

DOCUMENT RESUME

ED 054 530

EA 003 649

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TITLE A Comparative Study of Middle Schools and Junior High
Schools in the State of Michigan.
PUB DATE Jun 71
NOTE 27p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Administrative Problems; Cocurricular Activities;
*Comparative Analysis; Core Courses; Elective
Subjects; *Grade Organization; Grading; Guidance
Counseling; *Junior High Schools; *Middle Schools;
School Design; Special Services; Teacher
Certification; Teaching Methods
IDENTIFIERS Michigan

ABSTRACT

This study was made to (1) compare Michigan middle schools with junior high schools on the basis of selected ongoing programs and practices, and (2) determine if the two organizations differed in any way. Proportional stratified sampling provided a selection of 138 junior high schools that could be compared with the 138 middle schools in the State. A survey instrument mailed to principals of the participating schools provided the data for the study. Investigators found that (1) most of the organizational structures and instructional processes of both school types are similar to predecessor programs and instructional organizations for the middle years; (2) middle schools were primarily established to reduce overcrowded conditions in other schools, whereas the junior high school organization was to provide a program specifically designed for students in the age group served. (Author/MLF)

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**A COMPARATIVE STUDY OF MIDDLE SCHOOLS AND
JUNIOR HIGH SCHOOLS IN THE STATE OF MICHIGAN**

by

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CENTRAL MICHIGAN UNIVERSITY, JUNE, 1971

ED054530

EA 003 649

A Comparative Study of Middle Schools and Junior High Schools in the State of Michigan

Introduction

From its inception at the beginning of the twentieth century, the reason for being of the junior high school has been to intervene in the educative process between childhood and adolescence and serve the special intellectual, social, physical, and emotional needs of pre-adolescent and early adolescent pupils. In recent years, however, controversy has arisen germane to the alleged failure of junior high schools to achieve aims and functions proposed for them. Criticisms of dysfunctional processes of the junior high school have centered mainly around the similarity of the junior high program to that of the senior high school and the inadequacy of its instructional personnel. Primary among such criticisms are the junior high school's departmentalization of subject matter, interscholastic athletics, sophisticated social events, overemphasis upon academic subjects at the expense of the fine arts and humanities, and inadequately prepared teaching staff. Furthermore, discord has been directed at the junior high school's grade level organization and age levels served. Evidence on child growth and development has been offered indicating that children are physically, socially, and psychologically more mature than children in previous years; therefore, the conventional grade seven through nine or grade seven through eight grade level organization has been challenged by proposals to include grades five and/or six in schools for the middle years. Claims and counter-claims regarding the position of the ninth grade have further obfuscated the grade level reorganization controversy.

Out of the controversy over claimed dysfunctional processes of the junior

high school and the structure of its grade level organization has developed the middle school concept as an education alternative for the middle years of schooling. The middle school is of very recent origin, the first school having been established in Bay City, Michigan, in 1950. Current estimates place the number of middle schools in the United States at over 2,000.

The rapid emergence of the middle school has not been without controversy. Two basic questions have comprised the horns of the dilemma. Is the middle school really any different or better than the junior high school in terms of actual, ongoing curriculum and instruction? Is the middle school guilty of the same sins as its junior high school counterpart. Spawned by these questions, a growing national controversy has developed over the relative advantages and disadvantages of the middle school versus the junior high school.

What research that is available appears to indicate that actual middle schools are neither different nor an improvement over existing junior high schools. The few studies that have reported differences favoring either the middle school or the junior high school generally conflict with one another, thus making choice of one over the other virtually impossible. However, on one point the research is quite clear. Grade level reorganization and school name changes have not, in and of themselves, materially affected the overall quality of teaching and learning in middle schools.

Statement of the Problem and Methodology

The main purpose of this study was to compare the middle schools with the junior high schools of Michigan in terms of selected ongoing programs and practices

and to determine whether or not the two organizations really differ from one another.

The middle schools for the study were selected from a list of schools supplied by the Michigan State Department of Education organized in grade levels other than grades seven through nine. This list was then subjected to grade level criteria to arrive at a total of 138 middle schools. For this purpose, a middle school was defined as a school separately administered and containing grades seven and eight and at least one grade below grade seven.

The junior high schools for the study were selected from the Michigan Education Directory. Three hundred and fifty-eight junior high schools were found which met the junior high school grade level criteria. For this purpose, a junior high school was defined as containing either grades 7-9, 7-8, or 8-9. Then, separate middle school sub-populations were identified in terms of such variables as public schools, community schools, district schools, area schools, consolidated schools, and rural schools. Proportional stratified sampling was then utilized to insure that the sub-populations represented in the middle schools would also be represented in the sampling of junior high schools. This procedure resulted in a final selection of 138 junior high schools to compare with the 138 middle schools.

A survey instrument was developed, primarily adapted from a study¹ completed by one of the investigators. Certain aspects of the programs and practices of middle schools and junior high schools were selected and listed on the form in eleven

¹Gatewood, Thomas E., A Comparative Study of the Functions, Organizational Structure, and Instructional Process of Selected Junior High Schools and Selected Middle Schools. Unpublished doctor's dissertation, School of Education, Indiana University, Bloomington, 1970, p. 304.

categories.

A cover letter explaining the nature and significance of the study and providing directions for completing and returning the instrument, a copy of the instrument, and an addressed, stamped return envelope were mailed to the principal of each participating school.

One hundred and twenty-nine, or 94 percent, of the middle schools instruments were returned, as were 94 or 68 percent, of the junior high school instruments.

A description of the schools participating in the study by grade level organization is given in Table 1.

TABLE 1: A DESCRIPTION OF THE SCHOOLS PARTICIPATING IN THE STUDY REPORTED BY GRADE LEVEL

Middle Schools	N	%	Junior High Schools	N	%
5-8	23	18	7-8	31	33
6-8	99	77	7-9	62	66
6-9	5	4	8-9	1	1
4-8	2	1			
TOTAL	129	100	TOTAL	94	100

The collected data were hand tabulated and assimilated by the investigators.

The data then were subjected to statistical tabulation with comparisons between middle schools and junior high schools being made on the basis of simple frequencies and percentages.

Results

Respondents were requested to rank in order the top five reasons for the grade and age level organization of their schools. The establishment criterion was more related generally to the grade and age level rationale of the middle schools, whereas the retention criterion was more germane to the grade and age level rationale of the junior high schools. Table 2 shows the rank-orders of the most prevalently indicated reasons for grade and age level establishment or retention by type of school.

TABLE 2: RANK OF THE TOP FIVE REASONS FOR THE ESTABLISHMENT OR RETENTION OF THE GRADE AND AGE LEVEL ORGANIZATION OF THE SCHOOL AS REPORTED BY MIDDLE SCHOOLS AND JUNIOR HIGH SCHOOLS

Middle School		Junior High School	
Reason	Rank	Reason	Rank
To reduce overcrowded conditions in other schools	1.0	To provide a program specifically designed for students in the age group served	1.0
To provide a program specifically designed for students in the age group served	2.0	To reduce overcrowded conditions in other schools	2.0
To try out various innovations	3.0	To better bridge the elementary school and the high school	3.0
To better bridge the elementary school and the high school	4.0	To utilize a new school building	4.0
To utilize a new school building	5.0	To retain grade nine in the junior high school	5.0

Since four of the same reasons were indicated by both middle and junior high school respondents in the ranking of the top five reasons for the grade and age level establishment or retention of their schools, it would appear that Michigan middle schools and junior high schools were more alike than different in regard to the rationale for grade and age level organizations. However, a notable contrast was found with reference to the top-ranked reason indicated by each of the two school samples. Most middle schools in Michigan were established primarily to reduce overcrowded conditions in other schools, whereas the grade and age level organizations of the state's junior high schools were retained mainly to provide a program specifically designed for students in the age group served.

Table 3 shows the horizontal plans for instruction used by middle schools and junior high schools reported by grade level.

TABLE 3: HORIZONTAL ORGANIZATIONAL PLANS FOR INSTRUCTION USED BY MIDDLE SCHOOLS AND JUNIOR HIGH SCHOOLS REPORTED BY GRADE LEVEL

Organizational Plan for Instruction	Type of School	Grade									
		5		6		7		8		9	
		N	%	N	%	N	%	N	%	N	%
Entirely departmentalized with a teacher for each subject	MJS	3	12%	32	25%	96	74%	105	81%	4	80%
	JHS					67	71%	73	78%	58	62%
	MJS	11	46%	19	15%	1	.5%	0	0	0	0
	JHS					1	1%	1	1%	1	1%
Entirely self-contained with one teacher responsible for all of the instruction for a single group of pupils	MJS	15	63%	71	55%	29	23%	16	12%	0	0
	JHS					26	28%	16	17%	3	3%
	MJS	3	12%	20	16%	24	19%	20	16%	1	20%
	JHS					25	26%	23	24%	22	23%
A combination of either self-contained or block-of-time plan and departmentalized plan for instruction	MJS										
	JHS										
	MJS	2	8%	15	12%	15	12%	15	12%	0	0
	JHS					5	5%	8	8%	4	4%
Subject-area team teaching	MJS										
	JHS										
	MJS										
	JHS										
Interdisciplinary team teaching	MJS										
	JHS										
	MJS										
	JHS										

Comparisons between the two samples were made in grades seven and eight, the grades common to both the middle schools and the junior high schools of the study. Ninety-six or 74 percent, in grade seven, and one hundred five, or 81 percent in grade eight of the middle schools reported that they were entirely departmentalized with a teacher for each subject, whereas sixty-seven, or 71 percent in grade seven, and seventy-three or 78 percent in grade eight of the junior high schools indicated such a horizontal organizational plan.

A larger percentage of junior high schools than middle schools reported a combination of either self-contained or block-of-time plans and departmentalized plans for instruction and subject-area team teaching in use in grades seven and eight, while the converse by type of school was true for the use of interdisciplinary team teaching in both grades.

Table 4 shows the organizational and instructional strategies used by middle schools and junior high schools reported by grade level.

TABLE 4: ORGANIZATIONAL AND INSTRUCTIONAL STRATEGIES USED BY MIDDLE SCHOOLS AND JUNIOR HIGH SCHOOLS REPORTED BY GRADE LEVEL

Organizational and Instructional Strategies	Type of School	Grade									
		5		6		7		8		9	
		N	%	N	%	N	%	N	%	N	%
Large group instruction	MS	5	21%	40	31%	34	26%	40	31%	0	0
	JHS					35	37%	35	37%	31	33%
Small group instruction	MS	9	38%	50	47%	56	43%	54	42%	0	0
	JHS					35	37%	39	41%	21	22%
Independent Study	MS	2	8%	20	16%	28	22%	38	30%	0	0
	JHS					18	19%	22	23%	18	19%
Flexible scheduling (variable length, modular type)	MS	5	21%	40	31%	36	27%	37	29%	1	20%
	JHS					23	35%	23	35%	16	17%
Fixed length periods	MS	5	21%	64	49%	91	71%	90	71%	3	60%
	JHS					70	74%	67	71%	48	51%
Core classes	MS	1	4%	23	18%	20	16%	17	13%	1	20%
	JHS					27	29%	22	23%	12	13%
Ability grouping	MS	8	33%	37	29%	44	34%	51	40%	0	0
	JHS					43	46%	46	49%	32	34%
Tutorial programs	MS	7	29%	27	21%	21	17%	20	16%	0	0
	JHS					19	20%	19	20%	14	15%
Individually prescribed instruction	MS	5	21%	17	13%	14	11%	14	11%	0	0
						13	14%	15	16%	9	9%

Comparisons between the two samples were made in grades seven and eight, the grades common to both the middle schools and the junior high schools of the study.

A slightly larger number of junior high schools than middle schools reported the use of large group instruction, flexible scheduling, tutorial programs, and individually prescribed instruction. A slightly larger number of middle schools reported the use of small group instruction and independent study.

The largest contrasts, ranging from 9 percent to 13 percent, between the two school samples were found in the employment of core classes and ability grouping, with the junior high schools reporting more extensive useage of these strategies than the middle schools.

The most commonly-employed organizational strategy was fixed length periods, with over 70 percent of both samples reporting their use in grades seven and eight. However, in the fifth and sixth grades of the middle schools and in the ninth grade of the junior high schools, the useage of fixed length periods was numerically smaller.

With the exception of the use of fixed length periods, the number of middle schools reporting the use of the various organizational and instructional strategies in grades five and six did not vary markedly from the number of middle schools reporting their use in grades seven and eight. The same was true among grades seven, eight, and nine in the junior high schools of the study.

Table 5 shows the vertical organizational plans used by middle schools and junior high schools for moving pupils upward through the school's program.



TABLE 5: VERTICAL ORGANIZATIONAL PLAN

Vertical Organizational Plan	Middle School		Junior High School	
	N	%	N	%
Graded organization with end-of-the-year promotion (all pupils of a certain age or level of achievement must spend at least one academic year in a single grade)	127	98%	89	95%
Nongraded, continuous progress plan (students progress through courses at differentiated rates)	15	12%	4	4%

Almost all of the middle schools and junior high schools in the study reported a graded organization with end-of-the-year promotions. Only 15 or 12 percent of the middle schools and 4 or 4 percent of the junior high schools reported programs that were entirely nongraded or continuous progress in nature.

Table 6 shows the plant design of the middle schools and junior high schools.

TABLE 6: PLANT DESIGN

Plant Design	Middle School		Junior High School	
	N	%	N	%
Separate rooms and learning spaces enclosed with immovable walls	111	86%	74	79%
Structural flexibility with demountable walls, or movable and operable partitions	19	15%	15	16%
Learning or resource centers where pupils may obtain printed materials, engage in study and projects, listen to recordings, and view videotapes, motion pictures and filmstrips	65	50%	38	41%
Multi-use science laboratories	43	33%	35	37%
Space arrangements for independent study	37	29%	19	20%
Offices for teachers and special rooms in which team members may meet to plan their work and discuss their problems	33	25%	24	25%
Controlled thermal, acoustical, and visual environments (carpeting, air conditioning, central climate control and planned color schemes)	21	17%	13	14%

the first five plant design categories, contrasts between middle schools and junior high schools were not marked. More inflexibility than flexibility was found with reference to the enclosure of learning spaces. Both middle schools and junior high schools reported 25 percent had offices for teachers and special rooms in which team members may meet to plan their work and discuss their problems.

Table 7 shows the staffing practices and special positions used in middle schools and junior high schools.

TABLE 7. STAFFING PRACTICES AND SPECIAL POSITIONS

Staffing Practices and Special Positions	Middle School		Jr. High School	
	N	%	N	%
Special learning resources personnel skilled in the use of information retrieval procedures and capable of teaching these skills to pupils and to other teachers.	37	29%	34	36%
Competent and professionally qualified reading, art, music, and physical education specialists.	116	90%	89	95%
Guidance specialists to coordinate and direct the total guidance program of the school.	99	77%	75	80%
Paraprofessionals, including teacher aides, clerical aids, technicians, and intern teachers.	61	47%	48	49%
School social workers skilled in case work techniques and family education and can also provide a liaison between the school and other social agencies.	88	68%	61	65%
Activities director to administer and guide the pupil interest activity program.	36	27%	27	29%
Clinical psychologists who administer diagnostic tests to pupils that are referred by guidance counselors.	87	67%	65	69%



One hundred sixteen, or 90 percent of the middle schools and 89, or 95 percent of the junior high schools had competent and professionally qualified reading, art, music, and physical educational specialists. Ninety-nine, or 77 percent of the middle schools and 75, or 80 percent of the junior high schools had guidance specialists to coordinate and direct the total guidance program of the school.

Eighty-eight, or 68 percent of the middle schools and 61, or 65 percent of the junior high schools had school social workers skilled in case work techniques and family education and who can also provide a liaison between the school and other social agencies. In addition to this, eighty-seven, or 67 percent of the middle schools and 65, or 69 percent of the junior high schools had the services of clinical psychologists who administer diagnostic tests to pupils referred by guidance counselors.

Table 8 shows the professional certification of the teaching staff in middle schools and junior high schools.

TABLE 8: PROFESSIONAL CERTIFICATION OF THE TEACHING STAFF

Professional Certification of the Teaching Staff	Middle School		Junior High School	
	N	%	N	%
Number of teachers with Michigan elementary teaching certificates	1150	33%	210	8%
Number of teachers with Michigan secondary teaching certificates	2320	67%	2,575	92%

Michigan middle and junior high schools were found to be more different than alike with reference to the professional certification of their teaching staffs. The number of middle school teachers with elementary teaching certificates was 1150, or 33 percent, which contrasts markedly with the 210, or 8 percent, of the junior high school teachers with elementary certificates. Accordingly, fewer middle school teachers, 2320, or 67 percent, had secondary teaching certificates than did junior high school teachers, 2575, or 92 percent.

Table 9 shows the guidance and counseling arrangements in middle schools and junior high schools.

TABLE 9: GUIDANCE AND COUNSELING ARRANGEMENTS

Guidance and Counseling Arrangements	Middle School		Junior High School	
	N	%	N	%
Homeroom (Homebase) teacher	53	41%	24	25%
Regular classroom teacher	40	31%	23	35%
Part-time counselors	32	25%	16	17%
Full-time counselors	83	64%	74	79%
Principal	4	3%		

More junior high schools than middle schools employed full-time counselors.

Apparently, in the middle schools, more counseling responsibilities were assumed by part-time counselors and homeroom (home base) teachers.

Table 10 shows the curricular organization in middle schools and junior high schools in terms of the required course offerings reported by grade level.

TABLE 10: REQUIRED COURSE OFFERINGS REPORTED BY GRADE LEVEL

Course Offerings	Type of School	Grade									
		5		6		7		8		9	
		N	%	N	%	N	%	N	%	N	%
English-Language Arts	MS	24	100%	128	99%	129	100%	128	99%	4	80%
	JHS					91	97%	91	97%	62	66%
Science	MS	24	100%	128	99%	125	97%	122	95%	2	40%
	JHS					74	79%	78	83%	29	31%
Mathematics	MS	23	99%	127	98%	129	100%	128	99%	4	80%
	JHS					90	96%	92	98%	57	61%
Social Studies	MS	23	99%	127	98%	129	100%	127	98%	4	80%
	JHS					88	96%	86	91%	52	55%
Physical Education	MS	20	83%	104	81%	112	86%	103	80%	3	60%
	JHS					79	84%	71	75%	40	42%
Art	MS	14	60%	71	55%	63	49%	43	33%	0	0
	JHS					53	56%	31	33%	6	6%
Music	MS	15	63%	72	56%	56	43%	36	27%	1	20%
	JHS					47	50%	24	25%	5	5%
Home Economics	MS	0	0	22	17%	72	50%	69	53%	1	20%
	JHS					48	51%	47	50%	9	9%
Industrial Arts	MS	0	0	19	15%	53	41%	49	38%	1	20%
	JHS					44	47%	41	44%	5	5%
Foreign Languages	MS	0	0	1	.5%	0	0	0	0	1	20%
	JHS					5	5%	8	8%	3	3%
Typing	MS	0	0	0	0	2	1%	0	0	0	0
	JHS										
Speech	MS	0	0	1	.5%	1	.5%	2	1%	0	0
	JHS										
Reading	MS	0	0	3	2%	2	1%	1	.5%	0	0
	JHS										
	MS	0	0	3	2%	3	2%	2	1%	0	0
	JHS										

Comparisons between the two school samples were made in grades seven and eight, the grades common to both middle schools and junior high schools.

Five course offerings were predominantly required in both middle schools and junior high schools. English-language arts, mathematics, and social studies were required in over 90 percent of the middle schools and junior high schools in grades seven and eight. Mathematics and physical education were required in over 75 percent of both school samples.

A notable contrast was found in the requiring of science by type of school in grades seven and eight, with considerably more middle schools requiring the subject than junior high schools.

Art and music were more uniformly required in grade seven than in grade eight in both middle schools and junior high schools.

Home economics and industrial arts were required by similar numbers of middle schools and junior high schools in grades seven and eight.

Relatively small percentages of middle schools and junior high schools required foreign languages. Only the middle schools required typing, speech, reading, and health, all in very small percentages.

The numbers of middle schools requiring particular courses in the seventh and eighth grades were similar to the numbers requiring the same courses in grades five and/or six. Notable exceptions were found with home economics and industrial arts, with far fewer schools requiring these courses in grades five and six. The numbers of junior high schools requiring particular courses in the seventh and eighth grades were generally dissimilar to the numbers requiring the same courses in the ninth grade.

Table 11 shows the curricular organization in middle schools and junior high

schools in terms of the elective course offerings reported by grade level.

TABLE 11: ELECTIVE COURSE OFFERINGS REPORTED BY GRADE LEVEL

Course Offering	Type of School	GRADE									
		5		6		7		8		9	
		N	%	N	%	N	%	N	%	N	%
English-Language Arts	MS	0	0	0	0	0	0	0	0		
	JHS					6	6%	7	7%	8	8%
Science	MS	0	0	0	0	0	0	6	5%	2	40%
	JHS					6	6%	8	8%	31	33%
Mathematics	MS	0	0	0	0	0	0	1	.5%	1	20%
	JHS					4	4%	6	6%	10	11%
Social Studies	MS	0	0	0	0	2	1%	5	4%	1	20%
	JHS					6	6%	8	8%	15	16%
Physical Education	MS	1	4%	2	1%	19	15%	28	22%	2	40%
	JHS					13	14%	24	25%	34	36%
Art	MS	3	12%	19	15%	46	35%	64	49%	3	60%
	JHS					24	25%	49	52%	57	61%
Music	MS	3	12%	32	25%	63	48%	85	65%	3	50%
	JHS					38	41%	56	59%	62	66%
Home Economics	MS	1	4%	6	5%	26	20%	55	42%	4	80%
	JHS					19	20%	33	35%	57	61%
Industrial Arts	MS	1	4%	4	3%	22	18%	48	37%	4	80%
	JHS					19	20%	36	38%	57	61%
Foreign Languages	MS	0	0	1	.5%	2	1%	4	3%	0	0
	JHS					16	17%	27	29%	44	47%
Reading	MS	0	0	0	0	1	.5%	1	.5%	0	0
	JHS					1	1%	1	1%	1	1%
Drafting & Design	MS	0	0	0	0	0	0	1	.5%	1	.5%
	JHS					0	0	0	0	0	0
Business Problems	MS	0	0	0	0	1	.5%	1	.5%	0	0
	JHS					1	1%	1	1%	3	3%
Social Problems	MS	0	0	0	0	1	.5%	1	.5%	0	0
	JHS					0	0	0	0	0	0
Chorus	MS	0	0	1	.5%	2	1%	3	2%	1	20%
	JHS					1	1%	1	1%	1	1%
Office Practice	MS	0	0	0	0	1	.5%	1	.5%	0	0
	JHS					0	0	0	0	0	0
Typing	MS	0	0	1	.5%	3	2%	6	4%	0	0
	JHS					1	1%	5	5%	4	4%
Forensics	MS	0	0	0	0	0	0	1	.5%	0	0
	JHS					0	0	0	0	0	0
Drama	MS	0	0	1	.5%	2	1%	6	4%	0	0
	JHS					1	1%	4	4%	2	2%
Band and Orchestra	MS	0	0	12	9%	13	10%	14	11%	1	20%
	JHS					5	5%	5	5%	1	1%
Careers (Occupations)	MS	0	0	2	1%	2	1%	4	3%	0	0
	JHS										
Journalism	MS	0	0	1	.5%	3	2%	3	2%	0	0
	JHS					1	1%	3	3%	1	1%
Speech	MS	0	0	1	.5%	4	3%	5	3%	0	0
	JHS					3	3%	3	3%	3	3%

As would be expected, elective courses in English-language arts, science, mathematics and social studies were limited in middle schools and junior high schools in the seventh and eighth grades, with no more than eight schools offering any of these courses as electives in those grades. The courses offered most as electives in grade eight were art and music. Sixty-four or 49 percent, of the middle schools, and forty-nine or 52 percent, of the junior high schools offered art in grade eight. Eighty-five or 65 percent, of the middle schools and fifty-six or 59 percent, of the junior high schools offered music in grade eight.

Twenty percent of both middle schools and junior high schools offered home economics in grade seven; however, more middle schools than junior high schools offered home economics in grade eight. In industrial arts, middle schools and junior high schools showed similar emphases in grades seven and eight. Twenty-two, or 18 percent, of the middle schools, and nineteen or 20 percent, of the junior high schools offered industrial arts in grade seven. Forty-eight, or 37 percent, of the middle schools and thirty-six, or 38 percent, of the junior high schools offered industrial arts in grade eight.

Table 12 shows the student activities in middle schools and junior high schools reported by grade level.

TABLE 12: STUDENT ACTIVITIES REPORTED BY GRADE LEVEL

Student Activity	Type of School	GRADE									
		5		6		7		8		9	
		N	%	N	%	N	%	N	%	N	%
Interscholastic Athletics (Boys)	MS	0	0	3	2%	107	82%	114	88%	3	60%
	JHS					64	68%	83	88%	61	65%
Interscholastic Athletics (Girls)	MS	0	0	0	0	10	8%	13	10%	0	0
	JHS					12	13%	16	17%	26	28%
Intramural Athletics (Boys)	MS	12	50%	87	67%	89	69%	86	67%	1	20%
	JHS					65	69%	64	68%	46	49%
Intramural Athletics (Girls)	MS	5	21%	66	51%	85	66%	85	66%	2	20%
	JHS					67	71%	68	72%	47	50%
Student Government	MS	14	60%	91	71%	111	86%	110	85%	4	80%
	JHS					87	92%	88	94%	61	65%
Student Publications	MS	5	21%	39	30%	59	45%	75	57%	3	60%
	JHS					39	41%	60	64%	50	53%
Bond	MS	17	71%	113	87%	123	96%	118	90%	3	60%
	JHS					86	91%	89	95%	60	64%
Orchestra	MS	3	12%	28	21%	34	27%	35	28%	3	60%
	JHS					51	54%	51	54%	40	42%
Chorus	MS	8	33%	62	48%	83	64%	92	71%	4	80%
	JHS					62	66%	76	81%	56	59%
Speech	MS	0	0	7	5%	21	16%	26	20%	2	40%
	JHS					14	15%	26	28%	36	38%
Dramatics	MS	1	4%	23	18%	36	28%	43	33%	3	60%
	JHS					24	25%	34	36%	37	39%
Special Interest Clubs	MS	3	12%	50	39%	66	51%	66	51%	3	60%
	JHS					57	61%	62	66%	45	48%
Honor Societies	MS	1	4%	8	5%	15	12%	16	12%	2	40%
	JHS					15	16%	19	20%	17	18%
Social Dancing	MS	1	4%	24	18%	62	48%	64	49%	2	40%
	JHS					44	47%	48	51%	36	38%
School Parties	MS	15	63%	92	70%	105	84%	104	83%	1	20%
	JHS					77	82%	77	82%	53	56%
Camping	MS	0	0	1	.5%	0	0	1	.5%	0	0
	JHS					2	2%	2	2%	1	1%
Teen Club	MS	0	0	0	0	1	.5%	1	.5%	0	0
	JHS										

No differences of greater than 10 percent were found between the number of middle schools offering a student activity and the number of junior high schools offering the same activity to seventh and eighth grade pupils in the cases of fourteen of seventeen listed student activities. A notable exception to this general pattern occurred with interscholastic athletics for boys in grade seven, with 14 percent more middle schools than junior high schools offering this activity. Greater than 10 percent differences were also found with orchestra in grades seven and eight and special interest clubs in grade eight, with more junior high schools offering both activities. For the most part, however, it may be generalized that middle schools and junior high schools were more alike than different with respect to the numbers of them offering student activities in the seventh and eighth grades.

Summary of Findings

From the examination of data, it was found that:

1. The top-ranked reason for the establishment of the grade and age level organization of the middle schools was "To reduce overcrowded conditions in other schools."
2. The top-ranked reason indicated for the retention of the grade and age level organization of junior high schools was "To provide a program designed for students in the age group served."
3. With reference to horizontal organizational plans for instruction used in grades seven and eight, slightly more middle schools than junior high schools used entire departmentalization with a teacher for each subject and inter disciplinary team teaching. Slightly more junior high schools than middle schools used subject-area team teaching and a combination of either self-contained or block-of-time plan for instruction.
4. Slightly larger numbers of junior high schools than middle schools reported the use of large and small group instruction, flexible scheduling, core classes, ability grouping, tutorial programs, and individually prescribed instruction in grades seven and eight. Core classes and ability grouping were the categories displaying the greatest contrasts between the two samples. Slightly larger numbers of middle schools reported the use of small group instruction and independent study in the same grades.
5. Better than 95 percent of both middle schools and junior high schools in the study reported a graded organization with end-of-the year promotion. Nongraded, continuous progress plans were reported in 8 percent more middle schools than junior high schools.
6. With reference to plant design, contrasts between middle schools and junior high schools were not marked. More inflexibility than flexibility was found in the enclosure of learning spaces.

7. In the use of particular staffing practices and special positions, middle schools and junior high schools were more alike than different.
8. Middle schools and junior high schools were more different than alike with reference to the professional certification of their teaching staffs. More middle school than junior high school teachers possessed elementary teaching certificates.
9. The largest contrast between the guidance and counseling arrangements of middle schools and junior high schools was in the employment of more full-time counselors in the junior high schools and in use of more homeroom (home base) teachers in the middle schools.
10. Five course offerings were required predominantly in most of the middle schools and junior high schools in all grades. These were English-language arts, mathematics, social studies, science, and physical education. The contrasts between the two samples in seventh and eighth grade science represented the only required course offering where greater than a ten percent difference was found.
11. Middle schools and junior high schools were more similar than different in the elective courses offered in grades seven and eight. The courses most offered as electives in grades seven and eight in both types of school were art and music.
12. No differences of greater than ten percent were found between the number of middle schools offering a student activity and the number of junior high schools offering the same activity to seventh and eighth grade pupils in the cases of fourteen of seventeen listed student activities. A notable exception to this general pattern occurred with interscholastic athletics for boys in grade seven with more middle schools offering this activity. More junior high schools offered orchestra in grades seven and eight and special interest clubs in grade eight.

Conclusions

1. The middle schools of Michigan are established for reasons more administrative than educational, whereas the converse is true for the retention of the grade and age level organization of junior high schools.
 2. Implementation of the middle school concept in Michigan either by middle schools or junior high schools, exists more in ideal than in reality. It seems that grade level reorganizations have not, in and of themselves, materially affected the overall quality of teaching and learning in Michigan middle schools.
 3. The numbers of middle schools and junior high schools reporting the use of team teaching, large and small group instruction, independent study, and flexible scheduling are indicative of efforts by some of the state's schools to break away from traditional orientations to establish new patterns for the middle years of schooling. However, most of the organizational structures and instructional processes of both types of school in Michigan remain commonly similar to predecessor programs and instructional organizations for the middle years.
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