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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.

Michigan State University, Ph.D., 1972
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IN SELECTED MICHIGAN SCHOOLS AND NATIONALLY
PROMINENT SCHOOLS AS PERCEIVED BY
TEACHERS AND PRINCIPALS

By

James Hawkins

A THESIS

Submitted to
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in partial fulfillment of the requirements
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ABSTRACT

A STUDY TO ASCERTAIN ACTUAL MIDDLE SCHOOL PRACTICES
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James Hawkins

The middle school came into existence over sixty years ago. Other forms of organization existed prior to then, but it was during the 1960's that the middle school concept increased in popularity. Today more than 1,200 of these schools are in existence.

The middle school concept is based on the belief that a special kind of curriculum design and educational planning can better provide for the special needs and interests of the transescent at this level than the traditional junior high. The most defensible position taken for establishing the middle school is to remedy the deficiencies of the junior high school.

The purpose of this study was to investigate the relationship between principals and teachers in selected Michigan middle schools and four nationally prominent middle schools regarding their perceptions of their school practices.

James Hawkins

Eighteen basic middle school characteristics had previously been identified and validated. These characteristics centered on continuous progress programs, the use of multi-media, flexible schedules, social experiences, physical experiences, intramural activities, team teaching, planned gradualism, exploratory-enrichment programs, independent study, community relations, guidance services, creative experiences, evaluation practices, student security factors, basic learning skills, student services, and auxiliary staffing.

Four major hypotheses were developed to test for differences in perceptions, if any, between teachers and principals:

- Hypothesis 1: There is a significant difference between the mean scores of principals and the mean score of teachers in the Michigan middle schools.
- Hypothesis 2: There is a significant difference between the mean scores of principals and the mean score of teachers in the nationally prominent middle school.
- Hypothesis 3: There is a significant difference between the mean scores of Michigan middle school principals and teachers and the mean scores of principals and teachers of the national sample.
- Hypothesis 4: There is a significant difference between the mean scores of Michigan middle school principals and principals of the national sample in Survey I when compared with their mean scores in Survey II regarding their school program.

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Survey questionnaires seeking data related to the current practices of middle schools were mailed to the principal of all schools in Michigan identified as "middle schools" with a 6-8 grade organization. The survey questionnaires were also mailed to four schools that had been arbitrarily selected on a national basis because of their excellent reputation as exemplary middle schools. Each principal and two teachers who had been on the staff two years or more were asked to respond to the questionnaire. Survey forms were returned by 63.1 per cent of the Michigan middle schools and by all four of the schools in the national sample. Scheffé's one-way analysis of variance and the T-test were the statistical techniques used to test the data. Mean scores were calculated on each of the eighteen characteristics for principals and teachers in this study. The .05 level of confidence was established as the minimum criterion level for accepting mean differences as being significant.

Generally, the null hypotheses showed no significant differences in three comparative measurements:

- A. There was no significant difference discovered when comparing the mean scores of principals and teachers in the Michigan middle schools.

James Hawkins

- B. There was no significant difference found when comparing the mean scores of the national samples of principals and teachers.

- C. There was no significant difference found when comparing the mean scores of Michigan and national middle school principals in Survey I with the mean scores of both in Survey II.

A statistical significant difference was found on Hypothesis 4 when mean scores of teachers and principals in the Michigan middle schools were compared with mean scores of teachers and principals in the national sample. Principals and teachers in the national sample scored significantly higher than teachers and principals in the Michigan schools.

After an analysis of the data, it was apparent the schools in the national sample were applying the middle school characteristics to a greater degree than were the Michigan middle schools.

DEDICATION

To my wife, Vivian Dolores, whose
love, patience, and sacrificing
made this event a reality

ACKNOWLEDGMENTS

The writer wishes to express his sincerest appreciation and gratitude to the many people who contributed generously to make this thesis a reality.

Dr. Louis Romano, chairman of the doctoral guidance committee, whose scholarly advice and assistance guided this thesis to completion. To him I am indeed grateful.

To the other members of my doctoral committee, Dr. Wilbur Brookover, Dr. Donald Nickerson, and Dr. Joseph McMillen, I am appreciative for the generosity of their guidance.

A special dedication is due my mother, Mrs. Hattie B. Hawkins, whose greatest desire would have been to realize this occasion.

This thesis is also dedicated to my lovely daughters, Lisa and Linda, whose thirst and love of knowledge may someday yield the same return.

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM	1
Introduction.	1
Statement of the Problem.	2
Significance of the Problem.	2
Definition of Terms	4
Procedure.	6
Assumptions of the Study.	6
Limitations of the Study.	6
Research Objectives	7
Objective I	7
Objective II.	7
Objective III	8
Objective IV.	8
Procedures for Analysis of Data	8
Organization of Dissertation	10
II. REVIEW OF THE RELATED LITERATURE	12
History of the American Middle School	12
What Is the Middle School?	18
Why A Middle School?	28
Evaluating the Middle School	34
Review of Related Studies	37
Summary	41
III. DESIGN OF THE STUDY	45
Introduction.	45
Hypothesis and Sub-Problems.	45
Major Problem	45
Sub-Problem I	46
Sub-Problem II	46
Sub-Problem III.	47
Sub-Problem IV	47

Chapter	Page
Source of the Data	47
Instrument Employed.	49
Procedures.	56
Objectives to Be Measured.	59
Summary.	60
IV. ANALYSIS OF THE DATA	61
General Hypothesis	61
Findings	62
Findings	64
Findings	66
Findings	68
Summary	70
V. CONCLUSIONS	73
Summary	73
Findings	75
Hypothesis 1	75
Hypothesis 2	79
Hypothesis 3	81
Hypothesis 4	84
Conclusions	86
Recommendations for Further Study	87
Reflections	88
BIBLIOGRAPHY	89
APPENDICES	
Appendix	
A. Letter Requesting Permission to Use the Riegle Instrument	95
B. Letter Received Granting Permission to Use Survey Instrument	96
C. Letter Sent to Principals Requesting Their Assistance in Filling Out Questionnaire	97
D. The Questionnaire	98

LIST OF TABLES

Table	Page
3-1. A Listing of the Eighteen Middle School Characteristics Used in This Study to Measure Practices of Middle Schools (by Louis G. Romano, Jack Riegle, and Nicholas P. Georgiady)	50
3-2. The Questions Within the Survey and the Number Which Reflect the Practice Being Measured	54
3-3. Refers to Number of Michigan and National Schools Contacted, Number of Affirmative Responses and Percentage of Questionnaire Returns	57
3-4. Table depicting Data Sources	58
4-1. Mean Scores of Principals and Teachers in Michigan Middle Schools and Approximate Significance Probability of F Statistic	63
4-2. Comparison of Mean Scores of Principals and Teachers of the National Sample as Measured by Survey II	65
4-3. A Comparison of Michigan Middle School Teachers and Principals with National Sample Using Achieved Mean Score on Survey II	67
4-4. Comparison of Mean Scores Achieved by Michigan and National Principals in Survey I and II	69
4-5. Maximum Scores Yielded by Survey Instrument for Michigan and National Sample and Composite Mean Score on Each Variable	71

CHAPTER I

THE PROBLEM

Introduction

The past decade has witnessed a vast increase in the number of middle schools in the United States. Along with this increase various organizational designs have become practically standardized as representing this new innovation. This school of question often contains a proliferation of grade arrangements, but usually has grade five or six as its beginning level and terminates typically with grade eight. That the growth of the middle school is now approaching the dimensions of a movement appears to be well borne out by several significant surveys in recent years. At present there are over 1,200 middle schools in the United States.¹ Michigan has more than 136 middle schools of various grade combinations. Of these, 103 are organized as grades six through eight.

¹Doris L. Marshall, "A Comparative Study of Instructional Policies of Middle Schools Administered Respectively by Elementary-Oriented Principals and Secondary Principals" (unpublished Ph.D. dissertation, 1970), p. 1.

Statement of the Problem

The study is designed to investigate the relationship of reported practices in selected Michigan middle schools and four nationally prestigious middle schools as perceived by principals and selected teachers in each school. A concern for what is taking place in these schools can provide valuable information for future middle school development. Thus, the discovery of the viable ingredients of the middle school will have a significant impact on the total program of public school education.

Significance of the Problem

The major concern of educators during the late 1800's and 1900's was the early adolescent youth. The organizational design of six years of elementary schooling and six years of secondary schooling had failed to take into consideration the needs and problems of this age level. With these students representing the junior high school, the promise of an utopian future was never realized.

The events and forces that set the stage for the consideration of the middle school were paralleled in the development of the junior high school from 1890 to 1920. Lack of standardization of secondary school programs was causing considerable difficulty for the colleges in admission procedures by 1890. Thus, the

increase in industrialization and a discernable shift from rural to urban living was placing a heavier demand on colleges, and they in turn demanded more of the secondary schools. Therefore, this demand for excellence in the academics and preparation for future college students brought this new intermediate school into the position of a miniature high school.

The term "middle school" continues with great popularity today. Gaining momentum during the 1960's a variety of diverse organizational patterns have become extremely popular. Within a relatively short time period, many schools have made the transition to middle schools for a variety of reasons that range from pressures to integrate to alleviating overcrowded conditions.²

The rationale given for this emerging interest in the middle schools seems to relate to the dissatisfaction with what the junior high school has become.³ In essence the middle school movement is basically a reactionary movement against the existing structure. Much of the criticism of existing junior high school practices is undoubtedly justified, yet some of the

²William M. Alexander and Emmett L. Williams, "School for the Middle Years," Educational Leadership, XXIV (December, 1965), 217-23.

³William M. Alexander and Emmett L. Williams, The Emergent Middle School (New York: Holt, Rinehart and Winston, Inc., 1968), p. 4.

"excuses" for deserting the junior high school structure for a different number combination are not sound.⁴

Most theorists argue that the emergent middle school organization can and will meet the many needs of the transescent child.

The need exists for studies that analyze and investigate the reported practices of middle schools as perceived by both administrators and teachers. It seems paramount that this basic practice be examined now.

Definition of Terms

The definition of terms which follows is presented in order for this study to be easily and accurately understood and aids in any future replication that may be considered.

Middle School.--A school unit which combines into organization and facility grades six through eight.

Middle School Program.--A technique or educational strategy that commits itself to making provisions for each child within its program and strives to make the program flexible and consistent with the philosophic positions developed.

⁴R. P. Brim, "Middle School or Junior High? Background and Rationale," National Association for Secondary School Principals (March, 1969), p. 1.

Transescent Youth.--That youth in the stage of growth and development which begins just prior to the onset of puberty and continues to early adolescence.

Planned Gradualism.--Those experiences which assist early adolescents in making the transition from childhood dependence to adult independence.

Team Teaching.--An administrative design in organization that maximizes on teacher talents and provides experiences for students to interact with a variety of teachers in a wide range of subject areas.

Continuous Progress Program.--A nongraded educational program which utilizes a diversification of instructional techniques which are used to allow students to progress at their own individual rate regardless of chronological age.

Survey Instrument.--A survey instrument, consisting of eighteen validated middle school characteristics, that was mailed to all Michigan middle school principals and four exemplary middle school principals in the Riegle Study. The identical survey was also used in this study. Survey I instrument will apply to the Riegle Study while Survey II instrument will apply to this study.

Procedure

Much attention will be given to Survey II in this research project. This instrument is identical in organization as Survey I. It differs, however, from Survey I in the following:

- A. It was mailed to all middle schools in Michigan housing grades 6-8.
- B. All principals in 6-8 grade schools were asked to fill out the survey.
- C. Principals in Michigan and national middle school were asked to select two teachers, with two or more years seniority at their respective school to fill out the questionnaire form.

Assumptions of the Study

The Study assumes that the checklist prepared and organized was appropriate for measuring middle school practices. It also assumes that the instrument was presented in such a manner that allowed respondents to answer with their true perceptions relative to the programs housed within their school building.

Limitations of the Study

This study is limited to those schools in Michigan and a small national sample that house students in grades six through eight. Although the terms have been

carefully defined, a lack of consistent responses may develop because of the wide range of training and experiences of the respondents.

The intent of the survey was to discern the degree of application being made of eighteen middle school principals. The survey instrument used in this thesis was used in a previous study of the middle school and is considered acceptable for the purpose for which it is to be used.

Research Objectives

The problem as has been outlined can better be understood with the following research questions which will be tested in this study.

Objective I

Is there a high degree of consistency between responses of teachers and principals in Michigan middle schools relative to reported practices as measured by Survey II?

Objective II

Is there a high degree of consistency between responses of teachers and principals in the four nationally prominent middle school relative to reported practices as measured by Survey II?

Objective III

Is there a significant difference in responses between teachers and principals in the Michigan middle school as compared to the responses of teachers and principals in the four nationally prestigious schools relative to reported practices as measured by Survey II?

Objective IV

Is there a high degree of agreement between principals in Michigan middle schools and principals in the four nationally famous middle schools in their responses to both Survey I and Survey II?

Operational hypotheses in relation with these research questions are presented in Chapter III.

Procedures for Analysis of Data

The following study is an extension of the Riegler Study which was also done on the middle school. The Riegler Study dealt with making a compilation of the most frequently mentioned characteristics of middle school education after a thorough review of the literature. A survey instrument was designed and disseminated to all schools in Michigan housing grades above four but below nine. The survey instrument was also mailed to four arbitrarily selected schools outside the state of Michigan that had received national recognition as exemplary middle schools. The purpose of the study

was to determine the current level of implementation of the above mentioned characteristics which totaled eighteen. The author's main conclusion was, in general, the national sample of exemplary middle schools were found to be applying the basic middle school characteristics to a greater degree than were the middle schools in Michigan. He further concluded that middle schools in Michigan could provide improved middle schools programs by increased study and application of the middle school concepts presented in the literature.

This study is concerned with investigating the relationship of reported practices in selected Michigan middle schools and four nationally prestigious middle schools as perceived by principals and selected teachers in each school. The responses to the survey form used in the Riegel Study will constitute the reported practices in this study.

One hundred and thirty-six schools listed by the Michigan Department of Education met the criteria established for defining a middle school. From the schools on this list, those organized in a manner appropriate to this study were identified and totaled 104.

The same survey instrument used in the Riegle Study was determined appropriate for this study by the Research Department at Michigan State University.⁵

⁵Research assistance provided by the Department of Research Services, College of Education, Michigan State

A cover letter and survey forms along with a stamped return addressed envelope were sent to the 104 identified Michigan middle schools and the four nationally prominent schools. A follow-up letter was sent one month later to each school from whom no reply had been received.

The data were programmed and processed by the control Data Corporation (CDC) 3600 computer at Michigan State University. The analysis of variance was used to analyze these data.

Organization of Dissertation

A frame of reference for the entire study is provided in Chapter I. An introduction to the middle school and a statement of the problem examined in this study has been presented. Research questions and important terms have been stated and defined. Methods used for collecting and analyzing the data are also presented.

Chapter II begins with a review of the related literature. A middle school rationale is then espoused. The topic of middle school evaluation concludes this chapter.

The research design and procedures are described in Chapter III. Details relating to the samples, the

University, and Dr. Lawrence Lezotte, Assistant Director-Center for Urban Affairs-Research, Michigan State University.

instrument, administration, data collection, and analysis procedures are presented.

The analysis of data is presented in Chapter IV. Appropriate descriptive statistics are presented along with each hypothesis.

A summary of the study indicating the significant findings, conclusions, and implications for future studies is presented in Chapter V.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The key issue pursued in this dissertation dictates a thorough review of the literature. The review begins with a brief history of the intermediate school.

Because of the nebulous picture often given of the middle school, clarification is attempted by looking at what the middle school is, followed by a rationale or a why for its existence. Consideration is then given to the necessity of evaluation in the middle school.

History of the American Middle School

Over sixty years ago, with a reorganization movement developing in secondary education, seventh and eighth graders were siphoned off of existing elementary schools and either appended to the four-year high school to form the six-year secondary school or joined with high school freshmen in the newly created junior high school. This reorganization occurred because of many factors. As early as 1888, President Charles W. Eliot of Harvard had sounded the call as he addressed the

National Education Association. His basic concern was that if secondary education could begin earlier than the ninth grade the result would be younger high school graduates. As interest grew toward this idea the N.E.A. appointed a "Committee of Ten on Secondary School Studies." Their recommendation was to begin high school subjects in the late elementary school or within a six-year high school.¹

The emergence of a plethora of organizations came into existence, including the 6-6, 6-3-3, 6-2-4, 5-3-4, 4-4-4 plans. Despite the many aberrations, the concept of six years of elementary education and six for secondary was quite acceptable to most educators.

Economy of time was not the sole factor in the reorganizational movement. The new psychology of G. Stanley Hall had focused educator's attention on developmental characteristics and needs of children and adolescents. Age twelve was regarded by many psychologists as the turning point of adolescence. The belief was that these students should be with their peers in a three-year unit or with older students in the six-year secondary school.²

¹Theodore C. Moss, "The Middle School Comes--And Takes Another Grade or Two," The National Elementary Principal (February, 1969), pp. 37-38.

²Ibid., p. 38.

A second reason contributing to the reorganization movement was the great dissatisfaction over the duplication of studies offered in the elementary school. Rather than being bothered with the traditional offering of penmanship, grammar, spelling, geography, reading, arithmetic, and history, a variety of substitute courses, departmentalized teaching of high school subjects, some vocational courses, and a broader program of extra-curricular activities were suggested as alternatives. It was felt that earlier introduction of high school subjects, including the vocational courses, were justification for retaining those students who normally left school after consummation of grade eight. It was theorized that, given these high school courses within a building of older students, many potential dropouts would be encouraged to remain an additional year and hence, the dropout rate would greatly diminish. Both Thorndike and Dewey supported the theory and this gave considerable prestige to the movement.

The recommendations of the Commission on the Reorganization of Secondary Education in 1918 proved significantly important. The report, published under the title of "The Cardinal Principles of Secondary Education," reaffirmed the 6-6 plan of school organization but suggested the establishment of a three-year junior

high school with grades seven through nine. It distinguished between the functions of the junior and senior high by stating:

In the junior period emphasis should be placed upon the attempt to help the pupil to explore his own aptitudes and to make at least provisional choice of the kind of work to which he will devote himself. In the senior period emphasis should be given to training in the fields thus chosen. . . . In the junior high school there should be the gradual introduction of departmental instruction, some choice of subjects under guidance . . . and a social organization that calls forth initiative and develops the sense of personal responsibility for the welfare of the group.³

The first three-year junior high schools were opened in Columbus, Ohio, and Berkeley, California in 1909 and 1910. Their opening was the result of overcrowding in the existing four-year high school. The school age population reflected the rapid rise in our national birth rate. From 1890 to 1920 public secondary enrollment rose from 3.8 per cent to 24 per cent of the normal high school age group (14-17).⁴

Although the junior high school started slowly, by 1920 it was firmly entrenched as an American school between the elementary and the high school.⁵

³Leslie W. Kindred, The Intermediate School (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), pp. 20-21.

⁴Moss, op. cit., p. 38.

⁵Joseph C. Devita, Phillip Pumerantz, and Leighton B. Wilklow, The Effective Middle School (West Nyack, N.Y.: Parker Publishing Company, 1970), p. 17.

During the next forty years or the period from 1920-1960 the number of junior high schools increased at a phenomenal rate. In 1920, 55 separate schools had been established. The number then rose to 1,842 by 1930 and to 7,143 by 1964.⁶ These figures exclude those schools that were part of a six-year junior-senior high school form of grade organization. Because of this rapid growth and great popularity, the junior high school experienced wide and popular acceptance.

The popularity of the junior high school began to fade after World War II. The senior high school had begun to push more academics into the junior high and the statistics on the school dropout rate led to serious cogitation about the 7-9 grade plan. Afterwards many educators began accusing the junior high schools of not fulfilling its purposes in caring for the developmental and educational needs of its pupil. Parents began complaining that the junior high school was forcing their children to grow up too fast.⁷ The junior high school was slowly becoming a miniature high school. In 1965 Paul Woodring remarked that "it now appears that the 6-3-3 plan, with its junior high school, is on the way out."⁸

⁶Kindred, op. cit., p. 25.

⁷Paul Woodring, "The New Intermediate School," Social Foundations of Education, ed. by Dorothy Westley Gibson (New York: The Freedom Press, 1967), p. 235.

⁸Paul Woodring, "The New Intermediate School," Saturday Review, XLVIII (October 16, 1965), 77.

Even though a few middle schools existed in the 1950's, the middle school concept rapidly grew in popularity during the 1960's. In 1965 the Research Division of the National Education Association reported in a survey of the growing number of middle schools widely scattered across the country. Cuff reported in his study that in the 1965-66 school year 446 public school districts in 30 states were operating 499 middle schools.⁹

Middle school growth became so popular that by the 1967-68 school year, Alexander had identified over 1,200 in the United States.¹⁰ Alexander's survey was undertaken to provide more precise and comprehensive data regarding the nature and extent of the middle school movement. His survey clearly confirmed that there was definitely a national movement toward new school organization in the middle of the school ladder.

This new-found popularity was met by a series of criticisms by many well-established educators. Popper, who had been critical of the middle school practice but supportive of the concept, described the middle school as an "institutional corruption" that was corruptive of both early adolescent and childhood education in the

⁹William A. Cuff, "Middle Schools on the March," National Association of Secondary School Principals Bulletin, LVII (February, 1967), 83-86.

¹⁰William M. Alexander, "The New School in the Middle," Phi Delta Kappan, XVI (February, 1969), 335-36.

elementary school.¹¹ The junior high school Education Committee representing the National Association of Secondary School Principals proclaimed that any school housing grades six through nine had greater merit than a school housing grades five through eight.¹²

What Is the Middle School?

One current innovation which may eventually have great impact on education reform, and which certainly seeks to challenge conventional organizational patterns is the emerging middle school program.¹³

The term "middle school" has come to mean different things to different people. Alexander defined it as, "a school providing a program planned for a range of older children, preadolescents, and early adolescents that builds upon the elementary school program for earlier

¹¹Samuel Popper, "What About the Middle School?" Today's Education, LVIII (November, 1969), 52.

¹²"Recommended Grades or Years in Junior High or Middle Schools," National Association of Secondary School Principal's Bulletin, L (February, 1967), 69.

¹³John W. Vaughn, "Implication of Physical and Intellectual Growth Characteristics, Interests, and Cultural Forces for the Improvement of the Middle School Program" (unpublished Ph.D. dissertation, Michigan State University, 1970).

childhood and in turn is built upon by the high school's program for adolescence."¹⁴

The middle school concept, to establish an educational program designed to meet the needs and interests of the preadolescent and early adolescent has been described as having specific prerequisite features:¹⁵

1. Includes at least three grades to provide for the transition from elementary methods to high school instructional procedures.
2. A movement toward departmentalization, more pronounced in each higher grade, to effect the change from the elementary self-contained classroom to the departmentalized structure of the high school.
3. Flexible approaches to instruction characterize the middle school-team teaching, flexible scheduling, individualized instruction, independent study, programmed learning, and such other procedures as will help children learn how to learn.
4. Special courses, required of all students, usually taught in a departmentalized structure in such fields as industrialized arts, home economics, art, music and typing.
5. A guidance program that is a distinct entity, especially designed for the preadolescent and early adolescent, and one that is comprised of more than tests and record keeping.
6. A faculty that is specifically for this age group and this sort of school.

¹⁴William M. Alexander and Emmett L. Williams, The Emergent Middle School (Holt, Rinehart and Winston, Inc., 1969), p. 5.

¹⁵Alvin W. Howard and George C. Stoumbis, The Junior High and Middle School: Issues and Practices (Scranton, Penn.: Intext Educational Publishers, 1970), p. 198.

7. A program of interscholastic sports and social activities that is substantially limited from that commonly found in the traditional junior high.¹⁶

That the middle school is more than a grouping of grades is evident from an examination of the degree to which each of the above mentioned seven essentials of a school is part of the programs.

Williams notes that, ". . . The middle school is characterized by extreme variety. However, despite the fact that middle schools probably differ from one another more than they resemble one another, they do have some features in common:"

1. An effort to combine the best features of the elementary school and its self-contained classrooms with the best aspects of the specialization of the secondary schools.
2. An instructional program that emphasizes self-understanding and includes units on the special concerns of young adolescents.
3. An observable, definite, and planned emphasis upon greater student self-direction and self-responsibility for learning. This requires extended use of independent study and student selection of activities of the individual's own choosing and design.
4. Expanded use of innovations such as team teaching, nongrading, the newest of educational media, flexible scheduling, programmed learning, and laboratory facilities. The middle school movement is an exciting development and part of the excitement grows out of its newness--the excitement of creativity is felt in these schools.¹⁷

¹⁶"Middle Schools in Theory and in Fact," N.E.A. Research Bulletin, XLVII (May, 1969), 49.

¹⁷Emmet L. Williams, "The Middle School Movement," Today's Education, LVII (December, 1968), 41.

The Connecticut Legislature defined the middle school in an act of 1965 as an extension of the definition of a secondary school to include " . . . any separate combination of grades five and six or grade six with grades seven and eight in a program approved by the State Board of Education when the use of special facilities generally associated with secondary schools is an essential part of the program for all grades included in such a school."

Alexander and his associates¹⁸ see the middle school as bringing together in one facility and organization specific school years, commonly grades 5-8 or 6-8, that have previously been separated by elementary and junior high school organization patterns under the 6-3-3 plan. This new structure should be considered, they believe, in a larger sense as an effort to "reorganize the total school ladder," not just one of its divisions. The middle school, in this concept, is defined as,

. . . a school providing a program planned for a range of older children, preadolescents, and early adolescents that builds upon the elementary school program for earlier childhood and in turn is built upon by the high school's program for adolescence. Specifically it focuses upon the educational needs of what is termed the "in-between-ager."¹⁹

¹⁸Alexander and Williams, op. cit., pp. 4-5.

¹⁹Ibid.

Atkins relates the following as distinguishing characteristics of the middle school that promise to render it "uniquely appropriate for the children it serves":

1. Attitudinal stance, a difference in the approach to the task at hand. "The uniqueness of the middle school is not so much a matter of organization, of grouping, of schedules, or of staffing, as it is a matter of attitude, of expectation, of sensitivity, and of perception. The mission of the school is viewed as neither remedial nor preparatory." In such a concept the transitional condition of these children is both recognized and valued.
2. The middle school is "characterized organizationally by flexibility, environmentally by sensitivity to changing needs, and instructionally by individualization." There is more awareness of the need for reexamination of school practices in middle schools which, in turn, makes these schools more open to innovation.
3. There is an emphasis upon the shift from mastery of knowledge to utilization of knowledge. The prominent features of the program includes some form of these four ideas: diagnostic teaching, individualized instruction, self-directed learning, and learner-centered evaluation.²⁰

Compton described the middle school as "a promising alternative to the inadequate 6-3-3 organization--it focuses attention on a portion of the school population too often treated as second-class citizens in the public schools." In noting that the middle school varies between school districts, she has pointed out that it is just as impossible to describe the middle school specifically as it is to specify the elementary school

²⁰ Neil P. Atkins, "Rethinking Education in the Middle," Theory Into Practice (Columbus: Ohio State University College of Education, June, 1968), pp. 118-19.

or the junior high school. She labels common elements found in middle schools as:

1. Planned articulation with the elementary school that may require "a pseudo-self-contained approach" for a part of the school day in the first year of the middle school program.
2. Use of subject matter specialist into team teaching technique in closely related areas of general knowledge.
3. Establishment of skill laboratories within the middle schools that are staffed by technologists who possess subject matter competencies to furnish remedial, developmental, and advanced instruction.
4. An independent study program for all students in accord with the individual student's needs, interests, and abilities, and commensurate with the topics chosen for study.
5. Home base groups should be assigned to teachers who have special training in guidance and counseling and who also have the time and opportunity to help children both with personal and academic problems.
6. An activity program in which all students are encouraged and able to participate. Such a program is aimed at the individual student's development rather than building the school's prestige or providing public entertainment.
7. A vertical school organizational plan that permits continuous progress of students.
8. A system of evaluation and grading that is based upon individual progress rather than some mythical average for a particular grade or chronological age group.
9. Individualized student programs designed to fit the needs of each student, and individualized student schedules.
10. A faculty and administration that is knowledgeable concerning this age group, competent in at least one subject field, and that indicate a sincere desire to provide the best program possible for the "in-between-ager."²¹

An informational brochure prepared by the Grosse Pointe, Michigan, Public School System delineates

²¹Mary F. Compton, "The Middle School: Alternative to the Status Quo," Theory Into Practice (Columbus: Ohio State University College of Education, June, 1968), p. 110.

specifically the differences between a middle school and a junior high school. Their definition follows:

A middle school program is designed to recognize the uniqueness of the growth stage spanning the transition from childhood to adolescence. The junior high has evolved into exactly what the name implies--junior high school.²²

<u>Middle School Emphasized</u>	<u>Jr. High Emphasizes</u>
1. A program that is child-centered	A program that is subject centered
2. Learning how to learn	Acquiring a body of information
3. Creative exploration	Skill and concept mastery
4. A belief in oneself	Interstudent competition
5. Skilled Guidance for student self-direction	Conformance to the teacher-made lesson plan
6. Student assuming responsibility for their own learning	Student learning is the responsibility of the teacher
7. Student independence	Control by the teacher
8. A flexible schedule	A six-period day
9. Scheduling involving student planning	A schedule administrative constructed
10. Variable group size	Standard classrooms
11. Use of team teaching	One teacher per class
12. Students learning at different rate--self-pacing	All students at the same place at the same time; textbook approach

²²The Middle School in Grosse Pointe, A brochure prepared by the Gross Pointe, Michigan Public School system.

A theoretical model for the middle school has been enunciated by Alexander and Williams. The model middle school (grades 5, 6, 7, and 8) proposed by these writers is based on eight guidelines, a three-phase curriculum, and a suggested organization for instruction.

The Eight Guidelines are:

1. A real middle school should be designed to serve the needs of older children, preadolescents, and early adolescents.
2. A middle school organization should make a reality of the long-held ideal of individualized instruction.
3. A middle school program should give high priority to the intellectual components of the curriculum.
4. A middle school program should place primary emphasis on skills of continued learning.
5. A middle school should provide a high program of exploratory experiences.
6. A program of health and physical education should be designed for boys and girls of the middle school years.
7. An emphasis on values should underline all aspects of a middle school program.

8. The organization of a middle school would facilitate most effective use of the special competencies of the teaching staff.

They suggest that the curriculum of the model middle school would consist of planned programs in three areas: learning skills, general studies, and personal development. These programs would be developed in an organization of instruction comprised of a homeroom, the wing unit, the vertical unit, and special learning centers. They also suggest having homerooms of about twenty-five pupils in the same grade levels, but also heterogeneously arranged under the supervision of a teacher counselor. A suggestion is made of having four homeroom groups with their teachers constituting a wing unit. Each of the four homeroom teachers would possess a special competence in one of the general studies areas of language arts, social studies, science, or mathematics. The combination of these teachers working and planning together would serve as a committee and a teaching team for the wing unit of 100 students.

The vertical unit would consist of approximately 400 students and 16 teachers. This unit would be comprised of four wing units, one from each grade level, five through eight. This arrangement is often referred to as the "school within a school" concept. These special learning centers would serve the exploratory

interests as well as the special and remedial needs of students who would be scheduled on an individual basis for work in these centers for both long-term and short-term learning.

Certain statements consistently appear in discussions of what the middle school is or ideally should be. Among these are dissatisfaction with the actual practices of the junior high school--although not with its stated goals and functions; the opportunities for innovation; the conviction that the middle school more nearly answers the question, "How can we best serve the educational needs of pupils who are no longer children and not quite adolescents?"²³; and the claim that the middle school program should be a distinct entity in itself, not a carbon of the high school nor a fancy version of the elementary program. There appears to be a near-unanimous feeling that the middle school must avoid practices and curricula like those that now appear to characterize the traditional junior high school. It must establish itself as a truly middle unit in a three-segment system of American education, one comprised of elementary, middle, and high school.²⁴

²³Williams, op. cit., p. 41.

²⁴Howard and Stoumbis, op. cit., p. 203.

Why A Middle School?

A multiplicity of reasons have been given as to the rationale for the creation of middle schools as the intermediate unit of a school system. With this advocacy, much is made of the fact that today's young people mature earlier now than they did some years ago. Earlier maturation is attributed to a better diet.

As a result, many boys and girls enter puberty in grades five and six.²⁵ The majority of girls today enter puberty between the ages of ten and twelve, the majority of boys between the ages of eleven and thirteen, and these children share common developmental problems. Much evidence exists relating the positive aspects of placing the preadolescent and early adolescent in a school situation together where they will not have to compete and associate with the older and mature youth. It has been agreed upon by many middle school proponents that fifth and sixth-graders can profit from learning experiences typically allotted to seventh-graders in the junior high school. Brimm, however, feels that the actual age of puberty of girls today as compared with the estimated age for their mothers and grandmothers is relatively small, only a month or two. He further points

²⁵Kindred, op. cit., p. 33.

out that this slight difference hardly justifies a one-to two-year change in grouping.²⁶

In further support of this position, it is felt that children of middle school age appear to have more in common with each other than with elementary school pupils as a group or high school pupils as a group. There seems to be less difference between the maturity of boys and girls in grade six and eight than between boys and girls in grades seven and nine; consequently, it is felt that children in the fifth through eighth grades should be separated both physically and intellectually from older children.

A very popular belief related to the middle school is that children from the ages of ten through fourteen not only differ considerably from each other and require an appropriate environment for learning but also have particular emotional, social, and intellectual needs that cannot be met satisfactorily in elementary and junior high school. It is theorized in this respect that these conditions and needs can only be met through special facilities and instructional personnel who understand the growth and developmental processes in children of middle school ages.²⁷

²⁶R. P. Brimm, "Middle School or Junior High? Background and Rationale," National Association of Secondary School Principals, No. 335 (March, 1969), 5-6.

²⁷Ibid., p. 33.

It is typically accepted that the middle school child needs an educational program that is quite different from the traditional self-contained classroom at the elementary level, but one that does not quite parallel the departmentalized high school. The middle school can provide fifth or sixth graders with more constructive challenges and more leadership opportunities. In addition it slows down the more undesirable aspect of early sophistication and the rapid growth process.²⁸

American education has customarily been classified as elementary and secondary, with junior high school included as a part of the secondary. Middle school advocates believe that it is time to recognize the third major division of education, the intermediate area, to take its place between the elementary and secondary.²⁹

The educational advantages of the middle school are emphasized by its supporters. Grooms contends that the middle school provides an educational program aimed at the 10-14 age groups, one that stresses flexibility rather than the acquisition of specific skills as does the elementary school. Further, it does not emphasize

²⁸Howard and Stoumbis, op. cit., p. 204.

²⁹Ibid.

the specialization of the high school. Responsibility for learning is a goal expected of the middle school child; the encouragement of students to explore on their own, and the assignments are designed to fit the student's needs.

The junior high school became too large and overgrew itself. It became, because of expediency, too involved with high school type activities. The needs of the students, though advocated in its philosophy, were being neglected. Thus, the demise of the junior high began. The name itself, "junior high school" carried a very negative connotation which handicapped it for years.

The name, "middle school" gives this structure a standing of its own. The middle school exists in its own right, separate from the image of the senior high school. Techniques, programming, and curriculum permit the greatest possible flexibility of scheduling to provide for the varying rates, abilities, and interests of the individual.³⁰ A variety of basic subjects should be available in this school, however, there should be a wide range of exploratory subjects available. Williams³¹ has listed several innovative features common to the

³⁰Ibid., p. 205.

³¹Williams, op. cit., p. 42.

middle school, team-teaching, flexible scheduling, programmed instruction, laboratory facilities, and non-grading.

One major criterion espoused for a successful middle school program is individualized instruction. It has long been advanced in educational theory that a student's learning ability and retention is best when he has tackled the process of discovery by himself. Thus, a rationale is given for the inclusion of the concepts of non-grading and team teaching within the middle school as to improve instruction. Williams suggests that it is difficult to find a middle school that is not using some form of team teaching.³²

Alexander suggests three principal kinds of justification for adoption of the middle school:

1. To provide a program especially adapted to the wide range of individual differences and special needs of the "in-between-ager."
2. To create a school ladder arrangement that promotes continuity of education from school entrance to school completion.
3. To facilitate through a new organization, the introduction of needed innovations in curriculum and instruction.³³

Moss³⁴ contends that a new organizational pattern has developed. This, he believes, is the natural

³²Ibid.

³³Alexander and Williams, op. cit., p. 11.

³⁴Theodore C. Moss, Middle Schools (Boston: Houghton-Mifflin, 1969), p. 18.

development of the change from the 8-4 plan to that of the 6-3-3 which developed during the early 1900's.

In a 1967-68 survey by Alexander, he attempted to discern the nature and extent of the current middle school movement. His survey included a checklist of reasons for the establishment of 110 middle schools in a 10 per cent random sample of the ten regions in the nation as described by the USOE. Many of the reasons cited by the respondents for adopting the middle school program were:

1. To eliminate crowded conditions in other schools (58.2%)
2. To provide a program specifically designed for students in this age group (44.6%)
3. To better bridge the elementary and the high school (40%)
4. To provide more specialization in grades five and/or six (30%)
5. To move grade nine into the high school (24.5%)
6. To remedy the weaknesses of the junior high school (24.5%)
7. To try out various innovations (23.6%)
8. To utilize a new school building (20.9%)
9. To use plans that have been successful in other school systems (12.7%)
10. To aid in desegregation (6.4%)
11. Other (11.8%)³⁵

Several of these reasons other than "to remedy the weaknesses of the junior high school" do imply an inadequacy of the junior high: "to provide a program specifically designed for students in this age group";

³⁵William M. Alexander, "The New School in the Middle," Phi Delta Kappan (February, 1969), pp. 355-56.

"to better bridge the elementary and the high school"; and "to move grade nine into the high school."³⁶

Brod sees many positive advantages of the middle school. She surveyed more than 1,000 middle schools and concluded that the middle school is successful in practice.³⁷

Certainly one of the most cumbersome aspects of the middle school movement has been the bandwagon effect. Far too many schools have been created as middle schools without seriously considering the students to whom it is to serve. Without any serious planning or organization true implementation will be difficult. Thus, it is little wonder that many educators are skeptical about the middle school movement.

Evaluating the Middle School

There is no one way to evaluate a school. Schools and people both differ. However, the need for evaluation in the middle schools is certainly a must. Why is it necessary to evaluate the intermediate school?

The middle school movement has accelerated at such a pace until it has come to be almost a landslide. Each year witnesses a vast multiplication of such schools.

³⁶Alexander, op. cit.

³⁷Pear Brod, "Middle Schools in Practice," The Clearing House, XLII (May, 1968), 531.

Without evaluation boards of education and school people will never really know whether this organization is any better than the old.

Fundamentally, evaluation of the middle school, or of any educational enterprise or activity, seeks to provide answers to two related questions:

1. How well are we achieving our goals or purposes?
2. How can we improve what we are doing or how can we do it better another time?³⁸

A very thorough evaluation of a middle school has to begin with an examination of the philosophy, theory, rationale, and purposes of the school. It should include relationships to what precedes and what follows the middle school as well as relate the program to the stated purposes and to the cultural setting in which the school operates. In addition it should also include adequacy of facility, what the staff and administration do, and how well they are carrying out their activities. Major emphasis should be placed on curriculum--the instruction, services, and activities provided by the middle school for its pupils.³⁹ The highest priority should be the assessment of what the intermediate or middle school is doing for its students.

³⁸Vynce A. Hynes and Williams M. Alexander, "Evaluating the Middle School," National Association of Elementary School Principal (February, 1969), p. 32.

³⁹Ibid., pp. 32-33.

Alexander and Williams reviewed five purposes for evaluating the middle school:

1. To provide information on how well the purposes of the middle school are being met.
2. To test assertions or hypotheses underlying the middle school.
3. To provide feedback for improving practices in the middle school included here relates to what teachers do, how they do it, and all the courses, activities, and services provided for the children who attend the middle school.
4. To provide psychological security to staff, pupils, parents, and school officials.
5. To provide a basis for expanding middle schools.⁴⁰

The current costs of establishing and operating new schools--in dollars and in their effects, or lack of effects, on children are too great to allow another wave of "experimental" but untested school organizations to become fixed in the middle school movement is almost at hand.⁴¹

The existence of a movement toward middle schools is not justification alone for evaluating the new schools. The important questions are how middle schools differ from prior organizations and whether they are better schooling arrangements for children. Alexander's survey found that very few of the middle schools had any built-in evaluation plans for getting such data.⁴²

⁴⁰Alexander and Williams, op. cit., p. 131.

⁴¹Hynes and Alexander, op. cit., p. 34.

⁴²Ibid.

One of the important ingredients in evaluation of the middle school is to examine the goals. Stated goals should be very specific as they relate to philosophy and purpose. Goals must be appropriate for the students and community being served and thus should not be above criticism. There must exist close correlation between the goals and the knowledge of how pupils learn.

Evaluation can provide for clarifying objectives, for assessing progress toward achievement of the objectives, and can supply data for improving both process and product.⁴³ Evaluative measures have been developed in huge quantities for the traditional junior high school, but unfortunately nothing as complete and comprehensive has been done for the middle school as yet.

Evaluation should and must be a part of every middle school. An adequate evaluation will undoubtedly assist administrators and all from duplicating the mistakes of the traditional junior high school.

Review of Related Studies

Jack D. Riegle conducted a study in the 1970-71 school year to identify the basic middle school principles that were frequently expressed in the literature. He then attempted to determine the degree of application

⁴³Ibid., p. 35.

middle schools in Michigan and in a selected national sample were making of these principles. The study was limited to those schools housing grades above four and below nine.

The basic middle school principles focused attention upon the areas of: continuous progress programs, use of multi-media, flexible scheduling, provisions for student social experiences, provisions for student physical experiences, intramural activities, team teaching applications, programs for planned gradualism, exploratory-enrichment opportunities, guidance services, independent study programs, basic learning skills extension, creative experiences, programs to provide student security factors, student evaluation practices, community relations, student services, and auxiliary staffing.

The survey instrument which sought data related to the application being made of the eighteen middle schools principles was sent to the principal of all schools housing grades above four but below nine.

The findings and conclusions of the study were as follows: (1) The rapid increase in the number of schools labeled as middle schools has not been accompanied by a high degree of application of those principles considered by authorities in the field to be basic to middle school education; (2) An overall 46.94 application

by middle schools in Michigan as measured by the survey instrument used in this study and a 64.9 per cent application by the national sample when measured on the same basis; (3) The number of grades housed in a middle school was not a significant factor in determining application of middle school principles. In general both three-grade and four-grade middle schools in Michigan had implemented the middle school principle to a small degree; (4) While a high degree of agreement exists among authorities in the field regarding what constitutes basic middle school principles, the degree of application of these principles and the wide variation in levels of application provide evidence of a failure by the leadership of the middle schools of Michigan to implement the principles proclaimed by the authorities. (5) A few middle schools in Michigan demonstrated application of the basic middle school principles to a degree equal to that level achieved by the four selected exemplary schools included in the study.⁴⁴

A study by Marie-Therese Elie to compare the group behavior of students attending the middle school, and the junior high school on the basis of socio-emotional problems, self-concept of ability to learn, creative thinking ability, and physical fitness and health was done during the 1969-70 school year.

⁴⁴Riegle, op. cit.

The data required for testing the hypothesis of the investigation were collected by means of four instruments: The Mooney Problem Checklist: Junior High School Form; The Michigan State Self-Concept of Ability Scale; The Torrance Tests of Creative Thinking Ability; and the AAHPER youth fitness Inventory. A random sample of 108 seventh and eighth grade boys and girls was selected for testing. The results of the study were as follows: (1) A significant difference was found between the middle school and the junior high school students on the measures of socio-emotional problems and creative thinking ability. (2) No significant differences were found between the groups on the measures of self-concept of ability to learn, and physical fitness and health. (3) There was a significant difference between the groups in terms of creative thinking ability. Middle school students, regardless of grade, scored significantly higher than junior high school students than junior high school students on measures of "originality" and "flexibility." (4) No significant difference between the two groups was found on standard measures of physical fitness and health.⁴⁵

⁴⁵Marie-Therese Elie, "A Comparative Study of Middle School and Junior High School Students in Terms of Socio-Emotional Problems, Self-Concept of Ability to Learn, Creative Thinking Ability, and Physical Fitness and Health" (unpublished Ph.D. dissertation, Michigan State University, 1970).

Summary

The middle school came into existence approximately sixty years ago. From the early part of the twentieth century to the middle 1960's, the established institution for the transescent youth was the junior high school. The latter part of the nineteenth century saw Charles Elliot leading a movement to reorganize the educational organization in order for earlier graduation from high school. A claim was made that the drop-out rate was too high and this gave credence to the reorganization movement.

The popularity of the new organization, the 7-9 junior high school, began to decline after World War II. Many parents and educators became disenchanted with this new organization. It was then felt that the junior high school was slowly becoming a miniature high school.

The middle school concept achieved its greatest height and popularity during the 1960's. During the 1967-68 school year, Alexander identified over 1,200 middle schools in the United States as compared to 499 in the 1965-66 school year.

The popularity of the middle school was then met with a variety of viewpoints, both pro and con, by leading educators. Many were vigorously supportive of its concept and many were also equally opposed.

Thus, the divergence of opinions served to create a multitude of information available in print for consumption.

The middle school has been defined as a school providing a program for a range of older children, pre-adolescents, and early adolescents that build upon the elementary school program for earlier childhood and in turn is built upon by the high school's program for adolescence. It is more than a grouping of grades together.

There are specific prerequisites typically within the middle school; includes at least three grades, a movement toward departmentalization, more pronounced in each higher grade; flexible approaches to instruction; special courses required of all students; a guidance program that is a distinct entity; a faculty that is specifically trained for this age group; and a program of interscholastic sports and social activities that is substantially limited from that found in the traditional junior high school.

The middle school is characterized by extreme variety. Most differ from one another more than they resemble one another. However, there are some features they have in common which often revolve around a wide range of teaching strategies, team teaching, guidance programs, individualized instruction, and independent study. Since one of the goals of the middle school is

to meet the educational needs of pupils who are no longer children and not quite adolescents, the middle school program thus emphasizes a program that is child centered rather than subject centered. It has been described as a promising alternative to the inadequate junior high school which focuses attention on a part of the school population often treated as second-class citizens in the public schools.

Much of the justification for the middle school lies in the changes in maturation levels for adolescents which demands a special kind of personalized educational experience, and the failure of the junior high school to develop into a student-centered institution. Children at this level not only differ from one another and require an appropriate learning environment, but also have special social, emotional, and intellectual needs that cannot be satisfactorily met in elementary and junior high school.

A survey by Alexander in 1967-68 attempted to discover reasons for middle school development found that many were begun for reasons other than "to provide a program specifically designed for students in this age group." Some of the reasons given for middle school development were to aid in desegregation, to use plans that have been successful in other schools, to try out

various innovations, to remedy the weaknesses of the junior high school and to move grade nine to the high school.

Evaluation must be a constant and continuous process in the middle school. Evaluation serves to answer the questions of how well goals and purposes are being met and how can improvement be made in what is currently being practiced. Evaluation can provide for clarifying objectives and for assessing progress toward achievement of the objectives. Evaluation thus provides data for improving both process and product.

CHAPTER III

DESIGN OF THE STUDY

Introduction

The basic objective of this study was to provide a comparison between the perceptions of principals and teachers of Michigan middle schools and four nationally famous middle schools regarding practices within their respective building. This chapter is primarily concerned with composition of the sample, the development of the appropriate statistical instrument, the methods used for collection of the data, and the procedures used for analysis of the data. In addition four researchable hypotheses are made relative to differences expected between the responses of principals and teachers within the local and national schools regarding their school program.

Hypothesis and Sub-Problems

Major Problem

The purpose of this research was to investigate the relationship of reported practices in selected

Michigan middle schools and four nationally prestigious middle schools as perceived by principals and selected teachers in each school.

General Hypothesis: There is a significant difference between the mean scores of Michigan middle school principals and national principals regarding their school program measured in Survey I as compared to the mean scores obtained by these principals one year later in Survey II.

Sub-Problem I

To determine if there is a significant difference between responses of teachers and principals in Michigan middle school relative to reported practices as measured by survey II.

Hypothesis 1: There is a significant difference between the mean scores of principals and the mean scores of teachers in the Michigan middle schools.

Sub-Problem II

To determine if there is a significant difference between responses of teachers and principals in the four nationally prominent middle schools relative to reported practices as measured by Survey II.

Hypothesis 2: There is a significant difference between the mean scores of principals and the mean scores of teachers in the nationally prominent middle schools.

Sub-Problem III

To determine if there is a significant difference between the responses of Michigan middle school principals and teachers and the responses of principals and teachers of the four nationally famous middle schools relative to their school program.

Hypothesis 3: There is a significant difference between the mean scores of Michigan middle school principals and teachers and the mean scores of principals and teachers of the four nationally prominent middle schools.

Sub-Problem IV

To determine if there is a significant difference between the responses of Michigan middle school principals regarding their school program when Survey II is compared to Survey I, and responses of principals in the four nationally famous schools regarding their school programs when Survey II is compared to Survey I.

Hypothesis 4: There is a significant difference between the mean scores of Michigan middle school principals and national middle school principals in Survey I and the mean scores of Michigan middle school principals and national middle school principals in Survey II regarding their school program.

Source of the Data

The Michigan State Department of Education supplied a list of all schools classified as "middle schools."

One hundred and thirty-six met the qualification of housing grades above four and below nine. Of this number 103 schools were organized as 6-8 middle schools. The basic predominant pattern of middle school organization in the United States is 5-8 or 6-8. This study was limited to the 6-8 organization.

Since this study is a follow-up on a previous one done on the middle school, the Riegle Study, the same four nationally prestigious middle schools were used to constitute the secondary sample. These four schools were selected because of the national prominence received for operating exemplary middle school programs. The exemplary middle schools that were arbitrarily selected were: Hithergreen Middle School, Dayton, Ohio; Pearl River Middle School, Pearl River, New York; Fox Lane Middle School, Bedford, New York; and Barrington Middle School, Barrington, Illinois.

Three questionnaires were mailed to each of the 107 middle school principals. One was filled out by the principal and the two remaining were filled out by two separate teachers who had two years or more seniority on the staff. The data for this study were gathered from the questionnaires that had been completed and returned by the principals.

Instrument Employed

To measure practices in middle schools, an instrument used in the Riegler Study was replicated in this study.

The instrument had been developed previously by its author by reviewing the literature directly and indirectly related to the middle school. From this review a list of basic principles of middle school programming were extracted. The author reviewed the list with several well-known authorities on the middle school. Based upon their critique, a list of eighteen basic characteristics were compiled and agreed upon by the panel of authorities in the field (see Table 3.1). The instrument was a questionnaire containing sixty-two questions (see Table 3.2). The questions dealt with the application of eighteen middle school characteristics. The questions were divided into three sections according to the manner of response indicated for the question. Multiple choice questions that used mutually exclusive and exhaustive responses and sought a single answer per question made up the first section of the questionnaire. The second section of the questionnaire was multiple choice questions which sought multiple responses, and the final section contained check forms that were designed to compare two variables.

TABLE 3-1.--A listing of the eighteen middle school characteristics used in this study to measure practices of middle schools (by Louis G. Romano, Jack Riegler, and Nicholas P. Georgiady).

Characteristic I

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.

Characteristic II

Multi-material approach: The middle school program should offer to students a wide range of easy 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.

Characteristic III

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.

Characteristic IV

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.

Characteristic V and VI

Physical experiences and 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

TABLE 3-1.--Continued.

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.

Characteristic VII

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.

Characteristic VIII

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.

Characteristic IX

Exploratory and 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.

Characteristic X

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.

Characteristic XI

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.

TABLE 3-1.--Continued.

Characteristic XII

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.

Characteristic XIII

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.

Characteristic XIV

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.

Characteristic XV

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.

Characteristic XVI

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.

Characteristic XVII

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.

TABLE 3-1.--Continued.

Characteristic XVIII

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.

TABLE 3-2.--The questions within the survey and the number which reflect the practice being measured.

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

The questionnaire had previously been reviewed and revised by Dr. Louis Romano and staff consultants in the Department of Research Services, Michigan State University. The suggested revisions were incorporated into the questionnaire. A cover letter was then prepared.

Along with the cover, the questionnaires and an addressed stamped return envelope was mailed on January 31, 1972, to 103 principals of grades 6-8 middle schools in Michigan. Four questionnaires and a personalized letter, along with an addressed, stamped return envelope were mailed to each of the principals of the four selected national sample school.

The choices for each question on the questionnaire were given a numerical value. The values were weighted to provide a positive correlation between large scores and a high degree of implementation of the characteristics being measured. The numerical values and the weighting of responses were previously reviewed by Dr. Louis Romano and a research consultant. Modifications were made and the instrument was acknowledged as being appropriate.

Table 3.2 indicates which specific question in the survey instrument measures each characteristic which is indicative of a practice of the middle school.

Procedures

By March 6, 1972, thirty-eight schools had returned their questionnaires. The questionnaires of principals and teachers from one school were discarded because the school had erroneously been listed by the Michigan Department of Education as a 6-8 grade middle school. One principal returned his set of questionnaires unanswered with a note indicating he and his staff were too busy to take the necessary time to fill them out.

A letter was sent on March 9, 1972, to the principals of all the schools from whom no responses had been received. The letter asked their cooperation in returning their questionnaires within the next few days. As of April 11, a total of sixty-five schools had returned their questionnaires.

As the questionnaires were returned from the various schools the responses were coded and the coding was verified for each response. The coding forms were divided into two sample groups (see Table 3.3).

The data of this research project were programmed for computer analysis. The raw scores were recorded and a mean score for each principle used to measure middle school practice was developed. These mean scores were used to compare responses of principals in first and second surveys, responses of national principals with local middle school principals, and responses of

TABLE 3-3.--Refers to number of Michigan and National schools contacted, number of affirmative responses and percentage of questionnaire returns.

Number of Schools Contacted	Number of Responses Received	Percentage of Schools Responding to Questionnaire
National Schools 4	4	100%
Local Michigan Schools (6-7-8) 103	65	64%

principals and teachers. Any inconsistency discovered is reflected when comparing mean scores of one group with another. An analysis of variance technique which compares groups by their mean scores, was used to perform this statistical comparison. A copy of the design is seen in Table 3.4.

Formulas used to calculate the necessary statistics reported in Table 4.1 and other tables in this chapter are:

$$\text{Mean} = \frac{\sum X}{n}$$

where:

$\sum X$ = the sum of the scores for the variable being reported

n = the number of scores summed

TABLE 3-4.--Table depicting data sources.

		Principals	Teachers
Second Survey	4 National Middle Schools	1	2
	Local Michigan Middle Schools	3	4
First Survey	4 National Middle Schools	5	
	Local Michigan Middle Schools	6	

Comparisons will be made between cell 1 and 2.

Comparisons will be made between cell 3 and 4.

Comparisons will be made between cell 1 and 5.

Comparisons will be made between cell 2 and 4.

Comparisons will be made between cell 3 and 6.

Scheffé's Analysis of Variance:

$$F = \frac{ss\ b/dfb}{ss\ w/dfw} = \frac{M\ S\ B}{M\ S\ W}$$

where:

$$ss\ b/dfb = \frac{\text{sum of squares between}}{\text{degrees of freedom}}$$

$$ss\ w/dfw = \frac{\text{sum of squares within}}{\text{degrees of freedom within a group}}$$

M S B = variance between groups

M S W = average variance within each group

Student's t-test:

$$t = \frac{\bar{x} - m}{\sqrt{\hat{s}^2/n}}$$

where:

\bar{x} = sample mean

m = hypothesized mean

\hat{s}^2 = estimated population variance

n = number of people

Objectives to Be Measured

Objective one and two were met by comparing the mean scores of teachers with principals in the Michigan and National middle schools. Mean scores for each teacher were computed and a composite teacher mean score was used for comparison with the principals composite mean score from Survey II.

The conditions of objective three were met in a like manner as objective one and two. The only difference was that the raw scores and mean scores of Michigan principals and teachers were compared with the raw scores and mean scores of teachers and principals of the four nationally famous middle schools.

The conditions of objective four were met simply by comparing the results of principals in Survey I with the responses of principals to the same instrument one

year later. The analysis of raw scores and mean scores achieved by the two groups at different times were used to make this comparison.

Summary

Questionnaires designed to measure practices of middle schools were mailed to principals of 103 schools in Michigan housing grades 6-8. Questionnaires were also mailed to principals of four nationally prominent middle schools. Each principal and two teachers with two or more years of seniority on the school staff were requested to fill out and return the survey. A final total of sixty-five schools returned questionnaires. The data were computed and summarized in this study.

This chapter also presented the hypotheses and subproblems investigated in this research project. A description of the instrument employed and procedures to be followed has been detailed.

Mean scores were calculated for principals and teachers using the analysis of variance technique. Comparisons between groups were made using these mean scores.

CHAPTER IV

ANALYSIS OF THE DATA

The findings of the analysis of data are presented in this chapter. The research hypotheses presented in Chapter III were concerned with determining the existence of a significant difference between teachers and principals and between principals and principals locally and nationally concerning reported practices of their schools.

The data presented in this chapter were collected from the results of survey questionnaires returned by sixty-nine schools. A comparison of responses made by both teachers and principals was calculated and compared with similar responses made in the Riegle Study (Survey I). A one-way analysis of variance was used to make such comparisons.

General Hypothesis

The statistical hypothesis examined in the analysis of data was stated initially in research form and finally in the null as follows:

Ho₁: There is a significant difference between the mean scores of principals and the mean scores of teachers in the Michigan middle schools.

$$M_1 \neq M_2$$

Null Hypothesis 1: There is no difference between the mean scores of principals and the mean scores of teachers in the Michigan middle schools.

$$M_1 = M_2$$

Findings

Table 4.1 indicates the statistical contents calculated for both Michigan teachers and principals earlier identified.

The maximum score for each of the eighteen variables is indicated in Table 4.1. The mean total score achieved by the Michigan Middle School principals (147.74) represents 46.3 per cent of the maximum total possible. The mean total Michigan middle school teachers score represents 42.1 per cent of the maximum total possible.

The probability of significance of the F statistic was computed for each variable and significance found on four characteristics.

At the 95 per cent level of confidence, the null hypothesis was not rejected. The mean was calculated on eighteen items both for principals and teachers.

TABLE 4-1.--Mean scores of principals and teachers in Michigan middle schools and approximate significance probability of F statistic.

Characteristics	Principals	Maximum Possible Score	Teachers	Approximate Significance
1. Continuous Progress	1.88	8	1.94	0.874 NS
2. Multi-media	21.55	33	20.40	0.146 NS
3. Flexible schedule	3.11	18	3.06	0.939 NS
4. Social experiences	11.42	20	9.98	0.012 S ^a
5. Physical experiences	21.49	31	20.01	0.139 NS
6. Intramural activity	10.46	23	9.49	0.359 NS
7. Team teaching	3.68	16	3.06	0.328 NS
8. Planned gradualism	1.42	3	1.63	0.119 NS
9. Exploratory and enrichment programs	9.89	25	9.23	0.435 NS
10. Guidance services	10.68	23	9.06	0.047 S ^a
11. Independent study	5.14	16	4.56	0.286 NS
12. Basic learning Experiences	11.20	25	9.98	0.124 NS
13. Creative experiences	9.23	21	8.15	0.152 NS
14. Student security factors	4.34	8	2.69	0.0005 S ^a
15. Evaluation practices	6.37	16	6.27	0.817 NS
16. Community relations	5.60	16	5.32	0.440 NS
17. Student services	7.40	9	6.68	0.008 S ^a
18. Auxilliary staffing	2.88	8	2.73	0.579 NS
Total Scores	147.74	319	134.26	

^aSignificant at the .05 level.

Significance was discovered on only four of a minimum requirement of nine characteristics. Because the number of significant discoveries was less than nine the null hypothesis was not rejected.

Ho₂: There is a significant difference between the mean scores of principals and the mean scores of teachers in the nationally prominent middle schools.

$$M_3 \neq M_4$$

Null Hypothesis 2: There is no difference between the mean scores of principals and the mean scores of teachers in the nationally prominent middle schools.

$$M_3 = M_4$$

Findings

The procedure used to evaluate this hypothesis was the one-way analysis of variance. Table 4.2 projects the achieved mean scores of principals and teachers of the four nationally prominent middle schools.

This table also reveals that the mean total score achieved by principals was 215.75, which represents 67.6 per cent of the maximum possible score. The mean total score achieved by teacher in the national sample was 180.19 which represents 56.5 per cent of the maximum possible score.

Since only one item out of a minimum requirement of nine revealed significance, the null hypothesis was not rejected at the 95 per cent level of confidence.

TABLE 4-2.--Comparison of mean scores of principals and teachers of the national sample as measured by Survey II.

Characteristics	National Princi- pals	National Teachers	Approximate Significance Probability of F stat.
1. Continuous progress	1.25	2.89	0.310 NS
2. Multi-media	26.50	23.62	0.185 NS
3. Flexible schedule	8.25	6.37	0.512 NS
4. Social experience	13.25	12.25	0.759 NS
5. Physical experiences	26.00	23.37	0.116 NS
6. Intramural activity	20.25	16.75	0.338 NS
7. Team teaching	14.25	12.37	0.353 NS
8. Planned gradualism	0.50	0.87	0.443 NS
9. Exploratory and enrichment programs	15.75	10.00	0.041 S ^a
10. Guidance services	14.50	11.87	0.344 NS
11. Independent study	12.50	10.25	0.337 NS
12. Basic learning experiences	14.50	14.62	0.959 NS
13. Creative experiences	9.50	5.00	0.274 NS
14. Student security factors	6.50	4.50	0.299 NS
15. Evaluation practices	9.25	6.87	0.073 NS
16. Community relations	9.75	7.62	0.161 NS
17. Student services	7.75	6.62	0.287 NS
18. Auxiliary staffing	5.50	4.37	0.109 NS
Total	215.75	180.19	0.109 NS

^aSignificant at the .05 level.

Ho₃: There is a significant difference between the mean scores of Michigan middle school principals and teachers and the mean scores of principals and teachers of the four nationally prominent middle schools.

$$M_5 \neq M_6$$

Null Hypothesis 3: There is no difference between the mean scores of Michigan middle school principals and teachers and the mean scores of principals and teachers of the four nationally prominent middle schools.

$$M_5 = M_6$$

Findings

Table 4.3 compares the achieved mean scores of Michigan teachers and principals with the achieved mean scores of teachers and principals from the nationally exemplary middle schools. The T-test was used to measure significance between these means.

Significance was consistently found when comparing national principals with local principals and national teachers with local teachers. In each comparison the national schools scored significantly higher than Michigan schools.

The test of significance yielded several significant differences in achieved mean scores when comparing the mean scores of teachers and principals in Michigan middle schools with teachers and principals in the national sample. The teachers of the national sample scored

TABLE 4-3.--A comparison of Michigan middle school teachers and principals with national sample using achieved mean score on Survey II.

Characteristics	Local Teachers	National Teachers	Local Principals	National Principals
1. Continuous progress	1.94	2.87	1.88	1.25
2. Multi-material	20.40	23.62 ^a	21.55	26.50 ^a
3. Flexible schedule	3.06	6.37 ^a	3.11	8.25 ^a
4. Social experiences	9.98	12.25 ^a	11.42	13.25 ^a
5. Physical experiences	20.01	23.37 ^a	21.49	26.00 ^a
6. Intramural experiences	9.49	16.75 ^a	10.46	20.25 ^a
7. Team teaching	3.06	12.37 ^a	3.68	14.25 ^a
8. Planned Gradualism	1.63	0.87	1.42	0.50
9. Exploratory and enrichment programs	9.23	10.00	9.89	15.75
10. Guidance services	9.06	11.87 ^a	10.68	14.50 ^a
11. Independent study	4.56	10.25 ^a	5.14	12.50 ^a
12. Basic learning experiences	9.98	14.62 ^a	11.20	14.50 ^a
13. Creative experiences	8.15 ^a	5.00	9.23	9.50
14. Student security factors	2.69	4.50	4.34	6.50 ^a
15. Evaluation practices	6.27	6.87	6.37	9.25
16. Community relations	5.32	7.62	5.60	9.75 ^a
17. Student services	6.68	6.62	7.40	7.75
18. Auxiliary staffing	2.73	4.37	2.88	5.50 ^a
Total	134.26	180.19	147.74	

^aSignificant at the .05 level.

significantly higher than Michigan teachers on nine of the eighteen characteristics. The principals of the national sample scored significantly higher than the Michigan middle school principals on twelve of the eighteen characteristics.

Since both teachers and principals of the national sample met the requirements for significance between groups, the null hypothesis was rejected.

Ho₄: There is a significant difference between the mean scores of Michigan middle school principals and national middle school principals in Survey I and the mean scores of Michigan middle school principals and national middle school principals in Survey II regarding their school program.

$$M_7 \neq M_8$$

Null Hypothesis 4: There is no difference between the mean scores of Michigan middle school principals and national middle school principals in Survey I when comparing their mean scores with Survey II regarding their school program.

$$M_7 = M_8$$

Findings

Table 4.4 reflects the mean score achievements of Michigan principals and national principals on Survey I and Survey II. The survey instrument was administered to the same principals one year apart. The test of significance was performed and a significant difference

TABLE 4-4.--Comparison of mean scores achieved by Michigan and national principals in Survey I and II.

Characteristics	Michigan Principals		National Principals	
	Survey I	Survey II	Survey I	Survey II
1. Continuous progress	1.92	1.88	3.00	1.25
2. Multi-media	20.66	21.55	26.50	26.50
3. Flexible schedule	5.00	3.11 ^a	10.75	8.25 ^a
4. Social experiences	10.62	11.42	12.50	13.25
5. Physical experiences	21.59	21.49	27.25	26.00
6. Intramural activity	11.52	10.46	19.25	20.25
7. Team teaching	3.36	3.68	11.25	14.25 ^a
8. Planned gradualism	1.32	1.42	1.00	.50
9. Exploratory and enrichment programs	10.50	9.89	10.50	15.75 ^a
10. Guidance services	10.32	10.68	17.00	14.50
11. Independent study	4.96	5.14	9.00	12.50
12. Basic learning skills	12.35	11.20	14.50	14.50
13. Creative experiences	9.09	9.23	10.25	9.50
14. Student security factors	4.87	4.34	6.25	6.50
15. Evaluation practices	5.77	6.37	7.75	9.25
16. Community relations	7.09	5.60	8.25	9.75
17. Student services	7.09	7.40	6.25	7.75
18. Auxiliary staffing	3.03	2.88	6.25	5.50
Total Scores	150.63	147.74	207.25	215.75

^aSignificant at .05 level with 1 df.

was found only in one case with the Michigan principals and in three with the national principals. Because the number of significant items measured was less than minimum requirement of nine, the null hypothesis was not rejected.

The requirement for a minimum of nine items was a suggestion of the Research Department at Michigan State University.

Table 4.5 reports the maximum scores possible for the survey instrument and the composite mean scores of the Michigan middle schools and the national sample schools on each variable surveyed.

Summary

Generally, the null hypotheses showed no significant differences in three comparative measurements:

- A. There was no significant difference when comparing the mean scores of principals and teachers in the Michigan middle schools.
- B. There was no significant difference when comparing the mean scores of the national samples of principals and teachers.
- C. There was no significant difference found when comparing the mean scores of Michigan and National middle school principals in Survey I with the mean scores of both in Survey II.

TABLE 4-5.--Maximum scores yielded by survey instrument for Michigan and national sample and composite mean score on each variable.

Characteristic	Maximum Score	Michigan Composite Mean	National Composite Mean
1. Continuous progress	8	1.91	2.33
2. Multi-media	33	20.79	24.58
3. Flexible schedule	18	3.07	7.00
4. Social experiences	20	10.47	12.58
5. Physical experiences	31	20.51	24.25
6. Intramural activity	23	9.82	17.91
7. Team teaching	16	3.27	13.00
8. Planned gradualism	3	1.55	0.75
9. Exploratory and enrichment programs	25	9.45	11.91
10. Guidance services	23	9.61	12.75
11. Independent study	16	4.76	11.00
12. Basic learning skills	25	10.40	14.58
13. Creative experiences	21	8.52	6.50
14. Student security factors	8	3.25	5.16
15. Evaluation practices	16	6.30	7.66
16. Community relations	16	5.41	8.33
17. Student services	9	6.92	7.00
18. Auxiliary staffing	8	2.77	4.75
Total	319		

Because no significant differences were discovered in the three areas above the null hypotheses could not be rejected. A statistical significant difference was found when comparing the mean scores of teachers and principals in the Michigan middle schools with teachers and principals in the national sample. Further interpretation of this chapter will be treated in Chapter V.

CHAPTER V

CONCLUSIONS

Summary

The middle school came into existence over sixty years ago. Other forms of organization existed prior to then, but it was during the 1960's that the middle school concept increased in popularity. Today more than 1,200 of these schools are in existence.

The middle school concept is based on the belief that a special kind of curriculum design and educational planning can better provide for the special needs and interests of the transescent at this level than the traditional junior high. The most defensible position taken for establishing the middle school is to remedy the deficiencies of the junior high school.

The purpose of this study was to investigate the relationship between principals and teachers in selected Michigan middle schools and four nationally prominent middle schools regarding their perceptions of their school practices.

Eighteen basic middle school characteristics had previously been identified and validated. These characteristics centered on continuous progress programs, the use of multi-media, flexible schedules, social experiences, physical experiences, intramural activities, team teaching, planned gradualism, exploratory-enrichment programs, independent study, community relations, guidance services, creative experiences, evaluation practices, student security factors, basic learning skills, student services, and auxiliary staffing.

Four major hypotheses were developed to test for differences in perceptions, if any, between teachers and principals.

Survey questionnaires seeking data related to the current practices of middle schools were mailed to the principal of all schools in Michigan identified as "middle schools" with a 6-8 grade organization. The survey questionnaires were also mailed to four schools that had been arbitrarily selected on a national basis because of their excellent reputation as exemplary middle schools. Each principal and two teachers who had been on the staff two years or more were asked to respond to the questionnaire. Survey forms were returned by 63.1 per cent of the Michigan middle schools and by all four of the schools in the national sample. Scheffé's one-way analysis of variance and the T-test were the

statistical techniques used to test the data. Mean scores were calculated on each of the eighteen characteristics for principals and teachers in this study. The .05 level of confidence was established as the minimum criterion level for accepting mean differences as being significant.

Generally, no significant differences were found in three of the four hypotheses measured. A significant difference was found when comparing the mean scores of the national sample with those of the Michigan middle schools. The results indicated great dissimilarity between these two groups.

After an analysis of the data, it was apparent the schools in the national sample were applying the middle school characteristics to a greater degree than were the Michigan middle schools.

Findings

Hypothesis 1

There is a significant difference between the mean scores of principals and the mean score of teachers in the Michigan middle schools.

A close scrutiny of Table 4.1 (listed in Chapter IV) indicates that even though it was felt that there would be great dissimilarity between the two groups, very little actually occurred. Generally, there was a high

degree of agreement between principals and teachers regarding all items with the exception of four: social experiences, guidance services, student security factors, and student services. Significant differences were discovered on these four items when comparing the responses of these two groups. Item four, social experiences, revealed a mean score of 11.42 for principals and 9.98 for teachers out of a maximum possible score of 20. Even though the difference seems slight, it was, however, large enough to be significant. Michigan principals felt somewhat more positive toward applying this characteristic within their school than did teachers. The difference again seems small, and there always remains the possibility of error in chance fluctuation regarding this significance.

The difference between teachers and principals on item 10, guidance services, was statistically large enough to be considered significant. Principals scored, out of a maximum score of 23, 10.68 and teachers scored 9.06. Again the difference seems small. Guidance services, both group and individual, should be available in the middle school. However, focus should be on the individual student more than on the group. Michigan middle school principals' perception of providing individualized guidance services to students differed from that of teachers. Principals were more positive than teachers in relating to this principle.

A large difference was discovered between teachers and principals on item 14, student security factors. Significance was measured at the .05 level and this item had a calculated F statistic of 0.0005. Principals mean score on this characteristic were 4.34 and teachers were 2.69 of a maximum possible 8. Again principals felt more strongly than teachers in answering this question. It seems as though they felt they were doing an average job in providing students with some secure persons or groups within the school. Michigan middle school teachers, through their responses, did not agree closely with principals. Their responses indicated their school was doing little in helping children adjust to the school and to their problems. It seems as though their feelings were that no definite provision for each student to be known well by at least one teacher was available. Even though item 17, student services, indicated a significant difference between teachers and principals, which is indicative of their score, principals, 7.40, and teachers, 6.68, positive responses indicated positiveness in providing a variety of services for students. The maximum possible score for this characteristic was 9. This characteristic seems to be having wide application in the Michigan middle schools.

In general there was a great deal of agreement between Michigan middle school teachers and principals, regarding their school practices. Basically, there were only three main areas of wide use of the middle schools characteristics: multi-media, physical experiences, and student services. Even though there was much agreement on the remaining fifteen characteristics, this relationship was indicative of little application of these middle school characteristics actually being applied. The areas of greatest weakness of the Michigan middle school appeared to be continuous progress, flexible schedules, and team teaching. Several teacher questionnaires were returned with notes on questions relating to continuous progress stating, "not familiar with the term continuous progress." In several cases of principals responding to continuous progress programs, many stated that these programs are used by all of the students for their entire program, but this was not authenticated by their teachers who often reported, "not used at this time" or "used only with special groups." Teachers and principals often responded that team teaching was done with only a few of their students. Again teachers' and principals' responses indicated there was a fairly general time block for all students with some flexibility, but the flexibility occurred with general time limits.

There was very little evidence of students and teachers having the ability to control their daily time usage.

After comparing results on each of the eighteen characteristics, a comparison was made of the total teachers and principals achieved scores. From a maximum possible total of 319 for all items, the Michigan middle school principals score totaled 147.74 and the teachers' score totaled 134.26. Michigan middle school principals scored higher on all items measured with the exception of two, continuous progress and planned gradualism. The results indicated more similarity than dissimilarity of responses relative to practices of their school. The null hypothesis was not rejected for these reasons.

Hypothesis 2

There is a significant difference between the mean scores of principals and the mean score of teachers in the nationally prominent middle school.

A comparison of the recorded mean scores of teachers and principals on each of the eighteen items measuring practices of middle schools sharply reveals a general constancy in responses. The only characteristic where a significant difference in response was discovered was in exploratory and enrichment programs. On this item responses between teacher and principal were far out of proportion. Of a maximum possible score of 25 for this characteristic, the principals' mean score was 15.75

compared to 10.00 for teachers. One can only speculate regarding the difference in their perception to this item. Since item 9 was the only one where significance was discovered, it could possibly relate to chance. It could also possibly be that principals are much more cognizant of the need for variety in the curriculum and are also aware of a need for students to assume and explore creative roles and experiences. Teachers and principals of the national sample scored high on all items except two, continuous progress and creative experiences. Of a maximum total score of 8 for continuous progress programs, principals achieved a mean of 1.25 and teachers scored 2.89. Both groups seem to support the fact that little application of this characteristic is being implemented. Even more noticeable is that this item is one of two that principals scored lower than teachers. Their achieved mean score seems to indicate that the principals, as instructional leaders, have not capitalized thoroughly on implementing this characteristic. The second item of weakness occurred in the area of creative experiences. The maximum possible total for this characteristic is 21. Principals' mean score was 9.23 and teachers scored 5.00. Even though both groups did not score significantly high, the teachers' perception in the school's responsibility in providing creative experiences to

transescents were less than the principals. Though principals felt somewhat more positive than teachers, it seems they are at least aware of the need for students to assume and explore creative roles and experiences. Even though this variation in responses existed, the difference was not large enough to be considered significant.

Generally, principals and teachers scored fairly high and similar on all items except the two previously mentioned. However unusual as it may seem, in each case the principals scored higher, though not necessarily significant, on each variable than teachers except three, continuous progress, basic learning experiences, and planned gradualism. Of a maximum possible total for all eighteen characteristics, the national principals' sample had a total score of 215.75 compared to the teacher score of 180.19.

Hypothesis 3

There is a significant difference between the mean scores of Michigan middle school principals and teachers and the mean scores of principals and teachers of the national sample.

A careful inspection and observation of Table 4.3 (Chapter IV) sharply reveals differences between Michigan teachers when compared with teachers of the national sample, and Michigan principals when compared with principals of the national sample. When comparing the

two teacher groups, the national sample group clearly performed higher than the Michigan group in the application of the middle school characteristics. Of the eighteen characteristics, the national teacher sample group scored higher on all except three, planned gradualism, creative experiences, and student services. The difference between the two groups was so great that when comparing them with each variable, significance was discovered on ten of the eighteen. Nine of those situations reflected teachers of the national sample scoring significantly higher than Michigan middle school teachers. The Michigan teachers scored significantly higher on creative experiences than teachers of the national sample. On this item, Michigan teachers had a mean score of 8.15 compared to 5.00 for the national group. Whether or not Michigan teachers' perceptions on this item is indicative of actual implementation in their school is speculative. Of a maximum total score of 319, the local teachers scored 134.26 compared with 180.19 for the national teacher group. In general it seems teachers of the national sample perceptions of their implementing the middle school concept are much higher than the Michigan teacher group.

A comparison of the Michigan or local principals with the national middle school principals reveals somewhat the same conclusions found when comparing teachers.

Overall, the national principals sample group scored significantly higher on twelve of the eighteen characteristics than the Michigan principals. On several of the items, the national principals' score doubled or were nearly twice as much as the Michigan principals. For example, on flexible scheduling the Michigan principals scored 3.11 compared to 8.25 for the national principals; on the intramural experiences the Michigan principals scored 10.46 compared to 20.25 for the national group. This trend happened on several other comparisons. The Michigan principals did score higher than the national principals on two items, continuous progress and planned gradualism; on continuous progress local principals scored 1.88 to 1.25 for national group; on planned gradualism the local group scored 1.42 to 0.50 for the national sample. These differences are minimal and are not considered significant.

It has been mentioned that the maximum possible total for all eighteen characteristics is 319. When comparing Michigan principals with national principals the results seem to reflect what has already been said. The Michigan principals' total score was 147.74 compared to 215.75 for the national principal group. It could also be pointed out that the national teachers' total achieved score was quite higher than the Michigan principal group, 180.19 to 147.74.

In general the perceptions of middle school principals and teachers regarding school practices seems to be more visibly perceived in the national sample than in the Michigan middle schools. This seems to indicate that the national schools are doing much more than the Michigan schools in implementation.

Hypothesis 4

There is a significant difference between the mean scores of Michigan middle school principals and principals of the national sample in Survey I when compared with their mean scores in Survey II regarding their school program.

Though not expected, there was much consistency in the responses of Michigan middle school principals and principals of the national sample when comparing their mean scores between Survey I and Survey II. Michigan principals scored nearly identically on Survey II as they did on the first one. In general it again accentuated the feeling that even though one year had passed, their perceptions of what they were doing were still minimal. The Michigan principals had a total achieved score of 150.63 on Survey I compared with a score of 147.74 on Survey II. The difference seems to be attributable to the fact that a slight increase in some areas existed while a smaller decrease was evident in a few other areas. However, on an overall basis

their responses to Survey II were very much consistent with their responses in Survey I.

The national principals' score was also indicative of consistency with their prior responses. Of the eighteen characteristics the national principals responded much differently on three items, flexible schedules, team teaching, and exploratory and enrichment programs. On Survey I they achieved a mean score of 10.75 for flexible schedules compared with 8.25 for Survey II; on team teaching they achieved a mean score of 11.25 on Survey I compared with 14.25 on Survey II; on exploratory and enrichment programs their Survey I score was 10.50 compared with 15.75 for Survey II. The difference in responses to these three items was large enough to be significant. Significance was evidenced by an increase in the latter two characteristics and a decrease in flexible schedules. Overall, the national principals had a total achieved score of 207.25 on Survey I compared to 215.75 on Survey II.

The conclusion that can be derived from the data presented might be questionable. However, it certainly seems that the national exemplary middle schools are continuing their fine reputation in providing those services needed to the transescent. Michigan middle schools seem to have learned little in the past year and still are providing "token" programs.

Conclusions

1. A high degree of consistency between principals and teachers of the Michigan middle schools seems to indicate general agreement regarding their perceptions of their school practices.
2. The consistency of agreement between teachers and principals of the national sample seems to indicate they are "practicing what they preach."
3. The perceptions of principals and teachers of the national sample seems to indicate their attunement to the middle school concept more so than teachers and principals of the Michigan group.
4. Collectively, the perceptions of teachers and principals of 6-8 grade Michigan middle schools seems to indicate that "much remains to be done" if they are to truly implement the middle school philosophy as defined in the literature.
5. As defined in the literature the perceptions of principals and teachers of the national sample is indicative of their status as "true" middle schools.

Recommendations for Further Study

Though this study dealt specifically with middle schools in a 6-8 grade organization, a similar project that would encompass other forms of middle school organization could be pursued to discern whether or not the same conclusions are found; that is, are schools on the national level, identified as exemplary, continuing to outperform local middle schools? If so, why?

It is fairly apparent that a multitude of schools are middle schools in name only. Undoubtedly, because of its popularity, the transformation that has taken place has resulted in the same old school with a different name or grade. This in return has continued to lead to "traditional" kinds of schools with no emphasis regarding the special needs of the pre- and early adolescents.

The disparity that exists between the Michigan middle schools in this study and middle schools of the national sample should be cause for concern. The middle school is a philosophy and belief about children and their needs. An interesting area of research would be to again examine the perceptions of Michigan middle schools regarding the "back seat" they hold when compared with exemplary schools.

Reflections

While reflecting over this study, the writer became personally concerned regarding the placement of Michigan middle schools with the middle schools of the national sample. The perceptions of principals and teachers in this research project were profoundly clear. Yet, the writer is intrigued as to the reason.

Prior to beginning this project, the writer had a very obvious prejudice. Essentially, it was the feeling that too many middle schools of national acclaim were nothing more than little glorified schools living primarily on reputation. That, in actuality, they were not doing all the things they preached. This research project did not deal specifically with that hypothesis. If the results of the survey instrument given is any indication of what is actually being done, my suspicion has greatly been minimized.

The reader should not conclude from the basis of this finding that all Michigan middle schools are grossly inadequate. On the contrary, many Michigan schools performed admirably on the survey instrument, and many did not. The key researchable question continues to be why.

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APPENDICES

APPENDIX A

LETTER REQUESTING PERMISSION TO USE
THE RIEGLE INSTRUMENT

MICHIGAN STATE UNIVERSITY East Lansing • Michigan 48823

College of Education • Department of Administration
and Higher Education
Erickson Hall

January 24, 1972

Dr. Jack Riegle
Ball State University
Muncie, Indiana

Dear Jack:

The information forwarded me regarding your study was extremely helpful. Your expedient response was appreciated.

As you are aware, I too am doing my study on the middle school. In order to give credence to the study, I would like permission to use your developed survey instrument in my endeavor.

I am working closely with the research department and it is their suggestion that your instrument be used in my project.

You can rest assured that, as you promised, all responses will continue to be held in confidence.

Thanks again for your assistance.

Sincerely,

James Hawkins

APPENDIX B

LETTER RECEIVED GRANTING PERMISSION TO
USE SURVEY INSTRUMENT

FROM -- JACK D. RIEGLE

TO Jim

You have my permission to use the instrument
for the purposes of your study. Good luck.

Jack

APPENDIX C

LETTER SENT TO PRINCIPALS REQUESTING
THEIR ASSISTANCE IN FILLING
OUT QUESTIONNAIRE

COLLEGE OF EDUCATION · DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION
ERICKSON HALL

January 31, 1972

Dear Principal:

I need your assistance in a project of great personal and professional importance.

As you may recall you were asked to fill out this enclosed survey instrument one year ago by another student also seeking his doctorate. I hope you can bear going through this tedious task once again.

Like my previous colleague, I too am writing my doctoral dissertation on reported practices of middle schools. I am involved in extending the study on middle schools done last year by Jack Riegle in which you were asked to fill out the same questionnaire which is now before you.

I know the task requested isn't simple. As a former principal I can vividly remember the vast number of requests that "ended in the wastebasket." I hope you can resist this temptation.

Three questionnaires are enclosed. Would you kindly fill out copy "A"? The remaining two "B" copies, are to be filled out separately by two teachers who have been on the staff two years or more.

Again I apologize for this intrusion but desperately need your assistance if I am to make some attempt at determining the direction of middle schools for students in grades 6-8. Of course all respondents can be assured of complete anonymity.

If you would kindly return the questionnaire in the stamped self-addressed envelope within the next week I will be most appreciative. Hopefully, this study will provide me with information that I can later share with you regarding the middle school child.

Sincerely,

James Hawkins

APPENDIX D

THE QUESTIONNAIRE

PART I: Place a check mark before the answer that seems best to explain your current program as it relates to the question.

1-A. Continuous progress programs are:

- not used at this time.
- used only with special groups.
- used only for the first two years.
- used only by some students for all their years at this school.
- used by all of the students for their entire program.

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

- used in all or nearly all courses.
- used in most courses.
- used in a few courses.
- not used in any courses.

5-B. The materials center has a paid staff of:

- more than one certified librarian.
- one certified librarian.
- a part-time librarian.
- no certified librarian help.

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

- one calendar year.
- two calendar years.
- three calendar years.
- more than three calendar years.

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

- more than 5,000 books.
- between 4,000 and 5,000 books.
- between 3,000 and 4,000 books.
- between 2,000 and 3,000 books.
- between 1,000 and 2,000 books.
- less than 1,000 books.

6-B. For classroom instruction, audio visual materials other than motion pictures are used?

- very frequently by most of the staff.

Part I, Page 2

6-B. Continued.

- very frequently by a few of the staff and occasionally by the others.
- occasionally by all of the staff.
- very rarely by most of the staff.
- very rarely by any staff member.

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

- traditional
- traditional, modified by "block-time," "revolving period," or other such regularly occurring modifications.
- flexible to the degree that all periods are scheduled but are not identical in length.
- flexible to the degree that changes occur within defined general time limits.
- flexible to the degree that students and teachers control the daily time usage and changes occur regularly.
- other _____

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

- a ten to twenty minute module.
- a thirty minute module.
- a forty-five minute module.
- a sixty minute module.
- a combination of time so diversified that no basic module is defined.

9-D. Sponsorships for club activities are handled by staff members who:

- are assigned sponsorships without additional pay.
- are paid to assume club sponsorships that are assigned.
- volunteer to sponsor club activities without pay.
- are paid for sponsorship that they volunteer to assume.
- staff members do not work with club activities.

ATTACH A COPY OF THE MASTER SCHEDULE IF POSSIBLE.

Part I, Page 3

10-D. At present approximately what percent of your student body regularly participates in at least one club activity?

_____ none as we have no club program.

_____ 25 percent or less

_____ 25 to 50 percent.

_____ 50 to 75 percent.

_____ 75 to 100 percent.

12-F. Inter-scholastic competition is currently:

_____ not offered at this school.

_____ offered in one sport only.

_____ offered in two sports.

_____ offered in several sports.

14-G. Team teaching programs operate for:

_____ all students.

_____ nearly all students.

_____ about half of the students.

_____ only a few of the students.

_____ none of the students.

11-E. The physical education program is:

_____ highly individualized.

_____ moderately individualized.

_____ slightly individualized.

_____ not individualized at all.

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

_____ this does not happen because we have no intramural program.

_____ this does not happen because we have no interscholastic program.

_____ intramural activities take first priority and others schedule around their needs.

_____ interscholastic activities take first priority and others must schedule around their needs.

_____ other _____

Part I, Page 4

- 15-G. What percentage of your teaching staff is involved in team teaching programs?
- _____ over 90%
- _____ between 60% and 90%
- _____ between 30% and 60%
- _____ less than 30%
- _____ none
- 17-G. A student in grades seven or eight averages about how many minutes per day in a team taught situation?
- _____ 180 minutes or more.
- _____ 130 to 180 minutes.
- _____ 90 to 130 minutes.
- _____ 40 to 90 minutes.
- _____ less than 40 minutes.
- 19-I. Instruction in art is required for all students for:
- _____ one year
- _____ two years
- _____ three years
- _____ four years
- _____ not at all
- 16-G. A student in grades five or six averages about how many minutes per day in a team teaching program?
- _____ 180 minutes or more.
- _____ between 130 and 180 minutes.
- _____ between 90 and 130 minutes.
- _____ between 40 and 90 minutes.
- _____ less than 40 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 five thru eight)
- _____ completely self-contained program for the entire grade span.
- _____ completely departmentalized for the entire grade span.
- _____ modified departmentalized program. (block-time, core programs, etc.)
- _____ program moves from largely self-contained to departmentalized.
- _____ program moves from largely self-contained to partially departmentalized.
- _____ other _____
- _____

Part I, Page 5

- 20-I. Instruction in music is required:
- _____ for one year.
- _____ for two years.
- _____ for three years.
- _____ for four years.
- _____ not at all.
- 22-J. Guidance services are available upon request for:
- _____ all students every day.
- _____ all students nearly every day.
- _____ most of the students on a regular basis.
- _____ a limited number of students on a limited basis.
- _____ other _____
- _____
- 24-J. Guidance counselors are:
- _____ not expected to help teachers build their guidance skills.
- _____ expected to help teachers build their guidance skills.
- _____ expected to help teachers build their guidance skills and they are regularly encouraged to work in this area.
- _____ other _____
- _____
- 21-I. The amount of student schedule time set aside for elective courses students may select:
- _____ decreases with each successive grade.
- _____ is the same for all grades.
- _____ increases with each successive grade.
- _____ varies by grade level but not in any systematic manner.
- _____ does not exist at any grade level.
- 23-J. Guidance staff members:
- _____ always work closely with the teachers concerning a student.
- _____ often work closely with the teachers concerning a student.
- _____ seldom involve the teachers in their work with the students.
- _____ always work independently of the teachers.

Part I, Page 6

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| <p>25-L. Clinics or special classes to treat the problems of students with poor basic learning skills are:</p> <p>_____ not available at this time.</p> <p>_____ available to all students needing such help.</p> <p>_____ available only to the most critically handicapped learners.</p> <p>_____ other _____</p> | <p>26-L. The amount of time provided in the classroom for instruction in basic learning skills:</p> <p>_____ increases with each successive grade.</p> <p>_____ remains constant with each successive grade.</p> <p>_____ decreases with each successive grade.</p> <p>_____ varies greatly due to the way individualized program teachers operate.</p> |
| <p>27-M. Concerning a school newspaper, our school has:</p> <p>_____ no official student school paper.</p> <p>_____ an official student school paper that publishes no more than four issues per year.</p> <p>_____ an official school paper that publishes five or more issues per year.</p> <p>_____ other _____</p> | <p>28-M. Concerning school dramatical activities, most students:</p> <p>_____ do not get experiences in creative dramatics while enrolled in this building.</p> <p>_____ get at least one or two opportunities to use their acting skills while enrolled in the building.</p> |
| <p>29-M. Dramatic productions at this school are produced from:</p> <p>_____ purchased scripts only.</p> <p>_____ materials written by students only.</p> <p>_____ materials written by students and purchased scripts.</p> <p>_____ other _____</p> | <p>30-M. This school has oratorical activities such as debate, public address, etc.:</p> <p>_____ as a part of its planned program of instruction.</p> <p>_____ as a part of its enrichment program.</p> <p>_____ not included in school activities.</p> <p>_____ other _____</p> |

Part I, Page 7

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| <p>31-M. Talent shows are:</p> <p>_____ not a part of our program.</p> <p>_____ produced by students at each grade level.</p> <p>_____ produced once a year on an all school basis.</p> <p>_____ produced at each grade level with some of the acts entering an all school talent show.</p> <p>_____ other _____</p> | <p>32-N. In the operational design of this school the role of the teacher as a guidance person is:</p> <p>_____ given a very strong emphasis.</p> <p>_____ encouraged.</p> <p>_____ mentioned to the staff but not emphasized.</p> <p>_____ left strictly to the individual teacher's personal motivation.</p> <p>_____ not important in our guidance operational plan and therefore not encouraged at all.</p> <p>_____ other _____</p> |
| <p>33-N. As a general policy, in the teacher-pupil relationship:</p> <p>_____ no formal provisions are made for the teacher to provide specified guidance services.</p> <p>_____ teachers are expected to provide guidance services for all of their pupils.</p> <p>_____ teachers are expected to provide guidance services to only a limited number of pupils.</p> <p>_____ other _____</p> | <p>34-0. A student's academic progress is formally reported to parents:</p> <p>_____ two times per year.</p> <p>_____ four times per year.</p> <p>_____ six times per year.</p> <p>_____ other _____</p> |
| <p>35-0. Parent-teacher or parent-teacher-student conferences are held on a school-wide basis.</p> <p>_____ not at all.</p> <p>_____ once per year.</p> <p>_____ twice per year.</p> | <p>_____ three times per year.</p> <p>_____ four times per year.</p> <p>_____ five or more times per year.</p> |

Part I, Page 8

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| <p>36-P. Community service projects by the students are:</p> <p>_____ not a part of our program.</p> <p>_____ carried out occasionally for a special purpose.</p> <p>_____ an important part of the planned experiences for all students while enrolled in this building.</p> | <p>37-P. This school currently has:</p> <p>_____ no parent's organization.</p> <p>_____ a parent's organization that is relatively inactive.</p> <p>_____ a parent's organization that is active.</p> <p>_____ a parent's organization that is very active.</p> |
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PART II: FOR EACH QUESTION IN THIS SECTION CHECK ALL THE ANSWERS THAT APPLY.

- 38-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.
- 40-C. The master class time schedule can be changed by teachers when need arises by:
- planning with other teachers on a daily basis.
- planning with other teachers on a weekly basis.
- seeking administrative approval for a special change.
- requesting a change for next semester.
- requesting a change for next year.
- other _____
- 39-B. Which of the following types of materials are housed in your instructional materials center?
- filmstrips.
- collections (coins, insects, art, etc.)
- motion pictures. (include this if you are a member of a central service)
- micro films.
- overhead transparencies.
- phonograph records.
- ditto and/or mimeo machines.
- photo or thermal copy machines.
- maps, globes and charts.
- display cases or areas.
- 41-D. School dances are held for:
- grade five.
- grade six.
- grade seven.
- grade eight.

Part II, Page 2

42-D. A club program for students is offered for:

_____ grade five.

_____ grade six.

_____ grade seven.

_____ grade eight.

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

_____ in grade five.

_____ in grade six.

_____ in grade seven.

_____ in grade eight.

_____ not at all.

46-K. How much time would you estimate the average student spends in independent study for each grade listed below?

_____ minutes per day in grade five.

_____ minutes per day in grade six.

_____ minutes per day in grade seven.

_____ minutes per day in grade eight.

43-F. The intramural program includes:

_____ team games.

_____ individual sports.

_____ various club activities.

_____ other _____

45-I. Electives currently offered in this building are: (Check those you offer from this list and add any not listed that you offer.)

_____ art _____ speech

_____ band _____ typing

_____ vocal music

_____ drawing

_____ drama

_____ journalism

_____ foreign language

_____ family living

_____ unified arts

_____ orchestra

_____ wood shop

_____ natural resources

_____ creative writing

_____ other _____

_____ other _____

_____ other _____

Part II, Page 3

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

- we have no independent study program.
- assigned to them by the teacher.
- of personal interest and approved by the teacher.
- of personal interest and unrelated to classroom work.
- other _____

49-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 _____

48-L. Students with poor basic skills can get special help in the following areas.

(Check only those areas where special help on an individual basis is provided by special staff members trained to treat such situations.)

- reading
- spelling
- physical education
- mathematics
- grammar
- other _____

50-O. Formal evaluation of student's work is reported by use of:

- a standard report card with letter grades.
- teacher comments writing on a reporting form.
- parent-teacher conferences.
- standard report card with number grades.
- parent-teacher-student conferences.
- other _____

Part II, Page 4

51-P. In regard to community relations this school currently:

- does not send out a parents' newsletter.
- sends out a parents' newsletter on a scheduled basis.
- uses a district-wide newsletter to send out information related to this school.
- uses the commercial newspaper.
- other _____

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

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

53-Q. From the specialized areas listed below, check each service which is available to students in your building. (Note that a service need not be housed within the school building to be available to your students.)

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

- special reading teacher.
- others: _____

Part II, Page 5

54-R. Teaching teams are organized to include:

- fully certified teachers.
- para-professionals.
- clerical helpers.
- student teachers.
- others _____
- _____

55-R. From the following list check those types of auxiliary helpers available in your building:

- paid para-professionals.
- volunteer helpers from the community.
- student teachers and interns.
- high school "future teachers"
- other _____
- _____

Part III: FOR EACH QUESTION IN THIS SECTION PLEASE CHECK THE BOX OR BOXES THAT BEST DESCRIBE YOUR PROGRAM.

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

	During the afternoon	During the evening
Grade five		
Grade six		
Grade seven		
Grade eight		

57-E. The physical education program serves:

	All Students	All Students	All Students
Grade five			
Grade six			
Grade seven			
Grade eight			

58-E. What degree of emphasis does the physical education program give to the competitive and developmental aspects of the program for boys and girls?

	Boys	Girls
Competitive Aspects	High	High
	Medium	Medium
	Low	Low
Developmental Aspects	High	High
	Medium	Medium
	Low	Low

Part III, Page 2

59-F. Intramural activities are schedules for:

	All Students	Boys Only	Girls Only	No Students
Grade five				
Grade six				
Grade seven				
Grade eight				

60-J. How do your guidance counselors handle group guidance sessions?

	Regular Sessions Several Times Per Year	Special Sessions Only	None
Grade five			
Grade six			
Grade seven			
Grade eight			

Part III, Page 3

61-K. Independent study opportunities are provided for:

	All Students	All Students	All Students
Regular Class Time			
Time Scheduled For Independent Study			

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

	All Students	Poor Readers Only	Not At All
Grade five			
Grade six			
Grade seven			
Grade eight			