

## **INFORMATION TO USERS**

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

**The quality of this reproduction is dependent upon the quality of the copy submitted.** Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

# **U·M·I**

University Microfilms International  
A Bell & Howell Information Company  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
313/761-4700 800/521-0600

**Order Number 9111639**

**A study of the nationally recognized exemplary middle schools  
in Michigan and the extent of their implementation of the 18  
characteristics of middle school education**

**Prentice, David Alden, Ph.D.**

**Michigan State University, 1990**

**U·M·I**

**300 N. Zeeb Rd.  
Ann Arbor, MI 48106**

A STUDY OF THE NATIONALLY RECOGNIZED EXEMPLARY MIDDLE  
SCHOOLS IN MICHIGAN AND THE EXTENT OF THEIR  
IMPLEMENTATION OF THE 18 CHARACTERISTICS  
OF MIDDLE SCHOOL EDUCATION

By

David A. Prentice

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Educational Administration

1990

## **ABSTRACT**

### **A STUDY OF THE NATIONALLY RECOGNIZED EXEMPLARY MIDDLE SCHOOLS IN MICHIGAN AND THE EXTENT OF THEIR IMPLEMENTATION OF THE 18 CHARACTERISTICS OF MIDDLE SCHOOL EDUCATION**

**By**

**David A. Prentice**

The purpose of this study was to determine the implementation level of the 18 basic characteristics of middle school education as perceived by principals and teachers in the middle-level schools in Michigan recognized as exemplary by the United States Department of Education during the years 1982 through 1987. The survey questionnaire developed by Riegle (1971) was used in this study.

Fifteen objectives were designed to be used as a part of this study. Identical surveys to gather the data were sent to the principal and a randomly selected teacher in each of the 12 identified schools.

Survey questionnaires were returned from 11 of the 12 schools, for a return rate of 92%. The returned questionnaires were separated into the various subgroups stated in the objectives. Those subgroups were schools located in urban areas, schools located in suburban areas, schools located in rural areas, schools that had been middle schools for more than eight years, schools that had been

David A. Prentice

middle schools for fewer than eight years, schools with a student enrollment of between 450 and 550, and schools that had a student population of more than 550 or less than 450. Each subgroup was further divided into the group of administrators in that subgroup and the group of teachers in that subgroup.

Frequency counts of the responses were tabulated and multiplied by the values assigned to each of the survey questions. The weighted values were then converted to percentage scores of the maximum possible score in each category in order to provide for ease of comparison between the various subgroups.

Two conclusions were supported by the findings of this study. First, there was very little difference in the perceived level of implementation of the 18 characteristics between any of the various subgroups. There was a consistency in the perceived implementation level of the 18 characteristics among principals and teachers in each subgroup, as well.

The second major finding was that the implementation level in the case of every subgroup fell at the 61st percentile or higher. The entire group of principals rated the implementation level at the 64th percentile. The entire group of teachers rated the implementation level at the 65th percentile. These are the highest implementation levels of the 18 characteristics reported by any study.

This dissertation is dedicated to my wife, Evelyn, without whose continuing love, support, and encouragement this project would not have been possible, and to Dr. Louis Romano, who constantly encouraged the completion of this project and without whose guidance, assistance, and friendship this project would not have reached completion.

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vii
LIST OF FIGURES . . . . .	viii
 Chapter	
I. INTRODUCTION TO THE STUDY . . . . .	1
Background . . . . .	1
The Secondary School Recognition Program . . . . .	4
Statement of Purpose . . . . .	6
Need for the Study . . . . .	6
Definitions . . . . .	8
Assumptions . . . . .	9
Limitations . . . . .	9
Objectives of the Study . . . . .	10
Procedure and Methodology . . . . .	12
Organization of the Dissertation . . . . .	14
II. REVIEW OF RELATED LITERATURE . . . . .	16
Introduction . . . . .	16
The Middle School Program . . . . .	16
Studies of the Characteristics of Middle School Education . . . . .	29
Summary . . . . .	46
Studies of the Secondary School Recognition Program . . . . .	47
Summary . . . . .	56
The SSRP in Michigan . . . . .	57
The SSRP's Attributes of Success . . . . .	65
A Brief Discussion of the Relationships Between the 18 Basic Middle School Characteristics and the 14 Attributes of the SSRP . . . . .	66
Summary . . . . .	70
III. DESIGN OF THE STUDY . . . . .	72
Introduction . . . . .	72
Purpose of the Study . . . . .	72

	Page
The Sample . . . . .	72
The Survey Instrument . . . . .	73
Procedures . . . . .	74
Objectives of the Study . . . . .	75
Summary . . . . .	77
IV. RESULTS OF THE DATA ANALYSES . . . . .	79
Introduction . . . . .	79
Demographic Data . . . . .	81
Presentation of the Data for Each Objective . . . . .	82
Summary . . . . .	98
V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS .	101
Summary . . . . .	101
Purpose of the Study . . . . .	101
Design of the Study . . . . .	101
The Literature Review . . . . .	102
Conclusions . . . . .	104
Discussion of the Findings . . . . .	112
Recommendations for Further Study . . . . .	115
APPENDICES	
A. LETTERS . . . . .	118
B. THE SURVEY INSTRUMENT . . . . .	120
C. THE MICHIGAN MIDDLE-LEVEL SCHOOLS RECOGNIZED BY THE SECONDARY SCHOOL RECOGNITION PROGRAM DURING THE YEARS 1982-1987 . . . . .	133
BIBLIOGRAPHY . . . . .	134



## LIST OF TABLES

Table	Page
2.1 Number of Middle Schools of Various Grade Organizations, With Percent of Increase/Decrease, 1970-71 to 1986-87 . . . . .	25
2.2 Eighteen Characteristics of the Middle School . . . . .	30
2.3 Studies of Unusually Successful Secondary Schools . . . . .	67
4.1 The 18 Characteristics Included in the Survey Instrument and the Numbers of the Questions Included to Collect Data About Each Characteristic . . . . .	80
4.2 Demographic Data . . . . .	81
4.3 Findings Regarding Objectives 1, 2, and 3 . . . . .	83
4.4 Findings Regarding Objective 4 . . . . .	86
4.5 Findings Regarding Objective 5 . . . . .	88
4.6 Findings Regarding Objective 6 . . . . .	89
4.7 Findings Regarding Objective 10 . . . . .	92
4.8 Findings Regarding Objective 11 . . . . .	94
4.9 Findings Regarding Objective 13 . . . . .	96
4.10 Findings Regarding Objective 14 . . . . .	97
4.11 Comparison of the Total Implementation Scores for Each of the Groups Previously Discussed . . . . .	99

## LIST OF FIGURES

Figure	Page
2.1 Distribution of Middle-Level Schools Selected for SSRP Recognition, 1982-1984, Compared to National Distribution of Name Labels of Middle- Level Schools . . . . .	56

## CHAPTER I

### INTRODUCTION TO THE STUDY

#### Background

In February 1983, at the instigation of and with encouragement from the United States Department of Education (USD OE), Michigan, along with the other 49 states, instituted the Secondary School Recognition Program (SSRP). The stated purposes of the program were "(1) to identify and recognize unusually successful public secondary schools, and (2) through publicity and other means, encourage their emulation by other educators" (Woods, 1985). The USD OE encouraged all 50 states to participate in the program during the year of inception.

A letter from the Michigan Department of Education (MDOE) in Lansing was sent to the superintendents of all Michigan school districts. The purposes of the program, as stated in the letter, were to "call attention to the many good secondary schools in Michigan and the United States" as well as "to begin to establish a network of schools that can serve as models for other schools and school districts that are seeking to become better" (MDOE, 1983a). Included with this letter was a self-nomination form.

The purpose stated on the cover page of the nomination form was "to identify and call attention to a national group of schools that

are unusually effective in educating their students," but in seeking schools that were to be considered effective the program also sought "schools that have been successful in overcoming obstacles and problems and are continuing to work hard to improve" (MDOE, 1983b, p. 1). The assumption was that these efforts would be reflected in program innovation as well as in improved outcomes (MDOE, 1983b).

The letter further encouraged the superintendents who received it to nominate a high school and a "junior high or middle school" (MDOE, 1983a, p. 1). The method chosen in Michigan to nominate schools consisted of a self-nomination form that was to be filled out by local school personnel. The nomination form listed "the 14 attributes of effectiveness" (MDOE, 1983b, p. 1) about which information would be sought. Further, three "outcome variables" were listed on the form. All three were measurable (two included performance on competency or achievement tests), and data were sought for those variables, as well.

There were three parts to the nomination form. The first part consisted of a list of demographic characteristics of the school, including information about enrollment, racial composition, staffing, social composition, and type of community.

The second section of the nomination form consisted of answers to questions pertaining to the 14 attributes of effective schools that the USDOE stated had emerged from research. These were to be used as indicators of quality in the recognition program. The 14 attributes listed were:

- . Clear academic goals
- . High expectations for students
- . Order and discipline
- . Rewards and incentives for students
- . Regular and frequent monitoring of student progress
- . Opportunities for meaningful student responsibility and participation
- . Teacher efficacy
- . Rewards and incentives for teachers
- . Concentration on academic learning time
- . Positive school climate
- . Administrative leadership
- . Well-articulated curriculum
- . Evaluation for instructional improvement
- . Community support and involvement

The third section of the instrument consisted of questions that sought answers that were related to various educational outcomes. These included competency and/or achievement test scores, dropout rates, attendance rates, suspensions, and awards received by students and staff. Included also were several questions related to factors contributing to the school's success and to the obstacles that had been overcome.

The completed forms were to be sent to the MDOE and reviewed by a panel of "practicing principals of Michigan schools" (1983b, p. 1), as well as several employees of the MDOE.

In March 1983, five Michigan middle schools or junior highs and five Michigan high schools were selected by the panel to be designated "exemplary schools," and those schools were notified of their selection by Philip Runckel, Michigan's then-Superintendent of Public Instruction. All ten schools' nomination forms were then sent to the USDOE in Washington, D.C., where they were subjected to a further review. Schools that "passed" that review were then notified that a "site visitor" would come to the selected school for

one day of intense scrutiny that would consist of interviews with parents, students, teachers, and administrators. These site visitors would also ask for verification of certain data and would then make their own recommendations concerning national recognition.

From the recommendations of the site visitors, a final total of 60 to 80 secondary schools nationwide would be selected by a national panel of experts for recognition.

The program has remained essentially unchanged in form and structure during its seven years of operation in Michigan. However, a few modifications were stipulated by the national program. These included the addition of an elementary school section to the program, the addition of a private school section to the program, and the banning for five years of those schools that had previously been selected for national honors. A standardized method of selecting and rating schools was added to Michigan's program.

During these seven years, 12 Michigan junior high or middle schools have been designated as "exemplary" by the USD OE.

#### The Secondary School Recognition Program

The SSRP is administered by the United States Secretary of Education's office in cooperation with state departments of education. The states distribute individual school nomination forms and set up screening processes for review of school applications. Individual states are responsible for establishing selection procedures suited to the conditions in their state. In 1982-83, each state was permitted to nominate five schools in each of two

categories: schools for young adolescents and high schools. In the second year, 1983-84, the procedure was altered, and each state was given a quota for nominations reflecting its population and its number of eligible schools. In 1982-83, 44 states participated and 496 nominations were submitted. During 1983-84, 48 states, the District of Columbia, and the Department of Defense Dependents Schools participated and 555 nominations were received. In 1984-85, 49 states, the District of Columbia, and the Department of Defense Dependents Schools were involved.

The nominations submitted by the states undergo a three-step review process. First, each year a national panel of 18 members is convened by the recognition program to review the applications. The information provided by each school on both the outcome criteria and the 14 indicators of success in the nomination form is carefully reviewed by the panel. Typically, the paper screening reduces the pool of nominations by approximately one-half. The remaining schools receive a site visit. These site visits last for two days (only one day in 1983) and are conducted by visitors representing a mix of researchers, consultants, administrators, and other educators with extensive experience in secondary education. During the site visits, interviews are conducted with teachers, administrators, students, and parents. Observations are made in the buildings and classrooms, and detailed reports are prepared for each school. The reports contain extensive information about how the various school personnel who have a stake in the outcome perceive the strengths and

weaknesses of the school and their roles and influence in them. The reports also contain vivid descriptions of the climate in the schools and activities in the classrooms. In the final step of the selection process, the national panel reviews these site-visit reports and the school nominations, interviews the site visitors about each school, and makes recommendations to the Secretary of Education. As a final check, all nominated schools are reviewed by the Office of Civil Rights to ensure that they are in full compliance with federal civil rights laws (Woods, 1982).

#### Statement of Purpose

The purpose of this study was to determine the current level of implementation of 18 characteristics of middle school education as perceived by principals and teachers in the 12 designated Michigan middle and junior high schools selected for national recognition in the SSRP during the years 1983 to 1988. Essentially, the research was a discrepancy analysis between theory and practice in the operation of these schools.

#### Need for the Study

The early adolescent is at a unique and critical stage of development. If this is true, and research says that it is, there should exist a pattern of education that is unique to this particular student. By consensus, the 18 characteristics of middle school education seem to fit the needs of this age of student.

Each year, more school districts in Michigan and the rest of the United States are making a decision to abandon the junior high



school in favor of a school designated as a middle school. Cuff (1967) stated that, in 1965-66, there were nearly 500 schools designated as middle schools in the United States. That number has grown each year (Alexander, 1968; Compton, 1978; Moss, 1969) and in 1976 stood at more than 4,000 (Lounsbury & Vars, 1978). To serve the youth who are or will be in the age range of 10 to 14 years, as much information as possible needs to be gathered so that these middle schools can better meet the needs of the children attending.

In addition, if schools that are named middle schools are to be designated as exemplary and help serve as models for all other such schools to emulate, there needs to be some comprehensive information available that concerns whether or not these schools meet the criteria that have been developed as characteristic of middle schools.

The need exists for studies that analyze the practices of these USDOE-named exemplary schools and the relationship that exists between their practices and the basic middle school concepts that have been developed with the 18 characteristics in mind. Research concerning the implementation of the 18 characteristics of middle school education in the schools designated as exemplary in Michigan would be valuable to those schools that are seeking to emulate the designated schools. Further, this study would provide an indication of how those designated exemplary Michigan middle schools or junior highs are faring in their attempts to implement the 18 characteristics.

Finally, studies of this nature might be used to promote or disclaim the importance of recognition programs like the SSRP.

### Definitions

To assist in understanding the terms used in this study, the following definitions are provided. These definitions are also meant to be used as an aid for those who may wish to replicate this study.

Adolescence. The period of transition between puberty and adulthood in human development (Webster's Third New International Dictionary, 1971).

Continuous progress. An educational program designed to facilitate academic progress by individual students according to their ability to advance regardless of grade levels, peer-group readiness, or other organizational limitations. This type of program is often referred to in the literature as a nongraded program (Riegle, 1971).

Enrichment experience. Those courses and experiences designed by the school to meet the needs and interests of students.

Middle school. "Designates a school in between elementary and high school . . . and covering at least three of the middle school years, beginning with grades 5 or 6" (Murphy, 1965).

Planned gradualism. An organizational plan designed to allow a child to progress from childhood to adulthood in a gradual and incremental manner.

Rural. "The comprehensive, nonspecific word referring to life . . . in the country as distinguished from life in the city" (New World Dictionary of the American Language, 1974, p. 1248).

Suburban. "A district . . . on or near the outskirts of a city and often a separately incorporated town or city" (New World Dictionary of the American Language, 1974, p. 1421).

Team teaching. A method of instructional organization in which two or more teachers cooperatively plan and implement the instruction for a single group of students.

Urban. "Of, in . . . a city or town . . . citified" (New World Dictionary of the American Language, 1974, p. 1562).

### Assumptions

The writer assumed that the survey instrument developed by Riegler in 1971 and used in this study with only minor changes was appropriate for determining the number of middle school practices in the exemplary schools in Michigan. It was also assumed that the original questionnaire and the minor changes were presented in such a manner that those who completed the questionnaire were able to do so with an accurate and knowledgeable understanding of the programs in place in their schools.

### Limitations

The study was limited to the 12 middle schools/junior highs in Michigan that were determined to be outstanding and exemplary by the USD OE during the years 1983 to 1988. The writer's intention was to measure the level of each of the 18 characteristics that was present

school as of the date of the survey. No attempt was made to measure the effectiveness of any of the 18 characteristics. It was assumed that the respondents were knowledgeable and accurate about the characteristics and about what has happening in their schools.

#### Objectives of the Study

1. To measure the degree of implementation of the 18 middle school characteristics as reported by administrators in the Michigan middle schools and junior highs that were designated as exemplary by the USD0E in the years 1983 to 1988.

2. To measure the degree of implementation of the 18 middle school characteristics as reported by teachers in the Michigan middle schools and junior highs that were designated as exemplary by the USD0E in the years 1983 to 1988.

3. To compare the average level of implementation scores of the 18 characteristics as reported by administrators to that reported by teachers in the 12 designated Michigan middle or junior high schools.

4. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as urban schools.

5. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as suburban schools.

6. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as rural schools.

7. To compare the average level of implementation scores reported by the urban schools with that reported by the suburban schools.

8. To compare the average level of implementation scores reported by the urban schools with that reported by the rural schools.

9. To compare the average level of implementation scores reported by the rural schools with that reported by the suburban schools.

10. To measure the average level of implementation scores for those designated schools with a student population between 450 and 550.

11. To measure the average level of implementation scores for those designated schools with a student population less than 450 and more than 550.

12. To compare the average level of implementation scores reported by those schools with a student population between 450 and 550 with that of all other sizes of the 12 designated schools.

13. To measure the average level of implementation scores for those schools that have been designated a middle school for eight years or more.

14. To measure the average level of implementation scores for those schools that have been designated a middle school for fewer than eight years.

15. To compare the average level of implementation scores of those schools that have been designated a middle school for more than eight years with the average level of implementation scores of schools that have been designated a middle school for fewer than eight years.

#### Procedure and Methodology

The purpose of this study was to determine the level of implementation of the 18 basic middle school characteristics in the 12 selected Michigan middle schools/junior high schools during the first five years of the SSRP. The original 18 characteristics were developed by Riegle (1971). He extracted them from the literature and had them validated by recognized middle school authorities. These authorities were Marie Elie, Montreal, Canada; Nicholas Georgiady, Miami University, Oxford, Ohio; Ann Grooms, Educational Services Institute, Cincinnati, Ohio; Louis Romano, Michigan State University, East Lansing, Michigan; and Emmett Williams, University of Florida, Gainesville, Florida. After a list of 18 basic middle school characteristics had been compiled, a survey instrument was developed based on those characteristics. That instrument was reviewed by Louis Romano and staff consultants in the Department of Research Services at Michigan State University (Magana, 1987).

The MDOE in Lansing, Michigan, was visited to collect verbal and written information concerning the selection process used in determining the exemplary Michigan middle schools/junior highs, as well as the names of the schools that had been selected through the 1987 school year. Two copies of Riegle's replicated survey instrument, modified only by eliminating all references to "grade 5" from the original survey, were then mailed to each of these 12 schools, along with two cover letters (see Appendix A), requesting the completion of the surveys and their return in the two self-addressed, stamped envelopes provided.

The replicated survey instrument (see Appendix B) contained 62 questions and was divided into two sections. The first section contained questions that sought a single response per question. Questions seeking a multiple response (if applicable) were in the second section of the survey. Specific items in the survey related to each of the 18 characteristics of middle school education. The questions were coded according to which of the 18 characteristics they concerned.

Twenty-two of 24 survey instruments were returned, for a response rate of 92%. The completed instruments were separated into groups and then tallied according to which objective each question concerned. Mean scores and mean percentages of the maximum possible score yielded by the survey instruments were calculated for each of the 18 characteristics for each sample of schools in the study. These scores were tabulated, and comparisons between schools were made on the basis of mean percentage scores.

### Organization of the Dissertation

Chapter I contained a frame of reference for the entire study, including background information about the USDOE's SSRP. A statement of the problem and the purpose of the study were presented. The need for the study was outlined. The limitations and assumptions of the study were also listed. The objectives of the study were stated, and the procedures and methodology were explained.

Chapter II contains a review of literature pertinent to the study. The review is divided into five sections. The first is a general review of related middle school information and surveys and includes a list of the 18 characteristics of middle school education. The second section contains a review of studies concerning the characteristics of middle school education, as well as an explanation of and the rationale for the 18 characteristics of middle school education. Section three contains a review of the relatively few studies that have been completed pertaining to the SSRP, as well as other information related to that program. A historical review of the SSRP as it emanated from the USDOE and as it has been put into practice in Michigan is the focus of section four. In the last section, the 14 attributes of effectiveness of the SSRP are discussed.

Chapter III pertains to the design of the study, including its purpose, the sample, and an explanation of the instrument and the procedures used. The objectives of the study are restated in Chapter III.



Results of the data analysis are found in Chapter IV. These data pertain to the current level of implementation of the 18 characteristics of middle school education in the 12 Michigan schools selected as exemplary by the USDOE from 1983 to 1988.

Chapter V contains a summary of the study, conclusions based on the research findings, and recommendations for practice and further research.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

The review of literature begins with a discussion of what constitutes a middle school program, as defined by various authors. In the second section, studies of the characteristics of middle school education are reviewed. The third section consists of a review of studies pertaining to the SSRP, as well as other information related to that program. A historical review of the SSRP program and how it has been put into practice in Michigan is given in the fourth section. The discussion includes a summary of the changes in the program since its inception, as well as pertinent changes in the direction and guidelines of the program that have emanated from the USDOE. The last section of this chapter contains a discussion of the 14 attributes of effectiveness of the SSRP.

#### The Middle School Program

Conceived in 1960, coming of age approximately four years later with the publication in 1964 of several articles in Educational Leadership (Leeper, 1974), and continuing with the publication of Howard's (1968) Teaching in Middle Schools and Alexander's (1968) The Emergent Middle School and an even larger number of dissertations and other publications today, the middle schools of

the United States have received considerable attention. Authors such as Lounsbury, Vars, Moss, Georgiady, Eichhorn, Romano, and a host of others have written prodigiously about the middle school and its new concept for and of adolescents. In the nearly three decades since the inception of the term middle school education, significant strides have been made in the amount of knowledge available concerning how best to teach students who are 10 to 14 years of age.

Conant (1960) gave the initial impetus to the movement when he stated that:

Some people have approached the question of education for the 12-15 year olds from a viewpoint that emphasizes recent studies in physiology and adolescent psychology. Others have approached the question from a different viewpoint that strongly emphasizes academic subject matter. Having started from one or another of these approaches and defined the purposes of a school in general terms, one can then proceed by deductive reasoning to the details of the program in each grade. (pp. 9-10)

Conant's principal findings in this report were that there was a great diversity of opinion regarding the placement of grade 9 in a school system and, more important, that specially trained teachers were needed in grades 7 and 8 because these were the "transitional years."

Conant also made a number of recommendations. He wrote that instruction in the basic skills of reading and mathematics should be continued through the end of grade 8; group activities (music, drama, intramurals, clubs, homeroom, and assembly programs) should be a part of the "extra-class activities; block-time should be set aside; schedules should be flexible; guidance services should be available to all students"; and the "junior high school should not

continue to be a replica of the senior high school with its attendant social pressures" (pp. 16-21).

Vars (1961) stated that:

A school that would truly serve youngsters during their in-between years must combine the elementary school's concern for the whole child with the secondary school's stress on scholarship and intellectual development. This balance may best be provided through a program that includes a block-time or core class for guidance and problem-centered learning paralleled by more specialized courses . . . in such fields as mathematics, science, foreign language, art and music. (p. 4)

Howard (1968) wrote that "many experiences for this age of child must be provided with the thought in mind that they are mentally developing the ability to conceptualize and work with abstractions" (p. 11). He stated that there must be a variety of teaching methods and experiences, that teaching must involve a minimum of lecture and exclusively teacher-centered methods, and that the teacher should provide for student interaction and independent study. Howard also stated that the middle school should emphasize individual instruction, have flexible schedules instead of a rigid traditional bell schedule, and provide opportunities to use a variety of learning resources.

In a 1965 Educational Research Service survey, some advantages and disadvantages of middle schools were reported. Among the former were better age grouping, curriculum closer to ability level, smoother transition, better socially, better articulation, no limitation by Carnegie units, and the "newness" of the concept. Disadvantages listed were that the middle school takes more planning and scheduling time, teachers must spend more time preparing,

reporting pupil progress is more difficult, and girls mature faster than boys.

Finley (1967) noted that a middle school "is based on the knowledge of child development, especially the knowledge of the preadolescent. It is a school which is devoted to the education of the child who is in the age bracket of ten to fourteen" (p. 33). Murphy (1965) identified a middle school as "a school between elementary school and high school . . . and covering at least three of the middle school years, beginning with grades 5 or 6" (p. 14).

Brod (1966) conducted a survey of the 50 states' departments of education and also contacted some 5,000 school districts in an effort to measure the extent of the middle school movement. Results indicated the existence of middle schools in 45 of the 50 states.

In 1965 and 1966, Cuff (1967) contacted the 50 state departments of education again with a definition of middle school as containing grades 6 and 7, but not going below grade 4 or above grade 8. He received only 36 replies but received information from other sources about eight other states. From these sources he identified nearly 500 middle schools throughout the United States. His conclusion was that the number of middle schools was increasing, accompanied by a decrease in the number of junior high schools.

At the February 1968 annual conference of the National Association of Secondary School Principals (NASSP), Williams (cited in Grooms, 1967) claimed that there were more than 1,000 middle schools in the United States. If those figures were accurate, that

would be slightly more than a 100% increase in two years from the number Cuff determined.

In the introduction to a 1974 Association for Supervision and Curriculum Development (ASCD) publication, Alexander wrote that "watching the new middle school's emergence has been interesting indeed. . . . Confused as the middle school movement has been . . . its focus on the transition from childhood to adolescence gives the movement validity and significance" (p. vii). Alexander claimed that in the early 1960s mounting dissatisfaction with the discontinuity of elementary and secondary schools and the resultant problems with children's moving from level to level created a receptive climate for middle school proposals and the resulting reorganizations.

In his own 1968 survey, Alexander had identified 1,101 middle schools. Two years later, Kealy (1971) identified more than twice that number.

In 1973, both Trauschke and Mooney wrote that little research was available concerning the merits of a middle school organization. From their cooperative research, they believed that: (a) a middle school should recognize the dynamic physical, social, and intellectual changes that are occurring in young people; (b) middle schools should not include the ninth grade; (c) middle schools provide opportunities for innovation; (d) middle schools should de-emphasize the activities traditionally found in high schools, such as marching bands, interscholastic athletics, and dances; (e) middle schools should provide opportunities for exploratory and enrichment

activities, and (f) middle school teachers should be elementary trained but have a subject-area specialty.

Gatewood (1974) wrote that his review of both the available research and available surveys indicated that reorganization of the middle grades had been attributed primarily to practical reasons, such as moving the ninth grade to the high school, eliminating overcrowding in other buildings, aiding desegregation, and using a new building. He found that, "in truth, the only real difference between most junior highs and middle schools is in name and grade organization" (p. 13). He also discovered that middle schools were founded more on grounds of administrative expedience than of educational improvement and that most middle schools had simply moved the existing program and structure down a grade or two. Gatewood found that a number of studies favored the middle school over the junior high but that others demonstrated the reverse.

The landmark study in the area of middle school education in Michigan and surrounding states was conducted by Riegle (1971). By consensus, it is the study that established the definition of what middle school education should be. The study has been replicated many times, has received wide publicity, and was incorporated virtually in its entirety in both Michigan's and West Virginia's standards of middle education as outlined by their State Departments of Education.

In a 1973 article, Georgiady, Riegle, and Romano stated that:

The unrest in our public schools today is the result of a number of factors. . . . Among the significant and notable

efforts to reshape education in light of present societal conditions is the movement towards the middle school concept. (p. 73)

The authors stated that the junior high programs in use at that time displayed a serious lack of relevance to the true nature of the society in which transescents lived.

In an effort to provide general guidelines for use by educators in considering the middle school approach and in planning its implementation, Georgiady et al. organized the results of their investigations into a logical sequence, which they named "the 18 characteristics of middle school education." These characteristics are listed in their entirety, with rationale and explanations, in the next section of this chapter. Briefly, however, the 18 characteristics include continuous-progress programs, a multimaterial approach, flexible schedules, social experiences, physical experiences, intramural activities, team teaching, planned gradualism, exploratory-enrichment experiences, guidance services, independent study, basic learning skills, creative experiences, student security factors, evaluation practices, community relations, student services, and auxiliary staffing.

In 1973, Romano et al. proposed that the following questions be used in evaluating proposed and existing middle school programs:

1. Is continuous progress provided for?
2. Are class schedules flexible?
3. Is team teaching used?
4. Is a multimaterial approach used?
5. Is there provision for basic skill repair and extensions?



6. Are exploratory and enrichment studies provided for?
7. Are there activities for creative experiences?
8. Is there provision for independent study?
9. Is there full provision for evaluation?
10. Is planned gradualism provided for?
11. Is there an appropriate program of physical experiences and intramural activities?
12. Are appropriate social experiences provided for?
13. Are there adequate and appropriate guidance services?
14. Is there sufficient attention to auxiliary staffing?
15. Are there adequate provisions for student services?
16. Does the program emphasize community relations?
17. Is an intramural activity program integral to the total middle school program?
18. Are there provisions for student security factors?

In a 1977 "working draft" of a Michigan State Board of Education position paper (never officially adopted by the State Board), "middle school" was defined as "a building in which the program has been planned specifically to meet the needs of young people in the stage between childhood and adolescence" (p. 6). The document went on to state that:

Since the 1960's the middle school concept has continued to rapidly expand across the United States and in Michigan, and at present as many as 272 schools identify themselves as "middle schools" in Michigan. However, simply because a school is called a middle school does not necessarily mean that it is operationalizing the middle school concept nor that it is offering the kinds of programs most appropriate for emergent adolescents. Indeed a study of 138 schools in Michigan in 1972 found that however promising middle school concepts might appear, most of the programs and practices of the middle

schools in Michigan remain commonly similar to those of the state's junior high schools. On the basis of this study and others, it appears that in Michigan many schools have been unable to move very much beyond calling themselves middle schools, nor have they been able to establish programs based on our knowledge of the characteristics and needs of emerging adolescents. (p. 6)

Writing in 1978, Brooks noted that the number of middle schools nationwide had increased to 4,060 in 1977, according to a study done at the University of Kentucky. He listed the three primary reasons for establishing a middle school or for making the change to a middle school to be: (a) to bridge the gap from elementary to high school more effectively, (b) to provide a program tailored to the needs of the early adolescent, and (c) to eliminate overcrowding. Brooks noted that more than half of the principals responding to the study indicated these three reasons were important in the decision to establish middle schools.

In response to Brooks's article, Alexander (1978) reaffirmed Brooks's conclusion that "little significant differences were found other than that the number of middle schools had quadrupled" (p. 3) since Alexander's 1968 survey and that "an identity and a distinctiveness" for middle schools was not yet apparent. He also noted the similar conclusions of the two surveys--that the middle school program is not easily distinguished from junior high schools or even from high schools. Alexander noted that "with regard to certain program features included in both surveys [team teaching, interscholastic athletics, the provision for large/small-group instruction], little change occurred over the decade, 1967-77" (p. 3).

In a 1988 study of a large sample of the nation's middle schools, Alexander and McEwin stated:

The latest data we have . . . show that the total number of 7-9 units (junior high schools) was 2,191 in 1986-87, a drop of 53 percent since 1970-71, and that of 6-8 units (middle schools) was 4,329, an increase of 160 percent since 1970-71" (p. 2).

Their data are shown in Table 2.1.

Table 2.1.--Number of middle schools of various grade organizations, with percent of increase/decrease, 1970-71 to 1986-87.

Grade Organization	Number of Schools		Percent of Increase/Decrease
	1970-71	1986-87	
Grades 5-8	772	1,137	+ 47
6-8	1,662	4,329	+ 160
7-8	2,450	2,627	+ 7
7-9	4,711	2,191	- 53
Others <sup>a</sup>	850	573	- 33
Totals	10,395	10,857	+ 4

Source: W. M. Alexander and C. K. McEwin, Schools in the Middle: Status and Progress (Columbus, Ohio: National Middle School Association, 1989), p. 2.

In 1977, the West Virginia Department of Education accepted a report that encouraged the development of middle schools as an alternative to the traditional junior high schools. The report included all 18 characteristics of a middle school defined earlier by Riegler (1971).

In a 1977 survey in Florida, George reported that the number of middle schools in Florida exceeded the number of junior high

schools. He sought to determine whether or not the two types of schools were, in fact, different and which type was implementing the educational programs deemed appropriate for this age group. His sample consisted of 153 middle schools and 127 junior high schools, as defined by the names of the schools. The response rates were 84% and 82%, respectively. George found that the two types of schools were closely related in many respects, but that in a few areas (interscholastic athletics, dances, clubs and organizations, team teaching, elective offerings, certification of teachers, and organization for instruction), differences, although minor, were beginning to appear in Florida.

Valentine (1981) found that there were dozens of arrangements for the grade organization pattern of middle schools nationwide. The most common was grades 7-8-9 housed in the same building (42%), followed by grades 7-8 (31%) and grades 6-7-8 (15%).

In a 1984 National Association of Elementary School Principals publication, the authors noted that the recent

concern for our system of public education has been evidenced in numerous wide-ranging reports, many of them critical of schools and calling for widespread reforms. Too many students, several of the reports suggested, leave the classroom unprepared. (p. 1)

The NASSP authors attempted to determine whether there was a standard that could be applied to all elementary and middle schools in order to determine whether they could identify "those factors that make a difference between a successful school and one that needs a change in direction" (p. 1). The authors started from the assumptions that in order to merit a "quality" rating a school

"should focus its program on the particular needs of the individual children who attend that school" and that "quality schools do not exist in isolation from the rest of the community" (p. 1).

The authors went on to list and discuss 21 "Standards of Excellence" and the "Quality Indicators" that, if developed and followed, would provide a "quality" school for the community.

According to Alexander and McEwin (1989),

The dearth of information concerning the status of middle level education has long plagued this educational movement. Although a separate middle level school has been a part of majority practice for several decades . . . the United States Department of Education and many state departments have virtually ignored this reality. Information on those schools continues to be gathered by these agencies in just two categories, elementary and secondary. (p. ix)

In a 1989 Carnegie Corporation Report on Adolescent Development, the council stated that "Young adolescents face significant turning points" (p. 3). The council stated that the years of adolescence from 10 to 15 may be the last, best chance for many youths to choose a "productive and fulfilling life" and also "their last best chance to avoid a diminished future" (p. 3). The council noted that the "conditions of early adolescence have changed dramatically from previous generations" (p. 8).

The council made a number of recommendations. These included creating small communities for learning (team teaching), teaching a core academic program (basic learning experiences), eliminating tracking (continuous progress), empowering teachers and administrators to make decisions about the experiences of students (team teaching), fostering the health and fitness of students

(student services), reengaging families in the education of young adolescents (community relations), and connecting schools with communities.

The council noted that the "conditions of early adolescence have changed dramatically from previous generations" (p. 9); yet many of their recommendations appear to relate directly to Riegler's (1971) basic middle school characteristics as noted in the parentheses above.

Middle-level education has changed since the early 1960s, when it began. In 1965, Woodring wrote that the 6-3-3 plan, with its junior high school, appeared on the way out, and Vars (1961) commented that junior high schools were changing and that a state of flux existed in which educators needed to restructure intermediate education. The period of middle-level education that started a decade later showed signs that the movement to establish middle schools had already cleared the bandwagon or innovation stage and was here to stay. The period that began in the mid-1980s demonstrated that all doubt concerning whether the middle school was here to stay had been removed.

In the mid-1980s, several states required middle-level certification of teachers, several journals were regularly being published for middle-level educators, and one national and many state professional organizations had been formed. National, regional, and state conferences were held annually. Books for and about middle-level practitioners were published in prodigious quantities. References in the literature to junior high schools

were few, whereas references to middle schools were abundant. It appeared that the middle school concept--at least in concept, if not in fact--had preempted the field.

#### Studies of the Characteristics of Middle School Education

Riegle (1971) extracted from the literature a list of 18 basic middle school characteristics that previous writers had used to differentiate a middle school from a junior high school. This list was later refined by Romano et al. (1973), given wide publicity, and used as a model by many middle-level schools attempting to change their mode of operation. The list was used as a definition of what middle school education should be by both the West Virginia and Michigan State Departments of Education. Riegle's original dissertation was also used as the basis for many other studies.

The 18 basic characteristics of middle schools were chosen to be used in this study because (a) they are familiar to most Michigan middle school educators, (b) the 18 characteristics and the questionnaire that has been used to determine their degree of implementation have been used by a large number of other researchers in other studies, (c) their use has been supported by other studies during the past two decades, and (d) they encompass those characteristics that most middle school authorities and practitioners would expect to have in operation in a middle school.

The list of the 18 basic middle school characteristics is detailed in Table 2.2. Included are a definition of the characteristic and an explanation of the reasons for including the characteristic in the list of 18.

Table 2.2.--Eighteen characteristics of the middle school.

Principle	What and Why	Explanation
Continuous progress	The middle school program should feature a nongraded organization that allows students to progress at their own individual rate regardless of chronological age. Individual differences are at the most pronounced stage during the transescent years of human development. Chronological groups tend to ignore the span of individual differences.	The curriculum built on continuous progress is typically composed of sequenced achievement levels or units of work. As a student completes a unit of work in a subject he moves on to the next unit. This plan utilizes programmed and semi-programmed instructional materials, along with teacher-made units.
Multi-material approach	The middle school program should offer to students a wide range of easily accessible instructional materials, a number of explanations and a choice of approaches to a topic. Classroom activities should be planned around a multi-material approach rather than a basic textbook organization.	Maturity levels, interest areas, and student backgrounds vary greatly at this age, and these variables need to be considered when materials are selected. The middle-school-age youngster has a range biologically and physiologically anywhere from 7 years old to 19 years old. Their cognitive development, according to Piaget, progresses through different levels, too. (Limiting factors include environment, physical development, experiences, and emotions.) The middle school youngster is at one of two stages: preparation for and organization of concrete operations and the period of formal operations. These students have short attention spans. Variation in approach and variable materials should be available in the school program to meet the various needs and abilities of the youngsters and to help the teachers retain the interests of the youngsters.
Flexible schedules	The middle school should provide a schedule that encourages the investment of time based on educational needs rather than standardized time periods. The schedule should be employed as a teaching aid rather than a control device. The rigid block schedule provides little opportunity to develop a program to a special situation or to a particular student.	Movement should be permissive and free rather than dominated by the teacher. Variation of classes and the length of class time as well as variety of group size will help a student become capable of assuming responsibility for his own learning.



Table 2.2.--Continued.

Principle	What and Why	Explanation
Social experiences	The program should provide experiences appropriate for the transescent youth and should not emulate the social experiences of the senior high school. Social activities that emulate high school programs are inappropriate for middle school students. The stages of their social development are diverse and the question of immaturity is pertinent in the planning of activities for this age level.	The preadolescent and early adolescent undergoes changes which affect the self-concept. The youngster is in an in-between world, separate from the family and the rest of the adult world. This is a time of sensitivity and acute perception, a crucial time in preparation for adulthood. This is the age of sex-role identification. The youngsters model themselves after a same-sex adult and seek support from the same-sex peer group. The youngster needs to be accepted by the peer group. The attitudes of the group affect the judgment of the individual child. There is the necessity for developing many social skills--especially those regarding the opposite sex. There are dramatic changes in activity: dancing, slang, kidding, practical joke give and take, etc. Common areas should be provided in the building for social interaction among small groups.
Physical experiences & intramural activities	The middle school curricular and co-curricular programs should provide physical activities based solely on the needs of the students. Involvement in the program as a participant rather than as a spectator is critical for students. A broad range of intramural experiences that provide physical activity for all students should be provided to supplement the physical education classes, which should center their activity upon helping students understand and use their bodies. The middle school should feature intramural activities rather than interscholastic activities.	Activities that emulate the high school program are inappropriate for the middle school. The stages of their physical development are diverse and the question of immaturity is pertinent in planning activities for this age level. The wide range of physical, emotional, and social development found in youngsters of middle school age strongly suggests a diverse program. The child's body is rapidly developing. The relationship of attitude and physical skill must be considered in planning physical activities consistent with the concern for growth toward independence in learning. The emphasis should be upon the development of fundamental skills as well as using these skills in a variety of activities. Intramural activity involves maximum participation, whereas interscholastic activity provides minimum involvement. There is no sound educational reason for interscholastic athletics. Too often they serve merely as public entertainment, and encourage an over-emphasis on specialization at the expense of the majority of the student body.

Table 2.2.--Continued.

Principle	What and Why	Explanation
Team teaching	The middle school program should be organized in part around team teaching patterns that allow students to interact with a variety of teachers in a wide range of subject areas. Team teaching is intended to bring to students a variety of resource persons.	Team teaching provides an opportunity for teacher talents to reach greater numbers of students and for teacher weaknesses to be minimized. This organizational pattern requires teacher planning time and an individualized student program if it is to function most effectively.
Planned gradualism	The middle school should provide experiences that assist early adolescents in making the transition from childhood dependence to adult independence, thereby helping them to bridge the gap between elementary school and high school.	The transition period is marked by new physical phenomena in boys and girls which brings about the need for learning to manage their bodies and erotic sensations without embarrassment. Awareness of new concepts of self and new problems of social behavior and the need for developing many social skills is relevant. There is a responsibility to help the rapidly developing person assert his right to make many more decisions about his own behavior, his social life, management of money, choice of friends, in general, to make adult, independent decisions. The transition involves a movement away from a dependence upon what can be perceived in the immediate environment to a level of hypothesizing and dealing with abstractions. There is an establishment of a level of adult-like thought and a desire to test ideas in school as well as social situations.
Exploratory & enrichment studies	The program should be broad enough to meet the individual interests of the students for which it was designed. It should widen the range of educational training a student experiences rather than specialize his training. There is a need for variety in the curriculum. Elective courses should be a part of the program of every student during his years in the middle school.	Levels of retention are increased when students learn by "doing" and understanding is more complete when viewed from a wide range of experiences. Time should be spent enriching the student's concept of himself and the world around him, rather than learning subject matter in the traditional form. A student should be allowed to investigate his interests on school time, and to progress on his own as he is ready.

Table 2.2.--Continued.

Principle	What and Why	Explanation
Guidance services	The middle school program should include both group and individual guidance services for all students. Highly individualized help that is of a personal nature is needed.	The middle school child needs and should receive counseling on many matters. Each teacher should "counsel" the child regarding his learning opportunities and progress in respective areas. Each child should perhaps be a member of a home-base group led by a teacher-counselor, someone who watches out for his welfare. Puberty and its many problems require expert guidance for the youngsters, so a professional counselor should be available to the individual youngster.
Independent study	The program should provide an opportunity for students to spend time studying individual interests or needs that do not appear in the organized curricular offerings.	A child's own intellectual curiosity motivates him to carry on independently of the group, with the teacher serving as a resource person. Independent study may be used in connection with organized knowledge, or with some special interest or hobby. The student pursues his work, after it has been defined, and uses his teachers, various materials available in and out of school, and perhaps even other students, as his sources. He grows in self-direction through various activities and use of materials of his choice.
Basic skill repair and extension	The middle school program should provide opportunities for students to receive clinical help in learning basic skills. The basic education program fostered in the elementary school should be extended in the middle school.	Because of individual differences some youngsters have not entirely mastered the basic skills. These students should be provided organized opportunities to improve their skills. Learning must be made attractive, and many opportunities to practice reading, listening, asking questions, etc., must be planned in every classroom. Formal specialized instruction in the basic skills may be necessary and should be available.

Table 2.2.--Continued.

Principle	What and Why	Explanation
Creative experiences	The middle school program should include opportunities for students to express themselves in creative ways. Student newspapers, student dramatic creations, student oratorical creations, musical programs, and other student-centered, student-directed, student-developed activities should be encouraged.	Students should be free to do some divergent thinking and explore various avenues to various possible answers. There should be time allowed for thinking without pressure, and a place for unusual ideas and unusual questions to be considered with respect. Media for expressing the inner feelings should be provided. Art, music, and drama provide opportunities for expression of personal feelings.
Security factor	The program should provide every student with a security group: a teacher who knows him well and whom he relates to in a positive manner; a peer group that meets regularly and represents more than administrative convenience in its use of time.	Teachers need time to give the individual student the attention he needs, to help in counseling and curriculum situations. The student needs someone in school that he can be comfortable with.
Evaluation	The middle school program should provide an evaluation of a student's work that is personal, positive in nature, nonthreatening, and strictly individualized. The student should be allowed to assess his own progress and plan for future progress.	A student needs more information than a letter grade provides and he needs more security than the traditional evaluation system offers. Traditional systems seem to be punitive. The middle school youngster needs a supportive atmosphere that helps to generate confidence and a willingness to explore new areas of learning. Student-teacher planning helps to encourage the students to seek new areas. Student-teacher evaluation sessions can help to create a mutual understanding of problems and also to provide a more meaningful report for parents. Parent-teacher-student conferences on a scheduled and unscheduled basis should be the basic reporting method. Competitive letter grade evaluation should be replaced with open pupil-teacher-parent communications.

Table 2.2.--Continued.

Principle	What and Why	Explanation
Community relations	The middle school should develop and maintain a varied program of community relations. Programs to inform, to entertain, to educate, and to understand the community as well as other activities should be a part of the basic operation of the school.	The middle school houses students at a time when they are eager to be involved in activities with their parents. The school should encourage this natural attitude. The middle school has facilities that can be used to good advantage by community groups.
Student services	The middle school should provide a broad spectrum of specialized services for students. Community, county, and state agencies should be utilized to expand the range of specialists to its broadest possible extent.	Health services, counseling services, testing, opportunities for individual development (curricular and co-curricular) meeting the interests and needs of each child should be provided.
Auxiliary staffing	The middle school should utilize a highly diversified array of personnel such as volunteer parents, teacher aides, clerical aides, student volunteers, and other similar types of support staffing that help to facilitate the teaching staff.	Auxiliary staffing is needed to provide the individual help students require. A variety of teacher aides or paraprofessionals may be used to extend the talents of the professional staff.

Source: L. G. Romano, J. Riegler, and N. P. Georgiady.

Hawkins (1972) used the 18 characteristics as a measuring device to ascertain actual middle school practices in selected Michigan middle schools and in four other nationally prominent middle schools. He found that the four nationally prominent middle schools were applying the 18 characteristics to a significantly higher degree than were the 63% of Michigan middle schools that replied to his survey. He further found that the teachers and principals he surveyed viewed the application of the 18 characteristics to be of virtually the same degree.

Butera (1972) surveyed the literature and found 8 variables and 53 characteristics that should be present in middle schools. He surveyed all middle-level schools in New Jersey and scored each of them on their level of application of the eight variables. He found that most New Jersey middle schools did not possess a high number of the observable characteristics, that little difference existed in the actual practices of New Jersey middle and junior high schools, and that there was not a significant difference in the practices of those middle schools scoring in the top quartile of the variables and the total sample of middle schools.

Stark (1972) compared Arkansas middle schools and junior high schools. He received survey results from 94% of the middle schools and 88% of the junior high schools. Stark found that there was no significant philosophical or administrative difference between the two sets of schools, that most middle schools had adopted the practices considered most detrimental by critics of the junior high

schools, and that the primary reason for changing to a middle school was building use.

In a study of middle school practices, Good (1972) examined the organizational structure, administrative practices, and programs of middle schools in Pennsylvania. He found that the purposes and objectives of the middle schools reflected an interest in the "whole child" philosophy in exploration, in individualization, and in the development of learning skills. However, he also found that the level of innovation was low and incompatible with these purposes and that the organizational structures of the middle schools were inconsistent with the purposes of the schools. He also found that their instructional policies were at variance with their purposes and that many student activity programs were "inappropriate."

In 1972, Gross studied the present and perceived purposes, functions, and characteristics of the middle school. He surveyed 50% of the known middle schools with a survey consisting of 49 possible middle school purposes. This survey was augmented by an opinionnaire consisting of the same 49 possible purposes, which he sent to 150 nationally prominent middle school educators identified from the literature. Gross found that the middle school principals and the nationally prominent authorities agreed almost unanimously on the first 15 purposes and that the 7 purposes ranked last were rated as unnecessary by both groups. The two groups disagreed on the purposes ranked from 16 through 42, concerning whether it was necessary to exhibit these in a middle school. All but 1 of the 15

purposes were included among the 18 characteristics of Riegler's (1971) study.

Billings (1973) developed a selection of middle school criteria consisting of 78 items that he had culled from the literature. He attempted to identify those criteria and analyze their implementation in middle schools in Texas. Billings found that, although authorities in the field of middle school education demonstrated a high degree of consistency in their determination of the criteria necessary for middle school status, middle schools in Texas did not evidence implementation of those criteria.

Blight (1973) attempted to identify the unique characteristics of the emergent middle school and to establish characteristics that would delineate the emergent middle school. From the writings of nationally prominent middle school authorities, he extracted 33 characteristics and organized them into a model that contained seven categories. Blight interviewed 25 middle school principals and found that the majority of them accepted all 33 characteristics and that they agreed in general with the authorities writing in the field on the characteristics that made the middle school unique.

In a study of Arkansas middle schools, Daniel (1973) endeavored to determine the level of implementation of nine basic middle school characteristics as set forth in the literature. He found that Arkansas middle schools did not implement the nine characteristics to an appreciable degree.

Franklin's (1973) study of middle school practices in Virginia was undertaken to identify observable practices for middle schools



as proposed in the literature and to assess the degree to which these practices were in effect in Virginia middle schools. He identified 12 practices in the areas of instruction and organization and interviewed every middle school administrator in the state. All 12 practices Franklin identified were also included among Riegler's (1971) 18 characteristics. Franklin found that 5 of the 12 were practiced to an appreciable degree and that the remaining 7 were not in general practice.

In 1973, Fontenot investigated similarities and differences between middle schools and junior high schools in Louisiana. He determined that middle schools resembled junior high schools in operation, with grade structure being the most distinguishable feature. In his study of selected Pennsylvania middle schools, Hughes (1974) found that the organizational patterns of those schools were typified by team teaching within grades.

Raymer (1974) attempted to determine the current level of implementation of the 18 basic middle school characteristics that Riegler had identified in 1971. Raymer used a national sample of middle schools to contrast with a Michigan sample of middle schools. He found that Michigan middle schools with grades 6 through 8 implemented and practiced the 18 characteristics to a higher degree than the national sample of middle schools, but that the reverse was true for schools with grades 5 through 8.

In a study of middle school programs in California, Kramer (1974) investigated the degree of implementation of 18 basic middle

school characteristics in all California schools at the middle level. He found that approximately 50% of the characteristics had been implemented in middle-level California schools, but he stated that no further implementation would prevail until "trained teaching staffs" provided impetus for change.

Bloom (1974) conducted a study of Wisconsin schools to determine the extent of the implementation of 30 middle school principles underlying the middle school concept in the areas of curriculum, instructional practices, special services, and programs. Her 30 practices could be summarized into the 18 characteristics of Riegler's (1971) study. Bloom found that, in the area of instructional practices, Wisconsin middle schools showed a greater tendency to implement the principles than did junior high schools. However, there was not a high degree of implementation of those principles considered by authorities to be basic to middle school education in Wisconsin middle schools.

Bourgeois's (1974) study of a beginning middle school program demonstrated that there was a positive growth in student achievement during the first year of a middle school program that used as its principles 5 of the 18 characteristics of Riegler's (1971) study. However, the evidence was that the growth in achievement was not conclusive concerning the program's effect on students. There was no control group, and the study had a number of flaws.

As a result of his study of Utah schools, Dunham (1974) concluded that the reason for the move to the middle school was to meet more adequately the individual needs of students. The data

indicated that the majority of the emerging middle schools in Utah were student oriented and organized on a 6-8 pattern. The results of this study contrasted with those of several previous investigations (Mitchell, 1975), which had indicated that the primary reason for the move to middle schools was not to better meet the needs of students, but instead to manage enrollment problems.

In her 1975 study of student, teacher, and principal perceptions of organizational structures of middle schools with high and low levels of middle school concept implementation, Caul used Riegle's (1971) questionnaire to determine the implementation level of middle school concepts. She found that middle schools with a higher level of implementation of the 18 middle school characteristics had a more participative organizational structure and that the management practices of the principals of those schools were reflected in teacher management practices toward students.

Cave's (1975) study of middle schools and junior high schools in the Rocky Mountain region demonstrated that middle schools in the region did not incorporate a greater percentage of the 18 characteristics than did junior high schools. It was also found that middle school innovations requiring extensive changes in teaching styles, grade-level organization, schedule changes, and cooperation between teachers enjoyed less likelihood of being adopted than those not requiring such extensive changes.

Rosenau (1975) concluded that a number of characteristics should be incorporated into every middle school program. Of the

characteristics he studied, all had been included in Riegler's (1971) original list of 18 characteristics.

The purpose of Phelps's (1975) study of Georgia middle schools was to investigate their status. She concluded that their curriculum was very similar to that of junior high schools, with the exception of the inclusion of some related arts. The most predominant organization was departmentalization in both middle schools and junior high schools.

Unruh (1975) used a nationwide sample of three junior high schools and three middle schools from each state. He found that, in reference to their curriculum, middle schools more frequently used differentiated staffing, flexible scheduling, individualized instruction, and team teaching, all of which were part of Riegler's (1971) 18 characteristics. Unruh concluded, however, that in terms of organizational patterns, groups of subjects studied, instructional programs, and activity programs, the two types of schools were more alike than different and tended to follow the pattern of the previous two decades.

According to Kopko's (1976) study of New Jersey middle schools, the schools were only moderately (at the 50th to 74th percentile) implementing the recommendations of the publication of the Task Force on Intermediate Education in New Jersey, entitled "Middle School: An Idea Whose Time Has Come."

Walsh (1977) studied the self-concept of students in Michigan middle schools containing both high and low levels of implementation of the 18 basic characteristics of middle schools. Her purpose was

to determine whether a difference existed in students' level of self-concept in either of the two types of schools. Walsh concluded that no difference existed in students' self-concept that related to the level of implementation of the 18 characteristics.

Green (1977) attempted to ascertain the perceptions of principals in Michigan junior high schools and middle schools concerning the degree to which their schools implemented 55 selected practices recommended in the literature. The results indicated a substantial difference between principals' perceptions of "implemented" and "should be implemented" on the survey scale; principals' perceptions were greater on the "should be implemented" section of the scale.

Bohlinger (1977) investigated the current level of implementation of 18 basic middle school characteristics in Ohio schools housing grades 5-8 and 6-8. He concluded that Ohio middle schools had not implemented the 18 characteristics to a great degree. The total score of 50.5% supported this conclusion. Of the 18 characteristics, none had an implementation score higher than 80%.

In 1978, Beckmann conducted a study of Missouri middle schools to determine the current level of implementation of the 18 basic middle school principles. He, too, used Riegle's (1971) survey instrument. Beckmann found that schools whose name included the words middle school, when compared with those that called themselves junior high schools, made significantly higher scores in 7 of the 18

areas. However, although schools with the title "middle school" were slightly higher in applying the basic middle school principles, the differences between the two types of schools were not statistically significant.

Bell (1978) investigated 11 areas of difference between junior high and middle schools in Missouri. He, too, found that middle schools and junior high schools were more alike than different on selected characteristics of administration, organization, and curriculum.

Demps (1978) studied the relationship between teachers' perceptions of job satisfaction and their perceptions of the level of implementation of Riegle's (1971) 18 basic middle school characteristics. He found that no significant relationship existed between middle school teachers' job satisfaction and their perceptions of the level of implementation of the basic middle school characteristics. He also discovered that no significant difference existed between principals' and teachers' perceptions of the level of implementation of the 18 characteristics.

Wah (1980) also used Riegle's (1971) questionnaire about the 18 middle school characteristics. Wah determined that the longer a middle school had been operating, the greater the number of middle school characteristics it had implemented. He also found that the number of teachers who said they accepted the middle school philosophy had no influence on their responses to the 18 middle school characteristics. Wah's study involved only four schools and 70 staff members.

Pook's (1980) study concerned the relationship between teacher job satisfaction and the level of implementation of recommended middle school characteristics. She used Riegler's (1971) 18 characteristics and found that schools with high, medium, or low levels of implementation of the characteristics did not differ significantly in terms of teacher job satisfaction. However, Pook found that the higher the degree of implementation of middle school practices, the greater the satisfaction with school curriculum and facilities.

In a study of middle schools in New Jersey, Schuck (1982) concluded that there was no relationship between the desirable and observable characteristics of middle schools and student achievement.

Using a 24-question criterion scale, Middleton (1982) studied the relationship between the degree of perceived implementation of criteria associated with the middle school concept and selected characteristics of middle school teachers. She found that the amount of school time devoted to staff development was positively associated with the implementation of the characteristics but that age, years of experience, and teacher gender were not associated in any way with implementation of the characteristics.

In a 1982 study, Slate attempted to determine how middle school programs in Georgia had changed during the previous five years with regard to 15 middle school characteristics. She concluded that there had been an increase in the amount of implementation of the characteristics she studied over the previous five years.

Schindler (1982) conducted a study with a stratified sample of 10 exemplary middle schools and 150 national middle schools. He found that both groups were implementing the philosophical principles of the middle school concept and moving away from junior high school models. The exemplary middle schools showed the most concerted effort to provide a curricular program unique to the middle school student.

In 1985, Minster completed a study to determine the current level of implementation of 18 basic middle school characteristics as reported by a random sample of teachers, principals, and superintendents in selected Illinois middle schools. Using questions in Riegler's (1971) survey instrument, Minster found that superintendents reported a higher degree of implementation of the 18 characteristics than did principals, and principals reported a higher degree of implementation of the characteristics than did teachers. The findings also supported the indication that there was not a high degree of implementation of the 18 characteristics; the total average score was between 50% and 54%.

Magana (1987) replicated Minster's study in Wisconsin schools. Her findings were similar to Minster's in that administrators (superintendents and principals) perceived a higher degree of implementation of nearly all of the 18 characteristics than did teachers.

### Summary

From the early 1960s, when the trend toward the middle school concept first began to be discussed in the literature, to the early



1970s, when Riegle's (1971) landmark dissertation concerning the 18 characteristics of middle school education was published, to the present, the trend toward middle schools with their focus on meeting the individual needs of students has steadily progressed. New programs have been developed for this age group, the uniqueness of this age group has been established, numerous surveys have been conducted and dissertations published about middle school education, and more than 4,000 middle schools are in operation. Even a cursory review of the literature shows a plethora of articles about, interest in, and discussion of what constitutes a middle school. Riegle's (1971) investigation remains the landmark study in the expanding field of information about this unique age of student.

#### Studies of the Secondary School Recognition Program

A close inspection of the criteria and areas of measurement for the SSRP demonstrates that the criteria provide a description of a direct and simple style of management for a middle-level school. It is fairly representative of the way "tight ship" schools have been run during much of the twentieth century. St. Clair (1984) stated that the criteria are "incomplete, not faulty" and that "when one compares the DOE's list with the NASSP's list of components for good middle level schools, the discrepancies in style and tone are immediately obvious" (p. 1).

The NASSP's components were put together over a period of eight years by practicing school administrators working with university

personnel who specialize in middle-level education (NASSP, 1979). The NASSP's list was updated in 1983.

Garvin (1984) wrote that:

As one reads the national reports, one should keep in mind that the recommendations are not necessarily based on effective schools, but are, instead, recommendations for correcting ineffective ones. The findings of the SSRP reveal factors that are responsible for effectiveness in identified exemplary schools. It is interesting that these findings, at least on the middle grade level, do not often agree with those of the national reports. (p. 31)

Schindler (1982) used as one of his three sample groups ten exemplary middle schools. One of the study findings was that the exemplary middle schools showed the most concerted effort to provide a curricular program unique to the middle school student.

Hostetler (1984) attempted to determine to what extent there was agreement between leadership behavior in America's best-run companies and America's most effective schools. He used a sample of 82 schools recognized by the SSRP. Hostetler found that agreement existed between the managers of the best-run companies and principals of effective schools as to the eight basics of good management. Also, general agreement existed between teachers and principals about leadership style in schools recognized for excellence.

Jameson's (1985) study of Arizona's exemplary school program included all of the schools in the state recognized as exemplary since the inception of the program. Her study involved the effectiveness of the principals of these schools as related to their personality, formal training, and on-the-job experience. Jameson

found that principals perceived themselves to be operating mainly on the basis of their on-the-job experience; teachers perceived their principals to be operating mainly on the basis of their formal training.

In a 1985 study, Laurie sought to determine the communication patterns of principals of exemplary secondary schools in Kansas. His sample was the 29 schools identified as exemplary in the 1983-84 Kansas Exemplary School Program. Laurie found that teachers and principals perceived the principals' communication patterns differently.

O'Donnell (1985) investigated the correlations of risk taking and other selected variables among superintendents of exemplary schools. He sought data from 175 superintendents of exemplary schools selected in the SSRP during the 1983-84 school year. O'Donnell found that risk taking was greater among superintendents who had a large central office staff, whose districts spent more per pupil, who had been employed longer as a full-time teacher before achieving a superintendency, and who were younger at the time of their first superintendency.

Brown (1985) studied the leadership style of principals of the schools selected for national recognition in the 1983-84 school year. The sample included all 202 of the secondary schools selected that year. Brown concluded that the style of the principals was high leadership-high task, as delineated by Hershey and Blanchard's (1977) situational leadership theory.

Mason (1987) used as her subjects schools in Washington, D.C., that had been selected as exemplary by the SSRP. The study was concerned with computer use in these secondary schools.

Koger (1987) investigated the leadership activities, beliefs, and characteristics of all 209 principals of schools selected by the SSRP in 1984-85. He identified from the literature 7 general areas and 39 specific instructional leadership activities. Koger found that the most important belief of principals was that all students can learn.

In a 1987 study of secondary schools recognized as exemplary by the USDOE, Fink described community involvement in 28 secondary schools in Michigan, Ohio, and Indiana that had been selected over a three-year period. He found that superintendents and principals in these schools had actively sought and strongly encouraged community involvement and had nurtured it.

Suprina (1987) studied four high schools selected as exemplary by the SSRP. His purpose was to define the factors leading to their excellence and to contrast those four schools with another typical high school. From his study, Suprina developed a list of recommendations designed to transform an average high school into a candidate for recognition by the SSRP.

Scott (1987) sought to determine the practices currently in use in effective suburban high schools that had been selected as exemplary by the 1984 SSRP. After reading all of the applications of the nationally selected schools, Scott developed a list of

practices that had been reported by these exemplary schools as evidence of their effectiveness, in rank order of frequency.

Kolton (1988) compared practices of principals in secondary schools identified as exemplary by the SSRP with those of principals of nonexemplary schools. He found that principals of identified exemplary schools devoted less time to clerical tasks, were younger, had less administrative experience, were significantly more likely to have career aspirations other than the secondary school principalship, and spent less time on student discipline than did principals of nonexemplary schools.

Nelon (1988) sought to determine whether there was a relationship between a principal's behavior and the organizational climate in selected exemplary schools. The study involved only three North Carolina schools that had been selected as exemplary in the 1985 and 1986 SSRP. Nelon found a close and significant relationship between a principal's behavior and the organizational climate in those schools.

Westhoff (1988) attempted to draw a relationship between Wisconsin's School Improvement Project and characteristics of the six Wisconsin high schools selected as exemplary in the state's 1986-87 SSRP. (Three were selected for national recognition and three were not.) Westhoff's purpose was to compare the USDOE's criteria for selection as exemplary with those of the Wisconsin School Improvement Project to determine how consistent those criteria were in identifying successful secondary schools. Results of the study indicated that the instrument used in the Wisconsin

School Improvement Project (the Connecticut Staff Questionnaire) yielded results that were consistent with those of the SSRP selection criteria in their identification of selected secondary schools. The mean scores of teachers in the three nationally recognized schools were significantly higher on each of the 12 constructs factored from the Staff Questionnaire than the scores of teachers from the three schools that had not received national recognition.

Terry (1988) studied secondary school teachers' perceptions of principals' leadership behaviors in schools selected for national recognition in 1982 and 1983. She found that teachers in exemplary schools and those in nonrecognized schools had similar perceptions regarding their principals' behavior.

Arnn and Mangieri (1988) conducted a study of the 202 secondary schools that had received recognition in the 1983-84 SSRP. The researchers found that the top three teaching behaviors valued by the principals (regardless of the level of the school) were task orientation, enthusiasm and interest, and direct instruction. The three teaching behaviors valued least by the principals were variability (flexibility of teaching methods, extra materials, and so on), structuring (the amount of teacher direction), and the opportunity to learn criterion materials (the extent to which criterion material was covered in class). It appeared from their survey that the administrators of effective schools placed priority on strong goal orientation, active assessment, strong focus on academic subjects, and teacher-initiated instruction.

In a recent research project in Michigan, Ratajik (1988) concentrated on the SSRP's selection and determination process. The question he asked was: "Did those public elementary schools selected for recognition as exemplary by the Michigan Department of Education represent the highest levels of quality in Michigan?" Five independent variables that were suggested to be associated with the dependent variable of an exemplary school were identified. These variables were derived from Parsons, Bales, and Shils's (1953) organizational-effectiveness elements and from Mott's (1972) overall organizational-effectiveness rating. Also included in this study were socioeconomic elements such as household income and education, and district per-pupil expenditures.

The selection of subjects included all schools [in Michigan] which applied for recognition as an exemplary school in 1986, including the 20 finalists which were ultimately selected. As a reference point to compare the applicant schools, the highest achieving Michigan public elementary schools were identified according to 1984, 1985 and 1986 fourth grade Michigan Educational Assessment Program test results. Thus, three categories of schools--"exemplary" (those chosen), "non-exemplary" (applicants) and "achievement" (test results)--were compared. . . . The data were collected through surveys as well as the [Michigan Department of Education] computer system.

. . . . The major findings of the study indicate that:

1. No statistically significant difference exists among the three categories of schools, except for pupil academic achievement.

2. Schools which applied for exemplary status have pupil-achievement test scores which are significantly lower . . . than schools which were identified based upon highest pupil-academic achievement.

3. There is no significant statistical difference, between the three categories of schools, when comparing household income, household education and school district per-pupil expenditure. . . .

Thus, only one significant difference appears between public elementary schools involved in this study: schools

which applied for exemplary status have pupil achievement test scores which are significantly lower than schools which were identified based upon the highest pupil academic achievement. The organizational effectiveness elements used in this study--pupil achievement, staff commitment, staff innovation, staff cohesiveness and overall building effectiveness--are not related to the selection or rejection of the schools which applied for exemplary status. . . . The anticipated differences thought to exist between exemplary and non-exemplary schools do not exist.

Even more unexpected was the fact that the socioeconomic elements have no apparent effect on any one of the three sets of schools. How much money a school district spends per pupil has little or no effect on the selection of an exemplary school or on how well the pupils achieve. Family income has little or no effect on the selection of an exemplary school or how well pupils achieve. Family education has little or no effect on the selection of an exemplary school or how well pupils achieve. (pp. 22-23)

Connors and Irvin (1989) attempted to determine whether the way a school is organized for instruction and student life contributed to "excellence." They believed that there might be a relationship between "middle-schoolness" (the degree to which a school adheres to the middle school concept) and excellence. They conducted a national study whose purpose was to determine if there was indeed a difference in the degree of middle-schoolness between schools cited as excellent by the SSRP and a random sample of middle-level schools. Substantial differences were found between the two groups. Their sample comprised the 93 middle-level schools that were "recognized" by the USDOE in 1987, as well as a random national sample of 154 nonrecognized middle-level schools serving grades 6, 7, and 8. The response rate was 83% for the former group and 57% for the latter group.

The survey instrument was a 1982 National Middle School Association pamphlet from which Connors and Irvin drew 10 statements



that they used to determine the level to which a school ascribed to the middle school concept. Respondents had to answer only "yes" or "no" to each statement. Clear differences were found between the recognized schools and the randomly selected schools with regard to each of the 10 statements. Recognized schools were consistently one-third to one-half higher in their level of middle-schoolness, according to the authors. Schools were rated on a scale of 1 to 10, with 10 representing the highest degree of middle-schoolness. The authors stated that 74% of the nationally recognized schools implemented 6 to 10 of the essential elements of a middle school, as compared to only 47% of the randomly selected schools. They concluded that middle-schoolness appears to be an indicator of excellence, insofar as the SSRP is concerned.

A distribution of the middle-level schools selected for recognition by the SSRP during the years 1982 through 1984, compared to a national distribution of name labels of middle-level schools, is shown in Figure 2.1. According to the United States Department of Education's Office of Educational Research and Improvement, "in the schools for young adolescents, there are [sic] a greater variety of grade-span combinations" than in high schools, "but the distinguishing characteristic is whether a school labels itself as a junior high or a middle school" (Woods, 1985, p. 7). It should be noted that those schools that bear the name "middle school" exhibit a slightly increased incidence of selection by the SSRP than do those schools that are labeled "junior high school."

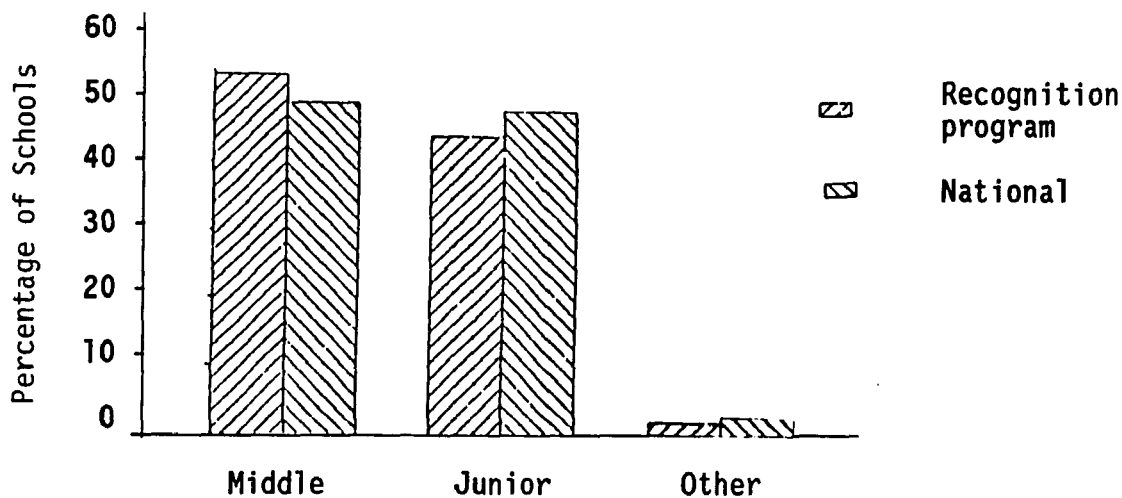


Figure 2.1: Distribution of middle-level schools selected for SSRP recognition, 1982-1984, compared to national distribution of name labels of middle-level schools. (From M. A. Woods, ed., The Search for Successful Secondary Schools--The First Three Years of the Secondary School Recognition Program, Philadelphia, Pa.: U.S. Department of Education, Office of Educational Research and Improvement, 1985, p. 10.)

### Summary

The SSRP is still too new to have developed around it a significant body of research. Of the studies that have been completed, most involved the principal's leadership behavior as an aspect of the research. A minor pattern is also the investigation of what determines the effectiveness of a school (other than the SSRP criteria). It appears that virtually all of the research that has been conducted involved high schools. Middle schools and elementary schools do not seem to have been investigated to an appreciable degree.

### The SSRP in Michigan

In 1982, Secretary of Education Terrel H. Bell established a program of recognizing exemplary schools, which, he believed, were to be found in every state and region of the nation. The intention was not simply to make Americans feel better about their schools and the schools to feel better about themselves. Bell hoped that the program, which was named the SSRP, would give rise to a "national conversation on excellence in education," which, in turn, would become the matrix of school improvement. He asserted that the nation's schools needed outstanding role models and that this was the motivation for the program.

During the early 1980s, the nation's educational institutions and their various publics had been battered by the deficiencies and recommendations that had been outlined in reports such as A Nation at Risk (National Commission on Excellence in Education, 1983), A Place Called School (Goodlad, 1983), High School: A Report on Secondary Education in America (Boyer, 1983), and The Paideia Proposal (Adler, 1982). Confidence in education and American educational institutions was at a low ebb. Secretary of Education Bell invited all 50 states to participate in the SSRP.

In Michigan in February 1983, self-nomination forms for the SSRP were mailed to the superintendents of local school districts by the Superintendent of Public Instruction. The form for the first year requested answers to questions in three categories and had an additional three questions relating to obstacles, changing conditions in the school, and school climate, as well as places for

the names, addresses, and signatures of local district administrators.

Michigan's then-Superintendent of Public Instruction, Philip Runkle, wrote to Michigan school district superintendents on February 4, 1983, asking each of them to "nominate any of your schools which you feel would be worthy of recognition." He enclosed a copy of the nomination form.

The forms were to be filled out and sent to Runkle's office in Lansing on or before March 4, 1983. His letter stated that "once the forms have been received in Lansing, they will be reviewed by a panel consisting of practicing Michigan principals who have been selected by their professional organizations." Runkle stated that, following this review, he would announce up to five schools at the high school level and up to five more at the middle school level whose nomination forms would be sent to Washington, D.C., for national consideration.

During the first year of the SSRP, each state was allowed to forward to Washington the names of a maximum of five middle schools/junior high schools and five high schools. In succeeding years, this restriction was changed, and each state was granted a quota determined by the number of secondary schools in the state on each educational level. For instance, in 1984, Michigan sent 18 names of schools to Washington (of these, 11 were selected for national recognition). Michigan had been allowed a total of 9 high schools and 10 middle-level schools during the second year of the

program. During the third year of the program, past years' nationally recognized schools were listed by the USDOE as ineligible to participate again. (This restriction was later defined to mean for a five-year period.)

Information about the program during its first year was sketchy, at best. The program was new and had received virtually no publicity at its inception in the literature or in the popular press. In Michigan, that situation was remedied during the second year of the program. The State Department of Education sent additional information such as a time line, the application forms were sent in November (as compared to February the previous year), applications had a due date that was two months later than the mailing date of the application (as compared to one month), and the site visits were to be completed before the end of May (as compared to mid-June the previous year).

During the second year of the program, Michigan also sent a point scale so that those who filled out the form would know the degree of emphasis those who reviewed the forms would be instructed to place on each item. In addition, the nomination form was expanded from a total of 14 pages that had been allowed to a total of 20 pages for each school.

During the first two years of the program (1983 and 1984), Michigan led all states in the number of schools that received national honors. Sixteen Michigan schools received awards during those two years.

The selection process in Michigan was not complex during the year of the program's inception. It has become increasingly more so during the past five years.

Following receipt of the self-nomination form in the initial year of the program, the MDOE in Lansing set up a review panel consisting of MDOE personnel and practicing administrators who had been recommended to serve on the panel by their professional organizations. The goal was to have 15 reviewers for middle-level schools and 15 for high schools.

In that first year, the reviewers simply rated each school that had sent a self-nomination form according to their perceptions of the minimal verbal instructions they received when they met in Lansing. The top five schools in each category were then selected and sent to the MDOE as Michigan's "selected schools."

The selection process in Lansing became increasingly more complex during succeeding years. By 1986, for instance, a number of significant changes had been made in the process. Reviewers were provided with a general background paper on the process of selecting schools for the SSRP in Michigan and copies of the nomination forms. Also, that year, 27 secondary school principals and 12 MDOE personnel participated in the selection process over a two-day period. Selection of this review panel had been based on (a) experience with the SSRP, (b) geographic distribution throughout the state, and (c) balance according to school size, racial/ethnic composition, and urban/suburban/small town/rural locations.

The 1986 review panel was divided into 13 teams consisting of three members each. The application review process involved two major components: (a) scoring based on multiple readings of the nomination form and (b) site visits by the panelists. This process was designed to use the same criteria proposed by the USD OE as its model and to use the same scoring, weighting, and site visit forms as the national program.

The selection process involved three parts. The first part involved reviewing and scoring the application. In the first round of scoring, each of the applications was read by a team of three panel members who scored them independently, discussed discrepancies, and collectively arrived at an average score based on the three independent scores. The applications were then rank ordered according to their average scores, and the top 25 in each category (high school and junior high/middle school) were selected for the second round of scoring. The second round of scoring involved the distribution of the top 50 applications to new teams and readers, where they were read by an additional three readers and scored independently. A new average score based on the total six independent reader scores was computed, and a new ranking list was established. Based on the new ranking, the top 15 schools in each category were selected for visits.

The second part of the selection process was the site visits. Thirty schools were visited during the week of January 12-16, 1987, by designated teams. The team of two was typically composed of a principal from a secondary school that had been recognized in this

program in previous years, and a member of that principal's community (i.e., parent, board member, business leader, teacher, etc.). Each team arranged an appointment with each visited school independently and expectations were discussed: (a) principals of the schools being visited would have to provide evidence of the programs and/or data present in their application, and (b) the site visit team would verify the information and data according to a site visit report form provided, which asked if the "information presented in the nomination form is (a) accurate as stated, (b) understated, or (c) overstated."

Each site visit team was given 15 points to use in the following manner:

1. If all information and data could be verified or otherwise proven, the site would gain 15 points to be added to their final average score, or

2. If the information provided by the application was inaccurate, grossly overstated or otherwise impossible to demonstrate, the site visit team was instructed to deduct 1 point for each area that could not be verified up to a total of 15 points.

The final selection process consisted of ranking the review panel's final recommendations and forwarding those rankings to the MDOE. The rankings were based on:

1. Ranking of first round of applications review (average of three scores).



2. Ranking of second round of applications review (average of six scores).

3. Site visitations that verified information (possible 0-15 additional points).

The Reviewer's Guide to Selecting Schools for Site Visits was drawn up by the USDOE and contained a maximum of 135 possible "points." Points were assigned, based on the following criteria for each of the three sections of the nomination form:

<u>For Sections I and III</u>		<u>For Section II</u>	
Excellent	= 5 points (E=5)	Excellent	= 14-15 points
Good	= 4 points (G=4)	Good	= 12-13 points
Average	= 3 points (A=3)	Average	= 9-11 points
Below Average	= 2 points (BA=2)	Below Average	= 6-8 points
Poor	= 1 point (P=1)	Poor	= 1-5 points
Missing	= 0 points (M=0)	Missing	= 0 points

For the 14 responses to Section I, the total possible points was, therefore, 70. The second section of the form contained a total of 30 possible points distributed equally between the two questions asked on the form. The total possible points on the third section of the self-nomination form was 35.

The Reviewer's Guide to Selecting Schools for Site Visits forms were used in Michigan by the Michigan panel. They were also used by the national panel in the second phase of the process in Washington, D.C., in 1986-87. This form contained 12 pages and a cover sheet with directions.

The Site Visit Report form was a more extensive document. It was used by both the Michigan panel in their one-day site visits and

by the national site visitors in their two-day site visits. It consisted of the same questions, but in a slightly different form. For each question on the self-nomination form, the site visitor was asked to check a blank that indicated whether the information presented in the nomination form was "(a) accurate as stated, (b) understated or (c) overstated."

There was a section for each question that asked for "documentation" also, and site visitors were expected to write comments in that area concerning the documentation they had verified. There was also a page for the site visitor to answer specific questions that the panel had posed. The final page noted that the site visitor should "use this space to note anything he/she believes is important in understanding this school and that is not mentioned elsewhere in this report."

The site visitors' completed reports were then sent back to the Michigan panel for the final elimination process. In Michigan that consisted of narrowing down the number of schools that was acceptable to send to the national panel.

In 1989 the MDOE's letter announcing the opening of the 1989-1990 elementary school portion of the program stated:

Our selection process will involve a peer panel review of the applications, site visitations for finalist schools, and the final nomination of fifteen Michigan schools for the national program. Superintendents should also be aware of the Department's concern for the need for representation from across the state. We will not be nominating more than a single school from any district with fewer than 50 elementary buildings. We will formally recognize our outstanding schools in a ceremony this winter with the State Board of Education.

This seemed to some to be a statement that Michigan was not seeking the very best, but only a representative selection of those schools at the upper end of the spectrum, and, thus, a denigration of the goals of the SSRP.

### The SSRP's Attributes of Success

To determine whether or not a school was exemplary and to be able to have some criteria to identify exemplary schools, the SSRP had first to answer questions such as "What constitutes success in public secondary education?" and "How can unusually successful schools be identified?"

The SSRP attempted to answer these questions by collecting information from the schools that nominated themselves based on the SSRP's "14 attributes of success." The SSRP stated that these attributes "were drawn from studies of effective schools and represent a synthesis of the findings concerning significant characteristics of schools" (Woods, 1985, p. 17). The SSRP went on to state that the "research on effective schools has often been criticized for methodological weaknesses" and that "most of the studies have examined urban elementary schools serving low-income children" (Woods, 1985, p. 17).

Nevertheless, the SSRP selected from the available research four studies (Coleman, Hoffer, & Kilgore, 1982; Lightfoot, 1983; Lipsitz, 1984; Rutter et al., 1979) that they thought confirmed "the general findings from the school effectiveness research" (Wood, 1982, p. 17). From those four studies the SSRP, although all of the

14 attributes were not discussed in each study, extracted their 14 attributes of success.

The 14 attributes of success are listed in Table 2.3. The descriptors of each attribute are listed under the column headed by the name of the author of the study and are intended to serve as a definition of the attribute.

A Brief Discussion of the Relationships Between the  
18 Basic Middle School Characteristics and the  
14 Attributes of the SSRP

The 18 basic characteristics of middle schools and the 14 attributes from the SSRP are listed and defined elsewhere in this chapter. The 14 attributes of the SSRP are used to evaluate self-nominated schools during the exemplary-school selection process. These 14 attributes are used to evaluate high schools, junior high schools, and middle schools. All of these three types of schools are, of course, distinctly different. The 18 basic middle school characteristics are meant to be applied only to middle schools or to those schools that are attempting to change to middle schools.

An examination of both lists indicates that:

1. None of the 14 attributes is worded the same as any of the characteristics.
2. The 18 characteristics seem to focus on student-related concepts. The 14 attributes seem to focus on teacher-related concepts.

Table 2.3.--Studies of unusually successful secondary schools.

Attributes of Success	Rutter et al. (1979)	Coleman et al. (1982)	Lightfoot (1983)	Lipsitz (1984)
1. Clear academic goals	Consensus on aims and values	--	Clear and shared ideology	Clarity about school mission and consensus about goals
2. High expectations for students	High expectations of academic success	Students taking more rigorous courses and higher grading standards	Desire to have all students work to their full potential	A climate of high expectations
3. Order and discipline	Students held responsible for personal behavior	Fewer disciplinary problems, but firm, fair discipline	A safe, regulated environment for teacher-student relationship	An orderly and caring environment
4. Rewards and incentives for students	Frequent use of praise and direct feedback on performance	Greater teacher interest in students	Respect for teachers	Respect for teachers; many rewards for students
5. Regular and frequent monitoring of student progress	Frequent feedback on performance to students; frequent homework	Higher standards in grading	--	--
6. Opportunities for meaningful student responsibility and participation	High proportion of children in positions of responsibility	High participation in extracurricular activities	--	School provides diverse experience for students
7. Teacher efficacy	Pleasant working conditions for staff and students	--	Respect for teachers and teaching; greater autonomy for teachers	A principal who supports the staff; lack of isolation of teachers
8. Rewards and incentives for teachers	--	--	--	--
9. Concentration on academic learning time	Students actively engaged in learning and doing more homework	Students do more homework and less class cutting	--	--

Table 2.3.--Continued.

Attributes of Success	Rutter et al. (1979)	Coleman et al. (1982)	Lightfoot (1983)	Lipsitz (1984)
10. Positive school climate	A positive "ethos"	Greater teacher interest in students	A sense of community	An orderly and caring environment
11. Administrative leadership	Consistent policies and procedures	--	Leadership fitting the culture of the school	Strong instructional leadership; a principal with vision
12. Well-articulated curriculum	--	--	--	Teaming promotes curriculum development and articulation
13. Evaluation for instructional improvement	--	--	Awareness of imperfections and willingness to search for solutions	Standardized tests used for diagnosis and justification of curricular decisions
14. Community support and involvement	--	--	--	Schools responsive to their particular social and political milieu

Note: A -- indicates this attribute was not discussed in that particular study.

3. By definition, the characteristic of continuous progress seems to be related to the attribute of high expectations for students.

4. By definition, the characteristic of community relations seems to be related to the attribute of community support and involvement.

5. By definition, the characteristic of evaluation seems to be related to the attribute of regular and frequent monitoring of student progress.

6. By definition, the characteristic of security factor seems to be related to the attribute of positive school climate.

7. The characteristic of creative experiences seems to be related to the attribute of opportunities for meaningful student responsibility and participation by definition in one of the studies. The characteristics of physical experiences and intramural activities and social experiences could also relate to this attribute.

It would appear that there may be a small degree of correspondence between the 18 basic middle school characteristics and the 14 attributes of the SSRP, based on the definitions of all 32 indicators.

If the USDOE-selected middle schools in Michigan rank high on their degree of attainment of the 14 attributes of success of the SSRP, based on the fact that they were, indeed, selected by the USDOE, then they also rank high on their implementation level of the 18 basic middle school characteristics as evidenced by the fact that

the implementation levels as reported by the teachers and administrators in those USDOE-selected schools were 64% and 65%, respectively. Those levels of implementation are the highest that have been reported by any study of the 18 characteristics. These facts, too, argue that (a) there may be a positive correlation between the two sets of criteria and (b) further study is needed.

### Summary

During the last three decades, the growth in the number of schools labeling themselves as middle schools has been phenomenal. The concepts that led to the development of middle schools and their tremendous growth have remained, according to the professional literature, remarkably unchanged during the past 30 years. There has been a growing unity that the needs of adolescents should be met by implementing the concepts that form the basis for middle school education.

Numerous studies that relate to middle school education have been completed during the past 30 years. Perhaps the landmark study was Riegler's (1971) study of the 18 characteristics of middle school education. It has been replicated many times and is used as a basis for evaluating and examining middle school programs.

The SSRP is yet too new to have been the subject of comprehensive studies. It has, however, because of its national scope and because of the widespread publicity given to those schools designated as exemplary by the program, received widespread recognition in the popular press.



Michigan has participated in the SSRP since the program's inception in 1982, and Michigan schools have received their share of the national awards. It appears that both the 18 basic characteristics of middle schools and the SSRP will be a part of middle school education for some time.

## CHAPTER III

### DESIGN OF THE STUDY

#### Introduction

The design and methodology of this study included the following areas: (a) purpose of the study, (b) the sample, (c) the instrument, (d) procedures, and (e) treatment of the data.

#### Purpose of the Study

The purpose of this study was to determine the extent to which the 12 nationally recognized exemplary middle schools/junior highs in Michigan had implemented the 18 characteristics of middle school education at the time of the survey, as perceived by principals and teachers in those schools.

The 18 characteristics have been recognized as definitive since Riegle (1971) extracted them from the literature and had them validated by a nationally recognized panel of experts. Essentially, the research was a discrepancy analysis between the survey results and the practices of the exemplary Michigan middle schools/junior highs chosen during the years 1983 through 1987.

#### The Sample

The MDOE identified the 12 Michigan middle schools/junior highs that had been selected by the USDOE as outstanding and exemplary

secondary schools during the first five years of the program. Those 12 schools became the study sample.

The 12 selected schools were sent two cover letters and a packet of materials that included two survey instruments and two stamped, self-addressed return envelopes. One survey instrument was to be filled out by the building administrator, and one was to be filled out by a teacher who was closest to tenth on the building's alphabetical list of teachers and who had also taught in the building for at least five years. The building administrators of all 12 schools were contacted by telephone in advance of mailing this material in order to solicit their cooperation. Those 22 documents that were completed provided the data for this study.

#### The Survey Instrument

The survey instrument that was developed and used by Riegler (1971) and used and replicated a number of times since then (Beckmann, 1978; Bohlinger, 1977; Demps, 1978; Kramer, 1974; Magana, 1987; Minster, 1985; Pook, 1980; Raymer, 1974) was selected as the instrument to be used in this study. It was particularly pertinent that this instrument be used because it (with its accompanying literature) is the instrument that is most often referred to in organizing middle schools in Michigan.

The original instrument that Riegler developed had been validated by a panel of middle school experts at the time of its original use. The original instrument was then further reviewed and revised by a panel of authorities at Michigan State University.

That panel included Marie Elie, Nicholas Georgiady, Ann Grooms, Louis Romano, and Emmett Williams.

Based on their suggestions, Riegler compiled a list of the 18 middle school characteristics on which he had based his survey document. Those characteristics were listed and explained in Chapter II.

The survey instrument used in this study included the entire survey as used by Riegler with only minor changes in wording. For instance, Riegler's original instrument included references to "Grade 5." That reference was eliminated from the instrument used in this study because not one of the schools surveyed included Grade 5 in its organization. Copies of the survey instrument, the cover letters, and other pertinent information are included in the appendices.

### Procedures

On February 28, 1988, a telephone call was placed to each of the building administrators of the 12 selected schools, soliciting their cooperation in filling out and returning the survey (and encouraging a teacher to fill out and return the survey) and giving them some background concerning the purpose of the survey. All promised to cooperate.

On March 5, 1988, two cover letters, the survey instruments, and two stamped, self-addressed return envelopes were mailed to each of the 12 selected schools. Surveys were returned from all but one of the selected schools. On March 28, 1988, a reminder letter and

two additional sets of material were sent to the single school from which completed surveys had not been returned. No response was received.

The responses received from the 11 responding schools provided the raw data for the analysis. The raw scores were recorded on a tally sheet. A mean score on each characteristic for each group was calculated. The mean score was converted to a percentage of maximum possible score yielded by the survey instrument for each characteristic and for the grand total possible for each group. The conversion of mean scores to percentages was necessary because of the varying maximum scores that were possible among the characteristics. This conversion made possible comparisons between the various groups.

#### Objectives of the Study

1. To measure the degree of implementation of the 18 middle school characteristics as reported by administrators in the Michigan middle schools and junior highs that were designated as exemplary by the USD0E in the years 1983 to 1988.

2. To measure the degree of implementation of the 18 middle school characteristics as reported by teachers in the Michigan middle schools and junior highs that were designated as exemplary by the USD0E in the years 1983 to 1988.

3. To compare the average level of implementation scores of the 18 characteristics as reported by administrators to that

reported by teachers in the 12 designated Michigan middle or junior high schools.

4. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as urban schools.

5. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as suburban schools.

6. To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as rural schools.

7. To compare the average level of implementation scores reported by the urban schools with that reported by the suburban schools.

8. To compare the average level of implementation scores reported by the urban schools with that reported by the rural schools.

9. To compare the average level of implementation scores reported by the rural schools with that reported by the suburban schools.

10. To measure the average level of implementation scores for those designated schools with a student population between 450 and 550.

11. To measure the average level of implementation scores for those designated schools with a student population less than 450 and more than 550.

12. To compare the average level of implementation scores reported by those schools with a student population between 450 and 550 with that of all other sizes of the 12 designated schools.

13. To measure the average level of implementation scores for those schools that have been designated a middle school for eight years or more.

14. To measure the average level of implementation scores for those schools that have been designated a middle school for fewer than eight years.

15. To compare the average level of implementation scores of those schools that have been designated a middle school for more than eight years with the average level of implementation scores of schools that have been designated a middle school for fewer than eight years.

#### Summary

In 1971, Riegle extracted from the literature a list of 18 characteristics of middle school education and constructed a survey instrument based on those characteristics. His study has been replicated a number of times since then. The 18 characteristics had been reviewed by practitioners and by consultants at Michigan State University before Riegle developed his survey instrument.

In 1982, the USDOE developed and requested the 50 state Departments of Education to put into practice a procedure for selecting, during the 1982-83 school year, the outstanding and exemplary secondary schools in their states. In the present study,

the researcher attempted to determine the extent of the usage of the 18 characteristics in those Michigan schools that had been selected as outstanding and exemplary by the USDOE during the first five years of the SSRP.

The survey instrument for this study was replicated from Riegle's (1971) study with only minor changes. Returns were received from all but one school surveyed. The completed surveys were used as the source material for this study.

Using the completed surveys, a raw score for each survey group was tallied. Scores were then converted to percentages, which provided an indication of the level of implementation for each of the 18 characteristics for each school and each group at the time of the survey. This information allowed certain comparisons to be made according to size of school, length of time the school had been termed a middle school, and the type of community in which the school was located.



## CHAPTER IV

### RESULTS OF THE DATA ANALYSES

#### Introduction

The data for the material presented in this chapter were gathered from the survey instruments that were sent to the 12 Michigan middle/junior high schools that had been identified for national recognition by the Secondary School Recognition Program during the years 1983 through 1987. A total of 22 survey instruments were returned; 24 had been sent out. One large metropolitan school did not reply to either the teacher or the administrator survey despite several requests.

The questionnaire used had been designed to collect data for each of the 18 basic middle school characteristics that were described and listed in Chapter II. The questionnaire was slightly modified only to reflect the fact that grade 5 was not included in any of the 12 selected schools. The original survey instrument had included references to grade 5, and all of those references were eliminated from this survey for purposes of clarification.

Table 4.1 lists the 18 characteristics and the survey questions that relate to each characteristic. Numerical values had been assigned to each survey question, and the table reflects the maximum

possible raw score for each characteristic. Appendix B contains a copy of the survey instrument.

Table 4.1.--The 18 characteristics included in the survey instrument and the numbers of the questions included to collect data about each characteristic.

The 18 Characteristics	Survey Question Number	Maximum Possible Score
1. Continuous progress	1, 2	10
2. Multi-material	3, 4, 5, 6, 46	37
3. Flexible schedule	7, 8, 38	15
4. Social experiences	9, 10, 47, 48, 60	19
5. Physical experiences	11, 41, 42, 61	15
6. Intramural activity	12, 13, 49, 62	18
7. Team teaching	14, 15, 16, 17	20
8. Planned gradualism	18	3
9. Exploratory & enrichment programs	19, 20, 21, 50, 51	26
10. Guidance services	22, 23, 24, 43	14
11. Independent study	39, 44, 52	8
12. Basic learning experiences	25, 26, 45, 53	13
13. Creative experiences	27, 28, 29, 30, 31, 54	17
14. Student security factor	32, 33, 34	9
15. Evaluation practices	35, 40	9
16. Community relations	36, 37, 55, 56	14
17. Student services	57	9
18. Auxiliary staffing	58, 59	8

Note: See Appendix B for the complete questionnaire.

This chapter contains an analysis of the data, the findings, and a summary of the demographic data obtained from the 11 responding schools. After the presentation of the demographic data that were used to categorize each responding school, each objective in this study is stated and is followed by a summary of the findings

that relate to that objective. The chapter concludes with a summary of the findings of the study.

### Demographic Data

The demographic data are presented in Table 4.2. Eleven administrators responded to the survey. Ten were male; one was female. The administrators had been in their present positions an average of 7.9 years, with a range of from 4 to 22 years and a median of 7 years. The administrators had served an average of 25.9 years in education, with a range of from 18 to 36 years. The median was 25.5 years.

Table 4.2.--Demographic data.

	Principals	Teachers
I. Males	10	3
II. Females	1	8
III. Average years in present position	7.9	13.0
Range	4-22	5-20
IV. Average years in education	25.9	18.1
Range	18-36	15-25
V. Average number of years as a middle school	8.2	8.2
Range	0-15	0-15
VI. Population category		
Rural	2	2
Urban	4	4
Suburban	5	5

Eleven teachers responded to the survey. Three were male; eight were female. The teachers had been in their present positions an average of 13.2 years, with a range of from 5 to 20 years. The median was 14 years. The teachers had served an average of 18.1 years in education, with a range of from 15 to 25 years. The median was 17 years.

Teachers' and principals' responses to the last two items of demographic data collected were identical. Both groups responded that their schools had been middle schools for an average of 8.2 years, with a range of 0 to 15 years. The median was seven years. Both groups in two schools stated that their schools were not middle schools.

Respondents from two schools said that their schools were considered "rural" schools; four indicated that their schools were considered "urban" schools; five said that their schools were considered "suburban" schools. These responses matched the definitions of rural, urban, and suburban listed in Chapter I.

#### Presentation of the Data for Each Objective

Objective 1: To measure the degree of implementation of the 18 middle school characteristics as reported by administrators in the Michigan middle schools and junior highs that were designated as exemplary by the USDOE in the years 1983 to 1988.

Only two of the characteristics were ranked below the 50% level of implementation. These were continuous progress (36%) and auxiliary staffing (20%). Sixteen characteristics were ranked above or at this level. The scores are reported in Table 4.3.

Table 4.3.--Findings regarding Objectives 1, 2, and 3.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	84%	Guidance services	88%
Multi-material	80%	Multi-material	80%
Exploratory & enrichment programs	71%	Basic learning experiences	79%
Student services	70%	Student services	79%
Student security factor	69%	Independent study	76%
Basic learning experiences	68%	Exploratory & enrichment programs	71%
Creative experiences	67%	Creative experiences	71%
Community relations	67%	Student security factor	69%
Planned gradualism	64%	Community relations	67%
Intramural activity	63%	Physical experiences	64%
Independent study	63%	Intramural activity	61%
Physical experiences	62%	Flexible schedule	56%
Flexible schedule	56%	Planned gradualism	55%
Social experiences	56%	Evaluation practices	54%
Evaluation practices	54%	Social experiences	53%
Team teaching	50%	Team teaching	48%
Continuous progress	36%	Continuous progress	36%
Auxiliary staffing	20%	Auxiliary staffing	23%

Green's (1977) study of the principals of Michigan middle-level schools indicated that the degree of implementation of 55 selected middle-level practices recommended in the literature was much lower than the levels found in the schools in this study.

Objective 2: To measure the degree of implementation of the 18 middle school characteristics as reported by teachers in the Michigan middle schools and junior highs that were designated as exemplary by the USD OE in the years 1983 to 1988.

Three characteristics were ranked by the teachers as below the fiftieth percentile. These were continuous progress (36%), auxiliary staffing (23%), and team teaching (48%). The remaining 15 characteristics were all ranked above the fiftieth percentile. The scores are reported in Table 4.3.

Bohlinger (1977) found that in Ohio schools the 18 characteristics were implemented at the 50.5% level, and that no characteristic had an implementation rate higher than 80%. Both of those results are much lower than the levels shown by the schools in this study.

Objective 3: To compare the average level of implementation scores of the 18 characteristics as reported by administrators to that reported by teachers in the 12 designated Michigan middle or junior high schools.

As Table 4.3 indicates, teachers rated five characteristics at the 75% or higher level. These were guidance services (88%), multi-material (80%), basic learning experiences (79%), student services (79%), and independent study (76%). Administrators ranked only the first two characteristics at higher than the 75% level.

In general, the scores appear to display little discrepancy, with only two exceptions. ("Discrepancy" is defined to be 10 percentage points or more difference in scores.) Those two

exceptions involve characteristics 11 and 12 from Table 4.1. Teachers reported basic learning experiences at the 79% level; administrators rated that characteristic at the 68% level. Independent study was rated by teachers at the 76% level; administrators rated that characteristic at the 63% level.

Administrators rated the implementation level of all 18 characteristics taken as a group at the 64% level. Teachers rated the implementation level of the 18 characteristics as a group at the 65% level, as noted in Table 4.11.

In 1982, Schindler conducted a study of 10 "exemplary" (but not USDOE-selected) middle-level schools and 150 other national middle-level schools. He found that the "exemplary" middle schools were making a more concerted effort to provide a curricular program unique for the middle-level student.

Objective 4: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as urban schools.

An examination of the implementation levels as displayed in Table 4.4 indicates that three characteristics were reported at less than the 50% level of implementation by each group. In two cases those were the same characteristics: continuous progress at 43% for administrators and 35% for teachers and team teaching at 44% and 49%, respectively. Administrators reported auxiliary staffing at a very low 19%, whereas teachers reported flexible schedule at 48%. Both groups reported guidance services at over the 90% level of implementation. In addition, both groups reported student services

Table 4.4.--Findings regarding Objective 4.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	93%	Guidance services	91%
Student services	81%	Independent study	83%
Student security factor	80%	Student services	78%
Basic learning experiences	75%	Exploratory & enrichment programs	77%
Exploratory & enrichment programs	71%	Basic learning experiences	75%
Planned gradualism	67%	Student security factor	73%
Creative experiences	66%	Community relations	73%
Multi-material	65%	Creative experiences	71%
Community relations	62%	Multi-material	66%
Independent study	61%	Evaluation practices	64%
Evaluation practices	61%	Physical experiences	60%
Physical experiences	58%	Intramural activity	58%
Social experiences	56%	Social experiences	56%
Intramural activity	55%	Auxiliary staffing	56%
Flexible schedule	52%	Planned gradualism	50%
Team teaching	44%	Team teaching	49%
Continuous progress	43%	Flexible schedule	48%
Auxiliary staffing	19%	Continuous progress	35%



and basic learning experiences at the 75% level of implementation or more.

Objective 5: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as suburban schools.

An examination of Table 4.5 indicates that administrators in suburban schools reported three characteristics at over the 75% level of implementation and four characteristics as below the 50% level of implementation. Teachers correspondingly reported four characteristics at over the 75% level of implementation and six characteristics as below the 50% level of implementation. Severe discrepancies existed in the areas of evaluation practices, team teaching, student services, and basic learning experiences; teachers reported the last two characteristics at a higher degree of implementation and the first two at a lower level of implementation than did administrators.

Objective 6: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as rural schools.

Teachers in rural schools reported eight characteristics as being at over the 75% level of implementation as Table 4.6 illustrates. Administrators reported only three of those same characteristics as being over the 75% level. Teachers reported two characteristics as being below the 50% level, and administrators reported three characteristics as being below that level.

Table 4.5.--Findings regarding Objective 5.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	83%	Guidance services	86%
Multi-material	81%	Basic learning experiences	83%
Intramural activity	76%	Student services	80%
Exploratory & enrichment programs	74%	Multi-material	78%
Student services	67%	Student security factor	74%
Intramural activity	66%	Intramural activity	71%
Creative experiences	65%	Independent study	69%
Physical experiences	65%	Creative experiences	68%
Basic learning experiences	64%	Physical experiences	67%
Community relations	64%	Exploratory & enrichment programs	66%
Independent study	62%	Community relations	63%
Team teaching	60%	Flexible schedule	57%
Social experiences	55%	Planned gradualism	47%
Flexible schedule	53%	Social experiences	45%
Evaluation practices	49%	Team teaching	43%
Planned gradualism	47%	Evaluation practices	38%
Continuous progress	38%	Continuous progress	36%
Auxiliary staffing	25%	Auxiliary staffing	18%

Table 4.6.--Findings regarding Objective 6.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Planned gradualism	100%	Guidance services	86%
Multi-material	77%	Team teaching	83%
Creative experiences	76%	Multi-material	80%
Flexible schedule	70%	Basic learning experiences	79%
Exploratory & enrichment programs	68%	Student services	78%
Guidance services	68%	Independent study	78%
Independent study	67%	Creative experiences	76%
Auxiliary staffing	63%	Exploratory & enrichment programs	75%
Basic learning experiences	61%	Evaluation practices	72%
Physical experiences	60%	Social experiences	70%
Social experiences	59%	Flexible schedule	67%
Community relations	57%	Community relations	67%
Student services	56%	Planned gradualism	67%
Student security factor	55%	Physical experiences	63%
Evaluation practices	50%	Student security factor	50%
Intramural activity	47%	Auxiliary staffing	50%
Team teaching	40%	Intramural activity	44%
Continuous progress	20%	Continuous progress	40%

An examination of the rankings and the level of implementation percentages in Table 4.6 evidences that there was a greater disparity in the rankings and in the percentage levels between administrators and teachers than in any other table in this section. Administrators, for instance, rated planned gradualism at the 100% level, whereas teachers reported that characteristic at the 67% level. Teachers, however, reported guidance services at the 86% level, whereas administrators reported it at the 68% level. Similar disparities were found for basic learning experiences, social experiences, community relations, evaluation practices, and team teaching.

Objective 7: To compare the average level of implementation scores reported by the urban schools with that reported by the suburban schools.

An examination of Table 4.11 shows that the administrators of urban schools reported the level of implementation of the 18 characteristics at the 63% level. Teachers in those schools reported the level to be 65%. Suburban schools' administrators reported the level of implementation to be at the 65% level, whereas teachers in those schools reported the level of implementation to be at the 63% level.

Objective 8: To compare the average level of implementation scores reported by the urban schools with that reported by the rural schools.

Table 4.11 shows that urban schools' administrators reported the average level of the implementation scores to be at the 63% level. Rural schools' administrators reported those scores to be at

the 65% level. Teachers in urban schools reported the average level of implementation to be at the 65% level, whereas teachers in rural schools reported the average level to be at 71%.

An examination of Table 4.11 shows that, with the exception of the 71% score reported by teachers in rural schools, there was a range of only two points in the implementation scores reported. To include the 71% figure would make a range of only eight points.

Objective 9: To compare the average level of implementation scores reported by the rural schools with that reported by the suburban schools.

Administrators in rural schools reported the average level of implementation scores to be at the 65% level, and administrators in suburban schools also reported that score to be 65%. Teachers in rural schools reported the average level of implementation to be 71%, and teachers in suburban schools reported the average level to be 63%. These last two reports provided the greatest disparity in the teacher section of Table 4.11.

Objective 10: To measure the average level of implementation scores for those designated schools with a student population between 450 and 550.

Table 4.7 indicates that although administrators rated the characteristics of guidance services, creative experiences, and multi-material at the 80% or higher level, teachers rated an additional two characteristics at higher than the 80% level. Both groups rated continuous progress and auxiliary staffing at lower than the 40% level.

Disparities in the ratings were evidenced in the areas of basic learning experiences, student services, and independent study;

Table 4.7.--Findings regarding Objective 10.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	86%	Basic learning experiences	90%
Creative experiences	85%	Guidance services	89%
Multi-material	81%	Creative experiences	89%
Basic learning experiences	69%	Student services	87%
Student security factor	68%	Multi-material	81%
Exploratory & enrichment programs	68%	Student security factor	75%
Student services	67%	Independent study	74%
Planned gradualism	67%	Exploratory & enrichment programs	64%
Intramural activity	67%	Physical experiences	64%
Community relations	64%	Community relations	62%
Physical experiences	63%	Flexible schedule	61%
Independent study	61%	Planned gradualism	61%
Social experiences	61%	Intramural activity	59%
Team teaching	58%	Team teaching	58%
Flexible schedule	58%	Social experiences	58%
Evaluation practices	52%	Evaluation practices	44%
Continuous progress	30%	Continuous progress	38%
Auxiliary staffing	25%	Auxiliary staffing	23%

teachers rated the implementation level of those three characteristics much higher than did administrators.

Objective 11: To measure the average level of implementation scores for those designated schools with a student population less than 449 and more than 551.

Administrators in these schools rated the implementation levels of three characteristics as being below the 50% level. Teachers rated these same characteristics at below that level, and they rated an additional three characteristics as being implemented at below that level, as well.

Disparities are evidenced in Table 4.8 in the areas of independent study, community relations, and planned gradualism. Teachers rated the levels of implementation of the first two at a higher level than did administrators. Administrators rated the implementation level of the last characteristic at a higher level than did teachers.

Objective 12: To compare the average level of implementation scores reported by those schools with a student population between 450 and 550 with that of all other sizes of the 12 designated schools.

Table 4.11 lists the average scores reported by the two groups of respondents. Administrators in those schools with enrollments of between 450 and 550 reported the average level of implementation to be 65%, whereas teachers reported the level to be 68%. Administrators in all other sizes of schools reported the level to be 62%, whereas teachers in those same schools reported the level to be 64%.

Table 4.8.--Findings regarding Objective 11.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	81%	Guidance services	86%
Multi-material	79%	Multi-material	81%
Exploratory & enrichment programs	77%	Exploratory & enrichment programs	81%
Student services	73%	Independent study	78%
Student security factor	70%	Community relations	73%
Basic learning experiences	66%	Student services	69%
Creative experiences	64%	Creative experiences	67%
Independent study	64%	Basic learning experiences	66%
Planned gradualism	60%	Intramural activity	64%
Physical experiences	60%	Evaluation practices	64%
Community relations	59%	Physical experiences	63%
Intramural activity	59%	Student security factor	62%
Evaluation practices	56%	Flexible schedule	49%
Flexible schedule	53%	Social experiences	48%
Social experiences	50%	Planned gradualism	47%
Continuous progress	44%	Team teaching	45%
Team teaching	40%	Continuous progress	34%
Auxiliary staffing	15%	Auxiliary staffing	23%



Objective 13: To measure the average level of implementation scores for those schools that have been designated a middle school for eight years or more.

Teachers reported that the implementation levels of four characteristics were higher than the 80% level. Administrators reported only one characteristic to be at that level or higher. Teachers reported four characteristics to be at the 50% level or lower, and administrators also reported that four were at the 50% level or lower.

Disparities are evidenced in Table 4.9 in the areas of student services, basic learning experiences, and independent study. Teachers rated all three characteristics at a higher level than did administrators.

Wah's (1980) study determined that the longer a school had been operating as a middle school, the greater the number of the 18 characteristics of middle school education it had implemented. His results from a sample of only four schools are in opposition to the results of this study.

Objective 14: To measure the average level of implementation scores for those schools that have been designated a middle school for fewer than eight years.

Administrators and teachers in these schools rated the same two characteristics at a 50% or lower level of implementation. Both groups also rated the same three characteristics at a level of implementation of 80% or more, as an inspection of Table 4.10 shows.

Only one disparity is in evidence from the table. This is the characteristic of community relations, which teachers rated somewhat higher than administrators rated that particular characteristic.

Table 4.9.--Findings regarding Objective 13.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	86%	Guidance services	86%
Multi-material	79%	Basic learning experiences	86%
Student services	69%	Student services	82%
Exploratory & enrichment programs	69%	Multi-material	81%
Planned gradualism	67%	Independent study	78%
Student security factor	66%	Creative experiences	72%
Creative experiences	66%	Student security factor	70%
Basic learning experiences	61%	Exploratory & enrichment programs	69%
Physical experiences	61%	Physical experiences	64%
Community relations	60%	Intramural activity	63%
Intramural activity	56%	Planned gradualism	60%
Flexible schedule	55%	Flexible schedule	60%
Independent study	53%	Community relations	59%
Social experiences	53%	Evaluation practices	53%
Evaluation practices	49%	Social experiences	50%
Team teaching	40%	Team teaching	48%
Continuous progress	40%	Continuous progress	46%
Auxiliary staffing	23%	Auxiliary staffing	20%

Table 4.10.--Findings regarding Objective 14.

Administrators		Teachers	
Characteristic	Level	Characteristic	Level
Guidance services	82%	Guidance services	89%
Creative experiences	82%	Creative experiences	84%
Multi-material	81%	Multi-material	80%
Basic learning experiences	73%	Student services	76%
Exploratory & enrichment programs	73%	Community relations	74%
Student security factor	72%	Independent study	74%
Student services	70%	Basic learning experiences	74%
Independent study	70%	Exploratory & enrichment programs	73%
Intramural activity	69%	Student security factor	68%
Community relations	63%	Physical experiences	63%
Planned gradualism	61%	Intramural activity	60%
Physical experiences	61%	Planned gradualism	56%
Social experiences	59%	Social experiences	56%
Team teaching	58%	Team teaching	56%
Evaluation practices	57%	Evaluation practices	54%
Flexible schedule	57%	Flexible schedule	53%
Continuous progress	33%	Continuous progress	35%
Auxiliary staffing	21%	Auxiliary staffing	25%

Table 4.10 also demonstrates a great similarity in the rankings of the implementation level of each characteristic when ranked both by percentages and numerically.

Objective 15: To compare the average level of implementation scores of those schools that have been designated a middle school for more than eight years with the average level of implementation scores of schools that have been designated a middle school for fewer than eight years.

Table 4.11 indicates that administrators in those schools that had been middle schools for fewer than eight years reported an implementation level of 67%, whereas administrators in schools that had been middle schools for more than eight years reported a level of 61%. Teachers in the newer middle schools reported the implementation level to be 67%, whereas teachers in the older middle schools reported the level to be 65%.

Conners and Irvin (1985) conducted a national study using as part of their sample 93 USDOE-selected schools that had been middle schools for both long and short periods of time. Included in the study were 154 other nonselected middle-level schools. They determined that USDOE-selected schools demonstrated a higher degree of "middleschoolness" than did nonselected schools.

### Summary

An inspection of Tables 4.3 through 4.10 indicates that the characteristics of auxiliary staffing and continuous progress were almost always ranked among the last of the 18 characteristics in the level of implementation both in the rankings and in the percentages reported by teachers and principals. The characteristics of

guidance services and multi-material were nearly as consistently ranked among the highest of the characteristics.

Table 4.11.--Comparison of the total implementation scores for each of the groups previously discussed.

	Principals	Teachers
I. All 18 characteristics taken together	64%	65%
II. Middle schools fewer than 8 years	67%	67%
III. Middle schools more than 8 years	61%	65%
IV. Enrollment between 450 and 550	65%	68%
V. Enrollment under 450/over 550	62%	64%
VI. Urban schools	63%	65%
VII. Suburban schools	65%	63%
VIII. Rural schools	65%	71%

A careful examination of the tables indicates that there were many more similarities among the rankings and the percentage ratings than there were differences. For instance, it was not uncommon for individual characteristics to receive the same percentage rating by both groups in any particular table. For instance, Table 4.4 showed that the characteristic of social experiences was rated at the 56% level by both teachers and administrators and was, thus, given a ranking of 13 in each table. In Table 4.8, the characteristic of basic learning experiences was given a rating of 66% by both groups. The same held true for the characteristic of exploratory and enrichment programs in Table 4.9 at 69%. In the vast majority of cases, the percentage ratings given to the characteristics by the groups being compared did not differ to a large degree.

An examination of Table 4.11 indicates that teachers tended to rate the implementation level of the 18 characteristics as being a few percentage points higher than did administrators. The difference, although not large, was consistent. Table 4.11 also demonstrates that the implementation levels for all groups and for the total group of surveys were rated at a level higher than 60%.

Those studies of the 18 characteristics reported in Chapter II that reported a percentage result all reported that level to be in close proximity to 50%, and most of these reported levels lower than 50% (Beckmann, 1978; Bohlinger, 1977; Hawkins, 1972; Kramer, 1974; Minster, 1985; Magana, 1987; Raymer, 1974).

Those discrepancies that were found in the percentage ratings given by the various groups fell in the areas of independent study (five cases), basic learning experiences (three cases), student services (four cases), planned gradualism (three cases), and community relations (three cases). In only six other different cases of the 162 possible cases were there discrepancies in the percentage rankings given by administrators and teachers within any given group.

In only two cases were there discrepancies in the percentage ratings given by the administrator and teacher groups when taken as a whole. In both of those cases (basic learning experiences and independent study), teachers rated the implementation of the characteristic at a higher level than did administrators.

## CHAPTER V

### SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V is presented in three sections. In the first section, the study is summarized through a brief review of several of its major sections. In the second section, conclusions are drawn from the findings of the study. The last section of this chapter contains recommendations for further study.

#### Summary

##### Purpose of the Study

This study was designed to answer the question: To what degree do the Michigan middle-level schools selected by the United States Department of Education to be nationally recognized and exemplary middle-level schools during the years 1982 through 1987 implement the 18 characteristics of middle school education? Specifically, the purpose of this study was to determine the extent of the implementation of the 18 characteristics of middle school education in Michigan's middle-level USDOE-selected exemplary schools, as perceived by teachers and principals in those schools.

##### Design of the Study

The MDOE identified those 12 middle-level schools that the USDOE had recognized as exemplary during the years 1982 through

1987. After securing verbal permission from the 12 building administrators, the researcher mailed a slightly modified copy of Riegle's 1971 survey instrument to one randomly selected teacher and the building administrator from each of the 12 designated schools. Replies were received from 22 of the 24 questionnaires sent, for a reply rate of 92%. Neither the administrator nor the teacher from the designated school located in the largest city in the state responded.

The surveys were divided into the various categories that were to be compared. These categories were: rural, suburban, and urban schools; schools with an enrollment between 450 and 550; schools with an enrollment smaller than 450 and larger than 551\0; questionnaires completed by teachers; questionnaires completed by administrators; schools that had been designated as middle schools for fewer than eight years; and schools that had been designated as middle schools for eight years or more. The survey questions were weighted in the traditional manner that previous researchers had used when using this survey instrument. The numbers derived from the survey questions were converted into percentages of the maximum possible score on each question in order to provide for ease of comparison between groups.

### The Literature Review

A brief review of the literature concerning middle schools since the early 1960s was written for this study. In general, this showed a tremendous growth in the number of schools that now call



themselves middle schools. This review also made clear the fact that a very large number of articles, publications, books, studies, and other related material is available concerning middle-school education.

A review of those studies pertinent to this study was a part of the overall literature review. Many researchers have attempted to define the "characteristics of a middle school."

There have been a number of replications of the original Riegle (1971) study, which many consider to be a landmark study in this area. Almost all of these replications have demonstrated an implementation rate of the 18 characteristics within a few percentage points of 50%. A few studies have shown slightly higher rates, but most of them have shown a lower rate.

A review of the literature concerning the Secondary School Recognition Program was also a part of this study. Although the SSRP is still too new to have been the subject of many studies, nearly all of the available studies focused on the relationship of the school administrator to the SSRP's "14 attributes of success." No SSRP studies focused on the 18 characteristics of middle school education, and only one study focused on schools other than high schools.

Middle school authorities and practitioners consider that certain of the 18 characteristics are essential to the middle school concept. That is, if the characteristic is not present, the school may be a middle school in name only. There appears to be a large discrepancy between theory and practice in middle school education.

Unfortunately, it appears that the USDOE's 14 attributes of success were not designed with the middle school concept in mind. For the most part, these attributes come from the effective schools research, which was conducted mainly in elementary and, to a much smaller degree, in high schools.

There appears to be a severe discrepancy in meaning between the 18 characteristics of middle school education and the 14 attributes of success of the USDOE program. There is a danger that middle-level schools will blindly attempt to implement the 14 attributes instead of the 18 characteristics in order to gain the prestige, laurels, and recognition that accompany the former. Should this occur to any large degree, the middle school may exist in name only in less time than it took for it to gain its current position.

### Conclusions

Objective 1: To measure the degree of implementation of the 18 middle school characteristics as reported by administrators in the Michigan middle schools and junior highs that were designated as exemplary by the USDOE in the years 1983 to 1988.

Conclusion. Administrators of the 12 designated schools rated the characteristics of guidance services and multi-material at the 80% level or higher. Only the characteristics of continuous progress and auxiliary staffing were rated below the 50% level of implementation.

Discussion. It appears that administrators of the USDOE-designated schools believed that their schools were implementing most of the 18 characteristics at a high level.

Objective 2: To measure the degree of implementation of the 18 middle school characteristics as reported by teachers in the Michigan middle schools and junior highs that were designated as exemplary by the USD OE in the years 1983 to 1988.

Conclusion. The teachers in the exemplary schools rated the implementation level of four characteristics (guidance services, multi-material, basic learning experiences, and student services) at the 79% or higher level and that of three characteristics (team teaching, continuous progress, and auxiliary staffing) at the 50% or lower level.

Discussion. Teachers in these USD OE-designated schools thought that their schools were implementing the majority of the 18 characteristics at a high level.

Objective 3: To compare the average level of implementation scores of the 18 characteristics as reported by administrators to that reported by teachers in the 12 designated Michigan middle or junior high schools.

Conclusion. In general, teachers and administrators both rated and ranked the characteristics in a very similar manner.

Discussion. Although Table 4.1 indicated that there were several exceptions to this generality, those exceptions can be explained by the fact that teachers are closer to the day-to-day situation than are administrators and may well be better able to judge the extent to which those characteristics are implemented. The exceptions were basic learning experiences and independent study, which were rated higher by teachers.

Objective 4: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as urban schools.

Conclusion. Teachers and administrators in urban schools indicated a close correspondence in the ratings and ranking of the 18 characteristics. Both indicated a high degree of implementation of guidance services.

Discussion. Guidance services was the only characteristic rated at over 90% by both subgroups of any larger group in the survey. Urban schools may have a higher need for a greater degree of implementation of this characteristic because of the population they serve.

Objective 5: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as suburban schools.

Conclusion. Administrators in suburban schools were the only group of administrators to rate the implementation of the 18 characteristics as being at a higher level than a given group of teachers in their schools. These suburban school administrators rated the total implementation level as being 2% higher than did teachers in these schools. All other groups of teachers (see Table 4.11) rated the implementation level higher than did their administrators.

Discussion. Although the difference was minor, it appears unusual. It would seem that administrators of these schools viewed the implementation level of the 18 characteristics as being at a higher level than did teachers in these schools.

Objective 6: To measure the average level of implementation scores of the 18 characteristics reported by those schools designated as rural schools.

Conclusion. Teachers in rural schools rated a total of eight characteristics at the 75% level or higher. These characteristics were guidance services, team teaching, multi-material, basic learning experiences, student services, independent study, creative experiences, and exploratory and enrichment programs. This 71% overall rating was the highest level of implementation by any group in the survey. The lowest level of implementation for any characteristic rated by the teachers in this group was at the 40% level of implementation. That was the characteristic of continuous progress. It was the highest "low" rating in the survey.

Discussion. Rural teachers seemed to think that the level of implementation (71%) of the 18 characteristics was very high in their schools. Perhaps teachers in the rural schools are granted more freedom to experiment; perhaps they understand or feel closer to their students because they are more apt to live in the same community; perhaps the fact that the rural middle school is most likely the only middle school in the community has an influence.

Objective 7: To compare the average level of implementation scores reported by the urban schools with that reported by the suburban schools.

Conclusion. Urban school teachers viewed the implementation level of the 18 characteristics as being at the 65% level. Administrators in those schools viewed the implementation level as being slightly lower. Administrators of suburban schools viewed the

implementation level as being slightly higher than did teachers in suburban schools.

Discussion. The implementation levels of 63-65% are very high when compared to the results of other such surveys. It appears that these USDOE-designated schools exhibited a very high level of implementation of the 18 characteristics. The differences among the four groups were very minor.

Objective 8: To compare the average level of implementation scores reported by the urban schools with that reported by the rural schools.

Conclusion. Both teachers and administrators in rural schools viewed the degree of implementation of the 18 characteristics as being at a higher level than did the groups of teachers and administrators in urban schools. Teachers in rural schools viewed the implementation level as being 6% higher, and administrators in rural schools viewed the level as being 2% higher.

Discussion. Perhaps urban schools have more constraints than do rural schools because urban schools are usually larger. They may have more administrative levels and/or have more of a possibility of having several middle-level schools with which they need to cooperate and correspond in the district.

Objective 9: To compare the average level of implementation scores reported by the rural schools with that reported by the suburban schools.

Conclusion. Although administrators in both rural and suburban schools viewed the implementation level of the 18 characteristics as

being of the same level (65%), suburban school teachers viewed the level in their schools as being at the 63% level and teachers in rural schools viewed the level as being eight points higher than that. This eight-point difference provided the greatest disparity among subgroups of teachers in the comparison. It was concluded that rural school teachers viewed the implementation level of the 18 characteristics as being higher than that of any other subgroup in the study.

Objective 10: To measure the average level of implementation scores for those designated schools with a student population between 450 and 550.

Conclusion. Teachers in schools with a student population between 450 and 550 rated five characteristics as being at the 80% level or higher. These were the characteristics of basic learning experiences, guidance services, creative experiences, student services, and multi-material. Administrators rated only three as being at that level or higher. These were the characteristics of guidance services, creative experiences, and multi-material. In view of the overall closeness of rating and ranking between administrators and teachers in this subgroup, it was concluded that the two groups viewed the implementation of the 18 characteristics as being virtually of the same degree.

Objective 11: To measure the average level of implementation scores for those designated schools with a student population less than 450 and more than 550.

Conclusion. Teachers and administrators in this group rated the implementation levels of the 18 characteristics lower than

nearly all of the other subgroups. Rated at 15% by administrators, the characteristic of auxiliary staffing was the lowest rated characteristic by any subgroup of teachers or administrators in the survey. It was concluded that principals rated the implementation level of the 18 characteristics at a level higher than did only one other subgroup in the survey. Teachers rated the implementation level as being higher than only one other subgroup in the survey, as well. (See Table 4.11.)

Objective 12: To compare the average level of implementation scores reported by those schools with a student population between 450 and 550 with that of all other sizes of the 12 designated schools.

Conclusion. Schools with an enrollment between 450 and 550 had administrators who rated the implementation level of the 18 characteristics as being 3% higher than did administrators in schools of other sizes. Teachers in schools with an enrollment between 450 and 550 rated the implementation level of the 18 characteristics as being 4% higher than did teachers in schools of other sizes. It was concluded that the subgroup of schools with enrollments between 450 and 550 implemented the 18 characteristics to a higher degree than did schools of other sizes.

Discussion. Recent literature has tended to state that it is more appropriate for middle-level schools to have enrollments that are relatively close to the 500-student enrollment level (Carnegie Council on Adolescent Development, 1989; Goodlad, 1983; NASSP, n.d.).



Objective 13: To measure the average level of implementation scores for those schools that have been designated a middle school for eight years or more.

Conclusion. Administrators of schools that have been middle schools for eight years or more rated the implementation of the 18 characteristics as being the lowest of any subgroup in the survey (see Table 4.11), at the 61% implementation level. Teachers in these schools rated the level as being at the 65% level of implementation. It was concluded that teachers in these schools perceived the implementation level as being higher than did administrators.

Discussion. Perhaps administrators in these schools were not as close to the teaching-learning situation as teachers were and tended to perceive the 18 characteristics as not being implemented at a high level. Perhaps these schools in general had grown "tired" of trying to attain the highest degree of implementation for some of the characteristics.

Objective 14: To measure the average level of implementation scores for those schools that have been designated a middle school for fewer than eight years.

Conclusion. Both the administrators and teachers in these exemplary Michigan middle schools that had been in existence for fewer than eight years rated the characteristics as being implemented at the 67% level. It was concluded that schools that had been middle schools for fewer than eight years ranked among the highest of any subgroup in the survey for degree of implementation.

Discussion. This was the highest rating for administrators as a subgroup in any section of the total group and among the highest for any subgroup of teachers. Perhaps "newness" makes a school try harder to implement all of the characteristics because everyone in the school is focused on that particular objective. It is also possible that inservice education for staff in the area of middle school education has been a comparatively recent occurrence in these schools.

Objective 15: To compare the average level of implementation scores of those schools that have been designated a middle school for more than eight years with the average level of implementation scores of schools that have been designated a middle school for fewer than eight years.

Conclusion. Teachers and administrators in those schools that had been middle schools fewer than eight years rated the level of implementation of the 18 characteristics as being higher than did administrators and teachers of the schools that had been middle schools more than eight years. It was concluded that schools that had been middle schools fewer than eight years displayed a higher degree of implementation of the 18 characteristics than did schools that had been middle schools for more than eight years.

#### Discussion of the Findings

There were two major findings of the survey. The first was that there was very little difference between the perceived level of implementation between any of the 14 subgroup categories listed in Table 4.11, Sections II through VIII. Indeed, there was very little perceived difference in the implementation levels of the 18

characteristics when all principals or all teachers were considered as a subgroup, as noted in Table 4.11, Section I. The degree of unanimity between and among groups is most unusual. Teachers as a group and principals as a group in these exemplary Michigan middle-level schools viewed the implementation level of the 18 characteristics as being only 1% apart. It appears that teachers and administrators in these USD OE-selected schools perceived the implementation level of the 18 characteristics to be at approximately the same degree.

The second major finding was that the perceived degree of implementation of the 18 characteristics was 64% for administrators and 65% for teachers in these schools. Because virtually all other surveys that included the 18 characteristics and that listed a degree of implementation in this manner stated that the degree of implementation was in the 50% category or lower, this is certainly a comparatively high degree of implementation. There is no implementation level that is known to be higher in any survey of this nature.

If it is true that these USD OE-selected middle-level schools rate high in their degree of attainment of the USD OE's 14 attributes, it appears that they rank equally high in their degree of implementation of the 18 characteristics of middle school education. Although further study needs to be done, perhaps there is some degree of correlation between the 14 attributes and the 18 characteristics.

Of the 18 characteristics, several were rated very high in nearly every subgroup listed in Table 4.11. Rated high in every subgroup of teachers were the characteristics of guidance services, student services, independent study, basic learning experiences, and creative experiences. Rated high by the administrators in every subgroup were guidance services, multi-materials, and exploratory and enrichment programs. In general, teachers perceived a higher degree of implementation of those characteristics that directly involve students.

Of the 18 characteristics, several were consistently rated and ranked lower than the others. These were the characteristics of continuous progress and auxiliary staffing. Ranking and rating only slightly above these two characteristics were the characteristics of team teaching and evaluation practices.

Emphasis needs to be placed on developing a higher degree of implementation of the 18 characteristics in middle schools. There also needs to be some discussion concerning whether or not the USDOE's 14 attributes are appropriate for middle school education.

Both the middle school concept and the 18 characteristics have been well-defined and discussed in the literature. Middle schools face the challenge of implementing these characteristics to a higher degree than the available literature suggests has typically been done. Failure to do so may well indicate the failure of the middle school movement in anything other than name only.

### Recommendations for Further Study

If these middle-level schools are indeed exemplary and outstanding as the USDOE has so designated them, if they are to be held up as models for other middle-level schools to emulate, and if the implementation level of the 18 characteristics is in the vicinity of 64-65% as the data from this survey suggest, there exists cause for concern about the future direction of middle-level education in Michigan. These are allegedly Michigan's best middle-level schools.

Because this is the first known study of middle-level USDOE-selected exemplary schools, a number of areas exist for further research:

1. There is a need to compare the Michigan exemplary middle-level school data with other USDOE-designated middle-level schools in other states. This would provide information for comparative purposes.

2. There exists a need to compare the USDOE-designated schools that scored high on the 14 attributes with those nonselected schools that would score high on the implementation of the 18 characteristics of middle school education.

3. There exists a need to determine whether or not the USDOE's 14 attributes are as applicable to middle-level education as some say they are to high school education.

4. Because the implementation level of 64-65% found is considerably higher than that found in other studies, there exists a need

to determine whether or not higher implementation levels exist in any other group of schools.

5. A replication of this study in Michigan using the same schools or using the USDOE-selected schools from some later period would be useful for comparison purposes.

6. Because the same characteristics scored at the highest level in each of the comparison groups and in the total group, it would be useful to attempt to determine why that is the case and whether it is the case in other middle schools.

7. Because the same characteristics ranked among the lowest in each of the comparison groups and in the total group, it would be useful to determine why that is the case and whether it is the case in other middle schools.

8. It would be useful to determine the degree of influence the USDOE's 14 attributes have had in determining the future direction of middle-level education.

9. Because some of the 18 characteristics are implemented to a high degree and some are not, it would be useful to determine the attitudes of a given group of school staffs versus the attitudes of their various publics concerning this situation.

10. A study to determine the cause of the factors that influence the degree of implementation of the 18 characteristics would be useful. Among the possible causes could be leadership of the building administrator, money available for implementation, attitude of the staff, attitude of the community, and other factors such as

staff turnover, leadership turnover, size of the school population, and community involvement in the school.

11. Because this is the first study to use USDOE-selected exemplary middle schools as its sample, a need exists to study outstanding middle schools selected by other commissions, groups, or organizations in relation to the 18 characteristics and in relation to the SSRP's 14 attributes of success.

12. A need exists for a comparison study using the 18 characteristics between the USDOE-selected middle-level schools and those middle-level schools that were selected for recognition at the state level only.

## APPENDICES



## APPENDIX A

### LETTERS

March 5, 1988

Dear Teacher,

I am currently beginning to write my dissertation at Michigan State University. My topic is: "A Study of the Nationally Recognized Exemplary Middle Schools in Michigan and the Extent of Their Implementation of the Eighteen Characteristics of Middle School Education."

I need your help and assistance in order to gather the data I need.

Your school was selected because it is, of course, a nationally recognized, exemplary Michigan middle or junior high school. I am asking the principals and a teacher in each of those twelve schools to complete one of the two enclosed identical questionnaires.

I have asked the twelve building principals to select a teacher to complete the attached questionnaire.

Enclosed are one questionnaire for the principal and one for a teacher, along with two stamped return envelopes. I know how very busy everyone is, especially at this time of year, but IT WOULD BE VERY HELPFUL IF YOU COULD RETURN THE QUESTIONNAIRES TO ME WITHIN THE NEXT WEEK OR SO.

If you would like a summary of the results, please list your name and address in the place indicated on the questionnaire.

Please accept my thanks for your cooperation and assistance, and please feel free to call me (collect) at 616-685-5813 (7:30 a.m. to 4:00 p.m.) if you have any questions.

Sincerely,

David Prentice

March 5, 1988

Dear (Principal's Name),

I am currently beginning to write my dissertation at Michigan State University. My topic is: "A Study of the Nationally Recognized Exemplary Middle Schools in Michigan and the Extent of Their Implementation of the Eighteen Characteristics of Middle School Education."

I need your help and assistance in order to gather the data I need.

Your school was selected because it is, of course, a nationally recognized, exemplary Michigan middle or junior high school. I am asking the principals and a teacher in each of those twelve schools to complete one of the two enclosed identical questionnaires.

I have asked the twelve building principals to select a teacher to complete the attached questionnaire. Please select the teacher who is closest to number ten on your alphabetical list of teachers and who also has at least five years of teaching experience.

Enclosed are one questionnaire for the principal and one for a teacher, along with two stamped return envelopes. I know how very busy everyone is, especially at this time of year, but IT WOULD BE VERY HELPFUL IF YOU COULD RETURN THE QUESTIONNAIRES TO ME WITHIN THE NEXT WEEK OR SO.

If you would like a summary of the results, please list your name and address in the place indicated on the questionnaire.

Please accept my thanks for your cooperation and assistance, and please feel free to call me (collect) at 616-685-5813 (7:30 a.m. to 4:00 p.m.) if you have any questions.

Sincerely,

David Prentice

## APPENDIX B

### THE SURVEY INSTRUMENT

A STUDY OF THE NATIONALLY RECOGNIZED EXEMPLARY MIDDLE SCHOOLS IN  
MICHIGAN AND THE EXTENT OF THEIR IMPLEMENTATION OF THE  
EIGHTEEN CHARACTERISTICS  
OF MIDDLE SCHOOL EDUCATION

A QUESTIONNAIRE FOR TEACHERS AND PRINCIPALS  
OF SELECTED MIDDLE SCHOOLS

PLEASE RETURN IN THE ENVELOPE PROVIDED TO:

DAVID PRENTICE  
709 GUN RIVER CT.  
PLAINWELL, MICHIGAN 49080

**General Information: (CONFIDENTIAL)**Title of Respondent:

(Check one)

Principal \_\_\_\_\_

Teacher \_\_\_\_\_

Sex:    \_\_\_ Female                      \_\_\_ Male

Years in Present Position: \_\_\_\_\_ years

Years in Education: \_\_\_\_\_ years

Please place a check mark before the grades served by your school:

\_\_\_5        \_\_\_6        \_\_\_7        \_\_\_8

Number of years as a middle school? \_\_\_\_\_School District:        \_\_\_ Rural        \_\_\_ Urban        \_\_\_ Suburban

If you would like a copy of the results of this study, please include name and address.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Your response to all questions will be greatly appreciated.  
All respondents can be assured of COMPLETE ANONYMITY.  
Please feel free to make additional comments when  
believed necessary.

**Part I:** Place a check mark before the  
SINGLE BEST answer that explains your  
current program as it relates to the  
question.

1-A. Continuous progress programs (A non  
graded program which permits students to  
progress at their own educational pace  
regardless of their chronological age.) are:

- \_\_\_\_\_ (1) not used at this time.
- \_\_\_\_\_ (2) used with special groups.
- \_\_\_\_\_ (3) used for the first two years.
- \_\_\_\_\_ (4) used by selected students.
- \_\_\_\_\_ (5) used by all students.

2-A. Continuous progress programs are  
planned for a student over a CALENDAR  
year span of:

- \_\_\_\_\_ (1) not used.
- \_\_\_\_\_ (2) one year.
- \_\_\_\_\_ (3) two years.
- \_\_\_\_\_ (4) three years.
- \_\_\_\_\_ (5) more than three years.

3-A. The multi-textbook approach to  
learning is currently:

- \_\_\_\_\_ (1) not used.
- \_\_\_\_\_ (2) used in a FEW courses.
- \_\_\_\_\_ (3) used in MOST courses.
- \_\_\_\_\_ (4) used in NEARLY ALL courses

4-B. The instructional materials center in  
this building houses:

- \_\_\_\_\_ (1) 1000 books or less.
- \_\_\_\_\_ (2) 1001 to 3000 books.
- \_\_\_\_\_ (3) 3001 to 4000 books.
- \_\_\_\_\_ (4) 4001 to 5000 books.
- \_\_\_\_\_ (5) more than 5000 books.

5-B. The materials center has a paid  
certified librarian:

- \_\_\_\_\_ (1) no.
- \_\_\_\_\_ (2) part-time only.
- \_\_\_\_\_ (3) one full-time.
- \_\_\_\_\_ (4) more than one full-time.

6-B. For classroom instruction, AUDIO  
VISUAL MATERIALS other than motion  
pictures are:

- \_\_\_\_\_ (1) not used.
- \_\_\_\_\_ (2) rarely used.
- \_\_\_\_\_ (3) occasionally used.
- \_\_\_\_\_ (4) frequently used.
- \_\_\_\_\_ (5) very frequently used.

7-C. The basic time module used to build the schedule is:

- \_\_\_\_\_ (1) 10 to 29 minutes.
- \_\_\_\_\_ (2) 30 to 44 minutes.
- \_\_\_\_\_ (3) 45 to 59 minutes.
- \_\_\_\_\_ (4) 60 minutes.
- \_\_\_\_\_ (5) a combination of time so diversified that no basic module is defined.
- \_\_\_\_\_ (6) other \_\_\_\_\_

8-C. Which of the below best describes your schedule at present:

- \_\_\_\_\_ (1) traditional.
- \_\_\_\_\_ (2) traditional, modified by "block-time," "revolving period," or other such regularly occurring modifications.
- \_\_\_\_\_ (3) flexible to the degree that all periods are scheduled but are not identical in length.
- \_\_\_\_\_ (4) flexible to the degree that changes occur within defined general time limits.
- \_\_\_\_\_ (5) flexible to the degree that students and teachers control the daily time usage and changes occur regularly.
- \_\_\_\_\_ (6) other \_\_\_\_\_

9-D. How are sponsorships for club activities handled?

- \_\_\_\_\_ (1) staff members DO NOT work with club activities.
- \_\_\_\_\_ (2) staff members are ASSIGNED WITHOUT PAY.
- \_\_\_\_\_ (3) staff members are ASSIGNED WITH PAY.
- \_\_\_\_\_ (4) staff members VOLUNTEER WITHOUT PAY.
- \_\_\_\_\_ (5) staff members VOLUNTEER AND ARE PAID.

10-D. What percent of your student body regularly participates in at least one club activity?

- \_\_\_\_\_ (1) we have no club program.
- \_\_\_\_\_ (2) 25% or less.
- \_\_\_\_\_ (3) 26% to 50%.
- \_\_\_\_\_ (4) 51% to 75%.
- \_\_\_\_\_ (5) 76% to 100%.

11-E. Is the physical education program individualized?

- \_\_\_\_\_ (1) not at all.
- \_\_\_\_\_ (2) slightly.
- \_\_\_\_\_ (3) moderately.
- \_\_\_\_\_ (4) highly.

12-F. Inter-scholastic competition is:

- \_\_\_\_\_ (3) not offered.
- \_\_\_\_\_ (2) offered in one sport only.
- \_\_\_\_\_ (1) offered in two or more sports.



13-F. Intramural activities often use the same facilities as interscholastic activities. When this causes a time conflict, how do you schedule?

- \_\_\_\_\_ (1) we have no INTRAMURAL program.
- \_\_\_\_\_ (2) interscholastic activities take first priority and others must schedule around their needs.
- \_\_\_\_\_ (3) we have no  
\_\_\_\_\_ INTERSCHOLASTIC PROGRAM
- \_\_\_\_\_ (4) intramural activities take first priority and others schedule around their needs.

14-G. How many students participate in team teaching programs? (Two or more teachers administratively organized to provide opportunities for them to maximize their teaching talents and allow students to interact with teachers responsible for a broad range of subject areas.)

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) 25% or less.
- \_\_\_\_\_ (3) 26% to 50%.
- \_\_\_\_\_ (4) 51% to 75%.
- \_\_\_\_\_ (5) 76% to 100%.
- \_\_\_\_\_ (6) comments
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

15-G. What percentage of your teaching staff is involved in team teaching programs?

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) 25% or less.
- \_\_\_\_\_ (3) 26% to 50%.
- \_\_\_\_\_ (4) 51% to 75%.
- \_\_\_\_\_ (5) 76% to 100%

16-G. How many minutes per day does a student in grade \_\_\_\_\_ SIX average in a team teaching program?

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) 40 minutes or less.
- \_\_\_\_\_ (3) 41 to 80 minutes .
- \_\_\_\_\_ (4) 81 to 120 minutes .
- \_\_\_\_\_ (5) more than a 121 minutes .

17-G How many minutes per day does a student in grades SEVEN or EIGHT average in a team teaching program.

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) 40 minutes or less.
- \_\_\_\_\_ (3) 41 to 80 minutes .
- \_\_\_\_\_ (4) 81 to 120 minutes .
- \_\_\_\_\_ (5) more than a 121 minutes .

18-H. Which of the following best describes your school program as it evolves from enrollment to completion of the last grade? (i.e., grades SIX thru EIGHT).

- \_\_\_\_\_ (1) completely self contained and/or completely departmentalized.
- \_\_\_\_\_ (2) modified departmentalized (blocktime, core, etc.).
- \_\_\_\_\_ (3) program moves from largely self contained to partially departmentalized.
- \_\_\_\_\_ (4) other \_\_\_\_\_

19-I. How many years is ART instruction required for all students.?

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) one year.
- \_\_\_\_\_ (3) two or more years.

20-I. How many years is MUSIC instruction required for all students?

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) one year.
- \_\_\_\_\_ (3) two or more years.

21-I. The amount of student schedule time set aside for elective courses.

- \_\_\_\_\_ (1) decreases with each successive grade or, is the same for all grades or, does not exist at any grade level.
- \_\_\_\_\_ (2) varies by grade level but not in any systematic manner.

22-J. For what percent of students are guidance services normally available.

- \_\_\_\_\_ (1) not available.
- \_\_\_\_\_ (2) 25% or less.
- \_\_\_\_\_ (3) 26% to 50%.
- \_\_\_\_\_ (4) 51% to 75%.
- \_\_\_\_\_ (5) 76% to 100%

23-J. Guidance staff members:

- \_\_\_\_\_ (1) never work with teachers.
- \_\_\_\_\_ (2) SELDOM work with teachers.
- \_\_\_\_\_ (3) OFTEN work with teachers.
- \_\_\_\_\_ (4) ALWAYS work with teachers

24-J. Guidance counselors are:

- \_\_\_\_\_ (1) not expected to help teachers build their guidance skills.
- \_\_\_\_\_ (2) EXPECTED to help teachers build their guidance skills.
- \_\_\_\_\_ (3) EXPECTED and REGULARLY encouraged to help teachers build their guidance skills.

25-L. Clinics or special classes to treat the problems of students with poor basic learning skills are:

- \_\_\_\_\_ (1) not available.
- \_\_\_\_\_ (2) available only to the most critically handicapped learners.
- \_\_\_\_\_ (3) available to all students needing such help.

26-L. The amount of time provided in the classroom for instruction in basic learning skills:

\_\_\_\_\_ (1) remains constant or increases with each successive grade.

\_\_\_\_\_ (2) decreases with each successive grade.

\_\_\_\_\_ (3) varies greatly due to individualization of program by teachers.

27-M. Does your school have an official newspaper?

\_\_\_\_\_ (1) no.

\_\_\_\_\_ (2) yes, and publishes four or less issues per year.

\_\_\_\_\_ (3) yes, and publishes five or more issues per year.

28-M. Do students get experiences in creative dramatics?

\_\_\_\_\_ (1) no.

\_\_\_\_\_ (2) yes.

29-M. Dramatic productions at this school are produced from:

\_\_\_\_\_ (1) does not apply.

\_\_\_\_\_ (2) purchased scripts only.

\_\_\_\_\_ (3) materials written by students only.

\_\_\_\_\_ (4) materials written by students and purchased scripts.

30-M. This school has oratorical activities such as debate, public address, etc.:

\_\_\_\_\_ (1) no.

\_\_\_\_\_ (2) yes, as a part of its enrichment program.

\_\_\_\_\_ (3) yes, as a part of its planned program of instruction.

31-M. Talent shows are:

\_\_\_\_\_ (1) not a part of our program.

\_\_\_\_\_ (2) produced on an all school basis.

\_\_\_\_\_ (3) produced at each grade level

\_\_\_\_\_ (4) produced at each grade level with some of the acts entering an all school talent show.

32-N. In the operational design of this school the role of the teacher as a guidance person is:

\_\_\_\_\_ (1) left strictly to the individual teacher's personal motivation.

\_\_\_\_\_ (2) mentioned to the teacher BUT NOT emphasized.

\_\_\_\_\_ (3) emphasized.

\_\_\_\_\_ (4) strongly emphasized.

33-N. As a general policy, provisions are made for the teacher to provide guidance services:

\_\_\_\_\_ (1) no.

\_\_\_\_\_ (2) yes, to a limited number.

\_\_\_\_\_ (3) yes, to all their students.

34-N. How many times per year is a student's academic progress formally reported to parents?

- \_\_\_\_\_ (1) zero to two times.
- \_\_\_\_\_ (2) three to five times.
- \_\_\_\_\_ (3) six times or more.
- \_\_\_\_\_ (4) other \_\_\_\_\_
- \_\_\_\_\_

35-O. How many times per year are parent-teacher or parent-teacher-student conferences held on a school wide basis?

- \_\_\_\_\_ (1) not at all.
- \_\_\_\_\_ (2) once.
- \_\_\_\_\_ (3) two times.
- \_\_\_\_\_ (4) three times.
- \_\_\_\_\_ (5) four or more times.

36-P. Community service projects by students in this school are:

- \_\_\_\_\_ (1) not a part of our program.
- \_\_\_\_\_ (2) carried out occasionally for a special purpose.
- \_\_\_\_\_ (3) an important part of the planned experiences for all students.

37-P. What is the status of the parents' organization in your school?

- \_\_\_\_\_ (1) none.
- \_\_\_\_\_ (2) relatively inactive.
- \_\_\_\_\_ (3) active.
- \_\_\_\_\_ (4) very active.

38-C. The master class time schedule can be changed by teachers when need arises by:

- \_\_\_\_\_ (1) requesting a change for next year.
- \_\_\_\_\_ (2) requesting a change for next semester.
- \_\_\_\_\_ (3) requesting administrative approval.
- \_\_\_\_\_ (4) planning with other teachers on a WEEKLY BASIS
- \_\_\_\_\_ (5) planning with other teachers on a DAILY BASIS.

39-K. Students working in independent study situations work on topics that are:

- \_\_\_\_\_ (1) we have no independent study program.
- \_\_\_\_\_ (2) assigned to them by the teacher.
- \_\_\_\_\_ (3) of personal interest and approved by the teacher.

40-O. Formal evaluation of student work is reported by use of:

- \_\_\_\_\_ (1) letter or number grades.
- \_\_\_\_\_ (2) teacher comments written on a reporting form.
- \_\_\_\_\_ (3) parent-teacher conferences
- \_\_\_\_\_ (4) parent-teacher-student conferences.
- \_\_\_\_\_ (5) other \_\_\_\_\_
- \_\_\_\_\_

41-E. What percentage of physical education class time is devoted toward COMPETITIVE TYPE ACTIVITIES:

\_\_\_\_\_ (1) 25% or less.

\_\_\_\_\_ (2) 26% to 50%.

\_\_\_\_\_ (3) 51% to 75%.

\_\_\_\_\_ (4) 76% to 100%.

42-E. What percentage of physical education class time is devoted toward DEVELOPMENTAL TYPE ACTIVITIES:

\_\_\_\_\_ (1) 25% or less.

\_\_\_\_\_ (2) 26% to 50%.

\_\_\_\_\_ (3) 51% to 75%.

\_\_\_\_\_ (4) 76% to 100%.

43-J. Do your guidance counselors offer regular group guidance sessions?

\_\_\_\_\_ (2) no.

\_\_\_\_\_ (1) yes.

44-K. Independent study opportunities are provided for:

\_\_\_\_\_ (2) some students.

\_\_\_\_\_ (3) all students.

\_\_\_\_\_ (1) not provided.

45-L. Daily instruction in a developmental reading program is provided for:

\_\_\_\_\_ (2) poor readers only.

\_\_\_\_\_ (3) all students.

\_\_\_\_\_ (1) not provided.

**PART II:** For each question in this section check **ALL THE ANSWERS** that apply to your school.

46-B. Which of the following types of materials are housed in your instructional materials center?

\_\_\_\_\_ general library books.

\_\_\_\_\_ current newspapers.

\_\_\_\_\_ below grade level reading materials.

\_\_\_\_\_ current magazines.

\_\_\_\_\_ files of past issues of newspapers.

\_\_\_\_\_ above grade level reading materials.

\_\_\_\_\_ card catalogue of materials housed.

\_\_\_\_\_ student publications.

\_\_\_\_\_ files of past issues of magazines.

\_\_\_\_\_ filmstrips.

\_\_\_\_\_ collections (coins, insects, art, etc.)

\_\_\_\_\_ motion pictures (include if you are a member of central service.)

\_\_\_\_\_ micro-films.

\_\_\_\_\_ overhead transparencies.

\_\_\_\_\_ computers.

\_\_\_\_\_ ditto and/or mimeo machines.

\_\_\_\_\_ photo or thermal copy machines.

\_\_\_\_\_ maps, globes and charts.

\_\_\_\_\_ display cases or areas.

47-D. School dances ARE NOT held for:

\_\_\_\_\_ grade six.

\_\_\_\_\_ grade seven.

\_\_\_\_\_ grade eight.

48-D. A club program for students is offered in:

\_\_\_\_\_ grade six.

\_\_\_\_\_ grade seven.

\_\_\_\_\_ grade eight.

49-F. The intramural program includes:

\_\_\_\_\_ team games.

\_\_\_\_\_ individual sports.

\_\_\_\_\_ various activities.

50-I. Students are allowed to elect course of interest from a range of elective offerings:

\_\_\_\_\_ no.

\_\_\_\_\_ in grade six.

\_\_\_\_\_ in grade seven.

\_\_\_\_\_ in grade eight.

51-I. Electives offered in this building are:

\_\_\_\_\_ art.

\_\_\_\_\_ band.

\_\_\_\_\_ vocal music.

\_\_\_\_\_ drawing.

\_\_\_\_\_ drama.

\_\_\_\_\_ journalism.

\_\_\_\_\_ foreign language.

\_\_\_\_\_ family living.

\_\_\_\_\_ unified arts.

\_\_\_\_\_ orchestra.

\_\_\_\_\_ wood shop.

\_\_\_\_\_ speech.

\_\_\_\_\_ typing.

\_\_\_\_\_ natural resources.

\_\_\_\_\_ creative writing.

\_\_\_\_\_ computers.

52-K. How much time would you estimate the average student spends in independent study?

\_\_\_\_\_ (3) 30 minutes or MORE per day in grades seven or eight.

\_\_\_\_\_ (2) 20 minutes or MORE per day in grade six.

\_\_\_\_\_ (1) less than the above.

53-L. Students with poor basic skills can receive special help on an individual basis from a special staff member trained to treat such situations in the following areas:

- \_\_\_\_\_ reading.
- \_\_\_\_\_ spelling.
- \_\_\_\_\_ physical education.
- \_\_\_\_\_ mathematics.
- \_\_\_\_\_ grammar.
- \_\_\_\_\_ other \_\_\_\_\_

54-M. Dramatic presentations by students are:

- \_\_\_\_\_ not a part of the school program.
- \_\_\_\_\_ a part of the activities program.
- \_\_\_\_\_ a part of certain class activities planned by the teachers.
- \_\_\_\_\_ other \_\_\_\_\_

55-P. In regard to community relations this school:

- \_\_\_\_\_ does not send out a parent news letter.
- \_\_\_\_\_ sends out a parent news letter.
- \_\_\_\_\_ uses the commercial newspaper.
- \_\_\_\_\_ uses a district wide newsletter to send out information related to this school.
- \_\_\_\_\_ other \_\_\_\_\_

56-P. The staff presents informational programs related to the school's functions.

- \_\_\_\_\_ when requested by parents.
- \_\_\_\_\_ once or twice a year at regular parent meetings.
- \_\_\_\_\_ at open house programs.
- \_\_\_\_\_ at regularly scheduled "seminar type" meetings planned for interested parents.
- \_\_\_\_\_ other \_\_\_\_\_

57-Q. From the specialized areas listed below, check each service which is AVAILABLE to students in your building.

- \_\_\_\_\_ guidance counselors.
- \_\_\_\_\_ school nurse.
- \_\_\_\_\_ school psychologist.
- \_\_\_\_\_ diagnostician.
- \_\_\_\_\_ speech therapist.
- \_\_\_\_\_ visiting teacher.
- \_\_\_\_\_ clinic services for the emotionally disturbed.
- \_\_\_\_\_ special education programs for the mentally handicapped.
- \_\_\_\_\_ special reading teacher.
- \_\_\_\_\_ other \_\_\_\_\_

58-R. Teaching teams are organized to include:

- \_\_\_\_\_ fully certified teachers.
- \_\_\_\_\_ para-professionals.
- \_\_\_\_\_ clerical helpers.
- \_\_\_\_\_ volunteer helpers from the community.
- \_\_\_\_\_ student teachers and interns.
- \_\_\_\_\_ high school "future teachers" students.
- \_\_\_\_\_ other \_\_\_\_\_
- \_\_\_\_\_

60-D. School social functions are held at this school:

During the afternoon:

- \_\_\_\_\_ Grade 6
- \_\_\_\_\_ Grade 7
- \_\_\_\_\_ Grade 8
- \_\_\_\_\_ Not scheduled

During the evening:

- \_\_\_\_\_ Grade 6
- \_\_\_\_\_ Grade 7
- \_\_\_\_\_ Grade 8
- \_\_\_\_\_ Not scheduled

61-E. The physical education program serves all students in:

- \_\_\_\_\_ Grade 6.
- \_\_\_\_\_ Grade 7.
- \_\_\_\_\_ Grade 8.



62-F. Intramural activities are scheduled  
for :  
BOYS ONLY

\_\_\_\_\_ Grade 6  
\_\_\_\_\_ Grade 7  
\_\_\_\_\_ Grade 8  
\_\_\_\_\_ Not scheduled

GIRLS ONLY

\_\_\_\_\_ Grade 6  
\_\_\_\_\_ Grade 7  
\_\_\_\_\_ Grade 8  
\_\_\_\_\_ Not scheduled

THANK YOU SINCERELY FOR YOUR  
ASSISTANCE.

Please return to:

DAVID PRENTICE  
709 GUN RIVER CT.  
PLAINWELL, MICHIGAN 49080

APPENDIX C

THE MICHIGAN MIDDLE-LEVEL SCHOOLS RECOGNIZED BY  
THE SECONDARY SCHOOL RECOGNITION PROGRAM  
DURING THE YEARS 1982-1987

## NATIONALLY RECOGNIZED EXEMPLARY MICHIGAN MIDDLE SCHOOLS

1982-1983

West Ottawa School System  
 West Ottawa Middle School  
 3700 140th Avenue  
 Holland, Michigan 48424

1983-1984

Lamphere School System  
 Page Middle School  
 29615 Tawas  
 Madison Heights, Michigan 48071

Ann Arbor School System  
 Slaussen Intermediate  
 1019 West Washington  
 Ann Arbor, Michigan 48104

Traverse City Public Schools  
 Traverse City Area Jr. High School  
 Silver Lake Road  
 Traverse City, Michigan 49684

1984-1985

West Bloomfield Public Schools  
 Abbott Middle School  
 3380 Orchard Lake  
 West Bloomfield, Michigan 48033

Detroit Public Schools  
 Brooks Middle School  
 16100 West Chicago  
 Detroit, Michigan 28228

Birmingham Public Schools  
 Berkshire Middle School  
 21707 West 14 Mile Road  
 Birmingham, Michigan 48010

Gaylord Public Schools  
 Gaylord Middle School  
 600 East Fifth Street  
 Gaylord, Michigan 49735

1986-1987

Troy School District  
 Larson Middle School  
 2222 East Long Lake  
 Troy, Michigan 48098

Grosse Pointe Public Schools  
 Parcels Middle School  
 20600 Mack  
 Grosse Pointe, Michigan 48236

Petoskey Public Schools  
 Petoskey Middle School  
 601 Howard Street  
 Petoskey, Michigan 49770

Bloomfield Hills Public Schools  
 West Hills Middle School  
 2601 Lone Pine  
 Bloomfield Hills, Michigan 48033

## BIBLIOGRAPHY

## BIBLIOGRAPHY

- Adler, M. J. The Paideia Proposal. New York: Macmillan, 1982.
- Alexander, W. M. The Emergent Middle School. New York: Holt, Rinehart and Winston, 1968.
- \_\_\_\_\_. "How Fares the Middle School Movement?" Middle School Journal 9 (August 1978): 3.
- \_\_\_\_\_. "The Middle School Emerges." In Middle School in the Making, pp. vii-ix. Washington, D.C.: Association for Supervision and Curriculum Development, 1974.
- \_\_\_\_\_. "A Study of Organizational Patterns of Reorganized Middle Schools." Cooperative Research Project No. 7-D-026. Gainesville: University of Florida, July 1968.
- \_\_\_\_\_, and McEwin, C. K. Schools in the Middle: Status and Progress. Columbus, Ohio: National Middle School Association, 1989.
- Arnn, J. W., Jr., and Mangieri, J. N. "Effective Leadership for Effective Schools: A Survey of Principal Attitudes." NASSP Bulletin 72 (February 1988): 1-4, 6, 7.
- Beckmann, V. G. "A Study to Determine the Current Level of Implementation of Eighteen Basic Middle School Principles in the State of Missouri." Ph.D. dissertation, St. Louis University, 1978.
- Bell, G. W. "A Comparison of Missouri Junior High and Middle Schools in Terms of Selected Administrative, Organizational and Curricular Characteristics." Ed.D. dissertation, University of Missouri-Columbia, 1978.
- Billings, R. L. "A Computer-Based Analysis of the Implementation of Selected Criteria in Texas Middle Schools." Ed.D. dissertation, University of Houston, 1973.
- Blight, J. "Identifying the Unique Characteristics of the Emergent Middle School." Ph.D. dissertation, University of Toledo, 1973.

- Bloom, J. M. "The Implementation of the Middle School Concept in Wisconsin Schools for Pre and Early Adolescents." Ed.D. dissertation, Marquette University, 1974.
- Bohlinger, T. L. "A Study to Determine the Current Level of Implementation of Eighteen Basic Middle School Characteristics in Ohio Public Schools Housing Grades 5-8 and 6-8." Ph.D. dissertation, Miami University, 1977.
- Bourgeois, G. P. "The Development, Implementation and Evaluation of a Middle School Program: A Descriptive Analysis." Ed.D. dissertation, Boston University, 1974.
- Boyer, E. L. High School: A Report on Secondary Education in America. New York: Harper and Row, 1983.
- Brod, P. "The Middle School: Trends Toward Its Adoption." Clearinghouse 40 (February 1966): 331-33.
- Brooks, K. "The Middle School--A National Survey." Middle School Journal 9 (February 1978): 6.
- Brown, E. D., Jr. "A Study of the Leadership Styles of Principals in the Exemplary Secondary Schools of the United States (Adaptability, Range)." Ed.D. dissertation, University of Alabama, 1985.
- Butera, T. S. "A Study of Middle Schools in the State of New Jersey." Ed.D. dissertation, Columbia University, 1972.
- Carnegie Council on Adolescent Development. Turning Points--Preparing American Youth for the 21st Century. New York: Carnegie Corporation of New York, 1989.
- Caul, J. L. "A Comparative Study of Student, Teacher and Principal Perceptions of Organizational Structure Between Middle Schools With High Levels and Those With Low Levels of Middle School Concept Implementation." Ph.D. dissertation, Michigan State University, 1975.
- Cave, B. B. "A Comparison of Organizational Curricular Practices and Innovational Factors Between Schools Named Junior High and Those Named Middle Schools Within the Rocky Mountain Region." Ed.D. dissertation, University of Wyoming, 1975.
- Coleman, J.; Hoffer, T.; and Kilgore, S. "Cognitive Outcomes in Public and Private Schools." Sociology of Education 55,2/3 (1982): 65-76.
- Compton, M. "The Middle School: A Status Report." Middle School Journal (June 1978): 3-4.

- Conant, J. B. Education in the Junior High School Years. Princeton, N.J.: Educational Testing Service, 1960.
- Connors, N., and Irvin, J. "Is 'Middle-Schoolness' an Indicator of Excellence?" Middle School Journal 20 (May 1989): 12-14.
- Cuff, W. "Middle Schools on the March." NASSP Bulletin 51 (February 1967): 82.
- Daniel, J. C. "A Study of Arkansas Middle Schools to Determine the Current Level of Implementation of Nine Basic Middle School Principles." Ed.D. dissertation, University of Arkansas, 1973.
- Demps, H. W. "A Study of the Relationship Between Teachers' Perceptions of Job Satisfaction and Their Perceptions of the Level of Implementation of Eighteen Basic Middle School Characteristics." Ph.D. dissertation, Michigan State University, 1978.
- Dunham, G. E. "A Study of Factors in the Implementation of the Middle School Concept." Ed.D. dissertation, Brigham Young University, 1974.
- Educational Research Service. Middle Schools. No. 3. Washington, D.C.: AASA, NEA, May 1965.
- Fink, J. P. "A Description of Community Involvement in High Schools Identified as Exemplary by the National Commission on Excellence in Education." Ph.D. dissertation, Miami University, 1987.
- Finley, \_\_. "An Illinois Middle School." In The Middle School: A Symposium, p. 33. London: Schoolmaster Publishing Co., 1967.
- Fontenot, G. L. "A Descriptive Investigation of Similarities and Differences Between Middle Schools and Junior High Schools in Louisiana 1972-73." Ed.D. dissertation, McNeese State University, 1973.
- Franklin, C. B. "A Study of Middle School Practices in Pennsylvania." Ed.D. dissertation, University of Virginia, 1973.
- Garvin, J. P. "Common Denominators in Effective Middle Level Schools." In In Search of Excellence: The National Reports--Implications for Middle Schools, pp. 31-34. Columbus, Ohio: National Middle School Association, 1984.
- Gatewood, T. E. "What Research Says About the Middle School." In Middle School in the Making, pp. 13-14. Washington, D.C.: Association for Supervision and Curriculum Development, 1974.

- George, P. "Florida's Junior High and Middle Schools." Middle School Journal 8 (February 1977): 10.
- Georgiady, N.; Riegler, J.; and Romano, L. "What Are the Characteristics of the Middle School?" In The Middle School, pp. 73-74. Edited by L. G. Romano et al. Chicago: Nelson-Hall, 1973.
- Good, C. W. "A Study of Middle School Practices in Pennsylvania." Ed.D. dissertation, Temple University, 1972.
- Goodlad, J. I. A Place Called School: Prospects for the Future. St. Louis, Mo.: McGraw-Hill, 1983.
- Green, R. C. "A Study of the Perceptions of Principals of Michigan Junior High Schools and Middle Schools on the Degree to Which Their Schools Implement Selected Practices Recommended in Literature on Intermediate Education." Ph.D. dissertation, The University of Michigan, 1977.
- Grooms, M. A. Perspective on the Middle School. Columbus, Ohio: Merrill Books, 1967.
- Gross, B. M. "An Analysis of the Present and Perceived Purposes, Functions, and Characteristics of the Middle School." Ed.D. dissertation, Temple University, 1972.
- Hawkins, J. "A Study to Ascertain Actual Middle School Practices as Compared to Reported Middle School Practices in Selected Michigan Schools and Nationally Prominent Schools as Perceived by Teachers and Principals." Ph.D. dissertation, Michigan State University, 1972.
- Hostetler, R. E. "In Search of Educational Excellence: To What Extent Is There Agreement Between Leadership Behavior in America's Best-Run Companies and America's Most Effective Schools?" Ed.D. dissertation, Ball State University, 1984.
- Howard, A. M. Teaching in Middle Schools. Scranton, Pa.: International Textbook Co., 1968.
- Hughes, S. "Organizational Patterns of Western Pennsylvania Middle Schools, Role and Role Conflict as Perceived by Their Principals." Ph.D. dissertation, Northwestern University, 1974.
- Jameson, K. S. "Principal Effectiveness as Related to Personality, Formal Training, and On-the-Job Experience in Arizona's Exemplary Schools." Ed.D. dissertation, Northern Arizona University, 1985.
- Kealy, R. P. "The Middle School Movement: 1960-70." National Elementary Principal (November 1971): 20-25.



- Koger, P. C. "The Instructional Leadership Activities, Beliefs and Characteristics of Principals of Effective Secondary Schools." Ed.D. dissertation, University of South Carolina, 1987.
- Kolton, W. D. "A Comparison of Secondary School Principals in Federally Identified Exemplary Public Schools and Principals of Non-exemplary Public Schools." Ed.D. dissertation, University of Wyoming, 1988.
- Kopko, J. R. "A Comprehensive Study of Selected Middle Schools in the State of New Jersey." Ed.D. dissertation, Rutgers University, 1976.
- Kramer, J. W. "A Study of Middle School Programs in California." Ed.D. dissertation, University of Southern California, 1974.
- Laurie, J. C. "Communication Patterns of Principals in Exemplary Secondary Schools." Ph.D. dissertation, Kansas State University, 1985.
- Leeper, R., ed. Middle School in the Making. Washington, D.C.: Association for Supervision and Curriculum Development, 1974.
- Lightfoot, S. L. The Good High School: Portraits of Character and Culture. New York: Basic Books, 1983.
- Lipsitz, J. Successful Schools for Young Adolescents. New Brunswick, N.J.: Transaction Books, 1984.
- Lounsbury, J. H., and Vars, G. E. A Curriculum for the Middle School Years. New York: Harper and Row, 1978.
- Magana, S. "A Study to Determine the Current Level of Implementation of Eighteen Basic Middle School Characteristics as Perceived by Teachers, Principals and Superintendents in Selected Wisconsin Middle Schools." Ph.D. dissertation, Michigan State University, 1987.
- Mason, D. A. S. "Factors That Influence Computer Laboratory Use in Exemplary Junior High/Middle Schools in the District of Columbia." Ph.D. dissertation, University of Maryland, College Park, 1987.
- Michigan Department of Education. Letter. Lansing: Michigan Department of Education, February 2, 1983. (a)
- \_\_\_\_\_. Letter. Lansing: Michigan Department of Education, September 6, 1989.

- \_\_\_\_\_. Secondary School Recognition Program in Michigan Nomination Form. Lansing: Michigan Department of Education, 1983.  
(b)
- Michigan State Board of Education. Task Force on Middle School Education. Working draft of a position paper. Lansing: Michigan Department of Education, December 1977.
- Middleton, P. M. "The Relationship Between the Degree of Perceived Implementation of Criteria Associated With the Middle School Concept and Selected Characteristics of Middle School Teachers." Ed.D. dissertation, University of Georgia, 1982.
- Minster, H. E. "A Study to Determine the Current Level of Implementation of Eighteen Basic Middle School Characteristics as Reported by Teachers, Principals, and Superintendents in Selected Illinois Middle Schools." Ph.D. dissertation, Michigan State University, 1985.
- Mitchell, S. T. "The Development of the Junior High and Middle School: Implications for Middle School Education." Ph.D. dissertation, George Peabody College for Teachers, 1975.
- Mooney, P. F. "A Comparative Study of Achievement and Attendance of 10 to 14 Year Olds in a Middle School and in Other School Organizations." Ed.D. dissertation, University of Florida, 1970.
- Moss, T. C. Middle School. Boston: Houghton-Mifflin, 1969.
- Mott, P. The Characteristics of Effective Organizations. New York: Harper and Row, 1972.
- Murphy, J. Middle Schools. New York: Educational Facilities Laboratory, 1965.
- National Association of Elementary School Principals. Standards for Quality Elementary Schools: Kindergarten Through Eighth Grade. Reston, Va.: NAESP, 1984.
- National Association of Secondary School Principals. Junior High and Middle School Evaluation Committee. "On the Threshold of Adolescence." Reston, Va.: NASSP, 1979.
- National Commission on Excellence in Education. A Nation at Risk: The Imperative for Educational Reform. Washington, D.C.: Government Printing Office, 1983.

Nelon, B. M. "The Relationship Between a Principal's Behavior and the Organizational Climate in Selected Recognized Exemplary Schools." Ed.D. dissertation, University of North Carolina at Greensboro, 1988.

New World Dictionary of the American Language. New York: World Publishing Company, 1974.

O'Donnell, P. G. "Correlations of Risk-Taking and Selected Socio-Professional Variables Among Superintendents of Exemplary Secondary Schools." Ph.D. dissertation, Miami University, 1985.

Parsons, T.; Bales, R.; and Shils, E. Working Papers in the Theory of Action. Westport, Conn.: Greenwood Press, 1953.

Phelps, C. S. B. "A Survey of Middle Schools in Georgia With a View of the Beginning, Present and Future Status." Ph.D. dissertation, Georgia State University, 1975.

Pook, M. E. P. "A Study of the Relationship of Teacher Job Satisfaction and the Level of Implementation of Recommended Middle School Practices." Ph.D. dissertation, University of Colorado at Boulder, 1980.

Ratajik, D. L. "The Exemplary Elementary School--A Different Perspective." Principal (Winter 1989): 22-23.

Raymer, J. T. "A Study to Identify Middle Schools and to Determine the Current Level of Implementation of Eighteen Basic Middle School Characteristics in Selected United States and Michigan Schools." Ph.D. dissertation, Michigan State University, 1974.

Riegle, J. D. "A Study of Middle School Progress to Determine the Current Level of Implementation of Eighteen Basic Middle School Principles." Ph.D. dissertation, Michigan State University, 1971.

Romano, L. G., et al., eds. The Middle School. Chicago: Nelson-Hall, 1973.

Rosenau, A. E. "A Comparative Study of Middle School Practices Recommended in Current Literature and Practices in Selected Middle Schools." Ed.D. dissertation, University of Colorado, 1975.

Rutter, M. "School Effects on Pupil Progress: Research Findings and Policy Implications." In Handbook of Teaching and Policy. Edited by L. S. Shulman and G. Sykes. New York: Longman, 1983.

- Schindler, J. F. "A Comparative Study of the Implementation of Recommended Middle School Principles Among Selected Schools." Ed.D. dissertation, Brigham Young University, 1982.
- Schuck, R. C. "Characteristics of Middle Schools." Ed.D. dissertation, Columbia University Teachers College, 1982.
- Scott, E. H. "The Practices Currently in Use in Effective Suburban High Schools: A Secondary Analysis of 1984 Data." Ed.D. dissertation, New York University, 1987.
- Slate, V. S. "Implementation of the Middle School Concept in Georgia Schools: Direction of Change." Ph.D. dissertation, Georgia State University, 1982.
- Stark, J. B. "A Comparison of the Middle Schools in Arkansas With Selected Junior High Schools Within the State." Ed.D. dissertation, University of Arkansas, 1972.
- St. Clair, R. "In Search of Excellence at the Middle Level." NASSP Bulletin 68 (September 1984): 1-5.
- Suprina, R. N. "Creating the Exemplary High School: A Study of the Factors Leading to the Development of Excellence in the American High School (New York)." Ed.D. dissertation, Fairleigh Dickinson University, 1987.
- Terry, K. W. H. "Secondary School Teachers' Perceptions of Principals' Leadership Behaviors in Selected Effective and Regular Secondary Schools." Ed.D. dissertation, Northwestern State University of Louisiana, 1988.
- Trauschke, E. M. "An Evaluation of a Middle School by a Comparison of the Achievement, Attitudes and Self-Concept of Students in a Middle School With Students in Other School Organizations." Ed.D. dissertation, University of Florida, 1970.
- Unruh, C. G. "A Study of Junior High Schools and Middle Schools With Reference to Philosophy, Function, Curriculum, Personnel and Activities Program." Ed.D. dissertation, University of Wyoming, 1975.
- Valentine, J., et al. The Middle Level Principalship. Vol. I: A Survey of Middle Level Principals and Programs. Reston, Va.: National Association of Secondary School Principals, 1981.
- Vars, G. "In Between." In The Transitional Years, A Middle School Portfolio. Washington, D.C.: Association for Childhood Education International, 1961.

Wah, W. "A Study of Teacher Perceptions of Selected Middle School Programs in Michigan." Ph.D. dissertation, Michigan State University, 1980.

Walsh, A. J. K. "A Descriptive Analysis of Self-Concept of Middle School Students in Michigan Based Upon High and Low Level Implementation of the Eighteen Basic Characteristics of Middle School Concept." Ph.D. dissertation, Michigan State University, 1977.

Webster's Third New International Dictionary. New York: Merriam-Webster, 1971.

Westhoff, D. "A Study of the Relationship Between the Connecticut Secondary School Development Project and the United States Department of Education Secondary School Recognition Program for Selected Wisconsin Secondary Schools." Ph.D. dissertation, University of Iowa, 1988.

West Virginia Department of Education. "A Programmatic Definition for Middle Schools in West Virginia." Wheeling: West Virginia Department of Education, April 1977.

Woodring, P. "The New Intermediate School." Saturday Review (October 1965): 37.

Woods, M. A., ed. The Search for Successful Secondary Schools--The First Three Years of the Secondary School Recognition Program. Philadelphia, Pa.: U.S. Department of Education, Office of Educational Research and Improvement, 1985.