

## INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University  
Microfilms  
International**

300 N. Zeeb Road  
Ann Arbor, MI 48106



Ryckman, Lynn A

IDENTIFICATION OF IN-SERVICE NEEDS AS RELATED TO  
PERFORMANCE TASKS AND RELATED DEMOGRAPHIC FACTORS BY  
SELECTED MICHIGAN BUSINESS AND OFFICE EDUCATION TEACHERS

*Michigan State University*

PH.D. 1982

University  
Microfilms  
International 300 N. Zeeb Road, Ann Arbor, MI 48106



PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy.  
Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs or pages \_\_\_\_\_
2. Colored illustrations, paper or print \_\_\_\_\_
3. Photographs with dark background \_\_\_\_\_
4. Illustrations are poor copy \_\_\_\_\_
5. Pages with black marks, not original copy \_\_\_\_\_
6. Print shows through as there is text on both sides of page \_\_\_\_\_
7. Indistinct, broken or small print on several pages ✓
8. Print exceeds margin requirements \_\_\_\_\_
9. Tightly bound copy with print lost in spine \_\_\_\_\_
10. Computer printout pages with indistinct print \_\_\_\_\_
11. Page(s) \_\_\_\_\_ lacking when material received, and not available from school or author.
12. Page(s) \_\_\_\_\_ seem to be missing in numbering only as text follows.
13. Two pages numbered \_\_\_\_\_. Text follows.
14. Curling and wrinkled pages \_\_\_\_\_
15. Other \_\_\_\_\_

University  
Microfilms  
International



IDENTIFICATION OF IN-SERVICE NEEDS AS RELATED TO  
PERFORMANCE TASKS AND RELATED DEMOGRAPHIC  
FACTORS BY SELECTED MICHIGAN BUSINESS  
AND OFFICE EDUCATION TEACHERS

By

Lynn A. Ryckman

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum

1982

## ABSTRACT

### IDENTIFICATION OF IN-SERVICE NEEDS AS RELATED TO PERFORMANCE TASKS AND RELATED DEMOGRAPHIC FACTORS BY SELECTED MICHIGAN BUSINESS AND OFFICE EDUCATION TEACHERS

By

Lynn A. Ryckman

The problem of this study was to: (1) identify the in-service needs of Michigan business and office education teachers, and (2) to determine the perceptions of the teachers regarding the importance of their daily performance tasks, as well as their ability to perform the same tasks. The study encouraged teachers to participate in identifying their teaching skills, by level of difficulty, for use in determining future in-service programs. Other related in-service areas examined were the opinions held by the teachers regarding the desirability of various instructional formats, delivery system approaches, financing procedures, and scheduling times for in-service programs.

A questionnaire was mailed to one teacher from each secondary school receiving vocational reimbursement to collect the descriptive data needed. The usable return rate was 89 percent.



It was determined from the findings that there was a need for in-service training in the area of special needs students. For example:

1. Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.
2. Identify students whose performance is impaired by chemical dependency, e.g., drugs or alcohol.

Some major conclusions were:

1. In-service training is needed for tasks involved with special needs situations, tasks dealing with the public relations aspects of courses and programs, and tasks associated with cooperative education and coordination activities.
2. New techniques and strategies may need to be developed to increase the degree of satisfaction for in-service activities.
3. Workshops, seminars, or conferences, including group classroom activities and seminar discussions, may be effective instructional approaches and methods for presenting in-service education.
4. No particular agency or group of individuals appears to be a dominant figure in meeting the teachers' in-service needs.
5. All performance tasks were perceived as at least moderately important by the teachers, and none of the tasks were considered low or of no importance.

## ACKNOWLEDGMENTS

The author would like to acknowledge the support and assistance of several people who helped make this study possible.

Sincere appreciation is extended to the Michigan business and office education teachers who cooperated in this study, and also to Mary Hedges from the Michigan Department of Education for her assistance.

A debt of gratitude, appreciation, and thanks to the following persons:

To Dr. Robert P. Poland, Chairperson of the Dissertation Committee, for his patience, guidance, and encouragement throughout the entire doctoral program;

To Dr. Ellis R. Thomas, Dr. Billie T. Rader, Dr. Zane K. Quible, Dr. Charles A. Blackman, Dr. Robert A. Ristau, and Dr. Rosetta Wingo, members of the dissertation committee, who gave excellent constructive suggestions during this period; and

To Professor John E. Kraeer and Dr. Marian C. Shaffer for their timely encouragement and support.

For support and encouragement, the author gives special thanks to his father, the late C. Roy Ryckman, and his mother, Margaret J. Ryckman.

Finally, the author would like to acknowledge a wonderful family. To Susan A. Ryckman and Roger R. Ryckman, for their help and assistance in mailing the questionnaires, and for being my children. To my wife, Annette J. Ryckman, without her support and encouragement this experience would not have occurred.

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vi
 Chapter	
I. INTRODUCTION . . . . .	1
Statement of the Problem . . . . .	6
Purpose of the Study . . . . .	8
Background of the Study . . . . .	9
Need for the Study . . . . .	10
Definition of Terms . . . . .	12
Delimitations of the Study . . . . .	14
Limitations of the Study . . . . .	14
Assumptions of the Study . . . . .	15
Organization of the Study . . . . .	15
II. REVIEW OF LITERATURE . . . . .	17
Introduction . . . . .	17
Historical Overview . . . . .	17
Status of In-Service Education . . . . .	20
Trends And Alternatives . . . . .	28
Significant Research Studies . . . . .	36
Summary . . . . .	42
III. RESEARCH METHODS AND PROCEDURES . . . . .	43
Selection of Participants . . . . .	44
Development of the Instrument . . . . .	44
Gathering of the Data . . . . .	47
Analyzing the Data . . . . .	48
IV. ANALYSIS OF THE DATA . . . . .	51
Introduction . . . . .	51
Description of Respondents . . . . .	52
Current Teacher In-Service . . . . .	58
Preferred Methods of In-Service . . . . .	62
Performance Tasks . . . . .	69
Summary . . . . .	85

Chapter	Page
V. SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	86
The Problem Researched, Research Methods, and Findings . . . . .	86
Conclusions . . . . .	99
Recommendations . . . . .	101
APPENDICES	
APPENDIX I . . . . .	104
APPENDIX II . . . . .	110
APPENDIX III . . . . .	112
APPENDIX IV . . . . .	114
BIBLIOGRAPHY . . . . .	120

# LIST OF TABLES

Table		Page
1	Response by Michigan Business and Office Education Teachers to this Study . . . . .	49
2	Education Levels Achieved by Michigan Business and Office Education Teachers . . . . .	53
3	Years of Non-Teaching Work Experience of Michigan Business and Office Education Teachers . . . . .	53
4	Number of Years of Teaching Experience by Michigan Business and Office Education Teachers . . . . .	54
5	Salary Increases for the Acquisition of Additional College/University Credits or Degrees . . . . .	55
6	Salary Increases for In-Service Programs Including Non-Credit Courses, Seminars, Workshops, and Conferences by Michigan Business and Office Education Teachers . . . . .	56
7	Tuition Reimbursement Received for Courses Taken for Credit . . . . .	57
8	Reimbursement for Mileage or Other Costs Associated With Conferences, Workshops, or Seminars . . . . .	57
9	Degree of Satisfaction of Michigan Business and Office Education Teachers With Current In-Service Education . . . . .	58
10	Agencies or Individuals Currently Meeting The In-Service Needs of Michigan Business and Office Education Teachers . . . . .	60
11	Sources of Funding as Perceived by Michigan Business and Office Education Teachers . . . . .	61
12	In-Service Instructional Approaches Most Preferred by Michigan Business and Office Education Teachers . . . . .	62

Table		Page
13	Preferred In-Service Methods as Rated by Michigan Business and Office Education Teachers . . . . .	64
14	Preferred In-Service Education Formats as Rated by Michigan Business and Office Education Teachers . . . . .	65
15	Preferred In-Service Schedules as Rated by Michigan Business and Office Education Teachers . . . . .	67
16	Preferred Time of Year for In-Service Activities as Rated by Michigan Business and Office Education Teachers . . . . .	68
17	Performance Task Importance as Perceived by Michigan Business and Office Education Teachers . . . . .	71
18	Performance Task Abilities as Perceived by Michigan Business and Office Education Teachers . . . . .	76
19	Rank Order of In-Service Needs as Perceived by Michigan Business and Office Education Teachers . . . . .	81

## CHAPTER I

### INTRODUCTION

In-service education has been an important part of our educational system for many years, serving the needs of teachers. The literature indicates there have been major problems in identifying specific teacher needs and determining the appropriate methods and alternative programs to make teachers more effective in a continuously changing society. Many business and office education teachers and teacher educators have been concerned with meeting the in-service needs which currently confront teachers as well as the problems which will be encountered in the future. Lee (1980) states the following:

The '80's will possess many challenges to the teacher educator with the development of new vocational legislation, with the new provisions on civil rights and sex equity acts, and pressure forthcoming from society. . . . The challenges are so massive for the '80's one must totally review in-service and pre-service programs to make certain that such programs are realistic in regard to having meaningful application (p. 1).

The challenges Lee refers to can be met by in-service programs which are planned, prepared, and delivered in a manner which will assist teachers in solving the problems they may encounter in preparing students for a useful and productive life.



In-service education is designed to promote the professional growth and development of teachers who already possess the basic competencies needed for entry into the teaching profession. In-service education may include formal classes, teachers corps, teacher centers, workshops, seminars, travel, professional reading, visitations, and other activities which contribute to the teachers' professional development. However, "in-service education should not be restricted to what may be regarded as the crises of the moment; instead, it can be addressed to a broad spectrum of social and cultural concerns" (Rubin, 1978, p. xiv).

The Vocational Education Act of 1963, and its subsequent amendments of 1968 and 1976 reinforced the federal governments commitment to in-service education. A 1978 U. S. Department of Health, Education, and Welfare Handbook refers to vocational legislation (sec. 135 a; 20 U.S.C. 2355) which states that funds will be available to the states for support programs or projects designed to improve the qualifications of persons serving or preparing to serve in vocational education programs, which includes teachers, administrators, supervisors, and vocational guidance and counseling personnel. This federal legislation specifically identifies a need for in-service education in areas concerned with new and emerging occupations, sex bias in vocational education, education for persons with limited English speaking ability, and the disadvantaged or handicapped (p. 147-149).

In an effort to comply with federal legislation, the Michigan Department of Education (1978) defines in-service or professional development as:

A planned and organized effort to provide teachers and other educational workers with the knowledge and skills necessary to facilitate improved student learning and performance and to meet additional needs of students... Professional development of school staff is one of the priorities for Michigan education. As a result, a state-wide system for professional development is in the developmental phases. Professional development programs and activities for vocational education personnel are an integral part of this state-wide system (p. D-1).

The Michigan Department of Education (1978) further states that the purpose of the State Plan for Professional Development is to serve as a communication device to department staff and educators in the field regarding the multiplicity of professional development activities and programs supported by the Michigan Department of Education (p. D-1).

The current Annual and Long Range State Plan For Vocational Education in Michigan (1980) describes how and when federal legislative mandates will be accomplished. The Long Range State Plan also acts as a communicative device to disseminate information to school staff and educators in the state regarding new federal mandates and their priorities for fulfillment. In the area of in-service for Michigan teachers the Annual and Long Range State Plan For Vocational Education (1980) concludes:

1. There is a need to provide in-service (pre-service) training for teachers in the areas of mainstreaming handicapped students in vocational education (Goal 11-E, Activity 16).
2. Office education teachers need in-service to provide their students with an understanding of computer operations (Goal II-E).
3. Vocational teachers should be provided sabbatical leaves and financial support for periodic updating of technical skills. (The Michigan Department of Education does not have the prerogative of providing leave or assistance; that is a function of the local school district)
4. In-service materials for teachers of handicapped and disadvantaged students should be developed.  
(Mentioned in Goal II-E)
5. In-service and other assistance needs to be given to school personnel for data gathering activities (Goal IV-A).
6. Distributive Education Guidelines recommend new procedures which necessitate additional in-service for teachers.
7. The teacher education institutions should improve their overall educational programs for pre-service and in-service vocational education teachers through

interaction with employers of students from secondary and postsecondary vocational-technical programs (Objective II-E covers this).

(p. 165-169).

The Education Amendments of 1978 mandate coordination of federal and state funds for staff development and specify that each state set forth a comprehensive plan for educational personnel in the state, including pre-service and in-service education. The United States Department of Education (USDE), formerly the United States Office of Education (USOE), authorized \$300 million for FY 1979 for professional development of educational personnel. Unfortunately, according to Feistritzer (1979), much of the funding did not go toward the professional development of regular educational personnel. Many Office of Education programs stipulated that training should occur, but did not specify what kind nor provide guidance on how it should be delivered (p. 37). Feistritzer concludes that "there is a lack of coordination among USOE programs in the area of professional development of educational personnel at the federal, state, and local levels" (p. 38).

Early literature of in-service education is concerned with concepts, however, current literature addresses the needs of the ultimate benefactor of in-service education, the student and teacher. Rubin (1978), a University of Illinois professor and author explains:

The movement is clearly toward teacher-determined in-service programs and the fulfillment of teacher requirements, there is an obvious relationship between a teacher's philosophy, intent and beliefs, and professional retraining interests....As a result, staff development policies must include provisions for activities that allow teachers to clarify the values underlying their in-service request.

What we most need, in the immediate future, is a rationale that accommodates the political differences that exist; preserves the teacher's autonomy in self-directed improvement; incorporates activities directly related to major educational inadequacies; provides for progressive enhancement of technical mastery; permits sharing of local-state-federal support; generates more dollars for in-service activities; and, of greatest significance, demonstrates tangible benefits (p. xiv-xv).

Readings from Rubin, as well as other educational leaders cited in Chapter II, emphasize the importance of teacher input in the planning and implementation of in-service workshops, seminars, or courses. Based on the need for teacher input, this researcher has included in this study the following topics for teacher response: content, planning, format, methods, scheduling, and locations.

#### Statement of the Problem

The problem of this study was to: (1) identify the in-service needs of Michigan business and office education teachers, and (2) to determine the perceptions of the teachers regarding the importance of their daily performance tasks, as well as their ability to perform the same tasks. This study was designed to encourage teachers to participate in identifying their own teaching skills, by levels of difficulty, for possible use in determining future in-service

programs. Other related in-service areas examined were the opinions held by Michigan business and office education teachers regarding the desirability of various instructional formats, delivery system approaches, financing procedures, and scheduling times for in-service teacher education programs.

### Research Questions

This study attempted to answer the following research questions as they appeared in the questionnaire:

1. What is the demographic profile of the population; and what demographic patterns emerge in regard to (a) practical work experience, (b) teaching experience, (c) salary increases for in-service, and (d) financial reimbursement for in-service?
2. What is the degree of satisfaction among Michigan business and office education teachers with current in-service training?
3. Which agency or agencies are providing the major source of in-service education for Michigan business and office education teachers?
4. How do Michigan business and office education teachers believe in-service education should be financed in the state of Michigan?
5. What do Michigan business and office education teachers perceive as the preferred method, format, location, and time of day and year for in-service education?

6. In the area of perceived importance by teachers, which performance tasks are rated from very high to low in importance?

7. In the area of perceived ability to perform by teachers, which performance tasks are rated from very high ability to low ability by the teachers?

### Purpose of the Study

The purpose of this descriptive study was to identify in-service needs of Michigan business and office education teachers and provide information which would be useful in the planning and implementation of future in-service programs.

The specific purposes were as follows:

1. To examine the perceptions of Michigan business and office education teachers regarding the importance of the performance tasks.

2. To examine the abilities of Michigan business and office education teachers to perform the performance tasks.

3. To compare opinions held by Michigan business and office education teachers regarding the desirability of the various formats, delivery systems, financing, and locations of in-service teacher education programs.

4. To determine the relative need for in-service programs by comparing and analyzing the performance task responses. The 39 performance tasks, described in

Chapter III, were derived from the following nine areas of instruction which the teachers are likely to encounter on the job:

- a. Course planning and instruction
- b. Classroom/student management
- c. Evaluation
- d. Coordination
- e. Special needs
- f. Program planning
- g. Post-instructional Activities
- h. Public relations
- i. Administrative

### Background of the Study

The concept of in-service education is not new to education. In-service education of one form or another has been part of the educational system for many years. Shortly after the turn of the century, in-service education was a means of providing pedagogical methods and subject matter content to teachers, usually through reading circles, teacher institutes, extension courses, and summer schools (Stephens and Hartman, 1978, p. 1). Vocational-technical educators have long recognized the value of adequate in-service education. The Smith-Hughes Act of 1917 incorporated provisions for both pre-service and in-service education of vocational teachers. Succeeding federal legislation, including the Vocational Education Act of 1963, reemphasizes the value of in-service education (Cameron and Cotrell, 1970). Postgraduate courses and workshops were common in-service practices during the 1950's, while the 1960's witnessed



in-service which included more postgraduate programs along with extension courses and summer school courses.

By the late 1960's, teachers and teacher groups were demanding changes in in-service education activities. These demands reflected a general dissatisfaction with concepts, methods, and university-controlled in-service programs. Rubin (1978) states that teacher complaints of irrelevance and meaninglessness in in-service education programs have been acknowledged in spirit and ignored in practice (p. 7). Change in education comes slowly, as with politics or other traditional areas, but eventually change must happen if the in-service education needs of teachers are to be met. Rubin (1978) further states that provisions for the improvement of the in-service teacher have rarely been adequate. The typical program has suffered from a lack of energy, precision, direction and imagination (p. 4).

The literature indicates that present teacher objections to in-service concerns the lack of relevance in in-service programs as they pertain to their daily responsibilities in the classroom. These concerns should be addressed in the future.

#### Need for the Study

Literature pertaining to in-service education indicates a need for new thinking and new directions. Several of the authors are indicating that the teachers

need to be more involved in in-service education, particularly the decision making process. According to Ryor (1979), "Inservice education has been in ill health for a long time. A major reason for that malady is that teachers who know most about their own needs have had too little to say about it" (p. 14). Gallegos (1979) expresses a similar viewpoint when he states that consideration should be given to the delivering of in-service education based on emergent and distinct needs of teachers (p. 23). Some writers believe that in-service education should include all parties involved. "Decisions should be made through a collaborative process involving all the agencies that will participate in the program. It is particularly important that the teachers who will be clients of the program are involved in the planning stages" (Hite and Howey, 1977, p. 14).

Even though many questions have been answered about in-service education, some still remain unanswered. For example, in an article by Sandefur (1979), he states that the primary purpose of in-service education is to upgrade and update the skills and competencies needed by educators at all levels, and that input in decision making is needed from the institution, the students, and the public. Sandefur also brings up for discussion unresolved issues which include:

1. Who determines what in-service education should be provided?
2. What delivery system should be used?

3. Who will deliver the in-service education?

4. Where is the logical place for in-service education to take place?

5. Is the financing of in-service education a state or federal responsibility?

6. How should in-service education be governed?  
(p. 19).

This study, therefore, will provide additional information needed which will relate to in-service education and aid in better understanding and solving the questions and issues confronting business and office education teachers today in the state of Michigan.

#### Definition of Terms

The following terms are defined as they apply to this research study:

Business and Office Education Teacher - A person designated as a classroom instructor of an office education program employed in a Michigan vocationally-reimbursed secondary school.

In-Service Education - Efforts to promote by appropriate means the professional growth and development of teachers which includes planned and organized efforts to improve the knowledge, skills, and attitudes of the teachers to make them more effective on the job. Some examples are activities such as role-playing, intervisitation, demonstrations, and laboratory sessions (Good, 1973, p. 294).

Instructional Approach - This refers to the way in which the teacher prefers to receive information or training such as group classroom, seminars, TV, self-paced work, or correspondence.

Instructional Format - The term format refers to the scheduling of in-service programs. Some teachers may prefer to have in-service training spread over a period of time such as regularly scheduled university courses. However, some teachers may prefer a short intensive time frame such as a week or even a weekend.

On-Site In-service - In-service programs that are offered at the teacher's home school or local intermediate district.

Performance Tasks - Performance tasks are the duties, obligations, or activities a business and office education teacher may be involved with while fulfilling his or her job requirements.

Teacher Center - A site where in-service education is conducted which is designed to meet the needs of the teachers and local intermediate districts. Centers are often organized, planned, and operated by teachers, either on-site or in changing locations.

Teacher Corps - "Federal-funded program for the graduate training of teachers to work in disadvantaged areas, combining course-work and practical experience through internships" (Page and Thomas, 1977, p. 238).

### Delimitations of the Study

The following were the delimitations of this study:

1. This study was concerned only with secondary schools which were vocationally reimbursed as an office education program by the state of Michigan and listed with the State Department of Education as a steno, steno-clerical, clerical, clerk-typist, legal secretary, medical secretary, stock and inventory clerk, general office clerk, or office cooperative program.

2. Participants were limited to a selected group consisting of one business and office education teacher from each school.

3. This study involved 39 performance tasks classified in nine areas of instruction. No attempt was made to identify all the possible tasks and areas of instruction a teacher may encounter.

### Limitations of the Study

The study was limited by the following constraints:

1. The ability and willingness of the respondents to analyze, interpret, and make a sound decision when answering the questions.

2. The fact that the responses of the respondents were opinions and perceptions they held only at the time the questions were answered.

3. Although secondary business and office education is similar throughout the country, the population included only Michigan teachers. The findings were generalized only to teachers who responded to this study.

#### Assumptions of the Study

The following assumptions were made in preparing and conducting this study:

1. The perceptions of Michigan business and office education teachers in regard to the importance of performance tasks and the teachers' abilities to perform the tasks will provide information which can be used to determine the in-service needs of the teachers.

2. All of the teachers did not have the opportunity to perform all 39 performance tasks in the questionnaire at this time in their career.

3. The survey instrument gave an accurate listing of the performance tasks performed by business and office education teachers in the state of Michigan.

4. All answers to the instrument were accurate and represented the true opinions of the respondents.

#### Organization of the Study

This study was organized into five chapters as follows:

Chapter I - "Introduction," includes the statement of the problem, purpose of the study, background of the

study, need for the study, definition of terms, limitations of the study, assumptions of the study, and organization of the study.

Chapter II - "Review of Literature," contains the historical overview, status of in-service education, trends and alternatives, significant research studies, and summary.

Chapter III - "Research Methods and Procedures," contains the selection of participants, development of the instrument, gathering of the data, and processing and analyzing the data.

Chapter IV - "Analysis of the Data," includes the description of the respondents, current teacher in-service education, preferred methods of in-service education, and performance tasks.

Chapter V - "Summary of Findings, Conclusions, and Recommendations," includes the major findings, conclusions, and recommendations of the study.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

An examination was made of the literature and research studies which pertain to in-service education. An ERIC search was conducted at the Michigan State University library and an extensive hand search was conducted by the researcher to obtain information about in-service education.

The findings from the literature review are grouped under the headings: (1) Historical Overview; (2) Status of In-Service Education; (3) Trends and Alternatives; and (4) Significant Research Studies. A summary is presented at the end of the chapter.

#### Historical Overview

In-service education is not a new concept in education. As described by Tyler (1971), in-service of teacher development has been in existence since the mid-nineteenth century. In the 1850s and '60s in-service education was largely remedial, and teachers attended for two or three days' duration while selecting short courses in the evenings. The content of the courses usually included arithmetic, spelling, geography, and history with recommendations as how to teach the basic



subjects. "The ideal teacher at that time was thought to be one who was always gaining new understanding of the old content, and new skills in carrying on his/her work" (p. 7).

The Land Grant College Act of 1862 was the forerunner of the idea that American educational institutions should be expected to respond to the realities of social change. The success of the new land grant institutions helped develop the idea that education must and can change to meet the changing needs of a modern society.

From 1880 until World War I, the summer courses in the normal schools were strategically the most important agencies of in-service education in America. Tyler (1971) continues to explain:

This was a period of questioning, promotion of new ideas, recognition of new educational problems, and introduction of new subjects into the curriculum, such as hygiene, civics, and vocational education. The in-service education programs of institutes and summer sessions were the chief means for helping teachers to deal with the changes that were proposed (p. 10).

Between World War I and the depression of the early 1930s, in-service education changed. Educators believed that major improvement in the quality of teaching in public schools could be obtained by requiring all teachers to have a bachelor's degree. Most teachers at that time only had the equivalent of two years of college; therefore, to attain the goal of a bachelor's degree for all required a tremendous investment in in-service courses that would count on a teacher's credentials toward his/her bachelor's degree.

Hence, from 1918 until the depression, in-service programs were not aimed at helping teachers meet new problems but rather at filling gaps in college degree requirements.

Tyler states that the differentiating characteristics of in-service education during the depression period arose from the primary concern of developing curricula and educational procedures that would better serve youth under the conditions of the day. This involved:

1. New approaches to curriculum building.
2. The identification of new content.
3. The development of new instructional materials.
4. The discovery of new teaching-learning procedures.
5. The education of teachers to understand and to conduct new programs (p. 11)

The second World War, and the increase in birth rate that followed, created an acute shortage of teachers. Because of the teacher shortage, in-service education offered types of courses which enabled the teachers to meet certification requirements.

Stephens and Hartman (1978) define the 1950s as the time when the workshop method of in-service was popular. Most public school workshops of that time consisted of staff development days conducted at the school district level frequently in cooperation with teacher associations. By the 1960s postgraduate in-service programs included summer school and fifth-year graduate programs which were merely extensions of the traditional four-year programs. Stephens and Hartman

further explain that by the 1970s there was a trend toward cooperation between in-service trainers and teachers and with the joint efforts of school districts and teacher institutions.

In summarizing the historical significance of in-service education, Tyler concludes the only new major purpose of in-service education since 1930 has been to aid schools in implementing new educational programs. In-service education programs helped teachers acquire understanding, skills, and attitudes essential to the roles they were to play in the new programs.

Rubin (1978) views the history of in-service as being characterized by randomness and fragmentation, by programs which deferred more to expediency than to need, and by methodologies that have been largely atheoretical. Rubin concludes by stating that the machinery for sustaining the future professional development of educators is in need of an overhaul.

#### Status of In-Service Education

In-service education has been a part of the educational system for many years; however, many educators are dissatisfied with the in-service system and contend the system has numerous problems. Rubin (1978) identifies such problems as:

1. A profound lack of continuity between pre-service and in-service;

2. A general lack of vitality and rigor;
3. A conspicuous lack of precision of current practices, at least in the sense that teacher-growth objectives are not coupled with an efficient means for their attainment;
4. A failure to exploit the rich potential inherent in the processes through which teachers can educate one another;
5. A preoccupation with teaching technique related to subject matter causing the importance of what might be called the "personological" skills of teaching to be overlooked;
6. A lack of systematic attention being given to the educational and social values teachers embrace; and
7. Not much done in the way of anticipating the kinds of teachers that will be required as school and societal change follow their inexorable course (p. 8).

Houston and Freiberg (1979) contend in-service is often based on a "cafeteria" approach. The school district organizes a wide array of one-time, two-hour, non-developmental in-service offerings with teachers selecting those that appeal to them. They also say this approach is a no-growth, no-direction style that does not lead to any specified goals of improved performance.

Not all educators are in agreement as to the specific problems of in-service education or the methods needed to alleviate the problems. Meade (1971) states provisions for in-service education are grossly inadequate because they suffer from the following three predominant and interrelated weaknesses:

1. time is not available on a regular and systematic basis for teacher retraining;
2. insufficient funds spent on retraining; and
3. an efficient method of retraining has not yet been devised (p. 220).

Meade further states that the challenge is to rearrange the teacher's workday so that on-the-job professional improvement actually takes place.

Albert Mamary agrees that time and money can cure some of our in-service problems. Mamary (1978) states:

A good renewal program requires that the district should initiate and encourage staff development. It should provide release time, extended time, or compensatory time for staff to plan, implement, and evaluate long and short range goals. It should recognize, support, encourage and supplement initiative; assist in the identification of the needs of students; and provide funds for staff growth and material resources (p. 80).

Van Wagoner (1978) identifies four major complaints by in-service recipients and suggests possible solutions as:

1. Irrelevance - Workshops offered very little that was relevant to the particular needs and problems of the school.

Solution - A needs assessment instrument distributed to all faculty for selecting in-service topics.

2. Presenters - Presenters were often pretentious, inarticulate, uninformed, and strived for unobtainable goals.

Solution - Utilize members of the faculty and fellow teachers as presenters.

3. Class time Loss - The fear that students would lose information by the teacher being absent from the classroom.

Solution - Allow the teacher to pick the in-service day and be able to plan for it weeks in advance.

4. Locations - Many of the teachers in-service activities were miles from their school and the attendees problems were unrelated to their own.

Solution - Have local on-site in-service activities.

In conclusion, Van Wagoner suggests solutions such as: (1) addressing problems pin-pointed by those attending, (2) having programs conducted by the teachers themselves, (3) scheduling sessions at the teachers' schools, (4) arranging sessions for a time when students were not in school.

Rubin and Van Wagoner both express a need for greater involvement by teachers in in-service activities. Many others share the same philosophy. Mann (1979) explains educators have failed to stimulate much improvement in schools in-service activities because they have failed to pay enough attention to teachers. He further states that the extent to which trainees (teachers) perceived a need for their own development is an important characteristic. Drummond (1979) expresses a similar idea when he emphasizes in-service education should be managed by the people who work in the building and should deal with the individual and group problems and aspirations found there. Shanker (1979)

indicates a need for stronger teacher in-service participation when he states:

The fact that the average teacher operates in a threatening environment must be a central consideration in the development of any in-service program.

The best way to deal with this phenomenon is to give teachers a dominant voice in the development and administration of in-service programs (p. 17).

There is agreement among some educators that in-service programs may aid in the further development of teachers, help teachers keep up with societal changes, and help satisfy the public demand for teacher accountability. According to Roth (1975) it is important for in-service programs to be addressed to the individual's needs and be relevant to their teaching responsibilities. Programs established merely to have in-service activity may be neither relevant to the realities of the classroom nor responsive to individual needs. Roth contends in-service programs can:

- (1) be an opportunity to express one's own ideas and explore these with colleagues along with other trends in education,
- (2) keep one's ideas active intellectually and avoid stagnation, and
- (3) regenerate the thinking process in a never ending pursuit of instructional excellence.

Fisher (1978) is somewhat less individualistic in his assessment of in-service needs. He considers in-service education as something broader than one or two meetings designed to deliver information about a particular set of programs, standards, or instructional strategies. Fisher (1978) lists the following as factors to consider when

planning in-service activities:

1. All staff members need to be kept aware of changes in educational technology, information delivery systems, assessment techniques, parenting, progress reports, etc.
2. Teachers no longer operate in isolation. They work with support personnel within school systems, including teacher aides, psychologists, and counselors. Much in-service is necessary to define the various roles of the members who make up the team of individuals who will guide the education of each and every child.
3. In-service training must occur to increase the paraprofessionals effectiveness in the delivery of educational programs.
4. Over the past 10 years many new programs have emerged from both state and federal levels. All school personnel who are expected to implement new programs should be given adequate and ongoing direction and support. In many instances new programs require the training of individuals to perform certain tasks. This in-service training is virtually impossible without a well mechanized delivery system.
5. Individual staff competencies may depend on several years of additional continuing education. Additional competencies acquired by the individual may allow him/her to feel more comfortable in the educational setting in which he/she must work on a day-to-day basis (p. 56-57).

There is evidence that in-service is needed by all teachers, not merely by older teachers who are filling in educational gaps. New inexperienced teachers may use in-service education to aid in the transition from university life to the world of a working teacher. Burlingame (1978) claims new and inexperienced teachers may also need in-service training for:

1. an emphasis on the basic skills of teaching;



2. additional information needed by inexperienced teachers; and
3. the development of prestige systems to enhance the status of inexperienced teachers (p. 158).

In an article by Elliott and Steinkellner (1979) they discuss in-service education for new teachers by saying:

....that early in-service truly is needed for teachers if they are to become as effective as they would like to be and the accountability-inclined public will demand that they be. It may well be that teacher demands for in-service time can provide school systems with excellent payoff in terms of student growth and development. This will be true, of course, only if that time is designed to meet the real areas of teacher weakness (p. 423).

As pointed out by Gryder, Hennington, and Hutt (1977), there is an ever-growing emphasis on in-service training which is in part due to the demand of accountability in the teaching profession. They reemphasize that teachers will participate only in those professional development or in-service activities that address their current needs. From these and other similar statements in the literature review it becomes apparent there is a necessity to determine the in-service needs of the teachers who will be participating in the in-service activities. Another factor imperative to the success of any in-service program is the motivation of the participants.

Teresa M. Palmer has written extensively about the extrinsic and intrinsic motivational aspects of in-service education participants. In order to properly plan and present in-service activities it is of utmost importance to know what motivates the prospective recipients of the

training. Palmer (1978) explains that:

Both extrinsic and intrinsic motivation are used to encourage teachers to improve teaching performance. In extrinsic motivation, the impetus may come from rule enforcement (making participation in in-service programs a requirement of the job), or from rewards that are valued by the participants but do not stem from improved performance (such as bonuses, increments, certificates, etc.). Those most susceptible to extrinsic motivation are those who have not adequately satisfied their basic needs or those who do not derive the satisfaction of higher order needs from their teaching. In intrinsic motivation, the impetus for improvement may come from a desire to do a better job of teaching. Intrinsically motivated teachers derive satisfaction directly from the performance of their teaching duties. The rewards here are the rewards perceived by the teacher and are highly dependent upon his or her values and attitudes and environmental pressures. . . . it would be wrong to assume that intrinsic motivation indicates a good teacher or that extrinsic motivation necessarily denotes a poor one.

When teaching provides intrinsic rewards expressive of the needs of the teachers, they develop a strong commitment to the (educational) system and the improvement of the education provided within. When the motivation is chiefly extrinsic in nature there is a much weaker commitment to the system and there is likely to be a fairly high rate of turnover when there are alternative forms of employment that offer rewards that are more highly valued (p. 216-217).

Palmer further states that the two types of motivation are not mutually exclusive and the difference in intrinsic and extrinsic motivation is usually the result of differing external pressures. For example, as related by Palmer, a teacher may decline to participate in a particular in-service program because of his or her perception of the value of the in-service program or the fact that attendance might interfere with an activity such as a part time job that is necessary to meeting financial commitments. If

a school system can strive to insure it is made up of highly committed individuals, there will be an effect upon the sincerity with which a teacher utilizes in-service programs to improve teacher performance.

### Trends And Alternatives

While many uncomplimentary remarks have been written regarding past and present in-service practices, one author believes there is modest optimism about the future of in-service training. Rubin (1978) states it is encouraging to note that in-service education will probably be taken more seriously than it has been in the past. A period of activity is under way, important issues are being contested, and teacher education is conceived of as a continuum that begins early in the baccalaureate experience and extends into the first few years of professional service. It is conceptualized as a career-long development.

A trend in in-service activities today is for the teachers to be actively involved in the planning, presenting, and evaluation of their own in-service programs. In an early writing Rubin (1971) explains that: "If there is to be significant improvement in education, the nation's teachers as professionals must participate in their own intellectual growth" (p. 249). In a later writing, Rubin (1978) was somewhat more emphatic when he claims: "If there is to be significant improvement in education, the nation's

teachers must manage their own professional development" (p. 31).

King, Hayes, and Newman (1977) express similar sentiments by stating that successful in-service programs emphasize suggestions from those who are to be in-service recipients. They continue to explain that in-service programs can be improved through creative and cooperative attention to:

1. selection of real needs and attainable objectives,
2. balancing of personal and organizational benefits as well as individualized and collective offerings,
3. cooperative determination of topic feasibility,
4. commitment on the part of those to be affected by the in-service program,
5. skillful and imaginative planning and programming necessary to make the experience rewarding,
6. proficient implementation of the planning, and
7. purposeful evaluation of its effects (p. 687).

Along with the trend of more teacher participation in in-service activities is the belief that teachers are the best source of information regarding the types of in-service needed. According to Edelfelt (1976) one of the primary characteristics of in-service education is that it is based on the needs of teachers, particularly the needs of teachers as perceived by teachers. As Zirkel and Albert (1979) point out, several studies have focused on teachers' perceptions about existing in-service programs but very little has been done regarding the teachers in-service education needs as

perceived by the teachers. Meade (1971) agrees with that analysis. He states:

. . One of the shortcomings of present practice is the failure to capitalize on one of the best sources of information regarding teacher needs: the teacher himself. If more relevance is required in in-service activities, and there seems to be widespread agreement that this is the case, it would appear sensible to involve teachers in the planning and execution of their own improvement programs (p. 217).

Indications are that not only is teacher participation needed in in-service planning, but it is also important for the planners to determine the educational "needs" of the teachers. Speiker (1978) emphasizes that more attention in the development of in-service programs and materials should be given to individual teacher needs and skill development with special attention toward: (1) who should pay for staff development programs, (2) when should staff development occur, and (3) who should determine staff development programs. Westbury (1978) agrees that more attention should be given to the needs of teachers and schools when he contends that:

1. traditional activities of the colleges of education have been irrelevant to the needs of the schools;
2. if colleges of education address the in-service needs of teachers they will become relevant in a way that they have not been to this point and will be able to work with teachers for the improvement of education; and
3. if we accept this mandate, there is a new population for the colleges of education that might, somehow, ameliorate our current enrollment problems (p. 266).

Rubin (1978) believes that teachers should determine their own in-service needs and be active participants in the in-service programs. Typical statements made by Rubin include:

1. The purposes of a retraining program should be based on classroom tasks that the teacher wishes to accomplish.
2. Professional growth should relate to life in the classroom. The continuing education of teachers should have a direct influence on the problems they encounter in their work.
3. Because many teachers have had unsatisfactory experiences with in-service activities, it is essential that teachers be involved in the identification and articulation of their own training needs. When teachers participate in the determination, initiation and organization of their own growth, the incentive to improve is greatly strengthened.
4. Ideally, most in-service education activities should be carried on in the setting in which the learner normally functions. Teachers can, while engaged in teaching, learn to identify and analyze pedagogical problems and search for solutions.
5. The retraining should increase the teacher's sense of job satisfaction and nurture the unusual abilities that exist among teachers.
6. It is unlikely that any teacher will ever reach his or her ultimate performance potential. Therefore, continuing education, on a systematic basis, should become a routine aspect of professional life (p. 296-302).

Various suggestions have been proposed to meet the in-service challenges of the future. Biemer (1978) states by assessing teachers' needs we can determine what they feel they need and want in order to assist them in their teaching. Bush (1971) agrees with those who contend the teacher is the

best source of information in determining in-service needs when he asserts that the teacher may be the most reliable judge of his or her own technical weaknesses. It follows, therefore, that the teacher should have a fundamental voice in determining his or her in-service education program. Bush further states that he considers the five most important conditions for an effective in-service program as (1) sufficient time to engage in the program, (2) conditions such that the program can be conducted with the necessary materials and supplies at hand, (3) a program that is relevant to the problem undertaken, (4) the necessary financial and other types of support required to carry it out, and (5) an opportunity to use the results of the training in the regular school situation (p. 56-57).

The role of higher education is changing with teacher education institutions maintaining an adequate amount of the teacher in-service economy. Pankratz (1979) suggests that if higher education is to remain a viable in-service source the following areas need immediate attention: (1) a conceptual framework that relates preservice to in-service education, (2) the unique role of higher education in in-service education, (3) the linkages of higher education with other organizations and agencies, and (4) the funding and reward system in higher education for involvement in in-service activities (p. 20).

In discussing the trends in in-service education the authors share many similar ideas while a few view future

trends somewhat differently. Often causes are examined in an effort to identify the reasons for various trends. Harty (1978) anticipates that future in-service will be more field-based and responsibilities will be shared between local authorities and a university or college. He explains that with a large number of teachers already possessing a masters degree, there seems to be a reduced need for typical campus-based courses.

Major trends in in-service as viewed by Cruickshank, Lorish, and Thompson (1979) are that:

1. In-service education, rather than eradicating deficits, is seen as complementing and extending professional growth beyond the baccalaureate.
2. There has been a progression from a discrete to a continuous view of in-service teacher education.
3. There has been a shifting from a relatively simple to a complex in-service teacher education operation. Today's teacher in-service programs address a wider range of topics and problems and engage a more diverse and larger clientele.
4. There has been a shifting from a narrow control of in-service education programs by school administrators and/or university professors to collaborative governance, including the clients-teachers (p. 27).

Cooper and Hunt (1978) describe a series of in-service models which they consider to be future trends. Time will determine which models or trends will become successful tools for the in-service training of teachers. The Cooper and Hunt models include:



1. Teacher Make-it/Take-it Sessions - These are sessions directed by teachers where ideas are shared about practical or useful educational learning devices. The teachers prepare and present their own in-service sessions.
2. Regularly Scheduled Case Studies - This is a regularly scheduled meeting of a group of teachers who identify concerns in their classroom. The group reacts with suggestions or opinions. The teacher is to decide on a course of action, implement it, and report back on the results.
3. Structured Observations - A system of planned and structured observations whereby teachers may observe other teachers using specific instructional techniques.
4. Demonstration Lessons - A demonstration of a set of skills in the learning teachers own classroom by a demonstration teacher who may be a peer or supervisor.
5. Supervision Visits - The supervisor may use a conference to describe ideas, define expectations, schedule follow-up visits, or define how to implement teaching strategies.
6. Teacher Centers - A concept that encourages local educational agencies to plan, establish, and operate in-service training sites (p. 66-67).

Hite and Howey (1977) list three basic in-service trends as: (1) those efforts to integrate in-service more fundamentally in the teacher's ongoing daily activity, (2) those efforts aimed at giving the teacher more power, autonomy, and decision-making latitude as reflected in the Teacher's Centers movement, and (3) the evolution of structures representing a more collaborative and programmatic approach to in-service teacher education (p. 48).

Sandefur (1979) agrees with many of the above mentioned in-service trends and adds some possible new directions when he states:

1. In-service and continuing education programs are more field centered. Instructional programs are moving from the college classroom into the schools, and there is increasing use of teachers as in-service instructional personnel.
2. Federally funded teacher centers have been developed that are designed for the professional improvement of teachers. These centers are governed and largely staffed by teachers; further evidence that the practicing profession is increasingly assuming responsibility for its in-service growth and development.
3. Credentialing changes are becoming evident. Many states permit the use of continuing education units and professional staff development units to replace college credit hours as a requirement for additional certification (p. 18).

As evidenced by the literature, the teacher center model was repeatedly mentioned as a trend for in-service teacher education. The teacher centers have been described as a method which could be organized and presented by teachers serving the needs of teachers. The teacher centers could be managed locally or in collaboration with outside agencies which include colleges or universities. Teacher centers may be operated from a home school in the district or any building conveniently located for the participants.

Tyler (1971) describes early teacher center philosophy as:

In-service education of the future will not be limited to college and university campuses or to school buildings but will be carried on in a variety of settings related to the problems and the resources to be dealt with. For example, some will be carried on in welfare agencies and other slum settings, some in factories or other work environments, some in laboratories, some in camps, parks, or other recreation spots, some in communication centers, and some will be quasi internships in political and social organizations (p. 15).

It is difficult to predict the extent to which Tyler's observations will all transpire. A trend has materialized with the cooperation between teacher centers and some colleges and universities. As Biemer (1978) states:

The teacher center model could require that the college faculty member spend one day a week, or parts of two days, at a teacher center located either in a separate building (perhaps a vacated school) or a functioning school that has an empty wing or floor. It is much more efficient for one professor to travel to a teacher center than for a number of teachers to travel to a university for classes (p. 140).

Biemer's observations are particularly important today because of the increased costs of transportation due to inflation and the energy shortage.

### Significant Research Studies

This section consists of three studies concerned with in-service education. Two are concerned specifically with business and office education teachers while the third is a study involved with the broad area of secondary education.

#### The Walters Study (1976)

Walters conducted a study to identify the perceptions of vocational business education teachers, administrators, local advisory committee members, and professors toward variables critical to the success of in-service education programs for vocational business education teachers. His sample included Ohio vocational business educators and local advisory committee members at both the high school and post-secondary levels.

The purpose of the study was to identify: (1) what business educators in Ohio perceive to be the most effective in-service education methods for keeping vocational business education teachers up to date with technical knowledge in the subjects they teach, (2) how often the teachers use identified in-service education methods, (3) how often educators think a vocational business education teacher should receive updating, (4) the time allotted to teachers in order to participate in in-service activities, (5) who should pay for in-service activities, and (6) factors concerned with incentives, work experience, and teaching experience.

The major findings from the Walters' study related to this study were:

1. The methods of in-service rated effective by the survey groups were (a) periodically visiting business or industry to observe and discuss new developments, and (b) attending seminars, meetings, and workshops sponsored by the business community.
2. The teachers who rated in-service methods high in value also tended to use the methods more frequently than teachers who rated the methods low in value.
3. The data indicated that at least 75 percent of all respondents felt the teacher should be updated at least within every four years.
4. High school teachers reported less time available for updating than postsecondary teachers.
5. The highest percentage of high school teachers (52.3) felt the State Department of Education should pay for the updating of teachers.
6. Incentives were usually centered around salary increases which the teachers received for college or university credits.

Based upon this study, Walters makes the following suggestions for improvement of in-service education programs by Ohio's vocational business education policy makers:

1. Determine the feasibility of increasing the incentives available to teachers for participation in in-service activities.
2. Attention should be given to more salary incentives for attending conferences, workshops, and seminars. Released time should also be established for teachers to enable them to participate in in-service programs.
3. Determine the feasibility of conducting regional meetings throughout Ohio for updating vocational business education teachers.
4. Determine the feasibility of developing cooperative arrangements between local school systems and business and industry for the technical updating of teachers.

#### The Massachusetts Study (1978)

In an article by Seldin (1979) he describes a study in Massachusetts which was done in an effort to develop useful staff development programs for public school personnel. The University of Massachusetts (Amherst), the Springfield Regional Education Center (State Department of Education), and the Hampshire Educational Collaborative were all interested in a systematized and accurate means of determining in-service needs of teachers. The collaborated effort was done in order to identify areas of need or interest in which to build in-service programs.

The purpose was to learn about or identify the in-service needs of the teachers in western Massachusetts. The sample included teachers and administrators from kindergarden

through grade 12. Of the 880 questionnaires distributed, 615 (70.0) were completed and returned. The information solicited was preferences for the following: format, location, time, length, instructor, subject matter, and credit for in-service programs.

The findings of the Massachusetts study were:

1. The public school personnel desired their staff development to be physically located within their school district rather than at a university or even a staff development center.
2. Staff development should be held after school rather than during school vacations, evenings, or weekends.
3. Staff development should involve intensive one-day or one-afternoon sessions.
4. A workshop and small group approach should be used.
5. Sessions should be taught by outside consultants and only secondly by university professors.
6. Staff development should yield in-house credit and only secondly university credit (p. 266).

As a result of the study, the planners from western Massachusetts made a strong effort to adhere to the needs-assessment findings. Conferences were held at a community location convenient to as many of the schools as possible. They scheduled them for an entire day during the school week. Small-group and workshop involvement was emphasized, and both consultants and university professors were directly involved in instruction.

### The Hage Study (1978)

Hage conducted a study to identify the performance elements for which full-time Colorado secondary business and office teachers need in-service teacher education. In addition to the identification of the in-service needs of the teachers, the study determined the desirability of various formats, delivery systems and locations of in-service teacher education programs. His study included a random sample of 120 teachers drawn from 483 Colorado full-time secondary business and office teachers.

The major findings of Hage's study considered pertinent to this study were as follows:

1. Thirty-three percent of the teachers were satisfied with their current in-service training.
2. Workshops were the preferred method of in-service training and university courses ranked second.
3. One-half of the respondents indicated that they preferred an intensive format, six hours per day for one week, over the traditional format of three hours per week for ten weeks and other alternatives.
4. The highest ranking instructional approaches were group classroom activities and seminar discussions.
5. Evenings were the preferred time of day for in-service training.
6. Fall was the preferred time of year for in-service training, followed by summer, spring, and winter.
7. Teacher educators were identified as the agency, group or individual meeting most of the in-service needs of business and office teachers.

8. Generally, the performance elements that related to regular, traditional classroom activities were considered the most important.
9. Respondents were generally better able to execute traditional, classroom related performance elements than the other performance elements (p. 78-80).

Hage drew the following conclusions based upon his findings:

1. Colorado full-time secondary business and office teachers are less than satisfied with current in-service teacher education programs. Intensive workshop formats are desired and they should be conducted as close to the location of the teacher as possible. Currently teacher-educators are meeting the in-service needs of most of the teachers.
2. All performance elements included in this study were considered to be important. Relatively, performance elements which dealt with special needs students, and evaluation of students, courses and programs were perceived as being of greater importance than the remaining performance elements.
3. Respondents were most able to execute traditional classroom activities. They were least able to execute performance elements which dealt with the needs of special needs students, operation of on-the-job cooperative training programs, utilization of advisory committees, preparation of multi-media materials, and operation of student vocational organizations.
4. Respondents were in greatest need of in-service teacher education for performance elements related to the needs of special needs students. Generally, performance elements which dealt with classroom management, course planning, classroom environment, course objectives, and student vocational organizations were the least in need of in-service teacher education by the respondents (p. 85-86).



### Summary

In Chapter Two the historical precedents to in-service education were reviewed describing the changes that evolved from the 1850s to the present. This was followed by a survey of literature examining the status of in-service education today, including the benefits, problems, and possible changes which need to occur in order to improve in-service training. In an effort to distinguish the direction of future in-service practices, literature concerned with trends and alternatives was examined. Finally, three significant research studies were discussed which were closely related to this study.

## CHAPTER III

### RESEARCH METHODS AND PROCEDURES

The main purpose of this study was to identify in-service needs of Michigan business and office education teachers. The study was also designed to assess the relative importance of 39 performance tasks as perceived by the teachers as well as their abilities to perform the tasks. A third aspect of this study was to examine related demographic factors which included formats, delivery systems, financing, and locations of in-service teacher education programs.

Borg and Gall (1979) state that descriptive studies typically employ survey research methods for the purpose of collecting information that permit a description of the characteristics of people (p. 38). This study was designed to be descriptive in nature because the present conditions and perceptions of the Michigan teachers were needed. An attempt was made to obtain information which would assist policy-makers in planning and implementing future in-service programs.

This chapter describes the steps that were followed in conducting this study. The procedures included the selection of the participants, development of the instrument, gathering of the data, and processing and analyzing the data.

### Selection of Participants

The population for this study consisted of individuals who were business and office education teachers employed in Michigan vocationally-reimbursed secondary schools.

At the time this study was conducted, there were 404 secondary schools receiving vocational reimbursement that operated one or more business and office education classes. One business and office education teacher from each school was chosen to represent the selected sample from the population used. According to Borg and Gall (1979), large samples should be used when small differences are anticipated and when the population is highly homogeneous (p. 204). The use of all 404 schools insured input and information from all geographical areas of the state.

### Development of the Instrument

A questionnaire (Appendix I) was used to collect the descriptive data needed for this study. Two researchers, Walters (1976), from Ohio State University, and Hage (1978), from Colorado State University, incorporated questionnaires that were, in part, useful in the development of the questionnaire for this study. Of the two, the Hage questionnaire was the most useful because it was a needs assessment instrument designed to obtain information directly from teachers regarding their perceptions of in-service education.

The Hage questionnaire included a list of performance tasks which were originally from Cotrell's (1972) list of competencies needed by vocational-technical teachers. The Hage questionnaire was validated and used to determine the in-service needs of Colorado business and office education teachers.

Additions and deletions were made to the Walters and Hage instruments to obtain a specific instrument for gathering data needed for this study. The original proposal was developed in a graduate research class. The professor of the course suggested the instrument was long, therefore, thirteen performance tasks were eliminated from the proposal.

A pilot test was then conducted with ten subjects from a graduate vocational class, which was followed by a feedback discussion session concerning length, content, and individual opinions regarding the instrument. A second pilot test was conducted with ten teachers from an additional graduate vocational group who evaluated the questionnaire for clarity of items and directions, ease in answering, and instrument length. The dissertation committee, also, made recommendations concerning the length of the instrument. Therefore, based on the dissertation committee recommendations as well as comments and suggestions from the pilot groups, the questionnaire was revised and two questions were deleted in the interest of reducing the length of the instrument.

The instrument consisted of two sections. The first section included questions dealing with the demographic data of the respondents and the teachers' preferred method of in-service education. The demographic data section consisted of questions which were designed to reveal information about the work experience, teaching experience, and educational background of the teachers. The demographic factors were analyzed to determine the teachers' satisfaction with in-service training methods, formats, approaches, financial assistance, times, and locations.

The second section contained a list of 39 performance tasks which business and office education teachers were likely to perform at their schools. The 39 tasks were included under the following major instructional duties:

1. Course planning and instruction
2. Classroom/student management
3. Evaluation
4. Coordination
5. Special needs
6. Program planning
7. Post-instructional activities
8. Public relations
9. Administrative

The teachers were asked to indicate their perceptions of the importance of each performance task and, also, to rate their ability to perform each performance task.

The perceptions of importance of each performance task were rated on a five point scale as follows:

1. Very high importance - A task with essential importance.

2. High importance - A helpful task, but not of essential importance.

3. Moderate importance - Needed for minimum importance.

4. Low importance - Could be desirable, but not necessarily needed.

5. No importance - Need not be considered.

The ability to perform each performance task was also rated on a five point scale as follows:

1. Very high ability - The maximum ability needed as perceived by the teacher.

2. High ability - Above average, better than typical, but not maximum.

3. Moderate ability - Average, typical, to meet minimum standard.

4. Low ability - Not as good as typical, less ability than the average teacher.

5. No ability - Very poor or not significant.

The data received from the performance task ratings were used to determine the need for in-service education in the various performance task areas.

#### Gathering of the Data

In December, 1980, the most current list (1979-1980) of vocationally reimbursed office education schools was obtained from the Michigan Department of Education. In January, 1981, a mailing list containing the names of 404

schools was compiled and envelopes were prepared. The questionnaires were coded with identification numbers. A cover letter (Appendix II), stamped addressed envelope, and a questionnaire were mailed in February, 1981, to a business and office education teacher in each of the 404 reimbursed schools in the state. The cover letter described the nature of the research, the specific research problem, and directions for the return of the instrument. After a two-week period, there were 295 questionnaires returned out of the 404 sent for a response rate of 73 percent.

On March 15, 1981, a follow-up letter (Appendix III), questionnaire, and addressed envelope were sent to the non-respondents. On March 30, 1981, all returns were counted and tabulated. Questionnaires received after March 30, 1981, were not counted in the usable response figures. There were 368 total returns from the 404 questionnaires mailed for a 91 percent response rate. The usable response was 361 returns out of 404 for a response rate of 89 percent. Table 1 summarizes both the total and usable response rate of Michigan business and office education teachers.

#### Analyzing the Data

All responses from the instruments were transferred to worksheets. These data were then keypunched on cards for computer input. Statistical analysis of the data was accomplished through the use of a Bio-Medical Program (BMD)

Table 1 Response by Michigan Business and Office Education Teachers to this Study (N=368)

	Questionnaires Mailed	Number of Responses	Percent of Responses
Total	404	368	91
Usable	404	361	89

from the Health Sciences Computing Facility (1978) developed at the University of California at Los Angeles and made available at the Michigan State University Computer Center. Descriptive information was received which included frequencies, medians, percentages, and a histogram for each variable.

An analysis of the frequency distribution of the responses was used to describe the demographic profile of the respondents, respondents degree of in-service satisfaction, and preferred method of in-service education.

The respondents ranked their preferences for in-service methods, formats, and scheduling. Numerical values were given to first, second, third, and fourth choices and mean values determined. Frequencies, percentages, and means were then used to rank the respondents choices.

The median scores of the respondents' perceived importance of the performance tasks and of the respondents' abilities to perform the performance tasks were analyzed.



The performance tasks were listed in the order of relative importance and in the order of the respondents' abilities to perform them.

To determine the need for in-service education, percentages were analyzed for the respondents who rated the performance tasks with a response of "Very High or High Importance" and "Moderate, Low or No Ability." The tasks were then ranked according to the percentages of high importance and low ability. It was assumed that a respondent who rated a performance task in the high importance low ability manner was in need of in-service training in that particular area of education.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Introduction

The analysis of the data received from the Michigan business and office education teachers who responded to the questionnaire is presented in four sections. The first section, "Description of the Respondents," includes a demographic profile of the respondents in regard to (a) education, (b) practical work experience, (c) teaching experience, (d) salary increases for in-service, and (e) financial reimbursement for in-service participation.

The second section, "Current Teacher In-Service," reports the current satisfaction with in-service education by Michigan business and office education teachers. This section, also, includes which agency or agencies were providing the major source of in-service education, and the teachers' perceptions as to how in-service should be financed.

The third section, "Preferred Methods of In-Service," includes a ranking of the teachers' preferred methods, formats, and times of day and year for in-service education.

The fourth section, "Performance Tasks," includes a listing of performance tasks based on the teachers' perceptions of the importance of the performance tasks and the

teachers' abilities to perform the performance tasks. This section, also, reports the performance tasks which make up the highest and lowest scores in both the "importance" and "abilities" categories.

A composite frequency distribution of responses to all items included in the data collection is presented in Appendix IV.

### Description of Respondents

#### Education Level

The education level of Michigan business and office education teachers who responded to this study ranged from a bachelor's degree through a doctoral degree. None of the respondents had earned less than a bachelor's degree. As indicated in Table 2, over 73 percent of the respondents held a master's or higher degree. The master's degree holders comprised 69 percent of the respondents. Approximately 4 percent held an educational specialist or doctoral degree.

#### Non-Teaching Work Experience

The years of non-teaching work experience which relates to the respondents' teaching area range from less than one year to ten or more years. The years of non-teaching work experience were grouped into five categories. As listed in Table 3, 73 percent of Michigan business and office education teachers had more than three years of

non-teaching work experience, and over 24 percent had seven or more years of non-teaching work experience.

Table 2 Education Levels Achieved by Michigan Business and Office Education Teachers (N=361)

Education Level	Number of Respondents	Percent of Respondents
Less than Bachelor's Degree	0	0.0
Bachelor's Degree	97	26.9
Master's Degree	249	69.0
Educational Specialist	12	3.3
Doctoral Degree	3	0.8
Total	361	100.0

Table 3 Years of Non-Teaching Work Experience of Michigan Business and Office Education Teachers (N=361)

Non-Teaching Work Experience	Number of Respondents	Percent of Respondents
Less than one year	14	3.9
1 to 2 years	80	22.2
3 to 6 years	178	49.3
7 to 9 years	33	9.1
10 or more years	56	15.5
Total	361	100.0

### Teaching Experience

Table 4 indicates the total years of teaching experience by Michigan business and office education teachers. The highest response was in the six to ten year category with 32.7 percent. Only two teachers indicated that they had less than one year's experience, while 53 percent of the Michigan business and office education teachers had more than eleven years teaching experience.

Table 4 Number of Years of Teaching Experience by Michigan Business and Office Education Teachers (N=361)

Teaching Experience	Number of Respondents	Percent of Respondents
Less than one year	2	0.6
1 to 5 years	46	12.7
6 to 10 years	118	32.7
11 to 15 years	101	27.9
16 or more years	92	25.5
No response	2	0.6
Total	361	100.0

### Salary Increases For In-Service

The teachers were asked if their schools provided salary increases for additional college/university credits or degrees. As Table 5 reveals, over 91 percent of the

teachers stated that their schools provided salary increases for additional credits or degrees.

Table 5 Salary Increases for the Acquisition of Additional College/University Credits or Degrees (N=361)

Response	Number of Respondents	Percent of Respondents
Yes	329	91.1
No	29	8.0
Do not know	1	0.3
No response	2	0.6
Total	361	100.0

When Michigan business and office education teachers were asked if their schools provided salary increases for in-service programs which included non-credit courses, seminars, workshops, and conferences, the majority stated that their schools did not offer salary increases for such programs. Table 6 illustrates that 92 percent of the teachers stated their schools did not offer salary increases; while 6.6 percent said their schools did offer salary increases for the above mentioned types of in-service.

Table 6 Salary Increases for In-Service Programs Including Non-Credit Courses, Seminars, Workshops, and Conferences by Michigan Business and Office Education Teachers (N=361)

Response	Number of Respondents	Percent of Respondents
Yes	24	6.6
No	332	92.0
Do not know	4	1.1
No response	1	0.3
Total	361	100.0

#### Financial Reimbursement For In-Service

One objective of this study was to determine the amount of financial assistance Michigan business and office education teachers received for participation in in-service programs.

The teachers were asked if tuition reimbursement was received for enrollment in credit courses. Table 7 shows the responses to whether tuition reimbursement is received for courses taken for credit. Eighty-two percent of the respondents indicated they did not receive tuition reimbursement while 15.8 percent said they did.

Table 7 Tuition Reimbursement Received for Courses Taken for Credit (N=361)

Response	Number of Respondents	Percent of Respondents
Yes	57	15.8
No	296	82.0
Do not know	3	0.8
No response	5	1.4
Total	361	100.0

The teachers were asked whether they were reimbursed for mileage or other costs associated with conferences, workshops, or seminars. Table 8 indicates 72.6 percent of the respondents were reimbursed while 23 percent of the respondents were not.

Table 8 Reimbursement for Mileage or Other Costs Associated With Conferences, Workshops, or Seminars (N=361)

Response	Number of Respondents	Percent of Respondents
Yes	262	72.6
No	83	23.0
Do not know	4	1.1
No response	12	3.3
Total	361	100.0



### Current Teacher In-Service

#### Degree of In-Service Satisfaction

Table 9 reveals the degree of satisfaction among Michigan business and office education teachers with the in-service education currently being received.

Collectively 55 percent of the respondents were more than satisfied with their in-service education while 42 percent were not satisfied.

Table 9 Degree of Satisfaction of Michigan Business and Office Education Teachers With Current In-Service Education (N=361)

Degree of Satisfaction	Number of Respondents	Percent of Respondents
Very Satisfied	12	3.3
Satisfied	67	18.6
Fairly Satisfied	121	33.5
Not Satisfied	153	42.4
No Response	8	2.2
Total	361	100.0

#### How Current In-Service Needs Are Being Met

Table 10 indicates the agency/individuals providing in-service education to Michigan business and office education teachers.

Thirty-one percent of the respondents specified most of their in-service needs were being supplied by a combination of the agencies identified in the questionnaire. The most commonly mentioned combinations included the categories of vocational director, teacher educators from state universities or colleges, and teacher centers.

Ninety-seven (26.9 percent) of the respondents indicated their in-service needs were "not being met."

Teacher in-service needs were also being met by teacher educators from state universities and colleges (12.5 percent) and local vocational directors (10.8 percent).

Only six of 361 respondents (1.7 percent) indicated their in-service needs were being met by business and office education state supervisors.

### In-Service Financing

Table 11 reveals the teachers' reactions relative to the financing of in-service education programs.

One hundred forty-five (40.2 percent) of the teachers revealed that the local board of education should finance in-service programs, while 109 (30.2 percent) of the teachers said in-service programs should be financed by the state department of education. "Business and industry" and "the teacher" received 4.1 and 4.4 percent respectively. The category "other" received 18.6 percent of the responses. The teachers who selected the "other" category often commented that they perceived that financing of in-service

education should be a shared responsibility. The agencies and individuals most often mentioned for the sharing of costs included the state department of education, the local board of education, and the teacher.

Table 10 Agencies or Individuals Currently Meeting The In-Service Needs of Michigan Business and Office Education Teachers (N=361)

Agency or Individual	Number of Respondents	Percent of Respondents
Vocational director (on site)	39	10.8
Teacher educators from a state university or college	45	12.5
Business and office education state supervisors	6	1.7
School administration	33	9.1
Teacher centers or (professional development centers)	26	7.2
Not being met	97	26.9
Other (Combinations of above)	112	31.0
No response	3	0.8
Total	361	100.0

Table 11 Sources of Funding as Perceived by Michigan Business and Office Education Teachers (N=361)

Agencies or Individuals	Number of Respondents	Percent of Respondents
State Department of Education	109	30.2
Local Board of Education	145	40.2
The Teacher	16	4.4
Business and Industry	15	4.1
Other (Shared Costs)	67	18.6
No response	9	2.5
Total	361	100.0

### Instructional Approaches

Table 12 indicates over 60 percent of the respondents preferred group classroom activities and seminar discussions. The instructional approaches most preferred by Michigan business and office education teachers were: (a) seminar discussions, (b) group classroom activities, and (c) self-paced individualized instruction.

The "other" category indicated a preference for a combination of seminar discussions in a group classroom atmosphere and received 14.9 percent of the response.

Table 12 In-Service Instructional Approaches Most Preferred by Michigan Business and Office Education Teachers (N=361)

Instructional Approaches	Number of Respondents	Percent of Respondents
Group classroom activities	108	30.0
Seminar discussions	111	30.7
TV lectures plus reading and homework and/or local discussion groups	4	1.1
Self-paced individualized work	77	21.3
Correspondence	1	0.3
Other (Combinations)	54	14.9
No response	6	1.7
Total	361	100.0

### Preferred Methods of In-Service

Another objective of this study was to determine the teachers' preferred methods, formats, time of day, and time of year for in-service education. For each question on the survey instrument teachers were asked to indicate their preference in rank order.

### Preferred Method

Table 13 illustrates the rank order of in-service methods preferred by Michigan business and office education teachers. The workshop, seminar, or conference method of

in-service was the first choice. Collectively, 94 percent of the teachers chose workshops, seminars, or conferences as their first or second choice of in-service education; while 59 percent chose teacher centers as their first or second choice as an in-service method.

University courses were ranked third by the respondents. Only 27 percent of the respondents chose university courses as their first or second choice, while 71 percent ranked university courses as their third or fourth choice for in-service education.

The self-study material category was least preferred by Michigan business and office education teachers.

#### In-Service Formats

Michigan business and office education teachers were asked to rank their preference of four different formats of in-service education. Table 14 reveals the results of this ranking.

Two of the four formats listed in the questionnaire were the traditional university-types of format; while the remaining two were traditional workshop or seminar types of format. One of the university formats, "one 3-hour period a week for ten weeks," was ranked first. The "intensive, 6-hours a day for one week" format was ranked second. The "one 6-hour period a month for five months" was ranked third. The other university-type format "three 1-hour periods weekly for ten weeks" was ranked last.

Table 13 Preferred In-Service Methods as Rated by Michigan Business and Office Education Teachers (N=361)

Method	Mean		First Choice	Second Choice	Third Choice	Fourth Choice	No Response
Workshops, seminars, or conferences	1.3	f %	271 75	67 19	12 3	4 1	7 2
Teacher centers	2.3		40 11	173 48	114 32	27 7	7 2
University courses	2.9		29 8	69 19	142 39	114 32	7 2
Self-study materials	3.3		16 4	45 13	86 24	207 57	7 2

Table 14 Preferred In-Service Education Formats as Rated by Michigan Business and Office Education Teachers (N=361)

Format	Mean		First Choice	Second Choice	Third Choice	Fourth Choice	No Response
One 3-hour period a week for ten weeks	1.8	f %	125 34	128 36	79 22	9 2	20 6
Intensive, 6 hours a day for one week	2.0		134 37	79 22	65 18	63 17	20 6
One 6-hour period a month for five months	2.5		71 20	83 23	82 22	105 29	20 6
Three 1-hour periods weekly for ten weeks	3.1		13 4	50 14	114 31	164 45	20 6



### In-Service Scheduling

Four scheduling alternatives were presented to the Michigan business and office education teachers for ranking. These were (a) weekends, (b) early afternoon 2:00-4:00, (c) late afternoon 4:00-6:00, and (d) evenings 7:00-9:00.

Table 15 illustrates that the two "afternoon" alternatives were ranked first and second, while "evenings" and "weekends" were ranked third and fourth respectively.

"Late afternoon (4:00-6:00)" was ranked first. Even though "early afternoon (2:00-4:00)" had the largest number of first choice responses, only 12 percent selected this alternative as a second choice and 36 percent chose it as a third or fourth choice. Therefore, the mean of "early afternoon (2:00-4:00)" was 2.0 which resulted in this scheduling alternative to be ranked second. "Weekends" were ranked last.

### Time of Year For In-Service

After the teachers ranked their preference for in-service methods, formats, and scheduling, the teachers ranked the time of year they preferred to attend in-service activities. These choices were fall, winter, spring, and summer.

As presented in Table 16, the respondents selected "fall" as the first choice as the preferred time of year for in-service. "Spring" was ranked as second choice, and summer and winter were virtually even in the rankings.

Table 15 Preferred In-Service Schedules as Rated by Michigan Business and Office Education Teachers (N=361)

Scheduling	Mean		First Choice	Second Choice	Third Choice	Fourth Choice	No Response
Late afternoon (4:00-6:00)	1.9	f %	93 26	184 51	62 17	8 2	14 4
Early afternoon (2:00-4:00)	2.0		172 48	43 12	64 17	68 19	14 4
Evenings (7:00-9:00)	2.5		43 12	101 28	165 46	38 10	14 4
Weekends	3.3		39 11	20 5	54 15	234 65	14 4

Table 16 Preferred Time of Year for In-Service Activities as Rated by Michigan Business and Office Education Teachers (N=361)

Time Of Year	Mean		First Choice	Second Choice	Third Choice	Fourth Choice	No Response
Fall	1.9	f %	149 41	89 25	86 24	23 6	14 4
Spring	2.3		52 14	146 40	110 31	39 11	14 4
Summer	2.71		97 27	32 9	55 15	163 45	14 4
Winter	2.72		50 14	81 22	95 26	121 34	14 4

## Performance Tasks

### Importance of Performance Tasks

One objective of this study was to rate the importance of the performance tasks listed in the questionnaire. In order to accomplish this, median scores of the performance tasks were analyzed. The tasks were then listed, by median scores, in order of perceived importance by Michigan business and office education teachers.

As Table 17 indicates, all of the performance tasks had a median rating of between "1.0 and 3.0," which indicated that all the performance tasks were considered to be moderately important to very important by the respondents.

The highest rated performance tasks in "importance" with a median score of 1.0 (Very high importance) were:

1. Identify and clarify individual student needs (1).
2. Identify and select appropriate instructional strategies (2).
3. Establish procedures for daily classroom management (10).
4. Develop a classroom environment/climate conducive to learning (11).

Two of the tasks were concerned with "course planning and instruction" while the other two were from the "classroom/student management" section of the questionnaire.

Two performance tasks received a median score of 3.0 (moderate importance), which was the lowest score

received. The lowest rated performance tasks as perceived by the teachers were:

1. Operate a student vocational organization (13).
2. Identify and clarify the role of the student vocational organization in your field (32).

One task was from the educational area of "classroom/student management" and the other from "program planning." Both of the low rated tasks were concerned with student vocational organizations. All the remaining tasks received a median score of 2.0 (high importance) and included all tasks from the sections of evaluation, coordination, special needs, post-instructional, public relations, and administrative on the questionnaire.

According to Michigan business and office education teachers, all of the performance tasks were rated as above moderate importance. None of the performance tasks were considered to be of "low" or "no" importance. Performance tasks which were concerned with course planning, instruction, and classroom/student management were considered the most important. Tasks which were involved with special needs and public relations were also considered important, while the tasks which were considered administrative in nature and dealt with student vocational organizations were considered of moderate importance.

Table 17 Performance Task Importance as Perceived by Michigan Business and Office Education Teachers

List (a)	Item No.	Performance Task	Median
Very High Importance	1	Identify and clarify individual student needs	1.0
	2	Identify and select appropriate instructional strategies	1.0
	10	Establish procedures for daily classroom management	1.0
	11	Develop a classroom environment/ climate conducive to learning	1.0
High Importance	3	Select and prepare course objectives	2.0
	4	Select and organize broad course content	2.0
	5	Identify and select existing instructional materials	2.0
	6	Prepare appropriate multi-media materials	2.0
	7	Select and utilize appropriate class presentation techniques	2.0
	8	Select and utilize appropriate individual instruction techniques	2.0
	9	Organize and maintain a vocational laboratory	2.0
	12	Establish and maintain a filing/ record keeping system	2.0
	14	Identify and implement appropriate means for monitoring and motivating student progress	2.0
	15	Identify and implement appropriate means for assessing student performance	2.0

Table 17 Continued.

List (a)	Item No.	Performance Task	Median
High Importance	16	Select and implement an appropriate system of overall program evaluation	2.0
	17	Select and implement an appropriate system of course evaluation	2.0
	18	Identify and select appropriate training stations	2.0
	19	Develop and implement criteria and procedures for the selection and placement of cooperative education students	2.0
	20	Develop and implement a system for coordinating the learning experiences of cooperative education students	2.0
	21	Develop and implement a procedure for periodic re-evaluation of student training stations	2.0
	22	Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc.	2.0
	23	Identify students whose performance is impaired by chemical dependency, e.g., drugs and/or alcohol	2.0
	24	Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc.	2.0
	25	Adjust the learning and classroom environment to better serve individual students with special needs	2.0

Table 17 Continued.

List (a)	Item No.	Performance Task	Median
High Importance	26	Adjust the curriculum and materials to better serve individual students with special needs	2.0
	27	Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs	2.0
	28	Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.	2.0
	29	Assess the need for a vocational program in your field	2.0
	30	Organize and operate an advisory committee in your field	2.0
	31	Develop and maintain a program budget	2.0
	33	Assist students in locating, applying for, and obtaining appropriate post-program employment and/or identifying further education	2.0
	34	Develop and implement a system for a follow-up of program graduates	2.0
	35	Identify and implement appropriate public relations activities for promoting the district and the school	2.0
	36	Identify and implement appropriate public relations activities for promoting your program and courses	2.0



Table 17 Continued.

List (a)	Item No.	Performance Task	Median
High Importance	37	Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field	2.0
	38	Develop and implement criteria for the selection of teachers in your field	2.0
	39	Develop and implement an appropriate procedure for informing superiors of your program status and needs, etc.	2.0
Moderate Importance	13	Operate a student vocational organization	3.0
	32	Identify and clarify the role of the student vocational organization in your field	3.0

Key: (a) = Listing based on the median score of the respondents' perception of the importance of the performance task.

Item No. = Number on questionnaire.

Median = The respondents' ratings of their perception of the importance of the performance tasks. (1 = Very high, 2 = High, 3 = Moderate, 4 = Low, 5 = No)

### Abilities To Perform The Performance Tasks

Table 18 is a listing of the beliefs of Michigan business and office education teachers as they perceive their ability to execute the performance tasks listed in the questionnaire. The median score for all tasks was between "1.0 and 3.0" which indicates the teachers perceived their abilities to be "very high" to "moderate."

Of all the tasks listed, the one that teachers believed they were most competent to perform was "establish procedures for daily classroom management." This task also scored high in task importance.

Twenty three tasks received a median score of 2.0 (high ability) from the teachers. These tasks were primarily from the educational areas of (a) course planning and instruction, (b) classroom student management, (c) evaluation, (d) coordination, and (e) program planning.

A median score of 3.0 (moderate ability) was received by 15 of 39 performance tasks. The lower rated performance tasks were made up of many administrative type tasks and all tasks associated with special needs. Many of the tasks the teachers rated as "moderate ability" were also rated as "high importance" by the respondents, particularly the special needs tasks.

Table 18 Performance Task Abilities as Perceived by Michigan Business and Office Education Teachers

List (a)	Item No.	Performance Task	Median
Very High Ability	10	Establish procedures for daily classroom management	1.0
	1	Identify and clarify individual student needs	2.0
High Ability	2	Identify and select appropriate instructional strategies	2.0
	3	Select and prepare course objectives	2.0
	4	Select and organize broad course content	2.0
	5	Identify and select existing instructional materials	2.0
	7	Select and utilize appropriate class presentation techniques	2.0
	8	Select and utilize appropriate individual instruction techniques	2.0
	9	Organize and maintain a vocational laboratory	2.0
	11	Develop a classroom environment/ climate conducive to learning	2.0
	12	Establish and maintain a filing/ record keeping system	2.0
	14	Identify and implement appropriate means for monitoring and motivating student progress	2.0
	15	Identify and implement appropriate means for assessing student performance	2.0
	16	Select and implement an appropriate system of overall program evaluation	2.0

Table 18 Continued.

List (a)	Item No.	Performance Task	Median
High Ability	17	Select and implement an appropriate system of course evaluation	2.0
	18	Identify and select appropriate training stations	2.0
	19	Develop and implement criteria and procedures for the selection and placement of cooperative education students	2.0
	20	Develop and implement a system for coordinating the learning experiences of cooperative education students	2.0
	29	Assess the need for a vocational program in your field	2.0
	30	Organize and operate an advisory committee in your field	2.0
	31	Develop and maintain a program budget	2.0
	33	Assist students in locating, applying for, and obtaining appropriate post-program employment and/or identifying further education	2.0
	36	Identify and implement appropriate public relations activities for promoting your program and courses	2.0
	39	Develop and implement an appropriate procedure for informing superiors of your program status and needs, etc.	2.0
	6	Prepare appropriate multi-media materials	3.0
	13	Operate a student vocational organization	3.0

Table 18 Continued.

List (a)	Item No.	Performance Task	Median
Moderate Ability	21	Develop and implement a procedure for periodic re-evaluation of student training stations	3.0
	22	Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc.	3.0
	23	Identify students whose performance is impaired by chemical dependency, e.g., drugs and/or alcohol	3.0
	24	Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc.	3.0
	25	Adjust the learning and classroom environment to better serve individual students with special needs	3.0
	26	Adjust the curriculum and materials to better serve individual students with special needs	3.0
	27	Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs	3.0
	28	Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.	3.0
	32	Identify and clarify the role of the student vocational organization in your field	3.0

Table 18 Continued.

List (a)	Item No.	Performance Task	Median
Moderate Ability	34	Develop and implement a system for a follow-up of program graduates	3.0
	35	Identify and implement appropriate public relations activities for promoting the district and the school	3.0
	37	Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field	3.0
	38	Develop and implement criteria for the selection of teachers in your field	3.0

Key: (a) = Listing based on the median score of the respondents' ability to perform the performance task.

Item No. = Number on questionnaire.

Median = The respondents' ratings of their ability to perform the performance task. (1 = Very high, 2 = High, 3 = Moderate, 4 = Low, 5 = No)

In-Service Needs as Perceived  
by The Teachers

A major objective of this study was to identify in-service needs of Michigan business and office education teachers.

Table 19 is a ranking of perceived in-service needs by Michigan business and office education teachers. A performance task which was rated high in importance was not always a good indicator that in-service was needed for that task. Many tasks were rated high in importance by teachers who also perceived themselves as having very high abilities to perform the tasks. Therefore, in-service was not particularly needed for tasks rated in the "high importance" and "high ability" manner.

All seven performance tasks concerned with special needs situations were among the top ten performance tasks the teachers rated as needing in-service education. Listed with the top ten, also, were both tasks dealing with public relations activities where the teacher needs to promote his or her school, district, or program of courses.

The coordination activities involving cooperative education students were rated relatively high as an area the teachers needed in-service education. Also rated at the same level as coordination activities were performance tasks associated with administrative duties. Administrative tasks involved duties which required personal interaction and communication between the teacher and other school personnel.

Table 19 Rank Order of In-Service Needs as Perceived by Michigan Business and Office Education Teachers

Rank (a)	Item No.	Performance Task	Percent MD
1	28	Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.	71.10 .897
2	23	Identify students whose performance is impaired by chemical dependency, e.g., drugs and/or alcohol	70.05 .798
3	27	Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs	67.45 .593
4	35	Identify and implement appropriate public relations activities for promoting the district and the school	66.20 .599
5	22	Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc.	66.05 .631
6	25	Adjust the learning and classroom environment to better serve individual students with special needs	65.50 .559
7	36	Identify and implement appropriate public relations activities for promoting your program and courses	65.10 .562
8	26	Adjust the curriculum and materials to better serve individual students with special needs	64.25 .532
9	24	Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc.	63.00 .523



Table 19 Continued.

Rank (a)	Item No.	Performance Task	Percent MD
10	20	Develop and implement a system for coordinating the learning experiences of cooperative education students	61.10 .412
11	21	Develop and implement a procedure for periodic re-evaluation of student training stations	60.80 .418
12	38	Develop and implement criteria for the selection of teachers in your field	60.10 .482
13	37	Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field	59.95 .443
14	16	Select and implement an appropriate system of overall program evaluation	59.85 .363
15	6	Prepare appropriate multi-media materials	59.85 .319
16	19	Develop and implement criteria and procedures for the selection and placement of cooperative education students	59.25 .405
17	14	Identify and implement appropriate means for monitoring and motivating student progress	58.75 .393
18	17	Select and implement an appropriate system of course evaluation	58.20 .310
19	31	Develop and maintain a program budget	58.15 .283
20	39	Develop and implement an appropriate procedure for informing superiors of your program status and needs, etc.	57.75 .374

Table 19 Continued.

Rank (a)	Item No.	Performance Task	Percent MD
21	34	Develop and implement a system for a follow-up of program graduates	57.10 .372
22	18	Identify and select appropriate training stations	55.70 .258
23	15	Identify and implement appropriate means for assessing student performance	55.40 .275
24	33	Assist students in locating, applying for, and obtaining appropriate post-program employment and/or identifying further education	55.25 .261
25	7	Select and utilize appropriate class presentation techniques	55.10 .286
26	2	Identify and select appropriate instructional strategies	55.00 .374
27	1	Identify and clarify individual student needs	54.85 .452
28	8	Select and utilize appropriate individual instruction techniques	54.85 .244
29	29	Assess the need for a vocational program in your field	53.35 .163
30	9	Organize and maintain a vocational laboratory	52.80 .186
31	30	Organize and operate an advisory committee in your field	52.45 .147
32	11	Develop a classroom environment/ climate conducive to learning	51.70 .238
33	3	Select and prepare course objectives	51.55 .095

Table 19 Continued.

Rank (a)	Item No.	Performance Task	Percent MD
34	32	Identify and clarify the role of the student vocational organization in your field	50.55 .075
35	12	Establish and maintain a filing/record keeping system	50.40 .017
36	10	Establish procedures for daily classroom management	49.45 .069
37	4	Select and organize broad course content	49.20 .008
38	5	Identify and select existing instructional materials	48.90 .053
39	13	Operate a student vocational organization	48.20 .008

Key: (a) = Ranking based on percent of teachers needing in-service education for performance tasks.

Item No. = Number on questionnaire.

Percent = Percent of the teachers who responded to a performance task with "Very High or High Importance" and "Moderate, Low, or No Ability."

MD = Mean difference of "abilities" and "importance" for each performance task.

As a group, performance tasks associated with course planning, instruction, classroom/student management, and post-instructional activities all were rated low in need for in-service education. Performance tasks involved with student vocational organizations were ranked very low by the Michigan business and office education teachers as areas they perceived to need in-service education.

### Summary

The purpose of this chapter was to present the "Analysis of the Data" reported by the Michigan business and office education teachers as follows:

Section I - This section included a demographic description of the respondents.

Section II - This section reported the current teacher satisfaction with the in-service education being received.

Section III - This section included a series of rankings which consisted of the teachers' preferred methods, formats, time of day, and time of year for in-service education.

Section IV - This section contained the teachers' perceptions of the importance and their ability to perform a list of 39 performance tasks. This section also identified performance tasks in which there was a need for in-service education as perceived by the teachers.

## CHAPTER V

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains (1) a summary of the problem researched, the research methods utilized, and the major findings; (2) a presentation of the conclusions; and (3) a list of recommendations.

#### The Problem Researched, Research Methods, and Findings

##### Statement of the Problem

The problem of this study was to: (1) identify the in-service needs of Michigan business and office education teachers, and (2) to determine the perceptions of the teachers regarding the importance of their daily performance tasks, as well as their ability to perform the same tasks.

This study was designed to encourage teachers to participate in identifying their own teaching skills, by levels of difficulty, for possible use in determining future in-service programs. Other related in-service areas examined were the opinions held by Michigan business and office education teachers regarding the desirability of various instructional formats, delivery system approaches, financing procedures, and scheduling times for in-service teacher education programs.

The following research questions also were associated with the problem of this study:

1. What is the demographic profile of the population; and what demographic patterns emerged in regard to (a) practical work experience, (b) teaching experience, (c) salary increases for in-service, and (d) financial reimbursement for in-service?

2. What is the degree of satisfaction among Michigan business and office education teachers with current in-service training?

3. Which agency or agencies are providing the major source of in-service education for Michigan business and office education teachers?

4. How do Michigan business and office education teachers feel in-service education should be financed in the state of Michigan?

5. What do Michigan business and office education teachers perceive as the preferred method, format, location, and time of day and year for in-service education?

6. In the area of perceived importance by teachers, which performance tasks are rated high or low in importance?

7. In the area of perceived ability to perform by the teachers, which performance tasks are rated high ability or low ability by the teachers?

### Methods of Data Collection

The population for this study consisted of individuals who were business and office education teachers employed in Michigan vocationally-reimbursed secondary schools.

At the time this study was conducted, there were 404 secondary schools receiving vocational reimbursement that operated one or more business and office education classes. One business and office education teacher from each school was chosen to represent the selected sample from the population used.

A questionnaire was developed and piloted. The instrument contained two sections. The first section was intended to gather demographic information from the respondents and included a series of four questions asking the teachers to rank their preferences for in-service methods, formats, and time of day and year.

The second section of the questionnaire contained a list of 39 performance tasks which business and office education teachers were likely to perform. The 39 performance tasks were classified under the following nine areas of instruction:

1. Course planning and instruction
2. Classroom/student management
3. Evaluation
4. Coordination
5. Special needs
6. Program planning
7. Post-instructional activities
8. Public relations
9. Administrative

The teachers were asked to indicate their perceptions of the importance of each performance task and their ability to perform each performance task. The respondents were asked to use a five point scale for rating importance.

In February, 1981, the questionnaire, cover letter, and addressed envelope were mailed to a business and office education teacher in each of the 404 reimbursed schools. A follow-up letter was mailed on March 15, 1981. There were 361 usable returns out of the 404 mailed to the Michigan business and office education teachers. The response rate for the study was 89 percent.

The data obtained from the instruments were key-punched on cards for computer input. Statistical analysis of the data was accomplished through the use of the Bio-Med (BMD) program from the Health Sciences Computing Facility (1978) developed at the University of California Los Angeles and made available through the Michigan State University Computer Center. Descriptive information was received which included frequencies, means, medians, and percentages for each variable.

### Findings

The data in this study were compiled from responses of Michigan business and office education teachers and are presented in four major categories. The categories include (a) description of respondents, (b) current in-service satisfaction, (c) preferred methods of in-service, and (d)



performance tasks. The following is a summary of the findings related to the research questions presented in this study.

Description of Respondents. This section was in response to research question number one which includes information from questions 1, 2, 3, 4, 5, 8, and 9 on the questionnaire. Frequencies and percentages were used to describe the teachers' responses in an effort to identify demographic trends and patterns.

1. What is the demographic profile of the population; and what demographic patterns emerged in regard to (a) practical work experience, (b) teaching experience, (c) salary increases for in-service, and (d) financial reimbursement for in-service?

The data from the teachers indicated that over 73 percent of the respondents held a master's or higher degree. The master's degree holders comprised 69 percent of the respondents and approximately 4 percent held an educational specialist or doctoral degree.

Over 73 percent of the Michigan business and office education teachers had more than three years of non-teaching work experience, and over 24 percent had seven or more years of non-teaching work experience in the same field in which they were teaching.

The years of teaching experience were relatively evenly distributed. However, the teachers were highly

experienced. The highest response was in the six to ten year category with 32.7 percent. Only two teachers indicated that they had less than one year's experience, while 53 percent of the teachers had more than eleven years teaching experience.

In respect to salary increases for in-service activities, over 91 percent stated there were salary increases for the acquisition of college/university credits or degrees. The findings were opposite for participation in non-credit courses, workshops, seminars, or conferences, as 92 percent of the teachers stated there were no salary increases for those kinds of activities.

Financial reimbursement for in-service activities established an opposite pattern than salary increases for in-service. Eighty-two percent stated they receive no tuition reimbursement for courses taken for credit. Seventy-two percent of the teachers receive reimbursement for mileage and other costs associated with workshops, seminars, or conferences, while 23 percent stated they receive no reimbursement for this type of in-service education.

Current In-Service Satisfaction. This section was in response to research questions two, three, and four which includes information from questions 6, 7, 10, and 11 on the questionnaire. Frequencies and percentages were used to describe the teachers' responses regarding their satisfaction with current in-service education.

2. What is the degree of satisfaction among Michigan business and office education teachers with current in-service training?

Fifty-five percent of the respondents were satisfied with their in-service training while 42 percent were "not satisfied."

The instructional approaches most preferred by Michigan business and office education teachers were: (a) seminar discussions, (b) group classroom activities, and (c) self-paced individualized instruction. Over 60 percent of the respondents preferred group classroom activities and seminar discussions.

The "other" category indicated a preference for a combination of seminar discussions in a group classroom atmosphere and received 14.9 percent of the response.

3. Which agency or agencies are providing the major source of in-service education for Michigan business and office education teachers?

Thirty-one percent of the respondents specified most of their in-service needs were being supplied by a combination of the agencies identified in the questionnaire. The most commonly mentioned combinations included the categories of vocational director, teacher educators from state universities or colleges, and teacher centers.

Ninety-seven (26.9 percent) of the respondents indicated their in-service needs were "not being met."

Teacher in-service needs were also being met by teacher educators from state universities and colleges (12.5 percent) and local vocational directors (10.8 percent).

Only six of 361 respondents (1.7 percent) indicated their in-service needs were being met by business and office education state supervisors.

4. How do Michigan business and office education teachers feel in-service education should be financed in the state of Michigan?

One hundred forty-five (40.2 percent) of the teachers revealed that the local board of education should finance in-service programs, while 109 (30.2 percent) of the teachers said in-service programs should be financed by the state department of education. The "other" category received 18.6 percent of the responses. The teachers who selected the "other" category often commented that they perceived that financing of in-service education should be a shared responsibility. The agencies and individuals most often mentioned for the sharing of costs included the state department of education, the local board of education, and the teacher.

Preferred Methods of In-Service. This section was in response to research question number five which includes information from questions 12, 13, 14, and 15 on the questionnaire. Frequencies, percentages, and means, were used to rank the teachers' preferences according to first, second, third, and fourth choice.

5. What do Michigan business and office education teachers perceive as the preferred method, format, location, and time of day and year for in-service education?

The ranking of in-service methods in order of preference by Michigan business and office education teachers resulted in the following:

- (a) Workshops, seminars, or conferences
- (b) Teacher centers
- (c) University courses
- (d) Self-study materials

Collectively, 94 percent of the teachers chose workshops, seminars, or conferences as their first or second choice of in-service training, while 59 percent chose teacher centers as their first or second choice of in-service method. The third ranked method of in-service was attending university courses while self-study materials was the last choice among the teachers.

The preferences of in-service formats by the Michigan teachers were as follows:

- (a) One 3-hour period a week for ten weeks
- (b) Intensive, 6 hours a day for one week
- (c) One 6-hour period a month for five months
- (d) Three 1-hour periods weekly for ten weeks

One university type format "one 3-hour period a week for ten weeks" was ranked first, while another university type format "three 1-hour periods weekly for ten weeks" was ranked last by the Michigan teachers. The format "intensive, 6 hours a day for one week" was ranked second by the respondents.

The ranking of in-service scheduling preferences by Michigan business and office education teachers were:

- (a) Late afternoon (4:00-6:00)
- (b) Early afternoon (2:00-4:00)
- (c) Evenings (7:00-9:00)
- (d) Weekends

The two "afternoon" alternatives were ranked first and second, while "evenings" and "weekends" were ranked third and fourth respectively. The afternoon alternatives were particularly appealing to the teachers if afternoon release time could be obtained from their schools.

The ranking of the preferences for the time of year of in-service activities were as follows:

- (a) Fall
- (b) Spring
- (c) Summer
- (d) Winter

The Michigan business and office education teachers ranked "fall" as their first choice for the time of year for in-service activities, while "spring" was selected as the second choice. Summer and winter were virtually even in the rankings, however, winter received a slightly lower rating and was therefore ranked fourth by the teachers.

Performance Tasks. This section was in response to research questions number six and seven which includes all information obtained from Section II of the questionnaire. The median scores of the performance tasks were used to list the teachers' perceptions of "importance" and their "ability to perform" each performance task. The "need for in-service

education" was determined by the use of calculated percentages of very high and high importance with moderate, low, or no ability.

6. In the area of perceived importance by teachers, which performance tasks are rated high or low in importance?

According to the Michigan business and office education teachers all the performance tasks rated very high, high, or moderate in importance. The highest rated performance tasks were:

- (a) Identify and clarify individual student needs.
- (b) Identify and select appropriate instructional strategies.
- (c) Establish procedures for daily classroom management.
- (d) Develop a classroom environment/climate conducive to learning.

The lowest rated performance tasks as perceived by the teachers were:

- (a) Operate a student vocational organization.
- (b) Identify and clarify the role of the student vocational organization in your field.

The consensus according to Michigan business and office education teachers was that performance tasks concerned with course planning and instruction, and classroom/student management were considered the most important. Tasks which were involved with special needs and public relations were considered important, while the tasks which were administrative in nature and tasks concerned with student vocational organizations were considered the least important.

7. In the area of perceived ability to perform by the teachers, which performance tasks are rated high ability or low ability by the teachers?

The Michigan teachers rated themselves as having very high ability in only one task. The highest rated task in ability to perform was:

- (a) Establish procedures for daily classroom management.

There were also relatively high ratings for tasks involved with course planning and instruction, classroom student management, evaluation, coordination, and program planning. There was a tendency toward high ability ratings for many of the same tasks the teachers rated high in importance.

The Michigan teachers rated their ability to perform performance tasks lowest in the following areas:

- (a) Prepare appropriate multi-media materials.
- (b) Operate a student vocational organization.
- (c) Develop and implement a procedure for periodic re-evaluation of student training stations.
- (d) Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc.
- (e) Identify students whose performance is impaired by chemical dependency, e.g., drugs or alcohol.
- (f) Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc.
- (g) Adjust the learning and classroom environment to better serve individual students with special needs.



- (h) Adjust the curriculum and materials to better serve individual students with special needs.
- (i) Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs.
- (j) Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.
- (k) Identify and clarify the role of the student vocational organization in your field.
- (l) Develop and implement a system for a follow-up of program graduates.
- (m) Identify and implement appropriate public relations activities for promoting the district and the school.
- (n) Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field.
- (o) Develop and implement criteria for the selection of teachers in your field.

The lower ranking performance tasks were made up of many administrative type tasks, and included all tasks associated with special needs situations.

One of the major goals of this study was to identify in-service needs of Michigan business and office education teachers. The percentages between the high importance and lower ability responses were calculated. The responses indicated specific areas of performance tasks needed for in-service education. Three of the top in-service needs listed were to:

- (a) Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc.
- (b) Identify students whose performance is impaired by chemical dependency, e.g., drugs or alcohol.

- (c) Identify resources, both in and outside of the school setting, to aid in the development of individual students with special needs.

The Michigan teachers indicated in-service education was needed for performance tasks associated with the following educational areas:

- (a) All seven tasks concerned with "special needs."
- (b) Tasks associated with "public relations."
- (c) Cooperative education tasks, "coordination."

Performance tasks associated with student vocational organizations were listed near or at the bottom of the in-service needs list as perceived by the teachers.

### Conclusions

The following conclusions evolved as a result of the study of Michigan business and office education teachers:

1. The majority of Michigan respondents who participated in this study were experienced teachers. Over 70 percent of the teachers had already received a masters' degree; over 74 percent experienced three or more years of non-teaching work experience in a related work area; and over 85 percent had been teaching more than six years.

2. The analysis of data indicated that periodic salary increases may be received through the acquisition of additional college/university credits or degrees. Over 90 percent of the Michigan business and office education teachers stated they do not receive salary increases for attending in-service workshops, seminars, or conferences.

3. New techniques and strategies may need to be developed to increase the degree of satisfaction for teacher in-service activities since over 40 percent were not satisfied with their current in-service education.

4. No particular agency or group of individuals appears to be a dominant figure in meeting the teachers' in-service needs. The study indicated a sizable number of teachers' in-service needs were being met by a combination of agencies, although 27 percent of the teachers stated their needs were not being met.

5. The Michigan business and office education teachers conceive the funding of in-service activities as a multiple or shared responsibility. The teachers stated the state department of education and local board of education should pay for in-service education.

6. Data from this study indicates Michigan business and office education teachers prefer early or late afternoon periods during the fall or spring for in-service education.

7. Data from this study indicated that workshops, seminars, or conferences, including group classroom activities and seminar discussions may be effective instructional approaches and methods for presenting in-service education to Michigan business and office education teachers.

8. All performance tasks were perceived as at least moderately important by the teachers, and none of the tasks were considered low or of no importance.

9. It appears the respondents perceive their abilities high in many of the same task areas that they considered high in importance. These areas included course planning and instruction, and classroom/student management.

10. In-service education is perceived as needed for tasks involved with special needs situations, tasks dealing with the public relations aspects of their courses and programs, and tasks associated with cooperative education and coordination activities.

#### Recommendations

Based on the findings of this study, the following recommendations were made:

1. Additional in-service education should be provided for Michigan business and office education teachers in the areas of teaching special needs students, public relations, and coordination activities.

2. Consideration should be given to providing released time for afternoon in-service activities.

3. In the state of Michigan, in-service activities for business and office education teachers should be intensified in the fall and spring.

4. Emphasis needs to be given for the greater use of various workshops, seminars, or conference methods and formats of in-service education, including group classroom activities and seminar discussions.

5. Vocational directors, state supervisors, curriculum coordinators, and teacher educators interested in improving business and office education in-service activities should consider the findings of this study.

Based on the findings of this study, the following recommendations for further research were made:

1. Further research should be conducted to determine the feasibility of increasing the joint efforts between teacher centers, school districts, colleges, universities, and other agencies for presenting in-service education.

2. Further studies should be made as to why tasks associated with student vocational organizations, as well as other lower-rated performance tasks, were considered of less importance than other tasks by the Michigan business and office education teachers.

3. Further studies should be conducted exploring possible changes in the areas of salary incentives and reimbursements for participation in various in-service education which includes college/university courses, workshops, seminars, and conferences.

4. Additional studies should be conducted to determine if any of the performance tasks used in this study need to be revised or deleted.

5. Further studies should be conducted to determine if relationships exist between the performance tasks and related demographic factors used in this study.

## APPENDIX I

MICHIGAN VOCATIONAL OFFICE EDUCATION  
INSTRUCTORS IN-SERVICE NEEDS ASSESSMENT

104

Conducted by  
Lynn Ryckman

Q U E S T I O N N A I R E

This study is being conducted in an effort to identify the IN-SERVICE NEEDS of Michigan secondary vocationally reimbursed business and office education teachers as PERCEIVED BY the Michigan business and office education teacher.

The following definitions may be helpful in clarifying the following questions and statements:

IN-SERVICE EDUCATION - Effort to promote professional growth and development of teachers with activities which could include university courses, workshops, seminars, teacher centers, self-study, or conferences sponsored by business and industry.

TEACHER CENTERS - A place where in-service programs take place which is organized, planned, and operated locally by teachers either on-site or in changing locations in the intermediate school district.

ON-SITE IN-SERVICE - In-service programs offered at a teacher's home school.

SECTION I

Directions: Section I is designed to collect information about the teaching background and work experience of the respondent and also try to determine the preferred method of in-service education as perceived by Michigan business and office education teachers. Please check the response that best approximates you or your opinion. Please respond to each item. Thank you.

PERSONAL DATA AND PREFERRED METHOD OF IN-SERVICE:

1. Indicate highest level of formal education completed.  

<input type="checkbox"/> Less than Bachelor's Degree	<input type="checkbox"/> Educational Specialist
<input type="checkbox"/> Bachelor's Degree	<input type="checkbox"/> Doctoral Degree
<input type="checkbox"/> Master's Degree	
2. Indicate your total years of non-teaching work experience which relates to your teaching area.  

<input type="checkbox"/> Less than one year	<input type="checkbox"/> 7 to 9 years
<input type="checkbox"/> 1 to 2 years	<input type="checkbox"/> 10 or more years
<input type="checkbox"/> 3 to 6 years	
3. Indicate your total years of teaching experience in vocational business and office education programs.  

<input type="checkbox"/> Less than one year	<input type="checkbox"/> 11 to 15 years
<input type="checkbox"/> 1 to 5 years	<input type="checkbox"/> 16 or more years
<input type="checkbox"/> 6 to 10 years	
4. Does the salary schedule at your school provide salary increases for the acquisition of additional college/university credits or degrees?  

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know
------------------------------	-----------------------------	--------------------------------------
5. Does the salary schedule at your school provide salary increases for other in-service programs, e.g. non-credit courses, seminars, workshops, and conferences, etc.?  

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know
------------------------------	-----------------------------	--------------------------------------
6. How is most of your technical updating and in-service education currently being met? (Check one)  

<input type="checkbox"/> Vocational director (on site)	<input type="checkbox"/> Teacher centers or (professional development centers)
<input type="checkbox"/> Teacher educators from a state university or college	<input type="checkbox"/> Not being met
<input type="checkbox"/> Business & office education state supervisors	<input type="checkbox"/> Other (Please specify) _____
<input type="checkbox"/> School administration	

7. To what degree are you satisfied with the in-service training you are now receiving? (Check one)
- ☐ Very satisfied                      ☐ Fairly satisfied  
☐ Satisfied                              ☐ Not satisfied
8. Does your school reimburse you for mileage, meals, or other costs associated with conferences, workshops, seminars, or meetings held away from your school?
- ☐ Yes              ☐ No              ☐ Do not know
9. Do you receive tuition reimbursement for courses taken for credit?
- ☐ Yes              ☐ No              ☐ Do not know
10. Who should pay for in-service education or technical updating of vocational business and office education teachers? (Check one)
- ☐ State Department of Education              ☐ Business and Industry  
☐ Local Board of Education                      ☐ Other (Please specify) \_\_\_\_\_  
☐ The teacher
11. Which of the following instructional approaches do you most prefer? (Check one)
- ☐ Group classroom activities              ☐ Self-paced individualized work  
☐ Seminar discussions                      ☐ Correspondence  
☐ TV lectures plus reading and homework and/or local discussion groups.              ☐ Other (Please specify) \_\_\_\_\_

Please answer questions 12 through 15 using the RANKING METHOD. For each question, RANK each offering with: 1 for first choice; 2 for second choice; 3 for third choice; and 4 for last choice. Thank you.

12. Which in-service method do you prefer? (RANK - See directions above)
- ☐ University courses                      ☐ Workshops, seminars, or conferences  
☐ Teacher centers (Professional development centers, local or on-site)              ☐ Self-study materials
13. Which of the following course or workshop formats do you most prefer? (RANK - See directions above)
- ☐ Intensive format, i.e., 6 hours a day for one week.              ☐ Three 1-hour periods weekly for ten weeks.  
☐ One 3-hour period a week for ten weeks.              ☐ One 6-hour period a month for five months.
14. Of the following times for scheduling courses or workshops, which do you prefer? (RANK - See directions above)
- ☐ Weekends                              ☐ Late afternoon (4:00-6:00)  
☐ Early afternoon (2:00-4:00)              ☐ Evenings (7:00-9:00)
15. Of the following possible time of year when courses are offered, which do you prefer? (RANK - See directions above)
- ☐ Fall                                      ☐ Spring  
☐ Winter                                      ☐ Summer

(Please continue to the next page)



SECTION II

**Directions:** Section II consists of a list of performance tasks that are likely to be performed at some time by Michigan business and office education teachers. Each performance task requires TWO RESPONSES. In the first column indicate your perception of your ABILITY to perform that task, and in the second column indicate your perception of the IMPORTANCE of the task.

- Very High Ability (Importance) - Maximum (essential)  
High Ability (Importance) - Above average, better than typical (helpful but not essential)  
Moderate Ability (Importance) - Average, typical (needed for minimum performance)  
Low Ability (Importance) - Not as good as typical (could be desirable, but not necessarily important)  
No Ability (Importance) - Very poor ability (need not be considered important)

Please respond to each item. Thank you.

	<u>ABILITY</u>					<u>IMPORTANCE</u>				
	Very High	High	Moderate	Low	No	Very High	High	Moderate	Low	No
<u>COURSE PLANNING AND INSTRUCTION</u>										
1. Identify and clarify individual student needs . . . . .										
2. Identify and select appropriate instructional strategies . . . . .										
3. Select and prepare course objectives . . . . .										
4. Select and organize broad course content . . . . .										
5. Identify and select existing instructional materials . . . . .										
6. Prepare appropriate multi-media materials . . . . .										
7. Select and utilize appropriate class presentation techniques . . . . .										
8. Select and utilize appropriate individual instruction techniques . . . . .										
9. Organize and maintain a vocational laboratory . . . . .										
<u>CLASSROOM/STUDENT MANAGEMENT</u>										
10. Establish procedures for daily classroom management . . . . .										
11. Develop a classroom environment/ climate conducive to learning . . . . .										
12. Establish and maintain a filing/ record keeping system . . . . .										
13. Operate a student vocational organization . . . . .										
14. Identify and implement appropriate means for monitoring and motivating student progress . . . . .										

ABILITY

IMPORTANCE

107

EVALUATION

15. Identify and implement appropriate means for assessing student performance . . .
16. Select and implement an appropriate system of overall program evaluation .
17. Select and implement an appropriate system of course evaluation . . . . .

Very High	High	Moderate	Low	No

Very High	High	Moderate	Low	No

COORDINATION

18. Identify and select appropriate training stations . . . . .
19. Develop and implement criteria and procedures for the selection and placement of cooperative education students.
20. Develop and implement a system for coordinating the learning experiences of cooperative education students . . .
21. Develop and implement a procedure for periodic re-evaluation of student training stations . . . . .



SPECIAL NEEDS

22. Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc. . . . .
23. Identify students whose performance is impaired by chemical dependency, e.g., drugs and/or alcohol . . . . .
24. Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc. . . .
25. Adjust the learning and classroom environment to better serve individual students with special needs . .
26. Adjust the curriculum and materials to better serve individual students with special needs . . . . .
27. Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs . . . . .
28. Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc. . . . .



PROGRAM PLANNING

29. Assess the need for a vocational program in your field . . . . .
30. Organize and operate an advisory committee in your field . . . . .



	<u>ABILITY</u>					<u>IMPORTANCE</u>				
	Very High	High	Moderate	Low	No	Very High	High	Moderate	Low	No
31. Develop and maintain a program budget .										
32. Identify and clarify the role of the student vocational organization in your field . . . . .										

POST-INSTRUCTIONAL

33. Assist students in locating, applying for, and obtaining appropriate post-program employment and/or identifying further education . . . . .										
34. Develop and implement a system for a follow-up of program graduates . . . . .										

PUBLIC RELATIONS

35. Identify and implement appropriate public relations activities for promoting the district and the school . . .										
36. Identify and implement appropriate public relations activities for promoting your program and courses . . . .										

ADMINISTRATIVE

37. Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field . . . . .										
38. Develop and implement criteria for the selection of teachers in your field . . . . .										
39. Develop and implement an appropriate procedure for informing superiors of your program status and needs, etc. . .										

THANK YOU

## APPENDIX II

## MICHIGAN STATE UNIVERSITY

COLLEGE OF BUSINESS

EAST LANSING • MICHIGAN • 48824

DEPARTMENT OF BUSINESS LAW AND OFFICE ADMINISTRATION

February 27, 1981

Dear Colleague

This letter is an invitation for you to participate and assist in a study designed to help improve and update in-service education programs for vocational business and office education in the State of Michigan. I became interested in in-service education while working with my advisor, Dr. Robert Poland, and the Vocational Office Block in-service project at Michigan State University.

As you know, changing technology and new legislation has created new challenges for business and office education teachers. Your input will offer information which will be invaluable in planning future in-service programs. Your response will enable teacher educators to better understand YOUR needs and perceptions regarding the tasks involved in business and office education.

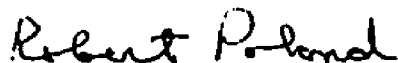
May I have a few minutes of your time NOW to complete the enclosed questionnaire and ultimately improve our professional course offerings? Please complete the form and return within 5 days, in the enclosed stamped, addressed envelope.

Also enclosed is a small envelope containing a token of my appreciation for your cooperation.

Cordially yours



Lynn Ryckman  
Researcher



Dr. Robert Poland  
Advisor

Enclosures: 3

### APPENDIX III

## MICHIGAN STATE UNIVERSITY

COLLEGE OF BUSINESS

EAST LANSING • MICHIGAN • 48824

DEPARTMENT OF BUSINESS LAW AND OFFICE ADMINISTRATION

March 13, 1981


Dear Colleague

During the week of March 2, a questionnaire was mailed to you concerning in-service needs of business and office education teachers in the State of Michigan. The purpose of the study is to have teachers participate and to help identify the needs in areas perceived to be critical for in-service training. Your quick response is CRUCIAL to the success of this study.

Won't you please help me by completing the enclosed survey and returning it to me before March 21 in the enclosed stamped, addressed envelope. If you have already mailed the questionnaire, I sincerely thank you for your response.

Your input will make a significant contribution to the final results of this study.

Cordially yours



Lynn Ryckman  
Researcher

Enclosures

#### APPENDIX IV



# MICHIGAN VOCATIONAL OFFICE EDUCATION INSTRUCTORS IN-SERVICE NEEDS ASSESSMENT

Conducted by  
Lynn Ryckman

## Q U E S T I O N N A I R E

This study is being conducted in an effort to identify the IN-SERVICE NEEDS of Michigan secondary vocationally reimbursed business and office education teachers as PERCEIVED BY the Michigan business and office education teacher.

The following definitions may be helpful in clarifying the following questions and statements:

IN-SERVICE EDUCATION - Effort to promote professional growth and development of teachers with activities which could include university courses, workshops, seminars, teacher centers, self-study, or conferences sponsored by business and industry.

TEACHER CENTERS - A place where in-service programs take place which is organized, planned, and operated locally by teachers either on-site or in changing locations in the intermediate school district.

ON-SITE IN-SERVICE - In-service programs offered at a teacher's home school.

### SECTION I

Directions: Section I is designed to collect information about the teaching background and work experience of the respondent and also try to determine the preferred method of in-service education as perceived by Michigan business and office education teachers. Please check the response that best approximates you or your opinion. Please respond to each item. Thank you.

#### PERSONAL DATA AND PREFERRED METHOD OF IN-SERVICE:

1. Indicate highest level of formal education completed.
 

<u>0</u> Less than Bachelor's Degree	<u>12</u> Educational Specialist
<u>97</u> Bachelor's Degree	<u>3</u> Doctoral Degree
<u>249</u> Master's Degree	<u>0</u> NR
2. Indicate your total years of non-teaching work experience which relates to your teaching area.
 

<u>14</u> Less than one year	<u>33</u> 7 to 9 years
<u>80</u> 1 to 2 years	<u>56</u> 10 or more years
<u>178</u> 3 to 6 years	<u>0</u> NR
3. Indicate your total years of teaching experience in vocational business and office education programs.
 

<u>2</u> Less than one year	<u>101</u> 11 to 15 years
<u>46</u> 1 to 5 years	<u>92</u> 16 or more years
<u>118</u> 6 to 10 years	<u>2</u> NR
4. Does the salary schedule at your school provide salary increases for the acquisition of additional college/university credits or degrees?
 

<u>329</u> Yes	<u>29</u> No	<u>1</u> Do not know	<u>2</u> NR
----------------	--------------	----------------------	-------------
5. Does the salary schedule at your school provide salary increases for other in-service programs, e.g. non-credit courses, seminars, workshops, and conferences, etc.?
 

<u>24</u> Yes	<u>332</u> No	<u>4</u> Do not know	<u>1</u> NR
---------------	---------------	----------------------	-------------
6. How is most of your technical updating and in-service education currently being met? (Check one)
 

<u>39</u> Vocational director (on site)	<u>26</u> Teacher centers or (professional development centers)
<u>45</u> Teacher educators from a state university or college	<u>97</u> Not being met
<u>6</u> Business & office education state supervisors	<u>112</u> Other (Please specify) _____
<u>33</u> School administration	<u>3</u> NR

7. To what degree are you satisfied with the in-service training you are now receiving? (Check one) 115
- |                          |                             |
|--------------------------|-----------------------------|
| <u>12</u> Very satisfied | <u>121</u> Fairly satisfied |
| <u>67</u> Satisfied      | <u>153</u> Not satisfied    |
| 8 NR                     |                             |
8. Does your school reimburse you for mileage, meals, or other costs associated with conferences, workshops, seminars, or meetings held away from your school?
- |                |              |                      |       |
|----------------|--------------|----------------------|-------|
| <u>262</u> Yes | <u>83</u> No | <u>4</u> Do not know | 12 NR |
|----------------|--------------|----------------------|-------|
9. Do you receive tuition reimbursement for courses taken for credit?
- |               |               |                      |      |
|---------------|---------------|----------------------|------|
| <u>57</u> Yes | <u>296</u> No | <u>3</u> Do not know | 5 NR |
|---------------|---------------|----------------------|------|
10. Who should pay for in-service education or technical updating of vocational business and office education teachers? (Check one)
- |  |  |
|--|--|
| <u>109</u> State Department of Education | <u>15</u> Business and Industry        |
| <u>145</u> Local Board of Education      | <u>67</u> Other (Please specify) _____ |
| <u>16</u> The teacher                    |  |
| 9 NR                                     |  |
11. Which of the following instructional approaches do you most prefer? (Check one)
- |  |  |
|--|--|
| <u>108</u> Group classroom activities  | <u>77</u> Self-paced individualized work |
| <u>111</u> Seminar discussions   | <u>1</u> Correspondence                  |
| <u>4</u> TV lectures plus reading and homework and/or local discussion groups. | <u>54</u> Other (Please specify) _____   |
| 6 NR   |  |

Please answer questions 12 through 15 using the RANKING METHOD. For each question, RANK each offering with: 1 for first choice; 2 for second choice; 3 for third choice; and 4 for last choice. Thank you.

12. Which in-service method do you prefer? (RANK - See directions above)
- |  |   |
|--|---|
| 29, 69, 142, <u>114</u> University courses   | <u>271, 67, 12, 4</u> Workshops, seminars, or conferences |
| 40, 173, 114, <u>27</u> Teacher centers (Professional development centers, local or on-site) | <u>Self-study materials</u>                               |
|  | 16, 45, 86, 207   |
|  | 7 NR  |
13. Which of the following course or workshop formats do you most prefer? (RANK - See directions above)
- |  |  |
|--|--|
| 134, 79, 65, <u>63</u> Intensive format, i.e., 6 hours a day for one week. | <u>Three 1-hour periods weekly for ten weeks.</u> 13, 50, 114, 164 |
| 125, 128, 79, <u>9</u> One 3-hour period a week for ten weeks.             | <u>One 6-hour period a month for five months.</u> 71, 83, 82, 105  |
|  | 20 NR  |
14. Of the following times for scheduling courses or workshops, which do you prefer? (RANK - See directions above)
- |  |  |
|--|--|
| 39, 20, 54, <u>234</u> Weekends                    | <u>93, 184, 62, 8</u> Late afternoon (4:00-6:00) |
| 172, 43, 64, <u>68</u> Early afternoon (2:00-4:00) | <u>Evenings (7:00-9:00)</u> 43, 101, 165, 38     |
|  | 14 NR  |
15. Of the following possible time of year when courses are offered, which do you prefer? (RANK - See directions above)
- |                               |                                |
|-------------------------------|--------------------------------|
| 149, 89, 86, <u>23</u> Fall   | <u>Spring</u> 52, 146, 110, 39 |
| 50, 81, 95, <u>121</u> Winter | <u>Summer</u> 97, 32, 55, 163  |
|                               | 14 NR                          |

(Please continue to the next page)

## SECTION II

**Directions:** Section II consists of a list of performance tasks that are likely to be performed at some time by Michigan business and office education teachers. Each performance task requires TWO RESPONSES. In the first column indicate your perception of your **ABILITY** to perform that task, and in the second column indicate your perception of the **IMPORTANCE** of the task.

**Very High Ability (Importance)** - Maximum (essential)

**High Ability (Importance)** - Above average, better than typical (helpful but not essential)

**Moderate Ability (Importance)** - Average, typical (needed for minimum performance)

**Low Ability (Importance)** - Not as good as typical (could be desirable, but not necessarily important)

**No Ability (Importance)** - Very poor ability (need not be considered important)

Please respond to each item. Thank you.

	ABILITY						IMPORTANCE					
	Very High	High	Moderate	Low	No	NR	Very High	High	Moderate	Low	No	NR
<b>COURSE PLANNING AND INSTRUCTION</b>												
1. Identify and clarify individual student needs . . . . .	95	214	49	1	0	2	221	123	14	2	0	1
2. Identify and select appropriate instructional strategies . . . . .	83	217	56	2	0	3	184	152	20	1	0	4
3. Select and prepare course objectives . . . . .	118	173	64	2	1	3	141	161	51	5	1	2
4. Select and organize broad course content . . . . .	116	191	51	2	0	1	127	174	52	5	1	2
5. Identify and select existing instructional materials . . . . .	104	219	32	3	0	3	133	182	40	2	0	4
6. Prepare appropriate multi-media materials . . . . .	30	95	173	58	3	2	37	159	139	22	1	3
7. Select and utilize appropriate class presentation techniques . . . . .	81	199	77	2	0	2	142	175	43	0	0	1
8. Select and utilize appropriate individual instruction techniques . . . . .	110	174	69	7	0	1	161	158	39	0	1	2
9. Organize and maintain a vocational laboratory . . . . .	117	143	76	20	4	1	160	120	63	11	5	2
<b>CLASSROOM/STUDENT MANAGEMENT</b>												
10. Establish procedures for daily classroom management . . . . .	199	143	17	1	0	1	231	107	20	1	0	2
11. Develop a classroom environment/ climate conducive to learning . . . . .	179	159	21	1	0	1	257	93	7	2	0	2
12. Establish and maintain a filing/ record keeping system . . . . .	116	166	72	6	0	1	121	164	69	5	0	2
13. Operate a student vocational organization . . . . .	49	84	106	81	38	3	43	77	135	71	32	3
14. Identify and implement appropriate means for monitoring and motivating student progress . . . . .	62	185	105	8	0	1	138	172	47	2	0	2

ABILITY

IMPORTANCE 117

EVALUATION

15. Identify and implement appropriate means for assessing student performance . . .
16. Select and implement an appropriate system of overall program evaluation .
17. Select and implement an appropriate system of course evaluation . . . . .

Very High	High	Moderate	Low	No	NR
99	197	62	1	0	
55	166	131	7	0	2
58	162	130	7	0	4

Very High	High	Moderate	Low	No	NR
160	175	22	2	0	2
111	181	64	3	0	2
106	173	74	5	0	3

COORDINATION

18. Identify and select appropriate training stations . . . . .
19. Develop and implement criteria and procedures for the selection and placement of cooperative education students.
20. Develop and implement a system for coordinating the learning experiences of cooperative education students . . .
21. Develop and implement a procedure for periodic re-evaluation of student training stations . . . . .

92	78	150	86	14	3	16
71	120	96	29	13		
63	113	108	33	10	19	
116	42	8	19	22		

133	125	150	58	0	3	17
111	160	56	7	8	19	
96	158	74	9	6	18	
125	143	56	7	8	22	

SPECIAL NEEDS

22. Identify students whose performance is impaired by physical handicaps, learning disabilities, behavior/emotional problems, etc. . . . .
23. Identify students whose performance is impaired by chemical dependency, e.g., drugs and/or alcohol . . . . .
24. Identify students whose performance is impaired by social problems, e.g., inability to relate, lack of transportation, family problems, etc. . . .
25. Adjust the learning and classroom environment to better serve individual students with special needs . .
26. Adjust the curriculum and materials to better serve individual students with special needs . . . . .
27. Identify resources, both in and outside of the school setting to aid in the development of individual students with special needs . . . . .
28. Deal with crisis situations involving students with special needs, e.g., epileptic seizures, racial confrontations, etc. . . . .

54	113	142	41	8	3
33	86	154	75	8	5
48	123	142	37	7	4
45	111	153	42	7	3
46	121	145	40	6	3
21	85	178	62	11	4
28	83	142	91	13	4

134	149	60	7	6	5
109	155	73	14	5	5
111	154	74	16	3	3
99	169	76	8	6	3
106	164	71	11	6	3
61	171	101	14	8	6
108	155	75	13	6	4

PROGRAM PLANNING

29. Assess the need for a vocational program in your field . . . . .
30. Organize and operate an advisory committee in your field . . . . .

109	164	69	13	1	5
121	112	42	13	1	
72	121	13	1		

140	157	52	4	2	6
131	113	31	5		
80	131	5			

ABILITYIMPORTANCE

31. Develop and maintain a program budget . . . . .
32. Identify and clarify the role of the student vocational organization in your field . . . . .

Very High	High	Moderate	Low	No	NR
96	119	94	34	12	6
39	82	136	59	33	12

Very High	High	Moderate	Low	No	NR
112	162	59	14	7	7
34	91	149	53	22	12

POST-INSTRUCTIONAL

33. Assist students in locating, applying for, and obtaining appropriate post-program employment and/or identifying further education . . . . .
34. Develop and implement a system for a follow-up of program graduates . . . . .

Very High	High	Moderate	Low	No	NR
91	150	90	19	8	3
48	107	124	51	24	7

Very High	High	Moderate	Low	No	NR
128	151	66	9	5	2
67	139	118	24	7	6

PUBLIC RELATIONS

35. Identify and implement appropriate public relations activities for promoting the district and the school . . . . .
36. Identify and implement appropriate public relations activities for promoting your program and courses . . . . .

Very High	High	Moderate	Low	No	NR
53	97	147	50	11	3
70	121	123	32	8	7

Very High	High	Moderate	Low	No	NR
102	165	75	10	6	3
131	169	44	5	5	7

ADMINISTRATIVE

37. Identify and inform staff of relevant laws, regulations and policies governing the operation of the program of courses in your field . . . . .
38. Develop and implement criteria for the selection of teachers in your field . . . . .
39. Develop and implement an appropriate procedure for informing superiors of your program status and needs, etc. . . . .

Very High	High	Moderate	Low	No	NR
32	103	137	59	23	7
44	100	115	59	34	9
84	159	83	22	7	6

Very High	High	Moderate	Low	No	NR
72	135	104	33	6	11
85	132	87	30	17	10
146	153	44	6	5	7

THANK YOU

## BIBLIOGRAPHY

## BIBLIOGRAPHY

- Biemer, Linda. "In-Service Delivery Models For Secondary Teachers." Viewpoints In Teaching And Learning, 54 (October, 1978), 138-146.
- Borg, Walter R., and M. Gall. Educational Research. 3rd ed. New York: Longman, 1979.
- Burlingame, Martin. "Their Hearts Were Young And Gay." The In-Service Education of Teachers. Ed. Louis Rubin. Boston: Allyn and Bacon, 1978.
- Bush, Robert N. "Curriculum-Proof Teachers: Who Does What To Whom." Improving In-Service Education. Ed. Louis Rubin. Boston: Allyn and Bacon, 1971.
- Cameron, W. A. and C. J. Cotrell. Remote Feedback Techniques For Inservice Education. R&D Series No. 40. Columbus: The Center For Vocational And Technical Education, August 1970.
- Cooper, John O. and Kenneth P. Hunt. "A Cooperative Approach To Inservice Training." Viewpoints of Teaching And Learning, 54 (October, 1978) 61-69.
- Cotrell, Calvin J., and others. Model Curricula for Vocational and Technical Teacher Education, Report No. V. Columbus: The Center for Vocational and Technical Education, March, 1972.
- Cruickshank, Donald R., Christopher Lorish, and Linda Thompson. "What We Think We Know About Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 27-31.
- Drummond, William H. "Don't Give Up On Inservice, Harry." Journal of Teacher Education. 30 (January-February, 1979), 39.
- Edelfelt, Roy A. "Inservice Education: Criteria of Local Programs." Bellingham Washington: Western Washington State College Press. Pamphlet, 1976.

- Elliott, Peggy, and Lesley Steinkellner. "Weaknesses in In-Service and Pre-Service Teacher Training." The Clearing House. 52 (1979), 421-423.
- Feistritzer, C. E. "The Role of USOE in Inservice." Journal of Teacher Education. 30 (January-February, 1979), 36-38.
- Fisher, Joseph E. "The State Department's Role In Local Inservice Programs." Viewpoints of Teaching and Learning. 54 (October, 1978), 55-59.
- Gallegos, Arnold M. "Some Critical Issues For Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 23.
- Good, Carter V. Dictionary of Education. New York: McGraw Hill Book Company, 1973.
- Gryder, Robert, Jo Ann Hennington, and Roger Hutt. "A Successful Formula For Promoting In-Service Education of Business Teachers." NABTE Review. (1977), 71-74.
- Hage, Payton Alfred. "Perceptions of Inservice Needs of Colorado Business and Office Education Teachers." Unpublished dissertation, Colorado State University, 1978.
- Harty, Harold. "A Field-Based Professional Development Complex: One Approach To Future Preservice-Inservice Teacher Preparation." Peabody Journal of Education. 55 (July, 1978), 337-345.
- Hite, Herbert and Kenneth R. Howey. Planning Inservice Teacher Education: Promising Alternatives. Washington: The American Association of Colleges for Teacher Education. (May, 1977), 14.
- Houston, Robert W. and Jerome H. Freiberg. "Perpetual Motion, Blindman's Buff, And Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 7-9.
- King, James C., Paul C. Hayes, and Isadore Newman. "Some Requirements For Successful Inservice Education." Phi Delta Kappan. 58 (May, 1977), 686-687.
- Lee, J. "A Challenge To Teacher Educators--The '80's." NATEBOE Notes. Spring (1980), 1.
- Mamary, Albert. "A District-Wide Model For Teacher Education." Viewpoints in Teaching And Learning. 54 (October, 1978), 80.



- Mann, Dale. "The Politics of Inservice." The Education Digest. 44 (January, 1979), 20-21.
- Meade, Edward J. Jr. "No Health In Us." Improving In-Service Education. Ed. Louis Rubin. Boston: Allyn and Bacon, 1971.
- Michigan Department Of Education. Administrative Guide For Vocational Education in Michigan: (October, 1978), p. D-1.
- Michigan Department Of Education. Standards For State Approved Regular Secondary Cooperative Vocational Education In Michigan: (October, 1977), Sec. E, p. 40.
- Michigan Department Of Education. The Annual and Long Range State Plan For Vocational Education in Michigan: (1980), p. 165-169.
- Page, G. T., and J. B. Thomas. International Dictionary of Education. New York: Nichols Publishing Company, 1977.
- Palmer, Teresa M. "In-Service Education: Intrinsic versus Extrinsic Motivation." The In-Service Education of Teachers. Ed. Louis Rubin. Boston: Allyn and Bacon, 1978.
- Pankratz, Roger S. "Surviving The Inservice Revolution: A Proactive Stance." Journal of Teacher Education. 30 (January-February, 1979), 20-22.
- Roth, Robert A. "An Individualized Inservice Program Model For Competency Development." Inservice Education Programs To Improve Teaching Competence. Washington: Association of Teacher Educators, 1975.
- Rubin, Louis. The In-Service Education Of Teachers. Boston: Allyn and Bacon, 1978.
- \_\_\_\_\_. "Continuing Professional Education in Perspective." The In-Service Education Of Teachers. Boston: Allyn and Bacon, 1978.
- \_\_\_\_\_. "Some Postulations and Principles." The In-Service Education Of Teachers. Boston: Allyn and Bacon, 1978.
- \_\_\_\_\_. "Teacher Growth in Perspective." Improving In-Service Education. Boston: Allyn and Bacon, 1971.
- Ryor, John. "Three Perspectives On Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 13-19.

- Sandefur, J. T. "Three Perspectives On Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 13-19.
- Seldin, Clement A. "Taking Inservice Off The Back Burner." Phi Delta Kappan. 61 (December, 1979), 266-287.
- Shanker, Albert. "Three Perspectives On Inservice Education." Journal of Teacher Education. 30 (January-February, 1979), 17.
- Speiker, Charles A. "Do Staff Development Practices Make A Difference?" The In-Service Education Of Teachers. Ed. Louis Rubin. Boston: Allyn and Bacon, 1978.
- Stephens, T. M. and A. C. Hartman. "Inservice Education: Its Murky Past And Uncertain Future." Viewpoints In Teaching And Learning. 54 (October, 1978), 1-3.
- Tyler, Ralph W. "In-Service Education Of Teachers." Improving In-Service Education. Ed. Louis Rubin. Boston: Allyn and Bacon, 1971.
- U.S. Department Of Health, Education, And Welfare. The Handbook: A Vocational Education Legislative Reference: Washington D.C., (1978), 147-149.
- Van Wagoner, James. "Psst! Want Some Secrets For Successful School Inservice?" Thrust. 8 (October, 1978), 8-9.
- Walters, Lawrence T. "Perceptions Of Vocational Business Educators and Advisory Committee Members Toward Factors Critical to The Success of Inservice Education." Unpublished dissertation, The Ohio State University, 1976.
- Westbury, Ian. "In-Service Education: Some Ruminations From The Firing Line." The In-Service Education of Teachers. Ed. Louis Rubin. Boston: Allyn and Bacon, 1978.
- Zirkel, Perry A. and Victoria F. Albert. "Assessing Teachers' Preferences Regarding In-Service Education." The Clearing House. 52 (March, 1979), 328-333.