level. Pearson Correlation Coefficient values for the dependent measures and regional job openings are shown on Table 29.

Multiple Regression Analysis

The multiple regression analysis was completed to obtain an estimate of the percentage of variance accounted for in each of the dependent measures of related job placement and job satisfaction program rates by the selected independent variables.

The multiple regression analysis included the raw data for the two dependent measures of job relatedness and job satisfaction and the ten independent variables. The ten independent variables included (1) percentage of females; (2) size of laboratory; (3) regional job openings; (4) pupil/teacher ration; (5) student organization; (6) percentage of whites; (7) type of school; (8) type of facility; (9) length of program; and (10) percentage of blacks.

Analysis of the data was done by procedures generated by the Statistical Package for the Social Sciences (SPSS) Version 8.0 and provided by the

Table 29 -- Pearson Correlation Coefficients Within the Group for Regional Job Openings, Job Satisfaction, and Job Placement Compared with Type of Dependent Measure or Independent Variable (n - 141)

Type of Dependent Measure or Independent Variable	Type of School	Type of Facility	Size of Facility
Job Satisfaction	1.0000 P = xxxx	.3298 P = .001	-.1562 P = .032
Job Relatedness	.3298 P = .001	1.0000 P = xxxx	-.2472 P = .002
% Female	-.1694 P = .022	.1372 P = .052	-.0282 P = .370
% White	.0968 P = .127	.0314 P = .356	.1281 P = .065
% Black	-.1159 P = .86	-.0330 P = .346	-.1212 P = .076
Type of School	.0411 P = .314	.1009 P = .117	-.4329 P = .001
Length of Program	-.0865 P = .154	.0234 P = .391	-.1021 P = .114
Student Organization	-.0630 P = .229	.1618 P = .028	.0266 P = .377
School Store	-.0511 P = .274	.0698 P = .205	.2763 P = .001
Pupil/Teacher Ratio	.0560 P = .255	-.0750 P = .189	.1374 P = .052
Size of Laboratory	-.0655 P = .220	.0642 P = .225	.0573 P = .250

Vogelbach Computing Center at Northwestern University and done at Michigan State University.

A stepwise multiple regression procedure was used, which weights each variable as if it were the last to be entered into the regression analysis. This procedure reported each variable independently of the others -- i.e., only the added effect of an individual variable was considered in determining significance. Variables which had the greatest weight on the dependent measures were entered first and all variables were then summarized.

Job Placement Regression Analysis (n - 141)

The analysis included all programs including 11 or more respondents for total job relatedness and a total of 141 programs met the requirements for inclusion in the analysis. A related job placement rate was calculated for each program.

The analysis indicated that approximately 13 percent (.1274) of the variability between job placement rates of general merchandising programs could be accounted for by the independent variables. Only two variables (regional job openings and DECA) were significantly related to job placement at ($p < .05$) level. All other variables failed to reach significance in the group. The data from the multiple regression analysis are shown on Table 30.

Job Satisfaction Regression Analysis (n - 141)

The second analysis included all programs including 11 or more respondents for total satisfaction and a total of 141 programs met the requirements for inclusion in the analysis.

This analysis indicated that approximately 10 percent (.1011) of the variability between job satisfaction rates of general merchandising programs could be counted for by the independent variables. Only the percentage of females in the program and regional job openings where the program was located

Table 30 -- Multiple Regression Data for Job Relatedness Measure and Type of Independent Variable Within the Group (n - 141)

Type of Independent Variable	F to Enter or Remove	Significance	R Square
Regional Job Openings	9.0585	.003	.0611
Student Organization	4.2984	.040	.0895
Percentage of Females	1.7793	.184	.1012
Type of Facility	1.8750	.173	.1134
Length of Program	1.1453	.286	.1209
Percentage of Blacks	.4801	.490	.1240
Pupil/Teacher Ratio	.2848	.594	.1259
Type of School	.2042	.652	.1272
Size of Laboratory	.0240	.877	.1274

were significant at the ($p<.05$) level. No other independent variables were significant at the ($p<.05$) level for job satisfaction. The data from the multiple regression analysis is shown on Table 31.

Table 31 -- Multiple Regression Data for Job Satisfaction Measure and Type of Independent Variable Within the Group (n - 141)

Type of Independent Variable	F to Enter or Remove	Significance	R Square
Percentage of Females	4.1086	.044	.0287
Regional Job Openings	3.7871	.054	.0546
Percentage of Blacks	2.3215	.130	.0704
Length of Program	2.2743	.134	.0857
Percentage of White	1.3016	.256	.0944

Table 31 -- Multiple Regression Data for Job Satisfaction Measure and Type of Independent Variable Within the Group (n - 141) (continued)

Type of Independent Variable	F to Enter or Remove	Significance	R Square
Pupil/Teacher Ratio	.8495	.358	.1001
Size of Laboratory	.0375	.847	.1003
Type of Facility	.0746	.785	.1008
Student Organization	.0174	.895	.1010
Type of School	.0123	.912	.1011

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The Vocational Education Act of 1963 and subsequent amendments to the Act attempted to make vocational education programs accountable to students for related job placement and student employment success on the job. The study of process variables that can affect student employment success is very timely.

Local and state marketing and distributive education personnel are in a continuous search for variables that can facilitate job placement and job satisfaction rates for general merchandising programs.

The Problem

The problem of this study was to identify selected planning and operational variables which were positively or negatively related to job placement and job satisfaction rates for general merchandising programs in the state of Michigan.

Another aspect of the study was to describe and explain the predictive nature of the combined variables upon individual related job placement and job satisfaction rates for general merchandising programs.

Research Procedures

The population of this study consisted of 5,701 program completers, who responded to the 1979 Follow-Up Survey from 265 general merchandising programs. The Statistical Package for the Social Sciences (SPSS) was used to analyze the frequency of survey responses to the job placement and job satisfaction

items for each of the 265 general merchandising programs. All general merchandising programs with eleven or more respondents to the job placement and job satisfaction survey items were included in a group for further study.

A complete descriptive analysis of the total population and the group under study was compiled.

The Pearson Product-Moment Correlation was used to compare the selected independent variables with the dependent measures of job placement and job satisfaction.

Correlation coefficients were derived from each independent variable when compared with the dependent measures of job placement and job satisfaction. In addition, correlation coefficients were obtained between the various independent variables and between each of the dependent measures. The strength, direction, and significance of the coefficients were identified.

The data for all independent variables and dependent measures were placed into a multiple regression analysis. The predictive nature of the selected independent variables on the dependent measures of job placement and job satisfaction was explained.

Findings

Description of the Population

The descriptive findings were based upon the 1979 Follow-Up Survey responses and other Vocational-Technical Education Service (V-TES) source documents. The findings for the total population of 265 general merchandising programs during the 1978-79 school year within the State were as follows:

1. A majority or (56.7%) of the program completers, who responded to the 1979 Follow-Up Survey, were female.

   The response rate very closely paralleled the total female enrollment of 57.0% found in general merchandising programs for the 1978-79 school year. General merchandising follow-up response rates do not differ significantly by sex from total program enrollments. Additionally, the general merchandising program area on a state-wide basis is not predominantly female or male-oriented.

2. A majority or (90%) of the program completers, who responded to the 1979 Follow-Up Survey, were white.

3. Nearly 80 percent or (79.2%) of the general merchandising programs were offered in comprehensive Class A and B high schools during the 1978-79 school year.

   The size of the student population influenced the number of high schools offering general merchandising programs. Smaller high schools did not offer general merchandising programs, because these schools had smaller student populations and fewer electives, such as general merchandising. The predominant type of school offering general merchandising programs during the 1978-79 school year was the large comprehensive high schools.

4. Approximately one-half or (49.8%) of the general merchandising programs during the 1978-79 school year had school stores.

   The establishment of school stores closely followed V-TES program approval criteria for general merchandising programs. Programs approved after 1977 are required to have school store laboratories. It is expected that the percentage of general

merchandising programs with school stores will increase in the future as new and revised programs incorporate school store laboratories.

5. The mean laboratory size of general merchandising programs during the 1978-79 school year was 1315 square feet.

   The data confirmed that the average laboratory size for general merchandising programs is below the state standard of 80 square feet per student. New and revised programs are required to have approximately 1800 square feet of instructional space (22 students x 80 square feet per student = 1760 square feet). It is expected that program revisions to existing programs and new program approvals will increase the average laboratory size for general merchandising programs in the future.

6. A minority or (31.7%) of the general merchandising programs during the 1978-79 school year had DECA chapters.

7. The average instructional time spent in general merchandising programs was a total of 550 minutes per week of instruction over the length of the program.

   The most frequently occurring program arrangement was a two-year program with 275 minutes of instructional time/week for each year. The average general merchandising program during the 1978-79 school year did not meet the current state standard of 725 minutes of instructional time over the length of a two-year program.

8. The mean pupil/teacher ratio for general merchandising programs during the 1978-79 school year was 22 students per teacher.

The data confirmed that the average pupil to teacher ratio for general merchandising programs during the 1978-79 school year was in compliance with the state standard of 22 students per teacher.

9. Approximately half or (50.2%) of all general merchandising programs during the 1978-79 school year were located in Employment Region I - Detroit.

10. General merchandising program completers during the 1978-79 school year had a state-wide related job placement rate of 63.6%.

    General merchandising program completers exceeded the state-wide average related placement rate of 59.2% for all vocational program completers during the 1978-79 school year. The average related placement rate for all vocational program completers was taken from a V-TES X-0607 report entitled "Job Placement Summary of Completers by Program within State" (Appendix I).

11. General merchandising program completers during the 1978-79 school year had a state-wide job satisfaction rate of 85.3%.

    The data indicated that the state-wide job satisfaction rate for general merchandising program completers of 85.3% was approximately equal to the state-wide average job satisfaction rate of 86.4% for all vocational program completers during the 1978-79 school year. The average job satisfaction rate for all vocational programs was taken from a V-TES X-0607 report entitled "Job Placement Summary of Completers by Program within State" (Appendix I).

Research Questions

A summary of the findings related to the specific research questions were derived by using Pearson Product Moment Correlation and multiple regression

analyses. The findings for the specific research questions for general merchandising programs during the 1978-79 school year were as follows:

1. What is the relationship between the percentage of female completers and the related job placement and job satisfaction rates for general merchandising programs?

   A positive relationship at the ($p < .05$) significance level was observed between the percentage of female completers and job relatedness. As the percentage of female completers increased, program related placement rates also increased.

   A negative relationship at the ($p < .05$) significance level was observed between the percentage of female completers and job satisfaction. As the percentage of female completers increased, program job satisfaction rates decreased.

2. What is the relationship between the percentage of minority completers and the related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed between the percentage of minority completers (black) and the dependent measures of related job placement and job satisfaction. However, as the percentage of black completers increased, program related job placement rates and job satisfaction rates tended to decrease, but failed to reach significance.

3. What is the relationship between type of school and the related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed for type of school and either of the dependent measures. The results

indicated that the type of school does not have any statistically significant affect on related job placement and job satisfaction rates for general merchandising programs.

4. What is the relationship between the type of facility (classroom only; classroom with school store) and the related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed for type of facility and either of the dependent measures. The type of facility did not have any statistically significant affect on related job placement and job satisfaction rates for general merchandising programs.

5. What is the relationship between size of facility (square footage available for instruction) and the related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed for the size of facility and the dependent measures. The amount of square footage available for instruction did not have any statistically significant affect on related job placement and job satisfaction rates for general merchandising programs.

6. What is the relationship between the presence of a DECA chapter and the related job placement and job satisfaction rates for general merchandising programs?

   A positive relationship at the ($p < .05$) significance level was observed between the presence of a DECA chapter and related job placement. The presence of a DECA chapter increased the related job placement rates for general merchandising programs.

7. What is the relationship between the length of the instructional program and related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed between the length of the instructional program and the dependent measures. The results indicated that the length of the instructional program for general merchandising programs did not have a statistically significant affect on related job placement and job satisfaction rates.

8. What is the relationship between pupil/teacher ratios and related job placement and job satisfaction rates for general merchandising programs?

   There were no statistically significant relationships observed between pupil/teacher ratios and the dependent measures. Pupil/teacher ratios did not have any statistically significant affect on related job placement and job satisfaction rates for general merchandising programs.

9. What is the relationship between projected regional job openings and related job placement and job satisfaction rates for general merchandising programs?

   A highly statistically significant negative relationship at the ($p < .01$) level was observed between projected regional job openings and related job placement rates for general merchandising programs.

   A statistically significant negative relationship at the ($p < .05$) level was observed between regional job openings and job satisfaction rates for general merchandising programs.

These results indicated that as the number of projected job openings increased, the related job placement and job satisfaction rates decreased for general merchandising programs.

10. What are the relationships between the selected process variables for general merchandising programs?

Statistically significant positive relationships at the ($p < .05$) level were observed between the percentage of white completers, length of program and type of facility. As the number of white completers increased, the general merchandising programs had longer instructional programs and school stores. Conversely, as the number of black completers increased, the general merchandising programs had shorter instructional programs, and fewer school stores.

Highly statistically significant relationships at the ($p < .01$) level were observed between the variables of type of school, DECA type of facility, pupil/teacher ratio, length of program, and size of laboratory. The results indicated that Class A schools had more DECA chapters, more school stores, longer instructional programs, larger laboratories, and lower pupil/teacher ratios than smaller school classifications during the 1978-79 school year.

11. What is the relationship between related job placement rates and job satisfaction rates for general merchandising programs?

A highly statistically significant positive relationship at the ($p < .01$) level was observed between the dependent measures.

The results indicated that as related job placement rates increased, the job satisfaction rates also increased for general

merchandising programs. General merchandising programs with higher related job placement rates had higher job satisfaction rates.

12. What is the overall affect of the combined process variables on related job placement and job satisfaction rates for general merchandising programs?

The combination of all selected independent variables was found to have minimal affect on predicting the amount of variance between individual related job placement and job satisfaction rates for general merchandising programs.

The regression analysis indicated that only 13 percent of the variability between related job placement rates for individual programs could be accounted for by the combination of the selected independent variables.

Only regional job openings and DECA were significantly related to job placement at the ($p < .05$) level.

Further, the analysis indicated that only 10 percent of the variability between job satisfaction rates for individual programs could be accounted for by the independent variables. Only the percentage of female completers and regional job openings were significantly related to job satisfaction at the ($p < .05$) level.

Conclusions

This study found that DECA and the percentage of female completers have a positive relationship to related job placement. Other learner characteristics and process variables have little affect on related job placement rates for general merchandising programs. It was also found that related

job placement rates are positively related to job satisfaction rates for general merchandising programs. This conclusion should lead to an increased emphasis on career planning and exploration activities to properly match interests and training with job placement opportunities after program completion.

Projected regional job openings and the percentage of female completers were found to have a negative relationship on job satisfaction rates. In addition, it was found that as projected job openings increased, related job placement rates for programs decreased. This conclusion is interesting, since one criteria used for program approval is potential job openings or labor market demand. Large annual projected job openings did not guarantee high related job placement rates or high job satisfaction rates for general merchandising programs.

Program standards established by the Vocational-Technical Education Service (V-TES) pertaining to length of program, instructional square footage and pupil/teacher ratios had no statistically significant affect on related job placement and job satisfaction rates for general merchandising programs. This study also found that general merchandising programs can be successful in any type of school and type of laboratory setting on the dependent measures of related job placement and job satisfaction.

Implications and Concluding Statements

The present research raises issues about planning and operational variables in general merchandising programs and has implications for marketing and distributive education personnel.

Although student employment success is only one criteria specified in the vocational education regulations for evaluation, it is drawing increasing attention by planners and policy-makers concerned with vocational education

programs. In fact, many state agencies have promulgated program standards, as a direct attempt to improve related job placement and job satisfaction rates.

This study has indicated that general merchandising programs can be successful in any type of school or type of laboratory on these measures, yet thousands of federal dollars continue to be allocated to the construction and equipping of laboratory facilities. Is the investment of financial resources required to construct and equip general merchandising programs justified in terms of higher employment success?

The establishment of one and two-year programs of instruction and the required instructional square footage in general merchandising programs have been largely arbitrary decisions on the part of the state and local personnel. Is the additional commitment of student instructional time and school instructional space justified in terms of increased employment success?

Pupil/teacher ratios do not statistically affect related job placement and job satisfaction rates. Should the state agency continue to fund programs up to an enrollment of 22 students per section or should the ratio be raised?

DECA was shown to have a positive relationship to related job placement but the establishment of DECA is largely a local programming option. Should the state agency require DECA chapters for all approved general merchandising programs?

Regional job openings was shown to have a negative affect on both related job placement and job satisfaction rates for general merchandising programs. Should the state agency continue to place a high degree of emphasis on potential job placement opportunities for program approval?

While this study has raised issues and implications for marketing and distributive education, various program standards of quality established by

the state agency should not necessarily be eliminated or revised. Instead, additional periodic program evaluations should and must be conducted in the other areas specified in the federal regulations before these issues can be resolved. Studies into the results of student achievement measured by standard occupational proficiency measures, criterion referenced tests, and other examinations of student skills and knowledges must occur. More empirical evidence is required beyond student employment success before program standards of quality are eliminated or revised.

It is, therefore, suggested that additional research can be done on planning and operational variables and their affect on student achievement and student employment success. The additional research should be done to: (1) improve the overall success of marketing and distributive education programs; (2) verify established criteria used by state agencies for program approval and funding; (3) identify other factors, such as student traits and teacher effectiveness, which may affect program success and student learning; (4) determine the casual nature of factors that do contribute to program success; and (5) fulfill all of the legislative requirements for program evaluation.

Findings regarding variables that affect student achievement and student success in the labor market should provide information for effective decision-making and program planning.

Variables found to affect job placement and job satisfaction should be incorporated into local and state marketing and distributive education programs and standards.

Recommendations

As a result of this study, the following recommendations are made:

1. That further research can be conducted on individual student traits, teacher characteristics and curriculum to determine

the relationship to related job placement and job satisfaction.

2. That the National Institute of Education (NIE), the National Center for Research in Vocational Education, and the U.S. Department of Education, Bureau of Occupational and Adult Education identify the study of variables that affect related job placement and job satisfaction as a high priority research item for all vocational education programs.
3. That the Michigan Department of Education, Vocational-Technical Education Service continue to provide financial and institutional support for DECA.
4. That the Michigan Department of Education, Vocational-Technical Education Service, maintain and expand support for career planning and exploration activities for general merchandising programs in conjunction with local education agencies.
5. That the Michigan Department of Education, Vocational-Technical Education Service carefully evaluate the continued use of labor market demand data for new and on-going program approval in general merchandising.
6. That the Michigan Department of Education, Vocational-Technical Education Service, Research Coordinating Unit conduct further research on length of program, instructional square footage, pupil/teacher ratios, and type of laboratory to determine the affect on student learning, performance, and achievement in general merchandising programs.

APPENDICES

APPENDIX A

Ad Hoc Follow-Up Advisory Committee

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APPENDIX B

VE 4045-A
1979

Michigan Department of Education

SCHOOL DISTRICT LABEL

1979 FOLLOW-UP SURVEY

By answering the following questions you can help us plan better educational programs. We will use the information you give us for educational purposes only. Thank you for your cooperation and assistance in completing this survey.

Please answer the items in this survey by placing an "X" in the box next to the response OF YOUR CHOICE.

PART 1

QUESTIONS	YOUR ANSWERS
1. Check ALL answers that apply to you.	15 ☐ I am now employed. I work about _____ hours per week. 16 17 ☐ I am unemployed. 18 ☐ I am looking for a job. ☐ I am not looking for a job. 19 ☐ I am a full-time student. ☐ I am a part-time student. 20 ☐ I am a homemaker. (Not working for wages.) 21 ☐ I am in the military service.
2. Check the word that best describes how well your high school courses (and any area center vocational courses that you took) prepared you to do what you are doing now. (Check only ONE.)	22 ☐ Excellent ☐ Good ☐ Fair ☐ Poor
3. Sex:	23 ☐ Male ☐ Female
4. Please identify yourself as a member of one of the groups of people listed to the right. (Check only ONE.)	24 ☐ American Indian or Alaskan Native ☐ Asian or Pacific Islander ☐ Black, not of Hispanic Origin ☐ Hispanic ☐ White, not of Hispanic Origin
5. During the 1978-79 school year, were you a member of any of the following student organizations? Business Office Education Clubs (BOEC) Distributive Education Clubs of America (DECA) Future Farmers of America (FFA) Future Homemakers of America (FHA) Home Economics Related Occupations (HERO) Vocational Industrial Clubs of America (VICA)	25 ☐ Yes ☐ No

If you are employed full-time or part-time now, or if you are in the military, please answer all the questions in Part 2.
If you are not working and are looking for a job, go directly to Part 3.
If you are a part-time or full-time student who is not working or looking for a job, go directly to Part 4.

PART 2 EMPLOYED

Answer these questions ONLY if you are working full-time or part-time.

Please fill in the name of the company where you work — or branch of the military		
Company's Street Address	City	State
Please fill in the name of your job (27)	· LEAVE BLANK (31)	
Please list the three most important things you do on your job	1.	
2.	3.	

QUESTIONS	YOUR ANSWERS
6. On your present job, how much do you use the vocational training you received in your high school or area vocational education center? (Check only ONE.)	(36) [1] A lot [2] Some [3] Hardly any [4] None
7. Overall, how satisfied are you with your present job? (Check only ONE.)	(37) [1] Very satisfied [2] Somewhat satisfied [3] Not very satisfied [4] Not at all satisfied
8. On my present job I am paid about $ _____ (38) per hour.	
9. In addition to training you, what did your High School or Area Vocational Center do to help you find a job? (Check ALL that apply.)	(42) [1] Told me about job openings (43) [1] Sent me for an interview (44) [1] Taught me to fill out a job application (45) [1] Gave information about me to my employer (46) [1] Other (Please specify) _____ (47) [1] None of the above
10. Who helped you find a job? (Check ALL that apply.)	(48) [1] High school or area vocational center counselor (49) [1] Teacher or co-op coordinator (50) [1] Parent, other relative or friend (51) [1] High school or area vocational education center placement office (52) [1] Public employment agency (For example, MESC-Michigan Employment Security Commission & CETA Youth Services.) (53) [1] Private employment agency (54) [1] College placement office (55) [1] Other (Please specify) _____ (56) [1] No one but myself

If you are now attending a school or college, or are enrolled in a training program, please answer the questions in Part 4. If you are not attending a school or college, and are not enrolled in a training or apprenticeship program, please turn to Part 5.

PART 3 UNEMPLOYED — LOOKING FOR WORK

Answer this question ONLY if you are not working and are looking for a job.

QUESTION

11. Whom have you asked for help in finding a job?
(Check ALL that apply.)

YOUR ANSWER

57 ☐ 1 High school or area vocational education center counselor
58 ☐ 1 Teacher or co-op coordinator
59 ☐ 1 Parent, other relative or friend
60 ☐ 1 High school or area vocational education center placement office
61 ☐ 1 Public employment agency (For example, MESC-Michigan Employment Security Commission & CETA Youth Services.)
62 ☐ 1 Private employment agency
63 ☐ 1 College placement office
64 ☐ 1 Other (Please specify)

_____

65 ☐ 1 None of the above

If you are now attending a school or college, or are enrolled in a training or apprenticeship program, please answer the questions in Part 4 on this page. If you are not working and not attending a school or college, or enrolled in a training or apprenticeship program, please turn to Part 5.

PART 4 EDUCATION

Complete Part 4 ONLY if you are now attending a school or college, or are enrolled in a training or apprenticeship program.

Please fill in the name of your School, College, Training or Apprentice Program	City	State

QUESTIONS

12. Check the type of school or program you are now attending.
(Check only ONE.)

13. My major area of study (or training) is _____

14. In your major area of study (or training), how much do you use the vocational training you received in your high school or area vocational education center?
(Check only ONE.)

15. Check all who assisted you in finding and/or getting into your present educational or training program.
(Check ALL that apply.)

YOUR ANSWERS

66 ☐ 1 High school
☐ 2 1-year college vocational-technical program
☐ 3 2-year college vocational-technical program
☐ 4 2-year college liberal arts program
☐ 5 4-year college or university
☐ 6 Business or trade school
☐ 7 Apprentice Program
☐ 8 Other (Please specify)

_____

67 ☐ 1 A lot
☐ 2 Some
☐ 3 Hardly any
☐ 4 None

68 ☐ 1 High school or area vocational education center counselor
69 ☐ 1 Teacher or co-op coordinator
70 ☐ 1 Parent, other relative or friend
71 ☐ 1 High school or area vocational education center placement office
72 ☐ 1 Training or apprentice program recruiter
73 ☐ 1 Other (Please specify)

_____ _____

74 ☐ 1 No one but myself

Please turn to Part 5

PART 5 COMMENTS

Please make any comments and/or suggestions you believe are needed to improve some of the courses you took or services you received while in high school. Also, add any general comments or suggestions you have about your school experience.

(SCHOOL USE ONLY)

1. A.

B.

C.O.E. Code ____ ____ . ____ ____ ____ ____

Name of Program _____

PSN ____ ____ ____ ____ ____

D.

2.

Information obtained by telephone. [1]

If an AREA CENTER, report respondent's home district identification.

CLPD | CODE

3. _____

APPENDIX C

Follow-Up
Sample Cover Letter

(Date)

Dear Survey Participant:

It's your chance to help _____L.E.A._____ plan its vocational education programs for the future. By sharing with us on the enclosed survey form what you are doing now and how your school's vocational programs met your needs, we are able to get a clearer picture of what our program(s) did for you and where you think improvements can be made. We are cooperating with both the Michigan Department of Education and the United States Office of Education in this effort.

Your answers and comments will help your school improve programs and services for your brothers, sisters, and friends who are or will be attend _____L.E.A._____ in the future.

Please fill out the enclosed survey form and return it in the enclosed, stamped, self-addressed envelope by _____. We're counting on your contribution.

Thank you and best wishes.

Sincerely,

(Name of Local School Official)

T1608 MICHIGAN DEPARTMENT OF EDUCATION 03-05-81
VOCATIONAL-TECHNICAL EDUCATION SERVICES PAGE 1
FOLLOW-UP SURVEY OF 1979 COMPLETERS

LENAWEE INTERMEDIATE S/D 45 460005975

VE COMPLETERS REPORTING =	47	47	5,957
PERCENT RESPONDING =	96.3%	94.5%	69.8%

P A R T I. STATUS DATA

	LOCAL		CEPD		STATE	
ITEM 1. PRESENT STATUS (ALL THAT APPLY):						
- EMPLOYED	33	70.21%	33	70.21%	3,912	65.67%
35 + HOURS	15		15		2,448	
24-34 HOURS	2		2		622	
12-23 HOURS					529	
1-11 HOURS					104	
- NOT EMPLOYED	8	17.02%	8	17.02%	952	15.98%
- LOOKING FOR A JOB	8	17.02%	8	17.02%	900	15.11%
- NOT LOOKING FOR A JOB	5	10.64%	5	10.64%	68	11.43%
- FULL-TIME STUDENT	6	12.77%	6	12.77%	1,698	28.50%
- PART-TIME STUDENT	2	4.26%	2	4.26%	587	9.85%
- HOMEMAKER		%		%	195	3.27%
- MILITARY SERVICE	1	2.13%	1	2.13%	191	3.21%
ITEM 2. ADEQUACY OF HIGH SCHOOL PREPARATION FOR PRESENT ACTIVITY:						
- EXCELLENT	3	11.11%	3	11.11%	681	12.93%
- GOOD	15	55.56%	15	55.56%	2,721	51.65%
- FAIR	6	22.22%	6	22.22%	1,384	26.27%
- POOR	3	11.11%	3	11.11%	482	9.15%
NUMBER RESPONDING	27	100.00%	27	100.00%	5,268	100.00%
ITEM 3. SEX:						
- MALE	18	39.13%	18	39.13%	2,505	43.20%
- FEMALE	28	60.87%	28	60.87%	3,293	56.80%
NUMBER RESPONDING	46	100.00%	46	100.00%	5,798	100.00%
ITEM 4. RACIAL-ETHNIC GROUP:						
- AMERICAN INDIAN OR ALASKAN NATIVE		%		%	33	.58%
- ASIAN OR PACIFIC ISLANDER		%		%	11	.19%
- BLACK, NOT OF HISPANIC ORIGIN		%		%	360	6.35%
- HISPANIC	1	5.26%	1	5.26%	56	.99%
- WHITE, NOT OF HISPANIC ORIGIN	18	94.74%	18	94.74%	5,208	91.88%
NUMBER RESPONDING	19	100.00%	19	100.00%	5,668	100.00%

LENAWEE INTERMEDIATE S/D 45 460005975

VE COMPLETERS REPORTING	=	47		47		8,957	
PERCENT RESPONDING	=	96.3%		94.5%		69.8%	

P A R T I. STATUS DATA

ITEM 5. MEMBER OF STUDENT EDUCATIONAL ORGANIZATION:	LOCAL		CEPD		STATE	
- YES	1	5.26%	1	5.26%	1,428	26.75%
- NO	18	94.74%	18	94.74%	3,911	73.25%
NUMBER RESPONDING	19	100.00%	19	100.00%	5,339	100.00%

P A R T II. EMPLOYMENT DATA

ITEM 6. DEGREE OF USE OF SCHOOL TRAINING ON JOB:						
- A LOT	4	15.38%	4	15.38%	869	22.85%
- SOME	14	53.85%	14	53.85%	1,556	40.92%
- HARDLY ANY	5	19.23%	5	19.23%	720	18.93%
- NONE	3	11.54%	3	11.54%	658	17.30%
NUMBER RESPONDING	26	100.00%	26	100.00%	3,803	100.00%

ITEM 7. DEGREE OF SATISFACTION WITH JOB:						
- VERY SATISFIED	6	33.33%	6	33.33%	1,602	42.04%
- SOMEWHAT SATISFIED	7	38.89%	7	38.89%	1,665	43.16%
- NOT VERY SATISFIED	3	16.67%	3	16.67%	405	10.63%
- NOT AT ALL SATISFIED	2	11.11%	2	11.11%	159	4.17%
NUMBER RESPONDING	18	100.00%	18	100.00%	3,811	100.00%

ITEM 8. HOURLY PAY RATE:						
- $0.01-$3.09 PER HOUR	3	25.00%	3	25.00%	190	6.07%
- $3.10-$3.59 PER HOUR	7	58.33%	7	58.33%	1,495	47.79%
- $3.60-$4.09 PER HOUR	1	8.33%	1	8.33%	583	18.64%
- $4.10-$4.59 PER HOUR	1	8.33%	1	8.33%	279	8.92%
- $4.60-$5.09 PER HOUR		%		%	225	7.19%
- $5.10-$5.59 PER HOUR		%		%	91	2.91%
- $5.60 + PER HOUR		%		%	265	8.47%
NUMBER RESPONDING	12	100.00%	12	100.00%	3,128	100.00%

LENAWEE INTERMEDIATE S/D 45 460005975

	LOCAL		CEPD		STATE	
VE COMPLETERS REPORTING =	47		47		8,957	
PERCENT RESPONDING =	96.3%		94.5%		69.8%	

P A R T II. EMPLOYMENT DATA

ITEM 9. TYPE OF SCHOOL HELP IN JOB PLACEMENT (ALL THAT APPLY):

	LOCAL		CEPD		STATE	
- TOLD ABOUT JOB OPENING	7	31.82%	7	31.82%	1,107	29.73%
- SENT FOR AN INTERVIEW	8	36.36%	8	36.36%	1,000	26.86%
- TAUGHT ME TO FILL OUT JOB APPLICAT	15	68.18%	15	68.18%	2,033	54.61%
- GAVE INFORMATION TO EMPLOYER	4	18.18%	4	18.18%	637	17.11%
- OTHER		%		%	297	7.98%
- NONE OF THE ABOVE	6	27.27%	6	27.27%	1,217	32.69%
NUMBER RESPONDING	22	100.00%	22	100.00%	3,723	100.00%

ITEM 10. SOURCE OF HELP IN JOB PLACEMENT (ALL THAT APPLY):

	LOCAL		CEPD		STATE	
- SCHOOL COUNSELOR	2	11.76%	2	11.76%	248	6.62%
- TEACHER OR CO-OP COORDINATOR	4	23.53%	4	23.53%	969	25.87%
- RELATIVE OR FRIEND	3	17.65%	3	17.65%	1,220	32.57%
- SCHOOL PLACEMENT OFFICE	5	29.41%	5	29.41%	191	5.10%
- PUBLIC EMPLOYMENT AGENCY	1	5.88%	1	5.88%	90	2.40%
- PRIVATE EMPLOYMENT AGENCY		%		%	23	.61%
- COLLEGE PLACEMENT OFFICE		%		%	52	1.39%
- OTHER		%		%	260	6.94%
- NO ONE BUT MYSELF	3	17.65%	3	17.65%	1,49-	39.83%
NUMBER RESPONDING	17	100.00%	17	100.00%	3,746	100.00%

P A R T III. UNEMPLOYMENT DATA

ITEM 11. SOURCES OF HELP REQUESTED IN JOB SEARCH (ALL THAT APPLY):

	LOCAL		CEPD		STATE	
- SCHOOL COUNSELOR	3	23.08%	3	23.08%	90	8.53%
- TEACHER OR CO-OP COORDINATOR	3	23.08%	3	23.08%	166	15.73%
- RELATIVE OR FRIEND	6	46.15%	6	46.15%	475	45.02%
- SCHOOL PLACEMENT OFFICE	4	30.77%	4	30.77%	75	7.11%
- PUBLIC EMPLOYMENT AGENCY	1	7.69%	1	7.69%	269	25.50%
- PRIVATE EMPLOYMENT AGENCY		%		%	51	4.83%
- COLLEGE PLACEMENT OFFICE		%		%	72	6.82%
- OTHER	1	7.69%	1	7.69%	115	10.90%
- NONE OF THE ABOVE	3	23.08%	3	23.08%	296	28.06%
NUMBER RESPONDING	13	100.00%	13	100.00%	1,055	100.00%

LENAWEE INTERMEDIATE S/D 45 460005975

VE COMPLETERS REPORTING =		47		47		5,957	
PERCENT RESPONDING =		96.3%		94.5%		69.8%	

P A R T IV. POST SECONDARY EDUCATION DATA

	LOCAL		CEPD		STATE	
ITEM 12. TYPE OF EDUCATIONAL PROGRAM NOW ATTENDING:						
- HIGH SCHOOL		%		%		%
- 1 YEAR COLLEGE (VOC-TECH)		%		%	79	3.77%
- 2 YEAR COLLEGE (VOC-TECH)	1	16.67%	1	16.67%	388	18.50%
- 2 YEAR COLLEGE (LIBERAL ARTS)	1	16.67%	1	16.67%	460	21.94%
- 4 YEAR COLLEGE OR UNIVERSITY	3	50.00%	3	50.00%	888	42.35%
- BUSINESS OR TRADE SCHOOL		%		%	135	6.44%
- APPRENTICE PROGRAM		%		%	17	.81%
- OTHER	1	16.67%	1	16.67%	130	6.20%
NUMBER RESPONDING	6	100.00%	6	100.00%	2,097	100.00%
ITEM 14. DEGREE OF USE OF SCHOOL TRAINING IN MAJOR AREA OF STUDY:						
- A LOT		%		%	452	21.29%
- SOME	2	28.57%	2	28.57%	914	43.05%
- HARDLY ANY	1	14.29%	1	14.29%	416	19.59%
- NONE	4	57.14%	4	57.14%	341	16.06%
NUMBER RESPONDING	7	100.00%	7	100.00%	2,123	100.00%
ITEM 15. SOURCES OF HELP IN POST SECONDARY EDUCATIONAL PLACEMENT: (ALL THAT APPLY)						
- SCHOOL COUNSELOR	2	33.33%	2	33.33%	622	29.35%
- TEACHER OR CO-OP COORDINATOR		%		%	387	18.26%
- RELATIVE OR FRIEND	3	50.00%	3	50.00%	871	41.10%
- SCHOOL PLACEMENT OFFICE		%		%	64	3.02%
- TRAIN OR APPREN PROGRAM RECRUITER		%		%	45	2.12%
- OTHER	1	16.67%	1	16.67%	128	6.04%
- NO ONE BUT MYSELF	1	16.67%	1	16.67%	798	37.66%
NUMBER RESPONDING	6	100.00%	6	100.00%	2,119	100.00%

LENAWEE INTERMEDIATE S/D 45 460005975

VE COMPLETERS REPORTING	47	47	5,957	
PERCENT RESPONDING	96.3%*	94.5%	69.8%	

P A R T V. SCHOOL USE ONLY DATA

	LOCAL		CEPD		STATE	
ITEM 1B. GRADUATION DATA:						
- GRADUATE	47	100.00%	47	100.00%	5,379	92.36%
- NON-GRADUATE		%		%	445	7.64%
NUMBER RESPONDING	47	100.00%	47	100.00%	5,824	100.00%
ITEM 1D. PARTICIPATING IN REGULAR OR PART G CO-OP PROGRAM:						
- YES	32	68.09%	32	68.09%	3,413	61.38%
- NO	15	31.91%	15	31.91%	2,710	38.62%
NUMBER RESPONDING	47	100.00%	47	100.00%	5,723	100.00%
ITEM 2B. PARTICIPATING IN SPECIAL NEEDS PROGRAM:						
- HANDICAPPED	1	33.33%	1	33.33%	27	9.85%
- LESA		%		%	9	3.28%
- DISADVANTAGED	2	66.67%	2	66.67%	238	86.86%
NUMBER RESPONDING	3	100.00%	3	100.00%	974	100.00%

APPENDIX E

FORM VE-4483-C MICHIGAN DEPARTMENT OF EDUCATION 02-22-79
VEISS COLLECTION REPORT PAGE 9
NO. X1401 VOCATIONAL TECHNICAL EDUCATION SERVICES
MANAGEMENT INFORMATION & FINANCE UNIT
BOX 30009, LANSING, MICHIGAN 48909

ROOM NUMBER AND FACILITIES SPACE ROSTER

MAILING INSTRUCTIONS:
SCHOOL DISTRICT - PLEASE COMPLETE 3 COPIES AND RETURN ORIGINAL AND 1 COPY TO YOUR CEPD SPECIALIST BY OCT 18. RETAIN COPY FOR YOUR RECORDS.
CEPD SPECIALIST - SEND THE ORIGINAL BY NOV 1 TO STATE OFFICE AT ABOVE ADDRESS. RETAIN A COPY FOR YOUR FILES.

CEPD 01
INSTRUCTIONAL FACILITY: 27-66050 ONTONAGON AREA SCHOOLS
A6170 ONTONAGON AREA HIGH SCHOOL

ROOM NO (5 DIGIT LIMIT) (1)	ROOM NAME (23 DIGIT LIMIT) (2)	INSTR. SQ. FT. (3)
138	OTHER HOMEMAKING	1,485
142	CLERICAL & SECRETARIAL	1,134
143	GENERAL MERCHANDISING	1,134
250A	WELDING & CUTTING	2,780
250B	MACHINE SHOP	2,016
258	BUILDING TRADES	2,520
AUSHP	AUTO MECH	4,392
EELAB	ELEC OCCUP	1,411
PRSHP	GRAPHIC ART OCCUP	1,537

* TEMPORARY STATE ASSIGNED NUMBER
**PERMANENT STATE ASSIGNED NUMBER FOR COMBINATION ROOMS - DO NOT CHANGE

APPENDIX F

Michigan DECA Roster

DISTRIBUTIVE EDUCATION CLUBS OF AMERICA

MAIL TO: State Association Advisor

DECA Chapter _____

Date: _____

School Phone: ( )

FOR NATIONAL USE ONLY

NAMES OF MEMBERS	NAMES OF MEMBERS	NAMES OF MEMBERS	PROFESSIONAL MEMBERS
1 Pres.	18	35	3 NAME
2	19	36	STREET
3	20	37	CITY/STATE/ZIP
4	21	38	SSN
5	22	39	**ALUMNI MEMBERS**
6	23	40	1 NAME
7	24	41	STREET
8	25	42	CITY/STATE/ZIP
9	26	**PROFESSIONAL MEMBERS**	SSN
10	27	1 NAME	2 NAME
11	28	STREET	STREET
12	29	CITY/STATE/ZIP	CITY/STATE/ZIP
13	30	SSN	SSN
14	31	2 NAME	3 NAME
15	32	STREET	STREET
16	33	CITY/STATE/ZIP	CITY/STATE/ZIP
17	34	SSN	SSN

*Please make corrections to Chapter Advisor name and address if incorrect below.

PLEASE CHECK ONE APPROPRIATE DIVISION

☐ High School ☐ Collegiate
☐ Jr. Collegiate ☐ Alumni

Name of School
School Address

(USE SEPARATE ROSTER FOR EACH DIVISION)

CHAPTER ADVISOR

Please check only one: New Chapter ☐ Established Chapter ☐ Additions ☐

TOTAL STATE FEES

$_____ Per Member X _____ Student Members = $_____

$_____ Per Member X _____ Professional Members = $_____

$_____ Per Member X _____ Alumni Members = $_____

NATIONAL FEES (Fees include $9 for annual subscription to DECA member's official publication.)

$_____ Per Member X _____ Student Members = $_____

$_____ Per Member X _____ Professional Members = $_____

$_____ Per Member X _____ Alumni Members = $_____

TOTAL STATE AND NATIONAL FEES SUBMITTED TO STATE ADVISOR $_____

TOTAL NO. MEMBERS → *(All Divisions)*

Approved _____ Chapter Advisor's Signature

STATE ASSOCIATION USE ONLY

Total Student Members _____

Total Professional Members _____

Total Alumni Members _____

TOTAL MEMBERS _____

Approved _____ State Advisor's Signature

NATIONAL DECA USE ONLY

Total Student Members _____

Total Professional Members _____

Total Alumni Members _____

TOTAL MEMBERS _____

NATIONAL COPY

R 1/81

ROSTER CONTINUATION

BEFORE COMPLETING THIS SECTION OF THE ROSTER REVERSE ALL CARBONS.

NAMES OF MEMBERS	NAMES OF MEMBERS	PROFESSIONAL MEMBERS
43	80	5 NAME
44	81	STREET
45	82	CITY/STATE/ZIP
46	83	SSN
47	84	6 NAME
48	85	STREET
49	86	CITY/STATE/ZIP
50	87	SSN
51	88	7 NAME
52	89	STREET
53	90	CITY/STATE/ZIP
54	91	SSN
55	92	8 NAME
56	93	STREET
57	94	CITY/STATE/ZIP
58	95	SSN
59	96	ALUMNI MEMBERS
60	97	4 NAME
61	98	STREET
62	99	CITY/STATE/ZIP
63	100	SSN
64	101	5 NAME
65	102	STREET
66	103	CITY/STATE/ZIP
67	104	SSN
68	105	6 NAME
69	106	STREET
70	107	CITY/STATE/ZIP
71	108	SSN
72	109	7 NAME
73	110	STREET
74	* Additional names see below.	CITY/STATE/ZIP
75	PROFESSIONAL MEMBERS	SSN
76	4 NAME	8 NAME
77	STREET	STREET
78	CITY/STATE/ZIP	CITY/STATE/ZIP
79	SSN	SSN

***ADDITIONAL NAMES AND ADDRESSES OF MEMBERS SHOULD BE LISTED ON SCHOOL LETTERHEAD AND ATTACHED TO EACH COPY OF THIS ROSTER.**

APPENDIX G
Secondary Vocational Enrollment and Termination Report

VE-430i SECONDARY VOCATIONAL ENROLLMENT AND TERMINATION REPORT FOR SCHOOL YEAR ENDING 06-30-79 RETURN BY JULY 2, 1979

MICHIGAN DEPARTMENT OF EDUCATION
VOCATIONAL-TECHNICAL EDUCATION SERVICE
MANAGEMENT INFORMATION AND FINANCE UNIT
BOX 30009, LANSING, MICHIGAN, 48909

DIRECT QUESTIONS REGARDING THIS FORM TO HACK SENEY 517-373-0600

PAGE 142

CEPD 90 FISCAL AGENT: ____ INSTR. FACIL: ____

SECTION A - 11TH & 12TH GRADE ONLY

OE CODE, NAME AND PSN	AMER INDIAN MALE (1)	AMER INDIAN FEMALE (2)	ASIAN MALE (3)	ASIAN FEMALE (4)	BLACK MALE (5)	BLACK FEMALE (6)	LATINO OR HISPANIC MALE (7)	LATINO OR HISPANIC FEMALE (8)	WHITE MALE (9)	WHITE FEMALE (10)	COOP (11)	LESA (12)	ACAD DISAD (13)
04.0000 GENERAL MERCHANDISE 09231													
1 ENROLLMENT	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	•	•	•
2 COMPLETIONS	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	OMIT•	OMIT•
3 LEAVERS	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	OMIT•	OMIT•
4 LEAVERS COMPLETING 50% OR LESS • ____, LEAVERS COMPLETING MORE THAN 50% • ____, TRANSFERS •													
14.9800 STENO/CLERICAL LAB 09230													
1 ENROLLMENT	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	•	•	•
2 COMPLETIONS	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	OMIT•	OMIT•
3 LEAVERS	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	OMIT•	OMIT•
4 LEAVERS COMPLETING 50% OR LESS • ____, LEAVERS COMPLETING MORE THAN 50% • ____, TRANSFERS •													

SECTION B - 9TH & 10TH GRADE ENROLLMENT

04 DISTRIBUTIVE EDUCATION	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
14 OFFICE	•	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•

SECTION C - GRADES 9-12, 09.01 CONSUMER & HOMEMAKING 0816

COURSE	GRADES 9&10	GRADES 11&12											
02 CHILD DEV	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
03 CLOTH & TEXTILE	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
04 CONSUMER ED.	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
05 FAMILY HEALTH	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
06 FAM RELATIONS	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
07 FOOD & NUTR	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
08 HOME MANAGEMENT	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
09 HOUS & HOME FUR	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•
98 ADVANCED COMP	•	•	• / ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	/ ••	OMIT•	•	•

APPENDIX H
1978-79 Reimbursable Vocational Education Programs

1978-79 REIMBURSABLE VOCATIONAL EDUCATION PROGRAMS

O E CODE 04.0400 GENERAL MERCHANDISE

CEPD	FISCAL AGENCY/OPERATING AGENCY COURSE NAME	SECTIONS	ENROLLMENT	MIN/WEEK	WEEKS	STUDENT HOURS	REIMBURSEMENT ADDED COST	PER PUPIL
07	15-050 CHARLEVOIX PUBLIC SCHOOLS							
	0646 CHARLEVOIX HIGH SCHOOL							
	01 GEN MER CORE	1	27.5	600	38.0	44.0	3,784.00	
07	24-070 PUBLIC SCHOOLS OF PETOSKEY							
	6150 PETOSKEY AREA VOCATIONAL CTR							
	01 GENERAL MDSE	1	27.0	300	38.0	22.0	1,892.00	
CEPD TOTAL	PROGRAMS= 2 XY XD	2	54.5			66.0	5,676.00	
08	16-015 CHEBOYGAN AREA SCHOOLS							
	0655 CHEBOYGAN AREA HIGH SCH							
	01 GEN MERCHAND	1	20.5	295	38.0	20.1	1,732.60	
	02 GEN MERCHAND	2	38.0	585	38.0	74.7	6,431.08	
BUILDING TOTAL	XY XD	3	58.5			94.8	8,163.98	
08	69-020 GAYLORD COMMUNITY SCHOOLS							
	1375 GAYLORD HIGH SCHOOL							
	01 RETAILING	1	24.0	260	38.0	19.0	1,640.02	
08	71-080 ROGERS CITY AREA SCHOOLS							
	3252 ROGERS CITY HIGH SCHOOL							
	01 RETAILING	1	27.5	300	38.0	22.0	1,892.00	
CEPD TOTAL	PROGRAMS= 3 XY XD	5	112.0			135.8	11,696.00	
09	01-010 ALCONA COMMUNITY SCHOOLS							
	0044 ALCONA COMM HIGH SCH							
	01 GENERAL MERCHAN	1	76.0	275	38.0	65.9	5,676.86	
09	04-010 ALPENA PUBLIC SCHOOLS							
	0075 ALPENA HIGH SCHOOL							
	01 DE RELATED	2	51.0	275	38.0	37.0	3,194.04	
	03 RETAIL SALES	3	56.0	575	19.0	49.6	4,286.24	
BUILDING TOTAL	XY XD	5	107.0			86.6	7,480.28	
CEPD TOTAL	PROGRAMS= 7 XY XD	8	183.0			192.5	13,197.14	
10	28-000 TRAVERSE BAY INTER. S/D							
	1299							
	01 PREPARATORY/REL	2	34.5	600	34.0	40.0	3,440.00	
10	28-000 TRAVERSE BAY INTER. S/D							
	1992							
	01 PREPARATORY/REL	2	0.0	750	34.0	0.0		
10	28-000 TRAVERSE BAY INTER. S/D							
	6145 TRAVERSE BAY AREA VOC CENTER							
	01 PREPARATORY/REL	2	29.5	750	34.0	73.7	6,342.50	
DISTRICT TOTAL	XY XD	4	64.0			113.7	9,782.50	

APPENDIX I

Job Placement Summary of Completers by Program Within State

X0607 — MICHIGAN DEPARTMENT OF EDUCATION — PAGE 1
08-14-79 — VOCATIONAL-TECHNICAL EDUCATION SERVICE
VOC. ED. JOB PLACEMENT SUMMARY BY PROGRAM WITHIN STATE

PROGRAM NUMBER AND NAME (1)	GRADS AVAIL FOR PLACMT (2)	TOTAL EMPLOYED (3)	FULL TIME RELATED TOTAL (4)	FULL TIME RELATED JOB SATISFACTION (5)	FULL TIME RELATED MEAN HOURLY WAGE (6)	FULL TIME UNRELATED TOTAL (7)	FULL TIME UNRELATED JOB SATISFACTION (8)	FULL TIME UNRELATED MEAN HOURLY WAGE (9)	FULL TIME OTHER (10)	PART TIME (11)	UNEMPLOYED SEEKING WORK TOTAL (12)	CONT-ED FULL TIME (13)	CONT-ED PART TIME (14)	OTHER (15)
01.0100 PRODUCTION AGRICULTURE	579	511 / 88.3%	206 / 40.3%	82.09	4.90 / 151	152 / 30.5%	72.91	4.00 / 116	31 / 6.1%	119 / 23.3%	60 / 11.7%	4 / 9.9%	1 / 1.9%	43 / 82.6%
01.0200 AGRICULTURAL SUPPLIES	12	11 / 91.7%	4 / 36.4%	91.79	4.43	3 / 27.3%	89.00	3.99	/ .0%	4 / 36.4%	1 / 8.3%	.0%	.0%	1 / 100.0%
01.0300 AGRICULTURE MECHANICS	220	204 / 92.7%	82 / 40.2%	82.09	4.94 / 80	70 / 34.3%	72.09	3.19 / 61	11 / 5.4%	41 / 20.1%	16 / 7.3%	2 / 12.5%	.0%	14 / 87.5%
01.0301 AG POWER AND MACHINERY	52	45 / 86.5%	18 / 39.0%	73.00	3.01 / 18	[illegible]	64.00	4.20	7 / 15.6%	17 / 37.0%	7 / 13.5%	.0%	1 / 14.3%	6 / 85.7%
01.0400 AGRICULTURAL PRODUCTS	15	15 / 100.0%	3 / 20.0%	75.60	3.78	4 / [illegible]	85.90	4.10	7 / 36.0%	3 / 19.0%	.0%	.0%	.0%	.0%
01.0500 ORNAMENTAL HORTICULTURE	274	237 / 86.5%	54 / 22.8%	83.73	3.99	119 / 40.9%	68.49	4.20	10 / 4.2%	58 / 24.5%	37 / 13.5%	4 / 10.8%	.0%	33 / 89.2%
01.0502 FLORICULTURE	121	106 / 87.6%	38 / 35.8%	81.20	3.14 / 31	40 / 37.7%	68.43	3.40	2 / 1.9%	34 / 32.1%	15 / 12.4%	1 / 6.7%	2 / 13.3%	12 / 80.0%
01.0503 GREENHOUSE OPERATION + MGT.	31	27 / 87.1%	6 / 22.2%	96.90 / 4	4.17	15 / 55.6%	72.35	4.35	3 / 11.1%	3 / 11.1%	4 / 12.9%	.0%	.0%	4 / 100.0%
01.0504 LANDSCAPING	15	13 / 86.7%	5 / 38.5%	73.60	4.38 / 5	5 / 38.5%	86.00	2.98 / 5	1 / 7.7%	2 / 15.4%	2 / 13.3%	.0%	.0%	2 / 100.0%
01.0600 AGRICULTURAL RESOURCES	75	66 / 88.0%	24 / 36.4%	86.25	3.07	27 / 40.9%	72.96	4.12	7 / 10.6%	8 / 12.1%	9 / 12.0%	1 / 11.1%	.0%	8 / 88.9%
01.0700 FORESTRY	72	60 / 83.3%	14 / 23.3%	89.86	4.18 / 10	18 / 30.0%	66.50	3.77 / 16	4 / 6.7%	19 / 31.7%	12 / 16.7%	.0%	.0%	12 / 100.0%
04.0100 ADVERTISING SERVICES	123	102 / 82.9%	42 / 41.2%	77.63	3.62 / 29	25 / 24.5%	64.04	3.71	5 / 4.9%	30 / 29.4%	21 / 17.1%	1 / 4.8%	2 / 9.5%	18 / 85.7%
04.0400 FINANCE AND CREDIT	57	44 / 77.2%	22 / 50.0%	77.26	4.06 / 15	11 / 25.0%	92.05	4.12 / 9	2 / 4.5%	7 / 15.9%	13 / 22.8%	2 / 15.4%	.0%	11 / 84.6%

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MICHIGAN DEPARTMENT OF EDUCATION
VOCATIONAL-TECHNICAL EDUCATION SERVICE
VOC. ED. JOB PLACEMENT SUMMARY BY PROGRAM WITHIN STATE

PROGRAM NUMBER AND NAME (1)	GRADS AVAIL FOR JOB PLACMT (2)	TOTAL EMPLOYED (3)	FULL TIME RELATED TOTAL (4)	FULL TIME RELATED JOB SATIS-FACTION (5)	FULL TIME RELATED MEAN HOURLY WAGE (6)	FULL TIME UNRELATED TOTAL (7)	FULL TIME UNRELATED JOB SATIS-FACTION (8)	FULL TIME UNRELATED MEAN HOURLY WAGE (9)	FULL TIME OTHER (10)	PART TIME (11)	UNEMPLOYED SEEKING WORK TOTAL (12)	CONT-ED FULL TIME (13)	CONT-ED PART TIME (14)	OTHER (15)
17.2802 LAW ENFORCEMENT	44	37 84.1%	13 35.1%	86.29	4.92 9	13 35.1%	69.30	3.04	3 8.1%	9 24.3%	7 15.9%	1 14.3%	.0%	6 85.7%
17.3008 REFRIGERATION	5	5 100.0%	4 80.0%	86.75	4.60 2	.0%			0 .0%	1 20.0%	.0%	.0%	.0%	.0%
17.3100 SMALL ENGINE REPAIR	381	327 85.8%	137 41.9%	82.00	4.41	104 31.8%	72.05	4.77	26 8.0%	60 18.3%	54 14.2%	5 9.3%	.0%	51 94.4%
17.3402 SHOE REPAIR	2	2 100.0%	.0%			2 100.0%	100.00	2.90	0 .0%	0 .0%	.0%	.0%	.0%	.0%
17.3500 UPHOLSTERING	10	9 90.0%	7 77.8%	89.00	4.25 5	2 22.2%	90.00	3.07	0 .0%	0 .0%	1 10.0%	.0%	.0%	1 100.0%
17.3600 WOODWORKING	53	50 94.3%	19 38.0%	91.38	4.00 14	10 20.0%	63.40	4.73	5 10.0%	12 24.0%	3 5.7%	.0%	.0%	3 100.0%
17.3601 MILLWORK-CABINET MAKING	24	21 87.5%	12 57.1%	73.17	4.12	5 23.8%	80.60	4.40 3	1 4.8%	3 14.3%	3 12.5%	.0%	1 33.3%	2 66.7%
17.3800 HYDRAULICS AND PNEUMATICS	15	11 73.3%	7 63.6%	94.30	5.82	1 9.1%	100.00		0 .0%	3 27.3%	4 26.7%	.0%	.0%	4 100.0%
99.9999 PROGRAM NAME UNKNOWN	145	130 89.7%	57 43.8%	84.90	4.13	20 15.4%	64.70	3.30	6 4.6%	47 36.2%	15 10.3%	4 26.7%	.0%	11 73.3%
****** STATE TOTALS ****	34,450	30,431 88.3%	13,451 44.2%	82.41	4.09	7,510 24.7%	60.52	4.22	1,643 5.4%	7,827 25.7%	4,019 11.7%	460 11.4%	201 5.0%	3,350 83.4%
*** NON-VOC ED STUDENTS ****	15,302	13,479 87.6%	.0%			8,581 63.7%	74.04	4.05 6,302	0 .0%	4,894 36.3%	1,887 12.4%	433 22.7%	97 5.2%	1,379 72.1%

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