

DOCUMENT RESUME

ED 046 105

EA 003 229

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TITLE The Four-Quarter Plan and Its Feasibility for the Port Huron Area School District. A Research Study.  
INSTITUTION Michigan State Dept. of Education, Lansing.; Port Huron Area School District, Mich.  
PUB DATE 31 Jan 70  
NOTE 275p.  
EDRS PRICE MF-\$0.65 HC-\$9.87  
DESCRIPTORS Community Support, Community Surveys, \*Extended School Year, Program Budgeting, Program Evaluation, \*Quarter System, School District Spending, \*School Planning, \*School Schedules, Simulation, \*Year Round Schools  
IDENTIFIERS Port Huron School District

ABSTRACT

This study examines the economic, educational, and physical feasibility of the four-quarter plan with an assigned vacation. The choice of this plan resulted from the examination of research and literature on different forms and uses of the four-quarter plan. It was concluded that the plan would be feasible if the following conditions were met: (1) curriculum revision must accompany the move to the proposed plan; (2) content within each discipline in the program of instruction must be reevaluated; (3) business and industry, as well as teaching and operational staffs of the school district, should support the plan; and (4) the program must be adequately financed. Three surveys were conducted to assess the attitudes of the community, the business and industrial representatives, and the certified staff to the plan. The surveys show that (1) the business and industrial community was evenly divided in approval or rejection, while (2) teachers were divided 39% in favor, 36% opposed, and 26% undecided. An annotated bibliography is included. (Maps I, II, and III on pages 2, 5, and 6 may reproduce poorly because of marginal legibility.) (Author/JF)

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THE FOUR-QUARTER PLAN AND ITS FEASIBILITY  
FOR THE  
FORT HURON AREA SCHOOL DISTRICT

A Research Study

Submitted to

The Michigan State Department of Education  
Lansing, Michigan

Submitted by

The Port Huron Area School District  
Gerald S. DeGrow, Ed.D., Superintendent

Conducted by

Sami J. Alam, Ed.D., Director  
for Research and Evaluation

January 31, 1970

EA C03 229

## ACKNOWLEDGEMENTS

The writer would like to express his appreciation to Mr. George Baker for his sincere, intelligent, patient, and meticulous work during the initial phases of the study.

Grateful acknowledgement is also due Mr. Leverne South and Mr. Robert Sternberg of the Michigan State Department of Education; their support and advice have been valuable.

Acknowledgement is made of the cooperation, encouragement, and advice provided by Dr. Gerald S. DeGrow, Superintendent of Schools. Mr. Robert Coulter, Mr. M. James Neveaux, Mr. Robert Sloan, and Dr. Paul Federoff were generous with their time and advice throughout the study.

The study would not have been possible without the expert help and patience of Mr. Gaylord Feick. His assistance is greatly appreciated. Mr. Duncan Carlisle and his staff have been very accommodating and cooperative.

To the members of the administrative, operational, and instructional staff who have worked cooperatively and patiently on the study, my sincere thanks.

The writer would like to thank his secretary, Miss Rosemary Campbell, for her dedication, patience, understanding, and efficiency. Mrs. Marjorie Lampard's assistance in printing the final draft of this study is also acknowledged and appreciated.

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## CHAPTER I

### THE PROBLEM AND ITS SETTING

#### The Community

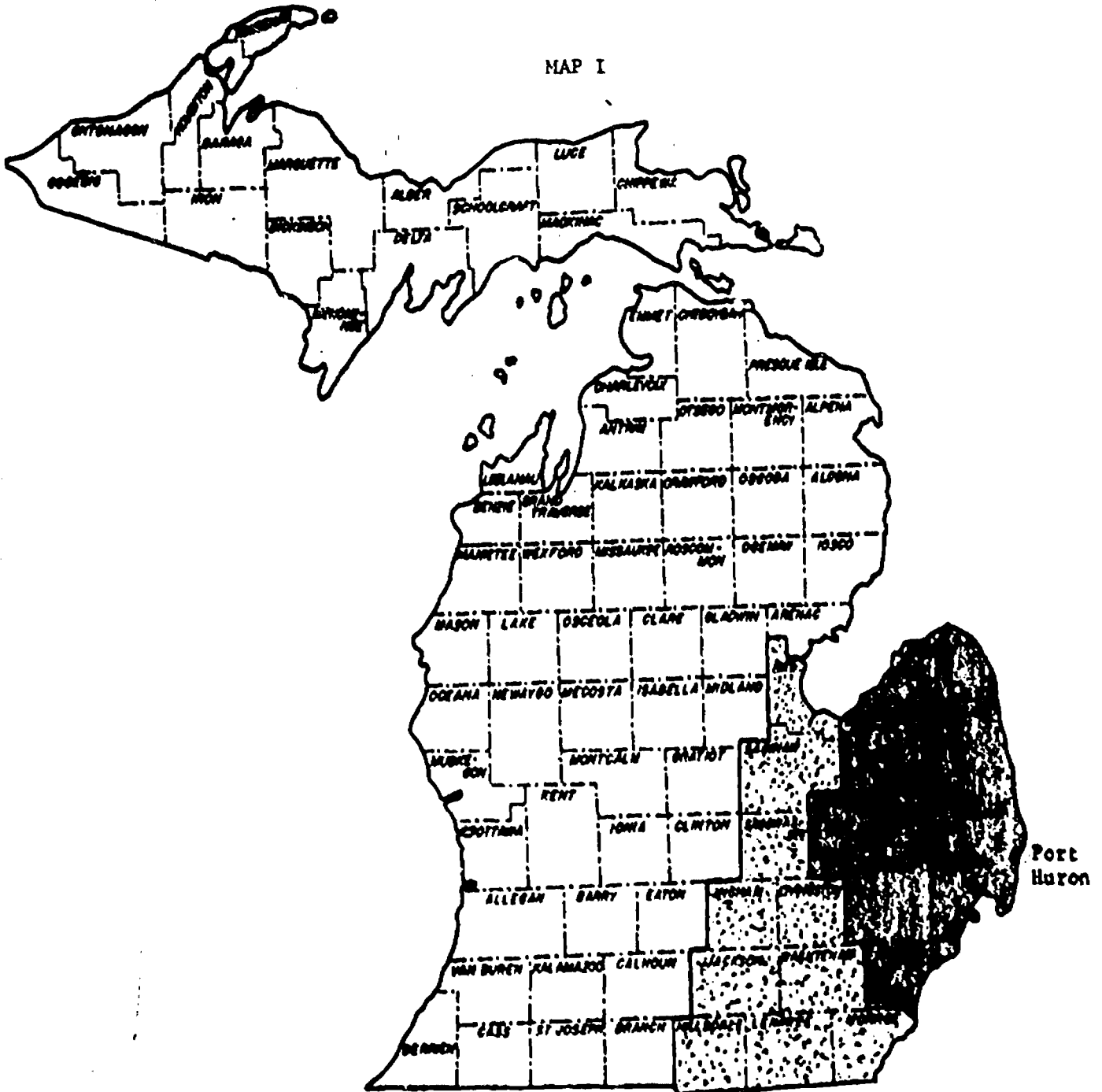
The Port Huron Area School District is composed politically and geographically of the City of Port Huron and the following adjacent governmental units: Port Huron Township; Fort Gratiot Township; major portions of Kimball Township, Burtchville Township, Grant Township, Clyde Township; and small portions of Kenockee Township and Wales Township. Voters in these areas approved annexation to form this enlarged school district in 1961, and approved a 6.5-million dollar bond issue to provide needed facilities.

The area served by the Port Huron Area Schools is equal to one hundred seventeen square miles. The 1966 school census puts the population served at more than 59,000 people composed of approximately 16,000 families.

Port Huron is located in the eastern part of Michigan on the St. Clair River. (See Map I.) It is approximately sixty miles northeast of Detroit and seventy miles east of Flint. As shown on the attached state map, Port Huron is part of a nine-county area (shaded) which comprises sixty per cent of the total population of the state. If one considers the area in a one hundred mile radius of Port Huron (dotted), this percentage would increase to sixty-eight per cent of the total population. In view of these facts, it is apparent that Port Huron would serve well as an exemplary school district whose findings would be readily demonstrated to about two-thirds of the total population of

# MICHIGAN

MAP I



Population of State (1960 Census)	7,823,194	
Population of Shaded Area (1960 Census)	4,395,295	56.18 % of State
Population of Dotted and Shaded Area (1960 Census)	5,312,506	67.91 % of State



the State of Michigan.

The community served by the Port Huron Area Schools has a nonwhite population equivalent to 4.5 per cent. The age distribution, according to the 1966 school census, is as follows: 0-4 years, 5,653; 5-18 years, 16,346; 19 years and over, 37,390. By 1970, age distribution projections, according to the latest county study, are as follows: 0-4 years, 6,044; 5-14 years, 11,739; 15-19 years, 6,407; 20 years and over, 39,086.

With a state equalized valuation of \$194,171,000 and an operating levy of 25-1/2 mills, Port Huron Area School District electors have a fine history of supporting their schools. Since 1962, two elementary schools with eighteen rooms, one intermediate school for five hundred students, and one high school for 1,800 students were erected in the district. Aside from the above, additions to one high school, two intermediate schools, and four elementary school buildings were also built. Those additions were a result of a 1962 \$6,575,000 bond issue. Aside from the above facilities the voters added to better serve the youngsters of the school district, the following projects have been or are in the process of being built: developing a juvenile detention facility; two outdoor community swimming pools under construction; a county library completed in 1968; a mental health clinic completed; a civic auditorium; a civic arena; county health department; county jail facilities; Y.M.C.A. building; public housing for senior citizens, 104 units; public housing for poor families, 60 units; additions to Port Huron and Mercy hospitals; technical building for the St. Clair County Community College; a library science building for the St. Clair County Community College; and the St. Clair County Community College urban renewal project.

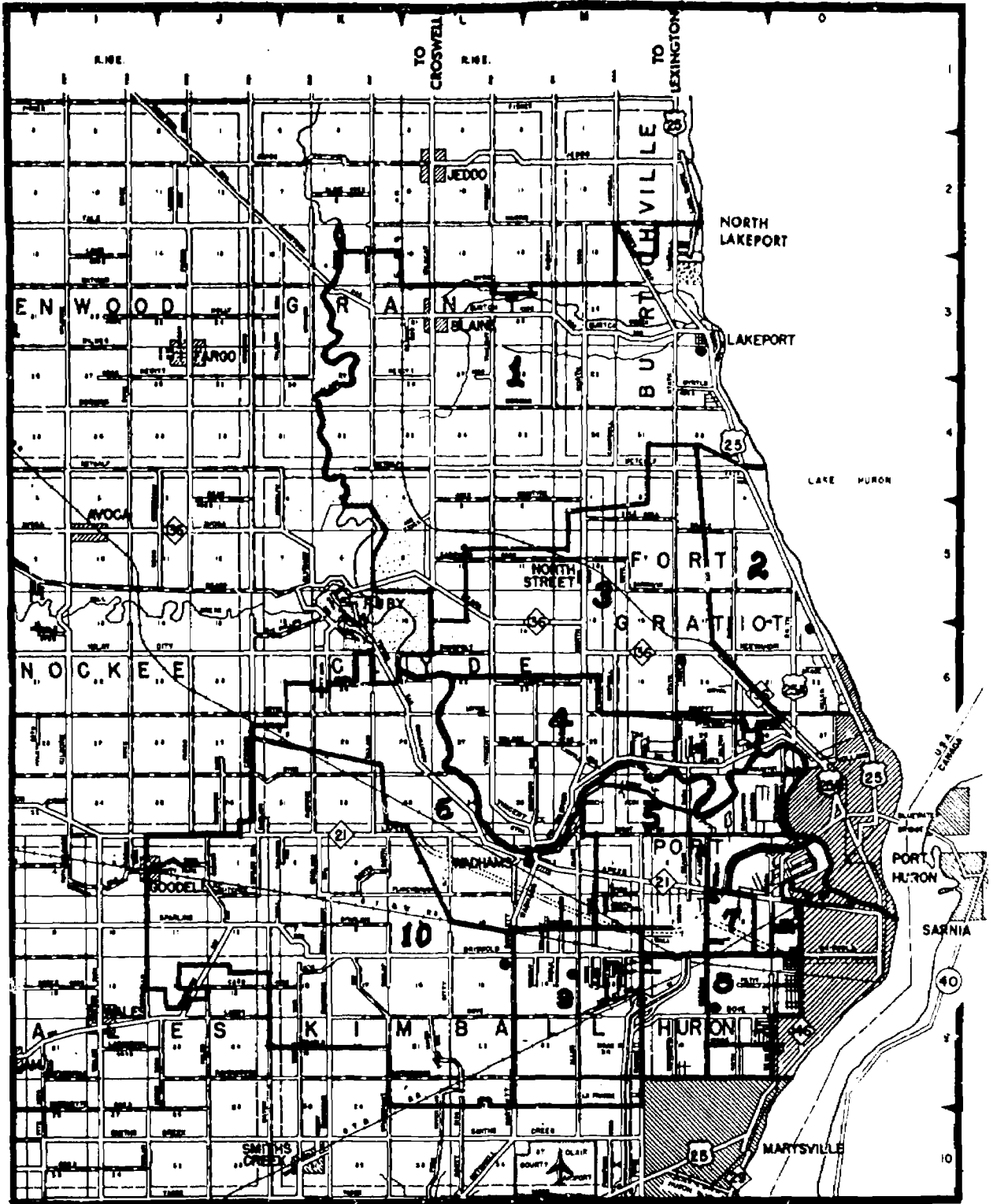
The Port Huron Area School District is served educationally by the Port Huron Area Schools which offer a program of education for 15,000 students extending from kindergarten through twelfth grade. Those 15,000 youngsters attend twenty elementary schools, six intermediate schools, and two senior high schools. The names of those schools, the number of classrooms in each, and their projected 1969-70 enrollments are presented in Tables I and II of this report. (Also see Maps II and III.)

TABLE I

PORT HURON AREA SCHOOL DISTRICT'S ELEMENTARY SCHOOLS,  
GRADE LEVELS SERVED, NUMBER OF CLASSROOMS, AND PROJECTED 1969-70 ENROLLMENTS

School	Grade Levels Served	Number of Classrooms	Projected Enrollment 1969-1970
Allendale	K-3	4	89
Ruth Bacon	K-5	14	385
Campau	K-2	5	131
Cleveland	K-5	8	168
Thomas Edison	K-5	11	419
Fillmore	K-5	10	286
Grant	K-5	16	345
Charles Gratiot	K-5	18	240
Harrison	K-5	12	356
Jefferson	K-5	15	420
Keewahwin	K-5	14	464
Lakeport	K-5	9	280
McKinley	K-5	20	434
Michigan	K-5	17	483
Negaunee	K-5	12	290
Roosevelt	K-5	19	548
Sparlingville	K-5	17	450
Tyler	K-3	5	103
Wadhams	K-3	4	115
Woodrow Wilson	K-5	30	827
Garfield	K-5	18	622
<b>Totals</b>		<b>278</b>	<b>7455</b>

MAP II



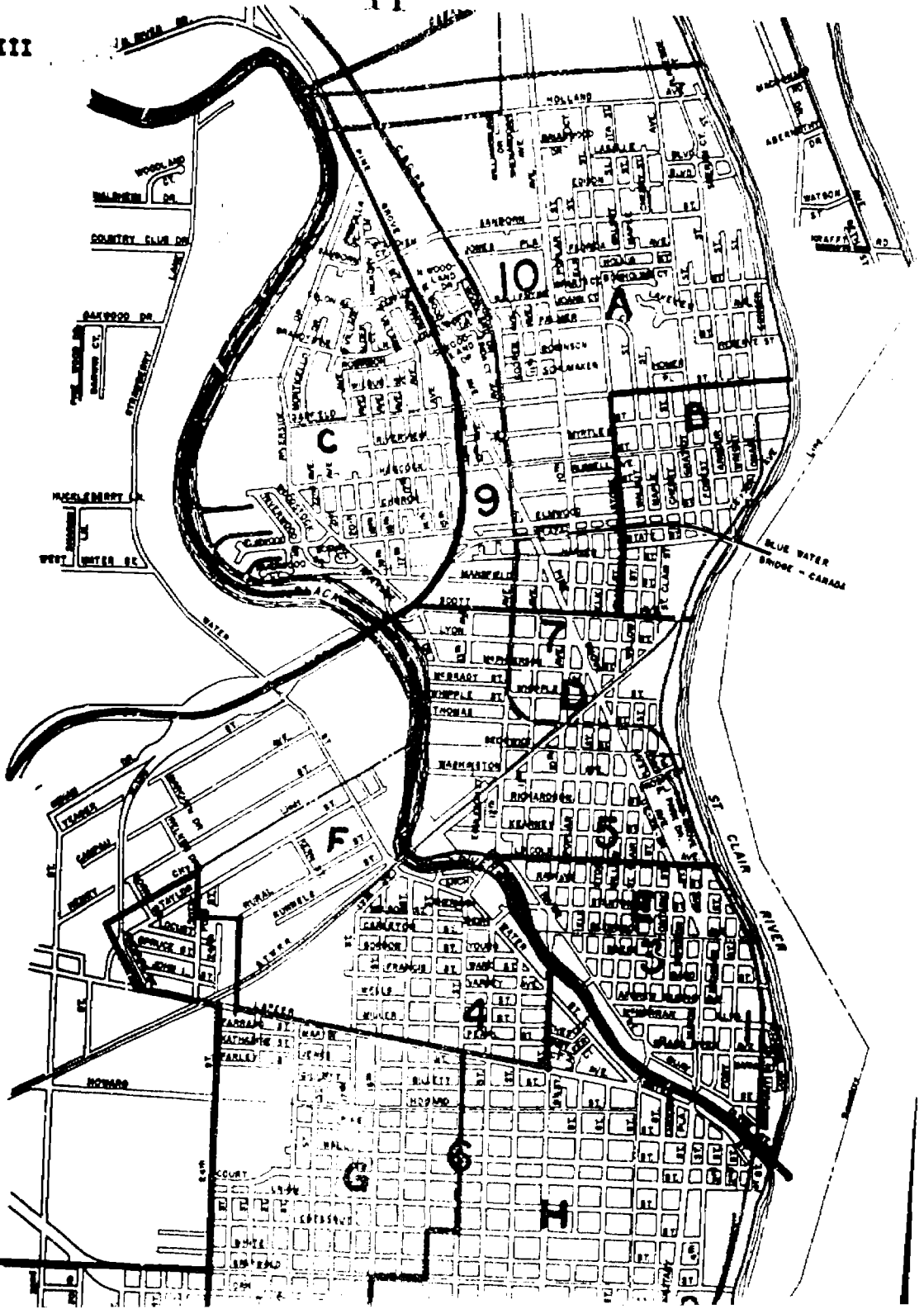
ELEMENTARY ATTENDANCE AREAS 1968-1969

- 1. Lakeport
- 2. Keewahdin
- 3. Charles Gratiot
- 4. Edison
- 5. Michigamme

10  
5

- 6. Wadhams
- 7. Allendale
- 8. Negaunee
- 9. Sparlingville
- 10. Ruth Bacon

MAP III



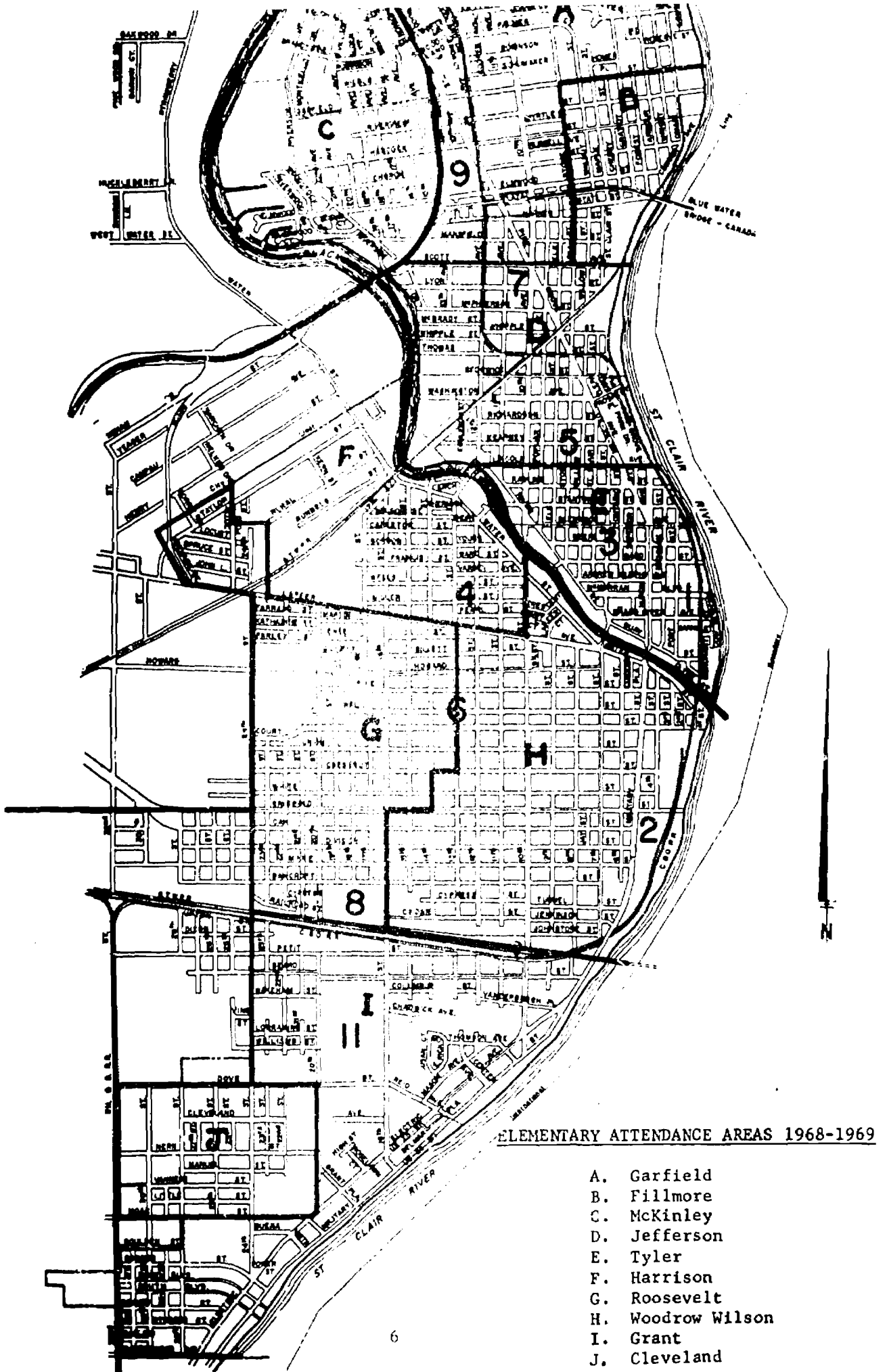


TABLE II

PORT HURON AREA SCHOOL DISTRICT'S INTERMEDIATE AND HIGH SCHOOLS, AND  
GRADE LEVELS SERVED, NUMBER OF CLASSROOMS, AND PROJECTED 1969-70 ENROLLMENTS

School	Grade Levels Served	Number of Classrooms	Projected Enrollment 1969-1970
Garfield	6-8	19	404
Chippewa	6-8	30	705
Howard D Crull	6-8	20	496
Fort Gratiot	6-8	15	603
Kimball	6-8	19	522
Washington	6-8	35	815
Port Huron High	9-12	60	2091
Port Huron Northern High	9-12	65	2141
Total Intermediate		138	3545
Total High School		125	4232

There is also a system of seven parochial elementary and secondary schools for kindergarten through twelfth grade with about 3,000 students. The St. Clair County Community College has an enrollment of about 2,400 students.

The Port Huron Area pupil enrollment has experienced an increase of over six hundred students in the past three years. This increase amounts to twenty classrooms. An additional three hundred fifty students are projected for the 1969-1970 school year. The Regional Planning Commission figures indicate that the Port Huron Area School District's population will increase from 59,389 in 1966 to 76,241 in 1980. The Detroit Water Plant Operation now underway in the Lakeport area of Port

Huron will bring in some four hundred families over the next four years, attracting residential growth in that area. About one half are expected during the coming 1969-1970 school year. With the above in mind, and with the existence of some thirty-three classrooms in the district that are educationally inadequate and constitute safety hazards according to current standards, the Port Huron Area School District presented an 11.8-million dollar bond issue to the electors on December 17, 1968. With the 11.8-million dollars, thirty-three classrooms were to be replaced, forty-five additional classrooms were to be built, together with a seventeen-room elementary school building, and an eleven-room elementary school building, as well as a five hundred-pupil intermediate building. Other additions and conversions were to include libraries in every elementary school, gymnasiums in every elementary school, and other needed remodeling in the school buildings. Part of the 11.8-million dollars was also to be used to build an 1800-student high school. This proposal was defeated by the voters who, like other voters throughout Michigan and the United States, reflected the general attitude of a public objecting to increasing taxes and the spiraling costs of education.

#### The Problem

The needs of the Port Huron Area School District have remained the same in spite of the fact that the voters have rejected the bonding issue. Immediate steps must be taken to alleviate the pending overcrowding at our two high schools and several elementary schools. Two of our elementary schools are still as inadequate as they were when the bonding proposal was formulated. They do not meet the safety standards desired; and it is our contention that the condition of the buildings

makes them educationally inadequate. Since necessary facilities cannot be provided in time to meet expanding enrollments and since it is obvious that the public is demanding more effective utilization of the schools, it is our duty to try and explore other means of reducing the crowding problems without impeding the educational development of our youngsters. It is with the above in mind, that the Port Huron Area School District is exploring the feasibility of extending the school year.

The study undertaken will thus attempt to explore all available quarter plans for the possibility of adopting and adapting the most economically and educationally sound plan for the Port Huron Area School District. With the feasible plan developed, it is intended to gather information relative to community attitude toward such a plan.

#### Significance of the Study

It is hoped and anticipated that the intended study will provide a definite answer to our overcrowded schools. Our student enrollment has been steadily rising and is expected to continue rising. In the past four years, our student population has increased from 14,033 to 14,970. By 1973, it is expected that the intermediate students now in school will increase our high school enrollment to 4,450, thus definitely requiring a third high school. Over six hundred new jobs will come into our community during the next three years due to expansions at Mueller Brass Company, Chrysler Corporation, and the extensive Detroit Water Plant Operation. The necessity for finding a solution to our problem is immediate. If it is educationally, economically, and politically feasible to implement a four-quarter plan or another plan to serve our purposes and allow us to utilize our present facilities



more efficiently and yet effectively than we are at the present, it is the intention to recommend this plan to the Port Huron Area School District Board of Education for possible adoption.

The findings, conclusions, and recommendations derived through this study would provide answers and possible alternatives to fiscal reform in public education. The State of Michigan through its legislature which provided for this grant would be interested in the outcomes of this study. It is our intention to make this study available to all educators in the United States.

#### Assumptions and Limitations of the Study

This study will describe and evaluate only four-quarter plans of all-year school operation. This is not a serious limitation to the flexibility or use of the study. For nearly every suggested plan of year-round school operation, there is a quarter plan which attempts to achieve the same purpose in nearly the same manner using a calendar that is based on four quarters.

Based on community rejection of a recent bond issue, it is assumed that no program would be acceptable that increased the cost of education in the Port Huron area. Therefore, no plan will be recommended which would result in an increase of the total cost of education, (i.e., operational and capital outlay). The administration is unwilling to offer, and the public is assumed unwilling to accept, any plan which would reduce the quality of education offered by the Port Huron Area Schools. Therefore, no plan will be recommended which would reduce the quality of education. The alleviation of pending overcrowding in the Port Huron Area Schools is the problem that motivates this study.

Therefore, any plan that is to be recommended must provide relief from overcrowded conditions in the classroom.

Although these assumptions and limitations are based upon the particular situation in the Port Huron area, they are probably acceptable in many other areas of Michigan.

#### Definition of Terms

For the purpose of this study, the following definitions of terms are offered:

1. **Feasible:** A plan of year-round school will be considered to be feasible when it can be implemented with an equal or lesser cost than the present school year plan, while at the same time maintaining or improving the quality of education offered by the school district.

2. **Quarter plan:** A quarter plan of year-round schools is one in which the school year is divided into four roughly equal parts called quarters.

3. **Standard school year:** A standard school year is one in which the students attend classes for about 180 days each calendar year.

4. **Lengthened school year:** A lengthened school year is one in which students attend classes for periods significantly longer than a standard year; for example, 220 days or more.

5. **All-year schools:** The term all-year schools will refer to operation of the school buildings for at least eleven months of each calendar year. All-year schools will be used interchangeably with year-round schools and schools operating for an extended school year. Thus, a year-round school plan that offered a standard year of instruction would describe a plan whereby students attend classes for about 180

days and the school buildings are operating for at least eleven months.

6. Complete year plan: The complete year plan is a quarter plan of all-year operation offering a lengthened year of instruction without acceleration.

7. Quadrimester plan: The quadrimester plan is a year-round school quarter plan that offers a lengthened school year in order to accelerate the achievement of students.

8. Optional vacation plan: The optional vacation plan is a quarter plan of year-round school that offers a standard year of instruction and allows the student the choice of one of the four quarters each year to take his vacation.

9. Assigned vacation plan: The assigned vacation plan is a quarter plan of year-round school that offers a standard year of instruction and assigns to each student one of the four quarters as a vacation.

CHAPTER II  
REVIEW OF RESEARCH AND RELATED LITERATURE

Introduction

The purpose of this chapter is to provide for a relationship between the investigator's research and the research of others. The voids left open will be pointed out and attempts will be made to show how the investigator's research fits into the broad scheme of research studies in this field.

To do the above, this chapter will start out by giving an historical sketch of the development of year-round school programs in the United States. Reliance in this section will be on secondary resources. Following the section on the history of year-round schools in the United States is a section describing each of the year-round plans fitting the definitions given for quarter plans as stated in Chapter I. Following this section, a section on community attitude toward year-round school as related by literature will be presented.

It is hoped that this chapter will discuss the advantages and the disadvantages of the four-quarter plan and in the long run develop a rationale for the undertaking of the study of the feasibility of the four-quarter plan with assigned attendance for the Port Huron Area School District.

History of the Year-Round School

One of the most commonly discussed possible solutions to the shortage of adequate school facilities lies in extending the school year. For many years proposals have been made to extend the school year. Those

proposals have been advanced for several reasons. The most common of those is that which emphasizes better and more efficient utilization of school plant, personnel, and instructional materials.

Early America was predominantly rural; and the demands of an agricultural society kept the school year short in most school systems. By contrast, the city schools were open nearly all year. Buffalo, Baltimore, Cincinnati, Chicago, and New York all operated their schools for at least eleven months yearly prior to 1840.<sup>1</sup> Thus, the concept of year-round schools is not new.

In the following years, city schools gradually operated for shorter periods each year; while rural areas increased the length of their school year. By 1915, with some variations, the present nine month school year was well established in both urban and rural communities.<sup>2</sup>

In 1904, even before the nine month year was well established, the first recorded four-quarter plan of school operation was being tried in Bluffton, Indiana.<sup>3</sup> This plan was discontinued in 1915.

During the 1920's, more than a dozen school systems were operating on an all-year basis. By 1930 this number had been reduced to six; and by 1950, Chattanooga was the only school operating with a four-quarter plan. Other quarter plans were tried in other parts of the country

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<sup>1</sup>National Education Association, Research Division, The Rescheduled School Year, Research Summary 1968-S2 (The Association, 1968), p. 6.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p. 11.

with a peak of about thirteen school systems using the quarter-plan by 1925. The two best known experiments with the four-quarter plan were those conducted by Ambridge and Aliquippa, Pennsylvania. The former was abandoned in 1936 and the latter in 1938.<sup>1</sup> In 1956, no city schools were known to be operating year-round schools with a quarter plan.

The Aliquippa experiment proved successful, according to the superintendent of schools. Savings on capital outlay for new schools and related services, especially debt service, resulted in savings for the school district. The two primary reasons for scrapping the Aliquippa experiment were listed to be the difficulty of maintaining the physical plant and increased costs of maintenance.

In its study of the feasibility of a four-quarter school year, Atlanta, Georgia concluded that its plan would cost more to operate than the cost of building new schools. The Atlanta study found that the four-quarter plan would cost \$8.8-million, while the traditional school year, including the cost of new construction, would cost \$7.6-million.<sup>2</sup>

Los Angeles conducted an extensive study of the four-quarter plan in 1954 and concluded that the all-year plan was too costly, was resisted by the public, and caused too many administrative headaches.<sup>3</sup>

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<sup>1</sup>Ibid.

<sup>2</sup>"The Twelve-Month School Year: Will It Solve Your Building Problems?" School Management 1 (September, 1957), p. 82.

<sup>3</sup>John Lombardi, "The Los Angeles Study of Year-Round Operation," Theory Into Practice 1 (June, 1962), pp. 131-35.

As recently as 1966, the Florida Research and Development Council undertook a study for Polk County, Florida school district, and arrived at the same conclusion. Yet, the New York Education Department has maintained a lively current interest in year-round school plans. Among these are some quarter plans.

In spite of the fact that nearly all four-quarter plans of year-round schools have been discontinued, and in spite of the fact that feasibility studies have shown their disadvantages outweighing their advantages, interest in the year-round schools continues. Several explanations of this interest readily occur. There is little factual information in the literature on the subject of year-round school. The quarter plan has been debated between 1924 and 1931, and between 1947 and 1953; at times when building costs were spiraling, and while the school population was growing.<sup>1</sup> In general most of this literature is composed of proposals and opinions both for and against various year-round plans. There is little factual data and less research to support the opinions or the proposals offered. Public resistance to year-round schools was a serious past problem. This problem may be less serious today than it was thirty years ago. The quarter plans suggest that a substantial savings in school cost may be realized by using the physical plants on an all-year basis, thereby achieving better efficiency than the present school year plans which leave these buildings, their staffs, and instructional materials virtually unused for about three months of each school year.

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<sup>1</sup>National Education Association, Research Division, op. cit., p. 5.

### The Four-Quarter School Plans

1. The Complete Year Plan. This plan was proposed by Frank B. May in 1961.<sup>1</sup> The plan would offer a lengthened school year as well as operating the schools throughout the calendar year. The school year would consist of four quarters of about eleven weeks each. There would be a two-week recess between each quarter. Students would attend school for all of the four quarters. There would be no acceleration of pupil achievement in this plan. The purpose of the extended and lengthened year is to improve the quality and depth of the educational program. In addition to the calendar changes, May also proposed curricular innovations. He suggests that the advanced state of instructional technology be used.

May's plan would be costly. He intends to achieve a better education and to pay for it. This plan achieves economy not by spending less, but by getting more for the amount spent. One economy, and a pillar of good educational practice, is achieved through the reduction of failed students. You don't have to pay to reteach students who don't fail. Students with academic problems have a better chance to achieve successfully the minimum curriculum offered by the schools because they have more time in which to work with May's plan than they would have during a nine-month year. In addition to the extra time at work, there would be a shorter forgetting time during recesses than during the present summer vacation. Students who did fail would not cost as much to

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<sup>1</sup>Frank B. May, "Year-Round School: A Proposal," Elementary School Journal 61 (April, 1961), pp. 388-93.



receach because they could repeat a fifty-five day quarter instead of a ninety day semester.

Average and above average students would use the extra time available in the complete school year plan to enrich their curriculum, master basic skills, and explore individual academic interests.

2. The Quadrimester Plan. The quadrimester plan is one of several extended school year plans proposed by the Department of Education of the State of New York.<sup>1</sup> This plan divides the school year into four quadrimesters of about fifty-five days each. In addition, the school day may be made longer. Students attend all four quarters and vacation as usual at Christmas and spring and in the month of July. Student progress is accelerated, because the same number of hours of instruction are offered in three quadrimesters that were offered in two semesters, and the students are expected to achieve accordingly.

By achieving an additional third of a nine month year in each calendar year, exponents of the quadrimester plan expect to provide thirteen standard years of education in only eleven calendar years. This saves the entire expense of educating each student for two years. These savings are to be realized through reduction of building space requirements.

The New York Department of Education offers several alternate plans of quadrimester design. One of these alternate plans would not allow acceleration in the first seven years of school. The elementary

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<sup>1</sup>George I. Thomas, Extended School Year Designs (Albany: University of the State of New York, State Education Department, January, 1966), pp. 53-66.

and junior high school, then, would resemble the complete school year proposed by May.

Table III shows how grades seven through twelve can be completed by average and above average students in five calendar years of school.

TABLE III  
QUADRIMESTER ACCELERATION OF GRADES 7-12

Grade by Nine-Month Plan	-----180 days-----		36 days
7	Grade 7		1/5 of Grade 8
8	4/5 of Grade 8	2/5 of Grade 9	
9	3/5 of Grade 9	3/5 of Grade 10	
10	2/5 of Grade 10	4/5 of Grade 11	
11	1/5 of Grade 11	Grade 12	
	36 days	-----180 days-----	

Among the disadvantages that may be noted in the quadrimester plan is the fact that space savings are not predicted until about the third or fourth year after the plan is implemented. Until then, educational costs will be greater than a nine-month school plan. In addition,

acceleration of student achievement may actually be an added expense if the rate of failure among the students rises. Not only will the district have paid more to teach the students on a year-round basis, but also it must now pay, at the newly established higher rate, to reteach the failed student. One may also note that placing students in a situation where opportunity for failure is increased is poor educational practice.

Studies conducted by the New York Department of Education indicate that junior and senior high school students achieved as well in an extended year accelerated design as did students taking the course in a nine-month year.<sup>1</sup> In addition, no social or emotional conflicts were evident among the accelerated students. Other studies seem to indicate that elementary pupils, too, do well in an accelerated school.<sup>2</sup> These studies, however, reported on accelerated work of less than a three-year duration. The actual amount of acceleration expected was less than one-half of a grade.

Caswell's evaluation of the Nashville all-year school suggests that acceleration in the elementary grades is probably not wise.<sup>3</sup> In this study, the achievement of elementary children who were allowed to accelerate one-third of a year in a summer school was found to be significantly less than that of children on the same grade level who had

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<sup>1</sup>George I. Thomas, Setting the Stage for Lengthened School Year Programs (Albany: University of the State of New York, State Education Department, March, 1968), p. 37.

<sup>2</sup>Ibid.

<sup>3</sup>Hollis L. Caswell, "A Study of Nashville's All-Year Schools," Peabody Journal of Education, Vol. 8, No. 6 (May, 1931), pp. 317-47.

not taken the summer program. Caswell concludes, "It is the judgment of the writer that rapid advancement by summer quarter attendance followed by failure has resulted in great injustice to numerous children."<sup>1</sup>

3. The Optional Vacation Plan. An optional vacation quarter plan was initiated in the schools of Atlanta, Georgia in the school year of 1968-1969.<sup>2</sup> The Atlanta plan requires a standard year of attendance from its students to be achieved in three of four quarters. The Atlanta plan divided the calendar year into four quarters of roughly equal length. Students are required to attend three quarters each year. This provides a minimum of one standard year of attendance each year. Attendance at the fourth quarter is optional. If a student does attend a summer quarter, he may choose to take any one of the next four quarters for vacation or he may choose to attend all four quarters. The summer quarter is not different in length or instructional quality from any other quarter; so attendance of four quarters a year may result in acceleration. Since the motive for attendance belongs to the student, the attendance of a fourth quarter may serve to enrich his program, to repeat previously unsatisfactory work, to accelerate, or to lighten his course load in other quarters. Thirty per cent of these secondary students volunteered for the first summer quarter in the summer of 1969.<sup>3</sup> At present, the Atlanta plan is implemented in the secondary

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<sup>1</sup>Ibid., p. 338.

<sup>2</sup>John S. Martin, "A Report to the Atlanta Board of Education Concerning A Four-Quarter Instructional Program." An unpublished report of Atlanta Public Schools, Atlanta, Georgia, February, 1968.

<sup>3</sup>"Focus on Education," Christian Science Monitor, June 30, 1969, p. 1.

schools only. There are hopes, but not immediate plans, for extension into the elementary grades.

The basis of the Atlanta plan is not only a calendar change. Atlanta area schools have completely revised their secondary school curriculum.<sup>1</sup> Each course, or part of a course, was redefined into units that could be completed within a single quarter. As much as possible, each quarter course was nonsequential. That is, it stood alone on its own merit. Courses within each department were revised and defined in behavioral terms. The purpose behind the curriculum revision was to achieve a better educational program than Atlanta had previously had. The reason that a quarter plan of year-round schools was selected was to achieve for students a more flexible program than they had previously been able to enjoy.

The exponents of the Atlanta plan do not claim that their plan will cost less money than their present plan. It will likely cost more to begin with. They do believe that they will get more out of each dollar spent. They believe that the fact that they do not intend to educate more students than previously suggests that the per pupil cost will likely remain the same.

4. The Assigned Vacation Plan. The assigned vacation plan offers students a standard year of attendance while operating the school plants on an all-year basis. This is accomplished by dividing the calendar into four equal quarters of about sixty days each. Each student is

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<sup>1</sup>Oral presentation by Reid Gillis to members of a conference on all-year schools held by the Michigan State Department of Education on May 27, 1969.

assigned one of these quarters for vacation and attends school for the other three, thereby achieving a standard year of attendance. The purpose of this arrangement is to save money by reducing the need for building space. Since one-fourth of the students are on vacation at any given part of the school year, one-fourth fewer classrooms are needed to house them and one-fourth fewer teachers are needed to instruct them. The plan provides for the same number of days of instruction as the nine month schools and students move through the curriculum at the same pace. Therefore, the quality of education should be unimpaired by this plan.

The schools of Aliquippa, Pennsylvania operated an assigned vacation plan between the years of 1928 and 1938. After five years, H. R. Vanderslice, Aliquippa Schools' superintendent, reported that there had been considerable savings to the Aliquippa school board due to savings in teachers' salaries and reduced cost of school buildings.<sup>1</sup> In addition, there seemed to be no difference either in achievement or attendance of students in the summer quarter compared to other quarters.<sup>2</sup>

Some of the reasons given for the discontinuance of assigned vacation plan at Aliquippa have been the difficulty of maintaining the physical plant, increased maintenance costs, and problems in assigning vacation periods.<sup>3</sup>

Bauman estimates that an assigned vacation quarter plan would cost

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<sup>1</sup>H. R. Vanderslice, "The All-Year School in Aliquippa, Pennsylvania," Elementary School Journal 30 (April, 1930), pp. 576-85.

<sup>2</sup>H. R. Vanderslice, "Five Year's Experience with the All-Year School," Elementary School Journal 34 (December, 1933), pp. 256-58.

<sup>3</sup>National Education Association, Research Division, op. cit., p. 12.

11.8 per cent of the total educational expenditure less than the usual nine month school year.<sup>1</sup> Much of this savings would be accounted for by the effect of the plan on teachers' salaries. In many cases, the teacher would be working a 240-day school year in place of a 200-day year. This is an increase of twenty per cent. The teachers' salaries could be expected to increase accordingly. Since only three-fourths of the students are in school each quarter, only three-fourths as many teachers would be needed to teach them. Suppose that one hundred teachers earned \$10,000 a year each to teach for nine months. This would be \$1,000,000. Compare that to the salary of seventy-five teachers earning \$12,000 a year, a twenty per cent increase for each teacher, and the total cost will be \$900,000, a saving of \$100,000 which is ten per cent of the \$1,000,000 needed for the nine-month year. In addition, paying a higher yearly salary would increase the ability of a district to attract, hire, and retain outstanding teachers. Teacher morale should improve, for teachers would be assured full-time professional employment and need not to hunt for other work in the summer.

Another savings may be realized in the reduced cost of building new schools. A school built to house six hundred pupils could educate only six hundred pupils on a nine-month year plan. Using the assigned vacation quarter plan, however, only three-fourths of the pupils educated by the school would be attending school. The building would still hold

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<sup>1</sup>W. Scott Bauman, The Flexible System: An Economic Analysis of Advantages of the Quarterly Calendar in Public Schools (Toledo: Business Research Center, College of Business Administration, University of Toledo, 1966), p. 16.

six hundred pupils. An additional two hundred would be on vacation each quarter. Therefore, the same building which had formerly educated six hundred pupils will educate eight hundred. This would be a boon to growing communities. They could expect to save the cost of one of every four new schools which they needed to build.

The economy attributed to the assigned quarter plan of school operation requires that each school have at least three classes of each grade level serviced by the school.<sup>1</sup> Small schools will have to be enlarged, consolidated, or accepted as an economic liability.

Jeri Engh feels that this quarter plan would combat juvenile delinquency because three-fourths of the students would always be in school.<sup>2</sup> The American Association of School Administrators warns, however, that this advantage could not be realized if the community fails to plan for year-round activities and recreation of vacationing students.<sup>3</sup>

#### Community Response to Year-Round School

In general the literature suggests that community response to all-year school plans has been negative. Less than five per cent of a random sample of the parents of children attending Polk County schools in Florida chose year-round plans other than a voluntary

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<sup>1</sup>American Association of School Administrators, Year-Round School (Washington, D.C.: the Association, a department of the National Education Association, 1960), p. 8.

<sup>2</sup>Jeri Engh, "Why NOT Year-Round Schools," Saturday Review 49 (September 17, 1966), pp. 82-84.

<sup>3</sup>American Association of School Administrators, op. cit., p. 9.



summer vacation or a summer vacation voluntary for some but required of students who fail.<sup>1</sup> Bienenstok describes the resistance to a year-round plan similar to the quadrimester in New York.<sup>2</sup> This resistance seemed to be based on the following points:

1. The parents did not feel that the plan, as presented, considered the welfare of the student.
2. The parents distrusted the concept of acceleration.
3. The details of the plan were vague.
4. The plan was seen as being promoted by the state legislature rather than that of the state department of education.

The studies above, along with the closing of past year-round plans, do not necessarily suggest a pattern of resistance to year-round operation of public schools. The public may be expected to oppose educational innovations that do not seem to consider the good of the student or appeared vague. The Florida study presented seven plans for the parents to react to. These were not ranked; only one could be selected. Failure to select a plan cannot be interpreted as rejection of that plan. Finally, changes in the cultural life of Americans has changed since most of the previous year-round studies were discontinued. The ending of a plan in 1938 need not be seen as indicating public resistance to that plan in 1970.

Robert Bullock outlined nine striking changes in American life in recent years. These were:

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<sup>1</sup>Florida Educational Research and Development Council, Year-Round Schools for Polk County, Florida: A Feasibility Study (Gainesville: College of Education, University of Florida, 1966), p. 55.

<sup>2</sup>Theodore Bienenstok, "Resistance to an Educational Innovation," Elementary School Journal 65 (May, 1965), pp. 420-28.

1. The shift from a predominantly agricultural society to one that is predominantly industrial,
2. The shift from rural patterns to intensely urban ones,
3. The recent appearance and spread of American suburbs with their unique population characteristics.
4. Fundamental changes in structure and functioning of the American family,
5. A tremendously increased mobility with an accompanying emergence of new transient populations,
6. An unequalled technological development with repercussions of many kinds,
7. An increasingly rapid accumulation of knowledge and culture content which must be transmitted.
8. Radically changed age characteristics of the total population, and
9. An over-all increase in population that is now becoming painfully manifest.<sup>1</sup>

Bullock views the school year as a cultural whole and warns that efforts to change school year organization will disturb this unity and elicit resistance from the community. This is likely true, yet resistance may be met without succumbing to it. Also note that the changes which Bullock describes have within them the potential to alleviate the tendency to resist all-year plans. The shift from an agricultural society to an industrial one and the accompanying shift from rural patterns to urban ones suggest that the summer vacation is no longer an economic necessity in the United States. The increased mobility suggests that families may be able, by traveling, to break their vacation times free from the limits of local climate. This, together with the increasing affluence of our society, suggests that greater numbers of families may take an interest in vacationing during the winter months at a southern part of our country.

Finally, the temper of a local community may not be in agreement

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<sup>1</sup>Robert P. Bullock, "Some Cultural Implications of Year-Round Schools," Theory Into Practice 1 (June, 1962), p. 154.

with that of the nation as a whole. There is a need, therefore, to develop an accurate and reliable measure of public opinions relative to effect of year-round school operation upon the local public's plans and interests. Within the community, too, there may be important groups that disagree with the general opinion of the community. For example, a survey of public opinion in Birmingham, Michigan in 1964 found that about half of the persons with opinions favored year-round schools, but the parents strongly rejected a twelve-month plan.<sup>1</sup>

Economic Aspects of Quarter Plans of Year-Round Schools

Opinions vary widely on the economic effect of various quarter plans of year-round schools. Vanderslice claimed to have saved money after five years of operation of an assigned quarter plan in Aliquippa.<sup>2</sup> The Los Angeles study of year-round schools concluded that all year-round plans were more costly than nine-month operation.<sup>3</sup> Although little practical research has been done in this area, E. B. Sessions sent a survey to thirty school business managers asking about the probable cost of school maintenance.<sup>4</sup> Replies indicated that maintenance costs could be expected to increase between twenty and thirty per cent. Because the increased cost of maintenance of a year-round plan is, in

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<sup>1</sup>Rashid Bashur, Stan Flory, and Ralph V. Smith, Community Organization and Support of the Schools (Birmingham, Michigan: Birmingham Public Schools, 1963).

<sup>2</sup>Vanderslice, loc. cit.

<sup>3</sup>Lombardi, loc. cit.

<sup>4</sup>E. B. Sessions, "Maintenance and Operational Cost in a Year-Round Program," Theory Into Practice 1 (June, 1962), pp. 148-50.

part, independent of the specific plan, twenty-five per cent seems to be considered as a reasonable increase in this area.

The expense of operating a complete year-round school has not been reported. It may be noted, however, that in addition to the twenty-five per cent increase in maintenance mentioned above, a twenty per cent increase in teachers' salaries will likely be incurred. This will be due to the additional length of the school year. Inasmuch as all the children attend school for the full year without acceleration, no savings of space would be realized. This is the most expensive plan described.

George I. Thomas presents an analysis of several quadrimester plans and different ways of implementing each.<sup>1</sup> Economies are claimed in the areas of instruction, building cost, and operations. These savings are not immediately available, for they depend upon reduced enrollment achieved through accelerating the achievement of students. A class graduated one year early leaves an empty room for the next year. The Florida Research and Development Council analyzed this plan with the finding that their total school expenditures could be reduced by 4.23 per cent. They believed that this reduction could not be realized for five years after introduction of the quadrimester plan.

The optional vacation plan of year-round school operation, as outlined by the Atlanta area schools, does not plan to save money.<sup>2</sup> Initially, the plan would cost more. The long term costs, however, are

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<sup>1</sup>School Management, op. cit., pp. 62-65.

<sup>2</sup>Martin, loc. cit.

expected to be about the same as the nine-month plan. This expectancy is based on the fact that no larger number of students will be educated and for no longer a time under the quarter plan than with the nine-month plan. No increase in teachers' salaries is expected, for teachers will still work a 190-day year. The cost of educating a pupil for a fourth quarter is expected to be offset by either the savings of having him vacation on a quarter other than summer or by savings of having him graduate early, should he accelerate. Since a summer program was in progress before the quarter plan was adopted, little change in maintenance cost is expected. Finally, some savings may be realized by the reduced expense of reteaching failed students for a quarter as compared to the longer semester.

The four-quarter plan with assigned vacations is probably the best known of the plans discussed. This plan appears to have the greatest potential for economy. It has been tried in several districts. Despite this background, estimates of the economic value of this plan vary more than those of any other. The following table shows the estimates of W. Scott Bauman, Associate Professor of Finance at the University of Toledo, of the costs of the assigned vacation quarter plan of year-round schools.<sup>1</sup> The same table also contains the estimates of the Florida Educational Research and Development Council of the cost of such a plan to the Polk County, Florida schools.<sup>2</sup>

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<sup>1</sup>Bauman, loc. cit.

<sup>2</sup>Florida Educational Research and Development Council, op. cit., p. 36.

TABLE IV

ESTIMATES OF PERCENTAGE CHANGE IN COSTS AS REPORTED BY W. SCOTT BAUMAN  
AND BY THE FLORIDA RESEARCH AND DEVELOPMENT COUNCIL.

Item	Per Cent Change in Cost	
	Bauman	Florida Study
Administration	0	0
Instruction	-10	+30
Plant Operation	-20	+24
Maintenance	0	0
Fixed Charges	-20	+ 6
Capital Outlay	-25	+ 6
Total Expenditure	-11.8	+25.2

Even considering that Bauman was computing the cost of a school district in abstract, assuming that the full savings of the assigned vacation plan could occur; while the Florida study was calculating the cost for the Polk County schools which could not take advantage of all theoretical savings, this discrepancy is hard to accept. Bauman shows a total savings of 11.8 per cent of the total expenditure while the Florida study shows increases of 25.2 per cent of the total expenditure. Closer examination of the Florida study reveals that the authors did not feel that Polk County could achieve any savings in space because many of their schools were too far apart for consolidation to be feasible. In addition, the estimate of teachers' salaries was based on the assumption that all schools would have a minimum of eighteen teachers so that schools having fewer were assigned eighteen teachers for the purposes

of computing the salary of the staff.<sup>1</sup> Teachers' salaries form a large part of a school budget. This accounts for most of the discrepancy between the estimates of Bauman and the Florida study.

In view of this wide difference of opinion, a school district should review its own situation carefully before recommending this quarter plan for its schools. Each part of its budget should be examined for the ability of the district to take advantage of the theoretical savings offered by the plan.

#### Summary

The complete school year plan requires attendance for four quarters of all students with no attempt to accelerate achievement. School year would be 220 to 240 days. There would be a short (one to two weeks) vacation between each quarter. The purpose of the plan is to improve mastery of achievement by average and above average students, and to enrich the present curriculum to reduce failure by offering the student with academic problems more time each year for work. Its advantages are: (1) Plan requires little preparation to implement. (2) The quality of educational programs should improve. (3) Some economy through reduced failure may occur. Its disadvantages are: (1) It costs more than the present plan or other quarter plans. (2) Community may resist extra cost. (3) Community may resist elimination of summer vacation. (4) It would not reduce space requirements.

The quadrimester plan requires attendance of all pupils for four

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<sup>1</sup>Florida Educational Research and Development Council, op. cit., pp. 22-24.

quarters. School year would be about 220 to 240 days. There would be no break (or only one or two days) between quarters. Students would have present Christmas and spring vacations and the month of July free of school. Its purpose is to achieve economy by accelerating the achievement of the students so that the present thirteen years of instruction are achieved in eleven years. Its advantage is that the plan would reduce costs of education per pupil by saving space. Its disadvantages are: (1) Plan would not produce reduced cost for first four to five years. (2) Plan would increase expense for first four to five years of operation. (3) Elementary pupils' opportunity to fail is increased by acceleration. (4) Reteaching failed students may increase cost.

The optional vacation plan requires attendance for three of four quarters every year. Students may elect to attend school for the summer and either take another quarter vacation or continue for four quarters of school work. Its purpose is to improve the educational program of the schools. Its advantages are: (1) Plan may achieve economy if distribution of students' vacations over the four quarters is about equal. (2) Extensive curriculum revision provides greater flexibility and individualization of educational program. (3) Curriculum revision may achieve further economy by reducing the cost of reteaching failed students. Its disadvantages are: (1) Plan assumes that the curriculum is revised into quarter units that are as non-sequential as possible. (2) Plan may be more costly than 180-day year if vacation distribution is not about the same in each quarter, but not more costly than 180-day year plus summer school at board



expense. (3) School plants may be more difficult and costly to maintain.

The assigned vacation plan divides the year into four quarters of about sixty school days each. Attendance is required for three quarters and a vacation quarter is assigned. Its purpose is to achieve economy by using school buildings on a year-round basis. Its advantages are: (1) Plan would reduce the per pupil cost of education by reducing space needed. (2) Area recreation facilities would be less crowded and used all year. (3) Juvenile delinquency would be reduced by having only one-quarter of the students on vacation at a time. (4) Job opportunities for older students would increase since one-quarter of pupils are on vacation at a time. (5) Higher salaries increase the district's ability to recruit and keep outstanding teachers. Its disadvantages are: (1) Plan requires at least a redefinition of curriculum to implement. (2) Community may resist the vacation at times other than in the summer months. (3) School plants will be more difficult and costly to maintain.

The above review of research and literature is suggestive of the need for a more detailed and objective evaluation of all the factors necessary to make the implementation feasible. This study, as will be shown in the following chapter, will consider all those factors described and implied in the literature reviewed.

## CHAPTER III

### THE METHOD OF THE STUDY

#### Introduction

There is enough information in the literature to justify limiting our study to a single quarter plan of year-round schools. For a plan to be considered feasible, it must be able to alleviate the present and anticipated overcrowding in our schools. The over all cost of this plan should be less than the total cost of operating the schools on a regular basis and the cost of building and operating the facilities recommended through the 11.8-million dollar bond issue. The plan, in order to be recommended to the public as being feasible, must offer the present quality of education or better.

With the above in mind, let each of the four plans identified in the literature be tested by these criteria.

#### Selection of a Quarter Plan for Study

The complete school year plan should improve the education offered by Port Huron schools. Since all students would attend for the full time that schools are open, without acceleration, this plan would save no classroom space. Because the schools would be open for a longer time each year, the cost of education would be appreciatively higher than it now is. Because of its increased cost and inability to relieve crowding, the complete school year plan must be dismissed as unfeasible at this time.

The quadrimester plan would achieve some relief from overcrowding. The effect of the plan is that of having about one-sixth extra classrooms

because seven grades are achieved in six years. Therefore, in the seventh year a room would be empty that would otherwise be needed to achieve the last grade. That is, a class of children would enter kindergarten and, in six years, have completed the sixth grade. Normally, this class would just be entering the sixth grade. Therefore, the classroom that they would have occupied as sixth graders is left empty. Of course, they will be occupying a class in the seventh grade, but this space would be provided by a class graduating from high school a year early. Unfortunately, no relief would be felt for the first three years of the program and the full one-sixth saving of space would not be enjoyed until six years after the program was started. In the meantime, the cost of educating children would rise because children are attending eleven months of school. In addition, it is doubtful in view of the experience of Nashville schools, that acceleration is educationally sound in the elementary grades.<sup>1</sup> Because of its higher initial cost, the small amount and delay of classroom savings, and the serious doubt of its ability to provide a program at least as educationally sound as the present one, the quadrimester plan must be regarded as unfeasible as defined by this study.

The optional vacation quarter plan is difficult to evaluate. In the event that at least three-quarters of the student body attended each quarter, including the summer quarter, the effect of this plan would be the same as that of the assigned vacation plan. There is no reason for believing that an even distribution of attendance would

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<sup>1</sup>Caswell, loc. cit.

occur. Atlanta achieved only thirty per cent in the first summer quarter.<sup>1</sup> Although future attendance may be more even, it may be noted that the climate in Port Huron is not as conducive to vacation in the nonsummer months as that of Atlanta. A transition period could be expected in which the optional vacation plan would cost more than present schooling and would not save space. For this reason, the optional vacation plan may be set aside as unfeasible for the present time.

The assigned vacation plan is designed to save classroom space. The quality of education should be at least as good using this plan as it is with the present nine month schools, for both plans provide about the same number of days of instruction to each student during the school year. In view of the range of opinions in the literature concerning the economy of this plan, we cannot state that this plan is at least as economical as the nine month schools without further study. In addition, it is not certain that the plan could be implemented in the Port Huron Area Schools. At the same time, it is not certain that the plan is not feasible. For these reasons the assigned vacation quarter plan will receive the attention of the remainder of this study.

#### Questions Answered by the Study

In determining the feasibility of the assigned vacation plan of year-round schools, attempts were made to answer the following

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<sup>1</sup>Christian Science Monitor, loc. cit.

questions:

1. What implications will this plan have for curriculum development?
2. What will be the calendar for assigned vacation plan?
3. How may elementary school children be assigned to schools and to classes within the school?
4. Can intermediate school students be scheduled on an assigned vacation plan?
5. Can high school students be scheduled on an assigned vacation plan?
6. How will vacations be assigned to pupils?
7. How will vacations be assigned to staff?
8. Can the school buildings be maintained?
9. What will the cost of maintenance be?
10. Can students be properly transported?
11. What will be the cost of transporting students?
12. What use of the present schools will achieve maximum economy?
13. What professional staff will be needed?
14. What non-professional staff will be needed?
15. How will the food services program of the Port Huron Area School District be affected by the four-quarter plan?
16. What changes in purchasing procedures will be needed?
17. What year-round recreational and cultural opportunities are available in Port Huron?
18. What effect will the plan studied have on the music program of the Port Huron Area School District?

19. What implications will this plan have for the Division of Personnel Administration of the Port Huron Area School District?

20. What effect will the four-quarter plan have on the Port Huron Area School District athletic program?

21. What implications does the four-quarter plan have on scheduling, graduation, the beginning date of school, transfer of youngsters in and out of the school district, job opportunities for students, special programs, vacations of principals, guidance and counseling, and other curricular details?

22. What implications will the plan have for the professional development of the teachers of the Port Huron Area School District?

23. What will be the total cost of the assigned vacation plan?

24. Will the public in the Port Huron area accept the assigned vacation plan?

25. Will the parents of the Port Huron Area School District children accept the assigned vacation plan?

26. Will the business and industrial community accept and support such a plan?

27. Will the staff of the Port Huron Area Schools accept the assigned vacation plan?

#### The Plan of the Study

The study was begun by constructing a calendar in which the year was divided into four quarters. The length of each quarter was noted and the total number of days that a student would attend school each school year was computed. This calendar was designed for the 1970-71

school year.

Based on the 1969-70 expected enrollment, a simulation of the placement of elementary and intermediate school children was made. In addition, the scheduling of students in a Port Huron high school and an intermediate school were simulated using the requests for the school year 1969-70. In simulating these schedules, the services of Mr. Gaylord Feick and Mr. Duncan Carlisle were enlisted. Mr. Feick is the Director of Federal Programs for Port Huron Area Schools and a former principal of Port Huron High School. Mr. Carlisle is supervisor of the Port Huron Area Schools' section for Data Processing. The heart of the data processing section is an IBM 360 model 20 computer. This machine is backed by a card sorter, reproducing punch with mark sensing and summary punch capability, collator, interpreter, and two keypunching machines. This equipment was used to simulate student schedules for an assigned vacation quarter plan.

Examination of the placement of students in elementary and intermediate schools and of the scheduling of an intermediate and a high school permitted calculation of the professional staff needed to carry out an instructional program of a year-round school with vacations assigned.

The determination of how school buildings may be maintained and the cost of such maintenance were computed with the expert aid of Mr. Richard Kallio. Mr. Kallio is the supervisor of the section of Buildings and Grounds of Port Huron Area Schools. The Buildings and Grounds section has over a hundred employees. Mr. Kallio's major responsibilities include: the development of plans and the coordination of the work

involving minor construction; screening and assigning buildings and grounds personnel; direct supervision of summer activities where school principals are not available; purchasing supplies, equipment, and services for the buildings and grounds program; assigning men and resources to individual building units for maintenance; providing carpentry and refinishing services to the schools.

Mr. Kallio also aided in the computation of the personnel needed to maintain the schools. This computation was based on the placement of students, the calendar of the school year, the method of maintenance, and the expertise of Mr. Kallio.

The cost and method of transporting students was calculated with the aid of Mr. William Cottingham. Mr. Cottingham is the supervisor of the Port Huron Area School's section for Transportation Services. This section is responsible for the following services: providing student transportation; providing delivery service; providing tractor services; and maintaining transportation equipment.

A way to schedule the vacations of the students and the teaching staff was worked out with representatives of the school administration, in cooperation with all those involved. The placement of students transferring into the district was also considered by this group.

The determination of changes needed in purchasing procedures was made with the help of Mr. Archie Sams. Mr. Sams is the purchasing agent of the Port Huron Area Schools.

The total cost of the assigned vacation quarter plan of year-round schools was computed from the information above with aid from Mr. M. J. Neveux, Assistant Superintendent for Business Administration, for the



school years 1968-69 and 1969-70. This figure was compared to the expected cost of that school year with the present school calendar.

A description of present and potential recreational facilities for school age children was made by contacting the public library, the city recreation department, the Y.M.C.A., representatives of the Boy Scouts, Girl Scouts, and local area churches.

The first twenty-three questions posed by the study were answered through the first phase of the study, the latter having been made public through a report to the Board of Education of the Port Huron Area School District on September 29, 1969.

Public reaction to the plan was determined through the interview of a random sample of registered voters of the Port Huron Area School District. The Kolomogorov-Smirnov Test was utilized to select the size of sample of the population whose opinion was sought.<sup>1</sup> Dixon's and Massey's formula for the determination of a sample size to assure variation of a proportion of a sample having the characteristics examined was also utilized to arrive at the sample representative at the 0.95 level of confidence with a maximum diversion of 0.05.<sup>2</sup>

The public relations firm of Ned S. Hubbell and Associates was contracted to select and survey the sample of registered voters. The opinions of the parents of the area children formed a part of this sample. The data processing facilities of the Port Huron Area School

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<sup>1</sup>W. W. Tate and R. C. Clelland. Non-Parametric and Shortcut Statistics (Danville, Illinois: Interstate Printers and Publishers, Inc., 1959), pp. 62-65.

<sup>2</sup>Wilfrid J. Dixon and Frank J. Massey, Jr. Introduction to Statistical Analysis (New York: McGraw-Hill Book Company, Inc., 1957), p. 81.

District were utilized to tally the responses of the interviewees. The summary and report of these findings was made by the previously mentioned firm to the Board of Education on January 19, 1970.

Prior to the survey, an intensified effort was made through public meetings and the mass media, informing the public of the plan being considered and of those findings presented at the conclusion of the first phase of the study. A total of twenty-five meetings were arranged with parent-teacher association groups, teachers, students, service clubs, and other business clubs in order to disseminate the findings of the study and to respond to questions and concerns raised by these groups.

The reaction of the Port Huron area business and industrial community was assessed through the cooperation of Mr. Daniel Hines of the Detroit Edison Company. A meeting of a group representative of business and industry was called by Mr. Hines at which time the plan considered was explained to this group. A questionnaire was mailed to each of the nineteen members of the group a week after the presentation, seeking their reactions and attitudes toward the plan. The data gathered through those questionnaires was tallied and summarized and appears in Chapter IV of this report.

As to the teaching staff of the Port Huron Area School District, efforts were made to inform them of the plan through the use of presentations made at the individual schools, through the process of making the report available, and by means of abstracts describing the four-quarter plan as studied in the Port Huron Area School District. A questionnaire was prepared with the assistance of the Port Huron Education Association seeking the teachers' assessment of and reaction

to the plan. Those questionnaires were returned to the Office of Research and Evaluation by December 19, 1969. The services of the data processing section of the Port Huron Area School District were utilized to tally the responses of the teachers.

The data gathered from the community survey, the business and industrial community survey, and the teacher survey were summarized and evaluated. The summary of all these data appears in Chapter IV of this report.

The fifth chapter will attempt to summarize the findings of the study and will arrive at conclusions based on the findings gathered. It is anticipated that recommendations will also be made based on the data gathered and the conclusions arrived at by the study.

CHAPTER IV  
THE RESULTS OF THE STUDY

Introduction

Since it is considered that the rationale for a thorough investigation of the four-quarter plan and its feasibility to the Port Huron Area School District has been established, the following chapter will attempt to answer the questions put forth in Chapter III.

Since the plan studied appears to have met the criterion of maintaining and/or improving the quality of the educational programs offered by the Port Huron Area School District, it is imperative that those implications for curriculum improvement be investigated. Accordingly, this chapter will start by discussing its curricular implications. Following that section, the study will then attempt to answer all the major questions listed in Chapter III.

Implications for Curriculum Improvement Under the Four-Quarter Plan

The Port Huron Area School District, like many a school district across the land, is faced with the necessity of providing a curriculum that better meets the needs, interests, aptitudes, and demands of its clients. Although it is recognized that curriculum improvements and additions have been made continuously in the above school district, an increasing number of pupils, particularly in our high schools, are finding the present course of study and curriculum organization irrelevant and inadequate.

Having reviewed the research and literature available and having contacted those with expertise in the four-quarter plan of year-round

school, the writer is convinced that a more flexible, more comprehensive, and a higher quality of instruction in a more efficient manner can be provided by revising our present curriculum and organizing it into a four-quarter program.

Any plan that requires an organizational and instructional change can never be initiated without the goal of improving instruction. For the purposes of simulation at the intermediate and at the high school level, we have taken two semester courses to be equivalent to the course content of three quarters. Accordingly, the course content in each subject matter area for each quarter must be redefined. The curriculum will have to be revised and organized into quarter courses. In revising their high school curriculum, the Atlanta School District has found that more than seventy per cent of their courses were non-sequential in nature. Subject offerings in the form of quarter courses are published in that school district in a catalog along with the requirements for graduation, prerequisites for courses, and a description of each course. The Atlanta School District estimates that approximately four hundred different quarter courses will be available covering all instructional areas. When properly and accurately completed, each high school can choose from the systemwide course offerings the quarter courses appropriate for students in that school. There is no reason that the Port Huron Area School District cannot follow this example.

Since the study assumes that for a four-quarter plan to be effective, and thus feasible, it must meet the criterion of improving the quality of the educational program of the Port Huron Area School District, and since the curricular structure is the vehicle through which an educational

program is carried out, a detailed plan for curriculum revision must be worked out immediately if the board of education of the Port Huron Area School District decided on accepting the four-quarter year-round school concept. The plan should take into consideration the presence of the Instructional Development Council and the latter's obligations and responsibilities. The plan must provide for the inclusion of all department chairmen, directors, principals, teachers, citizens, and students. A committee for each discipline must be charged by the Instructional Development Council for the task of revising that specific curriculum content. Resource people should be called upon for assistance.

The curriculum devised would be based on the establishment of a twelve-month school term. This twelve-month school term is divided into four quarters of equal length and of equal instructional quality. Students will be required to attend three of those four quarters. The students' vacation is randomly assigned. Although the plan recommended would require an attendance of three quarters to realize the economies contemplated in terms of buildings and sites, this same plan has the built-in capacity of eventually catering to those who prefer an accelerated program and thus would like to attend all four quarters. The plan contemplated would also eventually cater to the youngster who would like to repeat a course during his assigned vacation.

With the curriculum revised and organized into quarter courses, each course at the intermediate and high school levels can stand on its own. Pupils would select those courses needed to complete a desired course of study. The selection will be accomplished through the guidance

of teachers and guidance counselors. The student will be enrolled in the course if it is offered and if he meets the requirements for that course. The problems of scheduling elementary students are simpler because of the self-contained nature of the elementary classroom.

The above procedure will define the curriculum in written form in behavioral objectives; i.e., in terms of what the students are expected to accomplish in each course. It will provide the flexibility for a given school by enabling it to offer a curriculum designed for the students enrolled in that school. This system ultimately will reduce duplication by providing a systemwide framework of offerings, setting up reasonable standards for achievement and graduation, and by providing a diversification of learning opportunities. Youngsters will be able to progress at their own rate of speed, to specialize in certain areas, and to receive the general education they are entitled to in a democracy.

#### A Suggested Calendar

In constructing a calendar for the assigned quarter plan of year-round schools, the following requirements were considered. The state of Michigan requires that school be offered for one hundred eighty days to each student each school year. There will be no days counted as days of attendance when children do not actually attend school except for acts of God. Since each student would be required to attend three of the four quarters of the school year, this means that each quarter must offer at least sixty days of school. One possible calendar is shown following:

First quarter: July 14 to October 6

Second quarter: October 7 to January 13  
 Third quarter: January 14 to April 19  
 Fourth quarter: April 20 to July 13

In computing this division of the year into quarters, Labor Day, Memorial Day, and Independence Day were considered to be holidays. In addition, the usual Thanksgiving, Christmas, and Easter recesses were included. The starting date of July 14 was chosen in an attempt to include some fair weather in each quarter. The calendar is for the school year 1970-1971 because that is the earliest that the plan could be put into operation.

Another suggested calendar is offered that would meet most of the criteria of the first calendar and yet would provide the school district with a less difficult job of reporting attendance and financial reports on a quarterly basis. This plan is as follows:

First quarter: July 1 to September 24  
 Second quarter: September 25 to December 23  
 Third quarter: January 2 to March 30  
 Fourth quarter: March 31 to June 30

It is also recognized that neither of the above plans offer sufficient record days as stipulated through the master agreement with the Port Huron Education Association. Since we are legally obligated to one hundred eighty days of student-teacher contacts, this problem and others affecting the working conditions of the teaching staff will have to be resolved with the agreement and the consent of the teachers.

A third calendar is also suggested which assumes that the present agreement with the Port Huron Education Association would have to be renegotiated anyway, proposes shorter winter and spring vacations while allowing a twelve-day vacation during the summer for all students and teachers:



First quarter: July 1 to September 23  
 Second quarter: September 24 to December 21  
 Third quarter: December 28 to March 23  
 Fourth quarter: March 24 to June 17

The reader is reminded that the above calendar provides for the following days off above and beyond the assigned vacation quarter: Labor Day, Thanksgiving Day, two teacher institute days, a five-day Christmas vacation, two days for New Years, four days for Easter, and a twelve-day summer vacation.

#### Simulation of Student Placement

In placing students into elementary classrooms, the usual considerations of class size, student location relative to that of the school, and the capacity of the school were considered. The assigned vacation quarter plan places further restrictions on the ways in which students may be placed. If there are sufficient students in a grade at a school to make four sections of about twenty to thirty students each, there is little difficulty. The students are simply placed into classes along with the other students who had the same vacation quarter. The entire section would then vacation at once. This procedure requires at least eighty students in the grade. As a matter of fact, this distribution of students did not always occur in our simulations. Attempts were made to avoid the obvious solution of bussing students from school to school to achieve a minimum of eighty students per grade. It was possible to place students into classes with as few as forty-eight students in a grade. This method of placing students is shown in Table V. As may be seen from Table V, this arrangement results in some inequities in class load and does not achieve the economy of space that could be achieved by a larger

TABLE V

## PLACEMENT OF 48 ELEMENTARY STUDENTS INTO TWO CLASSROOMS

Vacation Quarter	Number of Students	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
First	12	On vacation	Miss Jones' class for First Quarter of grade	Miss Jones' class for Second Quarter of grade	Miss Jones' class for Third Quarter of grade
Second	12	Miss Jones' class for First Quarter of grade	On vacation	Miss Jones' class for Second Quarter of grade	Miss Jones' class for Third Quarter of grade
Third	12	Miss Smith's class for First Quarter of grade	Miss Smith's class for Second Quarter of grade	On vacation	Miss Smith's class for Third Quarter of grade
Fourth	12	Miss Smith's class for First Quarter of grade	Miss Smith's class for Second Quarter of grade	Miss Smith's class for Third Quarter of grade	On vacation
Totals	48	Miss Jones - 12 Miss Smith - 24	Miss Jones - 12 Miss Smith - 24	Miss Jones - 24 Miss Smith - 12	Miss Jones - 24 Miss Smith - 12

grade.

It was possible to place all of the elementary students that were expected in school year 1969-1970 into thirteen elementary buildings. Table VI shows how these students may be placed. The number of sections of each grade includes those that would be on vacation.

TABLE VI  
SIMULATED PLACEMENT OF ELEMENTARY STUDENTS FOR YEAR-ROUND SCHOOL

School	K		1		2		3		4		5	
	No.	Sec.	No.	Sec.	No.	Sec.	No.	Sec.	No.	Sec.	No.	Sec.
Bacon	82	4	93	4	86	4	86	4	53	4	60	3
Edison	120	5	110	4	116	4	113	4	0	0	0	0
Garfield	170	7	168	6	157	5	142	5	253	9	248	9
Grant	99	4	79	4	79	4	77	4	73	4	0	0
Harrison	110	4	90	4	89	4	81	4	0	0	0	0
Jefferson	87	4	95	4	73	4	87	4	77	4	0	0
Keewahdin	149	6	121	5	121	5	123	5	0	0	0	0
McKinley	70	4	65	3	55	3	58	3	157	6	164	6
Michigamme	85	5	98	4	74	4	86	4	117	4	112	4
Negaunee	55	3	56	3	46	3	45	3	46	3	117	4
Roosevelt	108	4	88	4	90	4	89	4	79	4	94	4
Sparlingville	80	4	82	4	72	4	81	4	63	3	72	4
W. Wilson	185	7	167	6	116	4	99	4	176	7	245	10

The zeroes in the fourth and fifth grades of the Edison, Harrison, Keewahdin, and Woodrow Wilson schools, and in the fifth grade of the Jefferson and Grant schools indicate grades that were simulated as attending other elementary schools due to overcrowding. The simulation assumed that other elementary classrooms would be closed. The Garfield was considered to be completely elementary. The intermediate students that would have attended Garfield were placed, for the study, into the Fort Gratiot Intermediate School. The Fort Gratiot would have no elementary classrooms.

Ideal efficiency of use of space was not realized because of the small numbers of students in some grades in different buildings. This reduced the economy of the plan. However, it should be noted that these thirteen elementary buildings can absorb over seven hundred more elementary students without an increase in staff or classrooms provided that the increased population is in areas served by buildings currently enjoying small classes with the above placement. Many of these buildings are located in such areas. The Grant, Negaunee, Michigamme, Sparlingville, and Ruth Bacon schools could absorb over four hundred of these seven hundred students and are located in areas that are expected to show future growth.

Port Huron Northern High School and Washington Intermediate School were chosen for simulation of student class schedules. The assumption is that if these students could be scheduled into classes based upon an assigned vacation quarter plan, then the students in the remaining intermediate and high schools could also be successfully scheduled. The information gained in these simulations also aided in estimating the staff needs in the secondary schools.

The simulation of Port Huron Northern High School began with the duplication of the student request cards for the school year 1969-1970 of Northern High students. These cards were then sorted by class groups and resorted within each group at random. Each class group was divided into four roughly equal parts. Each group of cards had about the same number of cards for each grade level as the others had. These four groups of cards represented students who would vacation on each of the four quarters of the school year.

After resorting each quarter of the cards by student number, each group was run through the IBM 360/20 computer; and a quarter tally sheet was printed which showed how many students had chosen each of the courses offered at Northern in each quarter. The probable number of students in each class and the probable number of faculty needed in each quarter was then computed by hand by combining the tallies of the three quarters of the students that would attend in each quarter.

The student request cards were then taken to Detroit where an IBM 360/20 computer ran a new tally count and constructed a conflict matrix. The matrix showed how many students who chose one course had also chosen each of the other courses offered. This conflict information was repeated for every course.

Because of the fact that no four-quarter computer program was available that would schedule youngsters for three quarters at a time taking into consideration the vacation to which each youngster is assigned, a master schedule showing the times at which each class for each quarter would be offered was constructed with a minimum number of conflicts. For this purpose, two quarters were simulated. The assumption here is that if two quarters could be scheduled, four quarters could also be scheduled.

The master schedule sheet was taken to Data Processing at Port Huron Area Schools to be keypunched on IBM cards. The computer printed a master schedule sheet for correction. The computer then printed student report cards from the master schedule cards and the student request cards. Using the report cards as input, a tab file and master schedule sheets for students were printed. At this point the simulation of the Port Huron Northern High School was complete.

The simulation of the Washington Intermediate School was achieved in the same manner.

This placement of students does not realize the ideal efficiency in the use of classroom space or teaching personnel. The intermediate school student body could increase about one thousand students without increasing the number of classrooms presently available. The Washington Intermediate School, for example, would have about ten unused classrooms if the simulated schedule were put into effect. The high school could serve about another one hundred fifty students if average classes had twenty-six students. If the two high schools were permitted to achieve the same degree of overcrowding that it has at present, they could serve fifteen hundred students more than the number used in the simulation.

Based on this simulation, it is calculated that the area's 7,319 elementary students could be taught by 208-1/2 teachers instead of the 245-1/2 that are planned for the school year 1969-1970. This is a reduction of fifteen per cent of the expected elementary teachers. It is further calculated that the area's 7,746 intermediate and secondary students could be taught by 260 teachers in the place of the 320 teachers actually planned for 1969-1970. This is a reduction of nineteen per cent of the planned intermediate and secondary teachers.

#### Assigning Area Students to a Vacation Quarter

As stated earlier, the four-quarter plan with assigned vacations requires the random assignment of youngsters to vacation quarters. Families will be accommodated by allowing youngsters from the same family to have the same vacation quarter. The method of fairly attending to this problem of random assignment might be that of sending a questionnaire

permitting persons to rank the quarters in order of their preference of each as a vacation. Cards from each attendance area could then be randomized with the computer placing families into vacation quarters according to the rankings on the cards. Every effort will be exerted to get those families to respond to the questionnaire. Persons not satisfied with the assignment may be permitted to apply for special consideration based on extenuating circumstances. Cards of families approved by the superintendent for special consideration can be placed on the bottom of the card pile after cards have been randomized. This will permit these cards to be placed according to its first choice of quarter.

#### Scheduling Teachers' Assignments

Because of the implications of teacher assignments to vacations for contractual negotiations, the following procedures are presented only as suggestions that could insure maximum efficiency for the plan. The plan proposed could possibly result in an alteration of the number of teachers employed on a year-round basis of fifteen per cent at the elementary level and nineteen per cent at the intermediate and high school level. Any resultant adjustment in the number of teachers may depend largely on the number of teachers electing to work the full four quarters.

Since it is assumed that student requests for one whole year in advance for each of the three quarters they are to be enrolled in school could be worked out, it would then seem safe to assume that we could be reasonably sure as to our requirements in terms of the number and qualifications of teachers needed for each quarter. Because of the fact that our school district has had no experience with the actual operation of a four-quarter plan, it would be safe initially to assume that eighty-five

per cent of our present elementary teaching staff and eighty-one per cent of our intermediate and high school staff would be needed for the full four quarters. In spite of the fact that when surveyed as to their preference for working four quarters, sixteen per cent of the responding teachers indicated a choice of four quarters, we have no way to assure us that the percentages of teachers needed on a year-round basis would be satisfied until the plan becomes operational. Accordingly, it is recommended that teachers during the first year of operation of this plan be contracted for no less than three quarters of teaching. Under such a plan a teacher's vacation will have to be assigned based upon the needs of the youngsters as determined through scheduling. Teachers can be contracted at the elementary level to teach a certain grade level and still be assigned to a single school building. At the intermediate and high school levels, teachers should be contracted for three quarters for a certain subject matter area. This would allow the district the flexibility of assigning where the needs are.

#### Year-Round Maintenance of the Port Huron Area Schools

The elimination of the long summer vacation requires that the maintenance be accomplished during the hours that school is in session and during the evening. Major repair may not be scheduled for the vacation period. The emphasis will be placed on continuing maintenance with an emphasis upon preventative maintenance.

The maintenance department estimates that maintaining the twenty area buildings included in the simulated student placement requires an addition of five men to its present maintenance crew. These additional men will be trained and skilled in heating, electricity, plumbing, and



other maintenance areas. The maintenance department contends that these five extra men, along with the present maintenance staff and sufficient funds, should be able to keep the area schools operating at an A-one standard condition on a year-round basis. The maintenance department emphasized that, while these men can keep the buildings in good condition, they will not be able to bring the buildings presently in less than standard condition up to standards. The estimated cost of this project is \$600,000. Because of the size of this task, it is recommended the work and expense of bringing the area schools up to standard be spread over a period of five years.

Since it has been customary that most custodians take their vacations during the summer months, year-round operation of schools would require the presence of a complete custodial staff for each building operating. Accordingly, the maintenance department recommends that custodians who would be released as a result of the closing down of buildings recommended shut for the purposes of the study be reassigned as a stand-by relief crew filling in for custodians whose vacations will be spread out now throughout the year.

A central warehouse service area building will be needed as a place to store maintenance materials and as a central workshop for the maintenance crew. Since much of the maintenance and repair work will have to be done in evenings, when local vendors of materials and replacement parts will be closed, a location for the storage of a fairly complete maintenance inventory is required. The maintenance department does not feel that the area schools could be properly maintained without the central warehouse service area.

Since the money for the central warehouse has already been allocated, this requirement will not demand any additional outlays of expenditures.

Transporting Students for the Four-Quarter School

In general, the transportation of students for the four-quarter school is the same as that at present with the addition of movement of some grades in order to provide large enough numbers of children in a grade to achieve economy. Table VII shows the placement of students from classes closed for the purpose of the elementary simulation. These will be taken to school by bus in most cases. This bussing will not be in addition to present bussing in many cases, because many of the students are bussed at present.

TABLE VII

## STUDENTS FROM CLOSED ELEMENTARY SCHOOLS BUSSED TO RECEIVING SCHOOLS

Schools Closed	Number of Students	Receiving School
Allendale	89	Michigamme
Campau	131	Harrison
Charles Gratiot	240	Edison
Cleveland	168	Grant
Fillmore	250	Garfield
Lakeport	280	Keewahdin
Tyler	103	Jefferson
Wadhams	115	Michigamme

TABLE VIII

## STUDENTS FROM CLOSED ELEMENTARY CLASSROOMS BUSSED TO RECEIVING SCHOOLS

Sending School	Grade	Number of Students	Receiving Schools
Edison	4 & 5	210	McKinley
Grant	5	75	Negaunee
Harrison	4 & 5	117	Woodrow Wilson
Jefferson	5	74	Woodrow Wilson
Keewahdin	4 & 5	230	Garfield

The transportation section of the Port Huron Area Schools believes that the transportation of students required by the placement simulation can be achieved with forty-seven busses if the time that the school day begins can be varied between schools by about thirty minutes. In order to keep the bus fleet functional, six of these should be replaced each year. This compares favorably with the present use of fifty-three busses with eight being replaced yearly. This reduction is made possible by the fact that only seventy-five per cent of the students are in school at one time.

The above beliefs and conclusions of the transportation department are based on the assumption that a central bus garage is essential and needed right now. The existence of such a facility is paramount for a four-quarter plan of school operation.

#### Food Services Under the Four-Quarter Plan

The food services facilities of the Port Huron Area School District are presently serving almost 600,000 lunches on a regular school basis. In spite of the fact that seventy-five per cent of the present school population will be attending school at any one quarter, the extension of the school year will demand increased salaries for the food services personnel. In spite of the increase in the number of lunches to be served and the increase in the length of the school year, the supervisor of food services predicts the job could be handled.

The food services facilities and space at the Garfield and Kimball schools were considered inadequate by the supervisor who also recommended that, for her department to be truly self-supporting, the price of lunches be increased to keep up with the spiraling cost of food.

Purchasing Procedures for Year-Round School

At present, most supplies used in the various schools in the area are ordered near the end of the school year. These orders are processed and delivery accepted during the summer months while the schools are closed. It is obvious that this procedure will not serve well for year-round operation. It is essential for the ordering and receiving of supplies to continue throughout the year in order to spread the work load in purchasing and to assure that supplies are ordered in time for use in the schools.

The following procedure was recommended by Mr. A. L. Sams, Port Huron Area School's purchasing supervisor, for year-round schools. Standard items used by the area schools would be ordered by the purchasing department based upon past use of the item and stored in the central warehouse service area. The building principals order the items as the materials are needed. The items would be delivered to the building from the central warehouse service area. Items would be reordered by purchasing with sufficient lead time to insure materials will be continually available to the schools. Special order items will be ordered by the building principals as the item is needed. The principal will be expected to order special items early enough to provide lead time for these items that would not be kept on hand.

This procedure for purchasing could not be implemented without a central receiving and storage area. The central warehouse service area needed to be used as a general receiving and storage area is the same building requested by maintenance to facilitate the maintenance of the schools on a year-round basis.

Year-Round Cultural and Recreational Opportunities

Students of the Port Huron Area School District have always been fortunate in the amount of recreational and cultural opportunities available to them in St. Clair County and the metropolitan area of Detroit. Those cultural and recreational opportunities are available throughout the four seasons.

Since twenty-five per cent of the student population will be on vacation at any one time during the school year, and since this vacation pattern is radically different from the pattern students and parents are accustomed to, it is imperative that we investigate the recreational and cultural opportunities available throughout the year instead of those available during the summer months only.

The St. Clair County Library, which sponsors a summer reading program for the youngsters of the Port Huron Area School District, is willing and able to extend this program to all quarters of the year. The children's library is open at present every weekday afternoon.

The City Recreation Department has expressed interest in the plan and indicated its willingness to cooperate with the school district on this matter. This same department, known for its fine summer recreation programs and offerings, states that it has the organization to operate throughout the year but not the funds to do so. Indoor space, according to the City Recreation Department, may also present a problem although space is available to rent. With the schools offering their facilities to the City Recreation Department, the latter will be willing and able to provide the needed activities. Some of those suggested include ice skating, skiing, ping pong, tennis, flag football, hockey,

baseball, and basketball.

The Y.M.C.A. executive secretary indicated that their services would have to be augmented to meet the needs of the twenty-five per cent of the youngsters on vacation at any one time during the year. In order for those services to be augmented, the Y.M.C.A. is willing and can provide at least two hours of activities every day throughout the year for school age children without diminishing its present services to the adults. The Y.M.C.A. provides year-round activities in swimming, physical education skills, hand crafts, and winter camping.

Representatives of the Boy Scouts and Girl Scouts both felt that normal troop activities could continue throughout the year. Both expressed concern about camping at other times of the year than the summer. Their major difficulties expected were the securing of volunteer help and the lack of buildings suitable for winter occupation. The Girl Scouts are presently planning to obtain a building that could be used in the winter.

Aside from the above, the McMorran Auditorium and Sports Arena have always been and will continue to be available for use of our youngsters throughout the year.

The above discussion does not assure that every waking moment of each student's vacation will be taken up with some organized activity. Neither does it exhaust the possibilities for year-round recreation. It does show, however, that there will be activities available for students throughout the year. It must also be remembered that with the increased affluence and mobility of our society, opportunities for vacation travel during any season of the year are increasing.

Inasmuch as only twenty-five per cent of our students will be competing for the activities available in Port Huron and St. Clair County, it would seem to be reasonable to expect that there will be at least as much for a student to do in the way of recreation during any quarter of the four-quarter school as there is at present during the summer vacation.

#### The Four-Quarter Plan and Port Huron's Music Offerings

The plan studied allows for the music programs of the Port Huron Area School District to continue and to improve. The electives offered at the intermediate and the high school level will continue to be offered. Those electives include chorus for grade eight, instrumental music for grade six, advanced band for grades seven and eight, and extra-curricular groups including ensembles and varsity or cadet bands at the intermediate level.

The plan envisioned would allow for the continuation of the vocal classes in grades nine, ten, eleven, and twelve; for the girls' glee club; for the A Capella Choir; for the Cadet Band; for the Varsity Band; the Honors Band; and the Marching Band. Extra-curricular groups at the high school level consisting of quartets, ensembles, stage bands, and trios will also continue. The plan would allow youngsters on vacation to participate in the Honors Band, the Marching Band, the A Capella Choir, and other musical ensembles and groups during the youngster's assigned vacation if the youngster so chooses.

Concern, however, must be voiced at this point for the possibility of having to contract for the services of band or vocal directors for one quarter if the present director does not elect to work for four quarters. With a second personality entering the program, adjustments

on the part of the student and the temporary teacher might hinder the program. Qualities desired for a singing group, including balance and blend, might also be jeopardized as a result of having twenty-five per cent of those eligible on vacation each quarter. According to the director, "A choral group is like a football team--all members must be present for successful preparation."

Implications of the Four-Quarter Plan  
for the Division of Personnel Administration

It goes without saying that the proposed four-quarter plan of school operation for the Port Huron Area School District will necessitate negotiations with the instructional as well as the operational employees of the Port Huron Area School District. The basic issues of discussion might include salaries, school calendar, work load, and vacation schedules. These implications, according to the executive director of the personnel division, might necessitate the need for additional personnel to assist in those negotiations.

The projected increases in salaries for teachers who choose to work the full four quarters are a hopeful sign that might enable the district to develop a newer image and attract more qualified teachers to the Port Huron Area School District.

Since the school will be operational on a year-round basis, the personnel division would have to develop guidelines for effective and efficient means of recruiting on a continual basis.

Other problems facing the personnel division will include the determination of the best way to staff each quarter course. The personnel division will also have to recommend the most effective means of staff



utilization, recruitment, and assignment. Possible changes in pension policies, sick leave, and vacation leave have to be examined and recommended with the involvement of the Port Huron Education Association.

Finally, with the program operational, it is necessary for the school district to develop new recruiting materials explaining Port Huron's program and projecting the advantages incurred in joining the Port Huron Area School District.

#### The Four-Quarter Plan and Port Huron's Athletic Program

It is hoped and anticipated that our present athletic program will remain as vigorous at the intermediate and at the high school levels under a four-quarter plan of school as it has been on the regular school basis. Intramural sports will continue as they are presently organized with the possibility of including some newer sports or extending the present sports through the summer quarter.

Varsity athletics will continue to exist at their present level. Since it is anticipated that students are assigned their vacations, about twenty-five per cent of the boys who could otherwise qualify for the varsity would be on vacation for some part of the season. Since no exceptions can be made to the rule of assigning youngsters randomly to a vacation and since the present eligibility rules imposed by the State Department of Athletics appear to be unfair to those youngsters, the Port Huron Area School District has requested on July 18, 1969, that eligibility rules be reconsidered and an exception be made to allow for youngsters on vacation but preregistered to enroll during the following quarter be entitled to play and practice during the vacation they are assigned to, if they so desire. On August 19, 1969, the state director of the Michigan High

School Athletic Association reported that his executive committee had reviewed the request of the Port Huron Area School District, but that it had deferred action until contacts and consultations are made with the other school districts involved in the feasibility studies.

It is the intention of the Port Huron Area School District to pursue its initial request in order to insure that all youngsters eligible and capable of participating in varsity sports be afforded the opportunity to do so. Accordingly, it is anticipated that the rules mentioned above would be relaxed if and when the Port Huron Area School District decides to initiate a four-quarter plan of school year operation.

Other Administrative, Guidance, Orientation, and Miscellaneous  
Implications of the Four-Quarter Plan

1. Scheduling. Evidence, based upon our attempts at simulating schedules for the Washington Intermediate School and the Port Huron Northern High School, suggests that scheduling will have to be done for each quarter separately. However, this problem does not suggest we schedule at the end of each quarter, but that we schedule for all four quarters during the spring of the year. As failure rates--which we hope will decline as a result of the curricular and organizational changes of the four-quarter plan--begin showing a pattern, the goal of scheduling more accurately will become closer to reality.

2. Graduation. Since youngsters will be completing their graduation requirements twice a year according to the projected type of scheduling, and since graduation from high school is an important stage in the youngster's educational development, it is recommended that two graduations be held per year. According to the scheduling simulated, it

would seem that one-fourth of our seniors will be graduating at the conclusion of the third quarter, with the remaining three-fourths graduating at the end of the fourth quarter. Because of the presence of no breaks between one quarter and the other, it is recommended that consideration be given to reviewing the procedures for commencement exercises. Those procedures might include rehearsals and other activities associated with graduation.

3. The Beginning Date of School. The legal obligation which holds Michigan school districts to a minimum of one hundred eighty days of teacher-pupil contacts will make the job of allowing a minimum of sixty days for each quarter a difficult one indeed. The suggested calendars given earlier in this chapter suggest that the starting date of school will be between July 1 and July 15. Youngsters randomly assigned to a vacation during the first quarter may start school at the beginning of the following quarter.

4. Transfer of Youngsters In and Out of the School District. The problem of youngsters entering the district from a system operating under a regular plan of school year will be handled by the individual building to which the youngster is assigned. It is assumed that since we have always managed to place youngsters transferring into our district without much difficulty, it would seem logical to assume again that this problem could be resolved.

Youngsters transferring out of the Port Huron Area School District into other districts operating on a regular school year basis, fortified with a transcript of their record and a description of our program, should have little difficulty in adjusting to the curriculum and the

regular program of the district they are transferring into.

5. Job Opportunities. Youngsters participating in Port Huron's cooperative work-study program should have no difficulty in continuing with such a plan. The fact that seventy-five per cent of our total enrollment will be attending school at any one quarter suggests that the cooperative work-study program student will have a wider choice of job opportunities with the business and industry of the Port Huron Area School District than is presently available.

The fact that twenty-five per cent of our youngsters are available for work during the summer instead of all one hundred per cent is indicative of the fact that those youngsters will be better able to secure jobs during the summer quarter. It is anticipated that, with the cooperation of the business and industrial community of Port Huron, the twenty-five per cent of our eligible youngsters who will be looking for jobs at any one quarter would be catered to by those businesses and industries whom we assume would be spreading their vacations throughout the entire year.

6. Special Programs. It is assumed that the four-quarter plan will not jeopardize our programs for exceptional children. The director of programs for exceptional children recommends that all academically gifted youngsters involved in Port Huron's academically gifted program in grades three, four, five, and six be allowed the same vacation quarter. This procedure would allow those youngsters to remain together in a homogeneous group setting. This director goes on to recommend that the program in grades seven through twelve be reviewed and reassessed with the ultimate goal of serving the academically gifted youngsters in

a heterogeneous classroom setting.

As to our Type A special education classes, it is recommended that the youngsters in that program be allowed the same vacation quarter because of the self-contained and homogeneous group setting those youngsters are involved in.

Any other special programs catering to a small population of our student body can be handled in the same fashion as the above two programs.

7. Vacations of Principals. Since our principals are already on a fifty-two week contract with a four week vacation, it would seem that scheduling vacations for those principals should not present many problems. Because of the fact that the high school principals are assigned assistant principals, the job of scheduling a vacation for the high school principal should be a simple one. At the intermediate and the elementary levels, the job of scheduling those vacations would be more taxing. It is with the above in mind that it is recommended that the three principals released from their positions as a result of the closing of the Cleveland, Fillmore, and Lakeport schools be assigned as assistant principals at large to be assigned to the building in question when the principal takes a vacation in that particular building. To augment the services of those three assistant principals, it is recommended that the administrative internship program suggested by the Office of Research and Evaluation be initiated with two interns per year who, aside from replacing principals on vacation, will be doing their internship training in administration and developing their administrative potential.

8. Curricular Details. With the curriculum overhauled and modified,

it is important that the following tasks be accomplished.

- a. The recommended courses in each discipline should be consolidated and printed out.
- b. A catalog of courses for the school system should be developed.
- c. Requirements for graduation necessitated by the change to a four-quarter plan should be determined and recommended to the board of education.
- d. Guidelines for equating quarter courses with present curricular offerings should be established and published.
- e. Guidelines for extra-curricular activities should be examined, modified, and published.

9. Guidance and Orientation. With any new program initiated, it is important that those affected be helped to adjust and understand the goals of the program. The radical changes necessitated by the four-quarter plan make the above conditions paramount. It is with the above in mind that the following are recommended for immediate initiation upon the acceptance of the feasibility of the recommended plan:

- a. Registration or preregistration and prescheduling procedures must be established and published.
- b. Policies and guidelines for each intermediate and high school must be developed to assist youngsters in their choice of a course of study to pursue.
- c. A plan for teacher, student, and parent orientation must be developed and implemented.
- d. In-service programs to orient the teachers, administrators,

and the public are needed immediately if the board of education decides to adopt the plan.

#### The Teacher and the Calendar

Since teachers have traditionally used the summer vacation for professional development by enrolling for summer course work, it is imperative to recognize the implications of the proposed calendars on this concept. Since it is suggested that classroom teachers be initially contracted for a minimum of three quarters, it would appear that this requirement would not hinder those teachers in their pursuit of self-improvement. The third calendar suggested appears to coincide rather well with the quarter calendars of universities around the Port Huron Area School District.

#### The Cost of the Four-Quarter Plan

At best, an estimated budget of a school district's expenses is only approximate. Estimating a budget for a plan of operation not actually in use presents many opportunities for honest errors. In order to reduce the possibility of error and to provide a fairly sound basis for comparing the cost of four-quarter operation with that of a nine-month operation, the expenditure budgets for two years were worked out for both plans of operation. Those budgets appear in Tables IX and X. The budget of expenditures and revenues for the school year 1968-1969 is complete and, although the yearly audit has not been finished, its figures are fairly accurate. In addition, using the 1968-1969 budget is facilitated because it is known how many students, teachers, buildings, and classrooms were used in that school year. This information

is essential in establishing a good estimation of the cost of a four-quarter school.

Although the school year 1969-1970 had not yet begun when this estimate was written, most of the needs of the 1969-1970 school year have been well established. The number of students for the 1969-1970 school year have been taken from the estimated enrollments. The number of teachers and classrooms needed for year-round school operation were computed from the simulation of student placement. As was noted in the section on that simulation of student placement, ideal savings were not realized. The number of teachers and classrooms that would have been needed in the 1968-1969 school year had Port Huron been on a four-quarter plan was computed by assuming the same percentage of savings would have occurred as did in the simulation.

Table IX compares the cost of the 1968-1969 school year as it occurred and the estimated cost of year-round operation for that year.

Table X compares the projected 1969-1970 costs for the nine-months school year to the estimated cost of year-round schools for 1969-1970.

Because of the apparent differences in the actual expenditures for 1968-1969 and the simulated expenditures for the same academic year on a year-round basis, it is essential that those items of discrepancy be explained. Accordingly, the rest of this section would mainly be devoted to explaining those differences.

#### The 1968-1969 Budget--An Explanation of Expenditures

##### 1. Instruction - Elementary

###### A. Salaries:

1. Principals: The increase from \$234,793 to \$267,664



TABLE IX

1968-1969 GENERAL FUND EXPENDITURES  
FOR THE REGULAR SCHOOL YEAR AND THE  
SIMULATED 4-QUARTER EXPENDITURES FOR THE SAME YEAR

Instruction - Elementary	Actual*	4-Quarter
Salaries:		
Principals	234,793	267,664
Supervisors and Consultants	115,144	133,567
Teachers	2,180,287	2,335,086
Substitutes	43,865	49,589
Librarians	18,569	23,397
Clerical	81,776	94,042
Others	63,114	78,892
Contracted Services	15,989	16,489
Teaching Supplies	48,058	40,849
Library Books	18,927	16,088
Audio-Visual Supplies	9,572	8,136
Office Supplies	5,980	5,980
Travel and Mileage	7,955	7,955
Recruitment	1,000	1,000
Miscellaneous Supplies	913	913
Total Instruction - Elementary	<u>2,845,942</u>	<u>3,079,647</u>
Instruction - Intermediate and Secondary		
Salaries: Principals	222,125	242,116
Supervisors and Consultants	59,043	70,000
Teachers	2,640,898	2,695,300

\*all figures shown are prior to audit.

Instruction - Intermediate and Secondary continued	Actual*	4-Quarter
Substitutes	65,687	70,764
Librarians	97,861	123,129
Guidance	264,683	238,214
Clerical	163,300	182,896
Others	115,569	144,461
Textbooks	2,525	2,525
Contracted Services	653	653
Teaching Supplies	56,488	47,450
Library Books	24,842	24,842
Audio-Visual Supplies	19,609	16,668
Miscellaneous Supplies	264	264
Office Supplies	11,313	11,313
Student Teachers	1,072	1,072
Recruitment	797	797
Rentals	158	158
Travel and Mileage	15,632	15,632
Printing	2,720	2,720
Miscellaneous Expenditures	13,931	13,931
<b>Total Instruction - Intermediate and Secondary</b>	<b><u>3,779,170</u></b>	<b><u>3,904,905</u></b>

#### Instruction -- Special Education

##### Salaries:

Supervisors and Consultants	60,444	65,944
Teachers	234,997	234,997
Substitutes	1,679	1,679
Psychological	31,400	31,400

Instruction - Special Education continued	Actual*	4-Quarter
Clerical	8,950	8,950
Aides	940	940
Contracted Services	473	473
Teaching Supplies	6,026	6,026
Library Books	24	24
Office Supplies	677	777
Mileage	8,418	8,418
Miscellaneous	5,573	5,573
<b>Total Instruction - Special Education</b>	<u>359,601</u>	<u>365,201</u>

#### Instruction - Summer School

##### Salaries:

Director	1,267	- 0 -
Teachers	21,113	- 0 -
Guidance	968	- 0 -
Aides	1,670	- 0 -
Other (instructional)	730	- 0 -
General (instructional)	693	- 0 -
Office Supplies	34	- 0 -
General (mileage)	114	- 0 -
Miscellaneous Expenditures	107	- 0 -
<b>Total Instruction - Summer School</b>	<u>26,701</u>	<u>- 0 -</u>

#### Instruction - Evening School

##### Salaries:

Director	3,695	3,695
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	Actual*	4-Quarter
Instruction - Evening School continued		
Teachers and Other	12,589	12,589
Printing	92	92
Miscellaneous	5	5
Total Instruction - Evening School	<u>16,331</u>	<u>16,381</u>

#### Instruction - E.I.P. Program

##### Salaries:

Consultants	31,449	35,852
Teachers	89,032	96,690
Substitutes	1,276	1,383
Clerical	4,006	4,006
Mileage	1,001	1,001
Miscellaneous Expenditures	328	328
Capital Outlay	2,111	2,111
Total Instruction - E.I.P. Program	<u>129,203</u>	<u>141,371</u>

#### Administration

##### Salaries:

Superintendent	23,100	23,100
Assistant Superintendents	56,077	56,077
Business Administration	44,637	44,637
Personnel Office	25,190	25,190
Research	17,664	17,664
Clerical	89,214	89,214
Others (S.C.R.)	14,500	14,500
Printing and Publishing	4,157	4,157

Administration continued	Actual*	4-Quarter
Legal Services	7,752	7,752
School Elections	17,137	17,137
School Census	2,632	2,632
Auditor	14,215	14,215
Office Supplies	21,880	21,880
Travel and Mileage	11,913	11,913
Rentals	1,541	1,541
Printing and Publishing	3,758	3,758
Miscellaneous Expenditures	7,343	7,343
<b>Total Administration</b>	<u>362,710</u>	<u>362,710</u>
<b>Attendance</b>		
<b>Salaries:</b>		
Attendance Officer	5,022	6,277
Visiting Teachers	51,032	48,225
Child Accounting	5,538	5,538
Office Supplies	526	526
Travel and Mileage	2,348	2,348
Miscellaneous Expenditures	90	90
<b>Total Attendance</b>	<u>64,556</u>	<u>63,004</u>
<b>Health Services</b>		
Salaries: Nurse	7,038	8,868
Contracted Services and Supplies	7,053	7,053
Travel and Mileage	224	300
Miscellaneous	10	10
<b>Total Health Services</b>	<u>14,325</u>	<u>16,231</u>

Pupil Transportation	Actual*	4-Quarter
Salaries:		
Supervision	15,529	17,029
Drivers	148,192	145,192
Contracted Services, Rentals, Gasoline, Oil, Tires, Parts, Repairs	68,112	68,112
Miscellaneous Supplies	1,063	1,063
Travel and Mileage	451	451
Transportation Insurance	5,960	6,543
Secretary (salary)	4,929	4,929
Overtime	14	14
Miscellaneous Expenditures	1,630	1,630
<b>Total Pupil Transportation</b>	<b><u>245,880</u></b>	<b><u>244,963</u></b>

## Plant Operation

## Salaries:

Engineers	95,011	135,011
Custodians (schools)	396,225	396,225
Custodians (grounds)	18,319	18,319
Overtime and Miscellaneous Help	58,575	58,575
Others (bus drivers, PBX, warehouse, overtime)	28,132	28,132
Contracted Services	32,489	32,489
Vehicle Supplies	56	56
Heat (coal, gas, oil)	118,280	118,280
Others - utilities	139,256	222,810
Custodial (grounds) and Miscellaneous Supplies	43,291	43,291

	Actual*	4-Quarter
Plant Operation continued		
Travel and Mileage	404	404
Rental of Equipment	1,127	1,127
Miscellaneous Expenditures	53	53
Total Plant Operation	<u>931,218</u>	<u>1,054,772</u>
Plant Maintenance		
Repairs of Grounds, Equipment, and Other Miscellaneous Repairs	63,356	63,356
Overtime	1,646	1,646
Contracted Services (grounds, roofs, decorating, boiler, heat, electricity, plumbing, miscel- laneous building, equipment, and vehicle re- pair)	86,341	86,341
Maintenance Supplies	35,974	40,291
Replacement of Equipment	16,798	16,798
Total Plant Maintenance	<u>204,115</u>	<u>208,432</u>
Fixed Charges		
Employment Retirement and FICA	1,709	1,709
Property and Other Insurance	123,266	123,266
Interest	5,461	5,461
Rental - Educational Data Processing	24,810	24,810
Miscellaneous Fixed Charges	11	11
Total Fixed Charges	<u>155,257</u>	<u>155,257</u>
Capital Outlay		
Site Acquisition	18,925	18,925
Remodeling	1,626	1,626
Furniture and Equipment	35,073	271,000
Total Capital Outlay	<u>55,624</u>	<u>291,551</u>

	Actual*	4-Quarter
Transfer to Other Funds		
Tuition	678	678
Miscellaneous	5,933	5,933
Total Transfer to Other Funds	<u>6,611</u>	<u>6,611</u>
Grand Total	<u>9,197,294</u>	<u>9,911,036</u>



is based upon the fact that elementary principals' salaries would have to increase by fourteen per cent due to the increase in the contracted number of weeks for that position from forty-two weeks to forty-eight weeks.

2. Consultants and Supervisors: The increase here from \$115,144 to \$133,567 amounts to a fifteen per cent increase resulting from a change in the number of weeks worked by those in that category.

3. Teachers: An increase in the teachers' salaries equivalent to about \$154,000 is necessitated using the rationale that teachers' salaries were reduced initially by fifteen per cent because at least that much reduction in elementary staff was computed by the simulation. Since each teacher worked 240 days in place of 189, the salaries were then multiplied by 1.26. It is important to remember, however, that this figure would have to be negotiated with the Port Huron Education Association.

4. Substitutes: An increase of about \$6,000 was necessitated in this area on the basis that substitutes' salaries had to be increased initially by one-third because the teachers will be working one-third more days of school each year. This salary figure was then reduced fifteen per cent because the elementary staff would have been reduced by at least that amount.

5. Librarians: It was assumed that the same number of librarians would be retained at the elementary level for year-round operation of schools. Accordingly, the salary of a librarian was increased by twenty-six per cent to account for the extra number of days worked by

the librarian.

6. Clerical: The increase of about \$13,600 in the area of clerical salaries is equal to twenty-three per cent. This is a justifiable amount of increase due to the fact that elementary secretaries were working the same number of weeks as were their principals. Additional secretarial and/or clerical help were considered in this figure.

7. Others: This category includes noon hour supervisors, aides, and other contracted salaries. An increase in salaries of twelve per cent was estimated to be a fair increase with only the fact that school will be in operation for a longer period of time taken into consideration.

B. Contracted Services includes salaries for consultants for in-service days and other activities. This item was increased by three per cent although it is not certain that any increase would occur.

C. Teaching Supplies were reduced fifteen per cent because it is expected that there will be fifteen per cent fewer teaching stations. It must be remembered that this is a compromised figure. Non-consumable items such as physical education equipment and science supplies could be reduced by twenty-five per cent because twenty-five per cent of the students are on vacation. Consumable items such as paper and chalk would remain the same because eventually the same number of students would use them.

D. Library Books: This area was reduced fifteen per cent. Since only seventy-five per cent of the students will be in school at any one time, a smaller inventory of books will be required. It is felt that a fifteen per cent reduction instead of a twenty-five per cent reduction

will permit continued upgrading of our school libraries. Audio-visual supplies would have been reduced approximately fifteen per cent because there would be about that many fewer teaching stations.

## II. Instruction - Intermediate and Secondary:

### A. Salaries:

1. Principals: These salaries have been increased only for the intermediate principals by nine per cent because of the increase in the number of weeks for which they are contracted.

2. Supervisors and Consultants: The increase in this figure of about \$11,000 is necessitated by the fact that supervisors' and consultants' salaries are pro-rated representing a percentage of the supervisors' salaries. The percentage reflects the part of the supervisors' time spent on secondary and intermediate education.

3. Teachers: The increase is a result of the fact that at the intermediate and high school level it was simulated that we would have nineteen per cent less teachers. Accordingly, what the teachers receive for the regular 1968-1969 school year was reduced by nineteen per cent. Since those teachers left would be working an additional fifty-one days, a twenty-six per cent increase in their salaries was necessitated. Again, it must be remembered that this item is to be negotiated with the Port Huron Education Association.

4. Substitutes: Substitutes' salaries were increased by thirty-three per cent for the extra sixty days substitutes might be needed and reduced by nineteen per cent because there would be nineteen per cent fewer teachers to substitute for.

5. Librarians: The same number of librarians would be

needed. Their salaries would be increased by twenty-six per cent due to the increase in the number of days worked.

6. Guidance: Guidance salaries were reduced by twenty-five per cent because twenty-five per cent of the students would be on vacation, thus requiring twenty-five per cent fewer guidance personnel. The salaries of those remaining were then increased by twenty per cent to account for the extra days the counselors will be working.

7. Clerical: The increase in clerical salaries reflects the increase in the number of days worked by the clerical staff. Not all clerks and secretaries presently work the same number of days. It was estimated that the average increase would be equivalent to twelve per cent.

8. Others: Other salaries were increased twenty-five per cent in expectation of additional services required by the longer year. The increase was not computed to be thirty-three per cent because fewer students will be served.

B. Teaching Supplies were reduced sixteen per cent using the same logic as that used in the case of the teaching supplies for the elementary level.

C. Audio-Visual Supplies were reduced using the same logic as that utilized at the elementary level.

### III. Instruction - Special Education:

#### A. Salaries:

1. Supervisors and Consultants: An increase in this item is noted in proportion to the extra days supervisors and consultants in this area will be expected to work. Average increase is equal to nine per

cent.

2. Teachers: Because students are in a homogeneous classroom setting and because it is recommended that special education students be granted the same vacation quarter, no change in salaries will be expected.

IV. Instruction - Summer School: The cost of the 1968-1969 summer school was equivalent to \$26,701. Since the four-quarter plan would eliminate the need for a separate summer school program, a savings equivalent to that amount would be realized.

V. Instruction - Elementary Internship Program:

A. Salaries:

1. Consultants: An increase of fourteen per cent in the salaries of consultants would be needed to adjust to the fact that the working days of those consultants would be increased on a four-quarter plan.

2. Teachers: Since about fifteen per cent less teachers would be required at the elementary level with the four-quarter plan, the cost of teachers' salaries for 1968-1969 was reduced by that amount. Since teachers' salaries would increase by twenty-six per cent because of the increase in the length of the year, the product was multiplied by 1.26 to arrive at the new figure of \$96,690 for teachers' salaries.

3. Substitutes: With the reduction in the number of teachers, the number of substitutes would be reduced proportionately. With the increase by one quarter of the working year of the teacher, an increase of twenty-six per cent was then made to adjust for the salaries of the substitutes in this area.

## VI. Attendance:

### A. Salaries:

1. Attendance Officer: The salary of the attendance officer would be increased by twenty-six per cent because of the extra days worked. There is only one officer; accordingly, there can be no reduction in personnel in this area.

2. Visiting Teachers: The number of visiting teachers was reduced twenty-five per cent because of the smaller number of students in school at any one time. The salaries were then increased twenty-six per cent because of the extra days worked.

## VII. Health Services:

A. School Nurse's salary: The school district has only one nurse. The school nurse's salary would be increased by twenty-six per cent due to the increase in the length of the school year.

B. Travel: Travel is increased by thirty-three per cent because of the extra quarter in which travel would occur.

## VIII. Pupil Transportation:

### A. Salaries:

1. Supervisors: An increase in the cost of supervision would be expected due to the need for two additional part-time supervisors.

2. Drivers: There would be a decrease in this item since there would be less busses to be driven because only seventy-five per cent of the students needing bussing would be attending school at any one time. This reduction is based on the estimate of the supervisor of the transportation department.

B. Transportation Insurance: This item would be expected to

increase because of the increase in the length of time busses would be operating.

IX. Plant Operation:

A. Salaries of Engineers: There would be an increase in this item upon the recommendation of the supervisor of maintenance. This increase represents salaries of five extra men with special maintenance training.

B. Utilities: A substantial increase is expected in the consumption of electrical power due to the use of the proposed air conditioners.

X. Plant Maintenance:

A. Maintenance Supplies: Maintenance supplies are increased by twelve per cent. This increase represents less than thirty-three per cent (the number of extra days schools are in use) because some supplies are year-round expenses. Besides, some buildings are projected to be closed.

IX. Capital Outlay: The substantial increase in this item is accounted for by an estimated cost of \$271,000 to air condition five hundred forty-two rooms that are presently without air conditioning in the school district. By selecting a unit for each room, this was considered the most expensive way to air condition. The real cost would certainly not exceed this figure. This expense is a one-time expense that need not be repeated.

The 1969-1970 Budget--An Explanation of Expenditures

As stated earlier, the budget of expenditures for the 1969-1970 regular school year does not represent the actual amounts spent for each item on that budget. However, the projected 1969-1970 expenditures were

again simulated for a 1969-1970 four-quarter school. (See Table X.) The following outline will attempt to explain the items which, in the judgment of the writer, might raise questions:

I. Salaries: It is noted that the principals' salaries for elementary, intermediate, and secondary instruction remain the same for both plans. This is due to the fact that the principals will work year-round in the 1969-1970 school year regardless of whether school is nine months or year-round. Teachers' salaries were increased again by twenty-six per cent for the extra days worked. The number of teachers was computed from the simulation of student placement under the nine-month plan for the 1969-1970 school year. It was projected that 245-1/2 teachers will be needed for the K through 5 program, and 320 for the 6 through 12 program. These figures compare with 208-1/2 teachers for the K through 5 program needed for the same number of students using a four-quarter plan in 1969-1970, and 260 teachers in grades 6 through 12 for the same four-quarter plan. With these figures available, the average teacher's salary was found by dividing the regular budgeted amount by the number of teachers projected for 1969-1970. This procedure was used for teachers in the elementary, intermediate, and secondary areas respectively.

II. Attendance: Due to a change in the accounting procedures in the Port Huron Area School District, supervisory salaries under this heading were placed under special education for the purposes of the 1968-1969 budget. For the 1969-1970 school year, special education and attendance share these salaries to reflect the responsibilities of the directors in these areas. It must also be noted that the increase in the salaries of the visiting teachers represents a decrease in the number of



TABLE X

PROJECTED 1969-1970 GENERAL FUND EXPENDITURES  
FOR THE REGULAR AND FOR THE  
4-QUARTER SCHOOL YEARS

Instruction - Elementary	Budgeted*	4-Quarter
Salaries:		
Principals	276,951	276,951
Supervisors and Consultants	95,000	100,000
Teachers	2,354,185	2,519,097
Librarians	16,647	20,975
Clerical	92,904	106,840
Others	42,898	51,480
Contracted Services	4,000	4,000
Teaching Supplies	79,600	68,456
Library and Audio-Visual Supplies	19,500	16,575
Office Supplies	5,000	5,000
Travel	7,450	7,450
Miscellaneous	600	600
Substitutes	49,000	49,744
Recruiting	1,000	1,000
Rentals	200	200
<b>Total Instruction - Elementary</b>	<b><u>3,044,935</u></b>	<b><u>3,228,368</u></b>

Instruction - Intermediate and Secondary

Salaries:

Principals	240,600	240,600
Supervisors and Consultants	146,605	165,000

\*The above figures are tentative and preliminary.

<b>Instruction - Intermediate and Secondary continued</b>	<b>Budgeted*</b>	<b>4-Quarter</b>
Teachers	3,062,500	3,135,080
Librarians	88,884	111,993
Others	88,740	98,425
Guidance	320,293	288,264
Clerical	134,590	150,740
Contracted Services	4,000	4,000
Travel	12,300	12,300
Bookstore (fees and book rental) K-12	78,181	78,181
Library	7,296	7,296
Audio-Visual Supplies	5,000	5,000
Teaching Supplies	41,496	41,496
Substitutes	74,000	79,966
Recruiting	500	500
rentals	250	250
Miscellaneous	2,500	2,500
Office Supplies	4,000	4,000
<b>Total Instruction - Intermediate and Secondary</b>	<b><u>4,311,735</u></b>	<b><u>4,425,591</u></b>

#### **Instruction - Special Education**

##### **Salaries:**

Supervisors	43,319	46,000
Teachers	268,206	268,206
Psychological	19,773	19,773
Clerical	10,105	10,105
Others	- 0 -	- 0 -
Contracted Services (teachers)	11,500	14,490

Instruction - Special Education continued	Budgeted*	4-Quarter
Teaching Supplies	5,304	5,304
Office Supplies and Res. Library	650	650
Travel and Mileage	10,550	10,550
Miscellaneous	- 0 -	- 0 -
Substitutes	2,000	2,053
Aides	1,200	1,500
<b>Total Instruction - Special Education</b>	<b><u>372,607</u></b>	<b><u>378,631</u></b>

**Instruction - Evening School**

**Salaries:**

Principal	3,500	3,500
Teachers and Consultants	16,500	16,500
Clerical	800	800
Teaching Supplies and Expense	700	700
<b>Total Instruction - Evening School</b>	<b><u>21,500</u></b>	<b><u>21,500</u></b>

**Instruction - E.I.P. Program**

**Salaries:**

Teachers	87,300	94,598
Consultants	33,716	38,436
Substitutes	3,300	3,526
Clerical	4,304	5,380
Contracted Services	2,500	2,500
Instructional Supplies	800	800
Travel	1,860	1,860
Capital Outlay	4,929	4,929

Instruction - E.I.P. Program continued	Budgeted*	4-Quarter
Miscellaneous	150	150
<b>Total Instruction - E.I.P. Program</b>	<b><u>138,859</u></b>	<b><u>152,179</u></b>

## Administration

## Salaries:

Superintendent	24,422	24,422
Assistant Superintendents	53,038	53,038
Business Administration	48,700	48,700
Clerical	99,968	99,968
Personnel Department	32,000	32,000
Printing and Publishing	4,659	4,659
School Elections	10,000	10,000
Contracted Services and Rentals	2,000	2,000
Office Supplies and Other Expenses	20,000	22,000
Travel and Mileage	10,000	12,000
Miscellaneous	4,850	5,000
Research	7,866	7,866
S.C.R. Director	16,500	16,500
Legal Services	10,000	10,000
Auditing	12,000	12,000
Rentals	1,500	1,500
Printing and Publishing	5,750	5,750
<b>Total Administration</b>	<b><u>363,253</u></b>	<b><u>367,403</u></b>

## Attendance

Salaries	20,144	20,144
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	Budgeted*	4-Quarter
Attendance continued		
Office Supplies and Expenses	500	500
Travel	2,625	3,500
Miscellaneous	100	100
Attendance Office	5,285	6,600
Child Accounting	5,981	5,981
Visiting Teachers	84,237	90,217
Total Attendance	<u>118,872</u>	<u>127,042</u>
Health Services		
Contracted Services and Supplies	5,100	5,100
Travel	350	350
School Nurse	7,000	8,750
Miscellaneous	100	100
Total Health Services	<u>12,550</u>	<u>14,300</u>
Transportation	Budgeted*	
Salaries:		
Supervision	15,500	
Drivers	158,300	
Contracted Services and Rentals, Gasoline, Oil, Tires, and Parts	64,000	
Insurance	7,000	
Supplies and Other Expenses	1,600	
Replacement of Vehicles	50,000	
Travel	400	
Secretary	6,125	

Transportation continued	Budgeted*	
Miscellaneous	950	
		4-Quarter
Salaries:		
Supervisors		18,000
Drivers (including extra miles)		154,800
Garage Mechanics and Employees		25,000
Travel		500
Clerical Salaries		6,000
Contracted Services		- 0 -
Gasoline, Oil, Grease		17,500
Tires, Tubes, and Batteries		2,500
Vehicle Repair Parts		20,000
Supplies and Expenses for Garage Operation		6,500
Miscellaneous Supplies		1,000
Travel and Mileage		900
Salaries		1,525
Transportation Insurance		6,543
Repairs on Garage Equipment		500
Bus Drivers' Physical Examination Costs		500
Bus Drivers' License Costs		172
Bus License Costs		10
Replacement of Vehicles (six)		49,200
Replacement of Garage Equipment		450
Office Supplies		400
<b>Total Transportation</b>	<b><u>303,875</u></b>	<b><u>312,000</u>**</b>

\*\*assuming a warehouse is provided

Plant Operation	Budgeted*	4-Quarter
Salaries:		
Engineers and Maintenance	105,465	148,000
Custodians	443,457	443,457
Others (PBX, truck drivers, warehouse)	29,856	29,856
Contracted Services and Rentals	36,500	36,500
Fuel	124,000	124,000
Utilities	148,000	236,000
Supplies and Other Expenses and Vehicle	47,000	47,000
Custodians (grounds)	20,965	20,965
Miscellaneous Help (summer)	5,164	- 0 -
Overtime	46,783	40,000
<b>Total Plant Operation</b>	<b><u>1,007,190</u></b>	<b><u>1,125,778</u></b>
Plant Maintenance		
Contracted Services (grounds, maintenance, decorating)	33,000	33,000
Equipment (contracted)	15,000	15,000
Supplies and Other Expenses	37,000	41,000
Repairs on Grounds and Equipment	76,117	76,117
Miscellaneous (not planned)	20,000	20,000
Vehicle Repairs	3,500	3,500
Replacement of Equipment	20,500	20,500
Travel and Mileage	500	500
<b>Total Plant Maintenance</b>	<b><u>205,617</u></b>	<b><u>209,617</u></b>

Fixed Charges	Budgeted*	4-Quarter
Insurances:		
Employment Retirement and FICA	2,000	2,000
Property	10,500	10,500
Employee	102,700	102,700
Interest (bus cost)	6,625	6,625
Miscellaneous	200	200
Rental (data processing)	32,000	32,000
<b>Total Fixed Charges</b>	<u>154,025</u>	<u>154,025</u>
<b>Expenses to Other School Districts</b>	<u>6,000</u>	<u>6,000</u>
<b>Transfer to Other Funds</b>	<u>1,000</u>	<u>1,000</u>
<b>Capital Outlay (Site, Remodeling, Equipment, and     Miscellaneous)</b>	<u>100,000</u>	<u>120,000</u>
<b>Grand Total</b>	<u>10,162,018</u>	<u>10,643,434</u>



visiting teachers contracted for the 1969-1970 regular school year plans for six visiting teachers. Reducing this by twenty-five per cent due to the fact that twenty-five per cent of the students will be on vacation at any one time, would leave four and one-half visiting teachers. The budget for year-round visiting teachers is figured as five visiting teachers earning twenty-six per cent more due to working more days each school year.

III. Transportation: Figures for a four-quarter plan of transportation have been supplied by the transportation department and are based on the acquisition of a central warehouse service area. This budget is also based on the simulated bus routes presented by the transportation department for the four-quarter school.

In comparing the cost of the nine-month school plan with the year-round plan, it should be noted that comparable situations would not exist between the two plans. The nine-month school would be overcrowded during the 1968-1969 and the 1969-1970 academic years. The latter year would be more crowded than the former. The year-round schools, by contrast, would not be overcrowded. There would be space to spare. As the figures for the two operational plans are examined, this very important difference must be kept in mind.

With the above in mind, let us then compare the costs of the two operations. The cost of the 1968-1969 regular school year amounts to \$9,197,294. In revenues, the Port Huron Area School District received \$4,154,655 from the State Department of Education. The difference, using a state equalized valuation for the Port Huron Area School District for the 1968-1969 school year of \$188,463,053, amounted to an expenditure equivalent to 26.75 mills. By contrast, operating the schools of the

district on the four-quarter plan would cost approximately \$9,911,036. Since the same revenue would have been received from the State Department, the cost for the taxpayer would have been equivalent to 30.55 mills. Accordingly, the difference in the cost of operating the 1968-1969 school year on a four-quarter basis would have been equal to 3.87 mills in extra operational millage. Almost two mills of that amount of difference is accounted for by the installation of air conditioning in the district schools. The rest is due to increased salaries and maintenance costs because of the increased length of the school year.

For the 1969-1970 school year, the preliminary budget prepared by the Port Huron Area School District estimates expenditures at \$10,162,018. The estimated expected revenues from the State Department of Education amount to \$4,857,825. The differences in revenues will amount to an expected expenditure of 27.31 mills for the above year. The cost of the 1969-1970 four-quarter year on the other hand was projected to be \$10,643,434. Since the revenues received from the State Department for a regular school year would not be any different from those received for a four-quarter year, the difference between the two plans would cost the taxpayers an extra 2.49 mills in operational levy.

As one considers the expected increase in the cost of operating schools on a four-quarter plan, it must be remembered that the Port Huron Area School District schools are overcrowded and that the needs justifying the requirement of an \$11.8-million bond issue are still with us. It must also be remembered that the cost of construction has increased by about twelve per cent in the past year. With this in mind, it is estimated that the buildings, rooms, and additions costing \$11.8-million in December of

1968 would cost \$13,216,000 at this time. It is then appropriate to consider the alternative cost of building and adding to our existing school facilities. In order to do that, the interest rate on municipal bonds as of September 8, 1969 was obtained from a bonding attorney. The figure quoted was 6.37 per cent. Equipped with this figure, an historical pattern of the increase in the state equalized valuation of the Port Huron Area School District was then developed. An average increase in the state equalized valuation was determined to be 2.28 per cent per year. Accordingly, the state equalized valuation of the Port Huron Area School District was projected as shown in Table XI for a period of thirty years, starting with the 1969-1970 academic year. The cost of borrowing \$13,216,000 for buildings and sites was also determined per year. In order to retire a mortgage of \$13,216,000 in the maximum allotted time of thirty years at an interest rate of 6.37 per cent, it was determined that it would cost \$988,889 in principal and interest per year. Dividing this figure by the state equalized valuation for each of the thirty years required to retire the bond, the cost in mills for each of the thirty years needed to pay off this mortgage was then determined. With these figures computed, an average of 3.75 mills per year in buildings and sites levy for a period of thirty years would be required. To this amount, it is estimated that the cost of maintaining the additional facilities would amount to 1.8 mills per year.

Assuming no major and drastic increase in the population of the Port Huron Area School District, the rate of increase of two hundred per year, which has been our rate of growth for the past four years, would then be expected. The four-quarter plan could then reasonably forestall a major

building program for the school district for a period of ten years. Comparing the projected cost of operating the facilities mentioned in the study on a year-round basis to the cost of building and operating the needed facilities for a regular plan of school year operation, it would appear that the taxpayers could be saved a minimum of three mills per year. The cumulative savings amount approximately to \$6,463,000 in ten years.

Another important item to remember is that the alternative of constructing the proposed new high school, two elementary schools, and one intermediate school would require operating those schools as well. Accordingly, as new buildings are constructed, those buildings have to be equipped and staffed. Both of these items are also costly. Since one of the schools proposed at the North Road area calls for the construction of an eleven-room elementary building, the cost of operating the Negaunee School (the most equivalent of our schools to the proposed North Road area school) was computed. This cost amounts to \$143,202 for the 1968-1969 school year. It would then be safe to assume that a school equivalent to the Negaunee would have cost approximately the same amount of money to operate on a regular school year basis during the year 1968-1969. The bond issue also calls for the construction of a seventeen-room elementary building at Allen and West Water Roads. The Michigamme School, a seventeen-room elementary building, cost the Port Huron Area School District \$185,262 to operate in 1968-1969. This same bond issue called for the construction of a five hundred pupil intermediate school in the Garfield area. The cost of operating the Howard D Crull Intermediate School with a student population of about five hundred was \$318,456 for 1968-1969.

A high school was also slated for construction to house eighteen hundred students. Port Huron Northern High School, which is designed for eighteen hundred students, cost the school district \$1,173,923 to operate for the 1968-1969 school year. The above examples are given to indicate that once the building is constructed, it costs money to operate that building and the cost of operating newer buildings must also be taken into consideration as one decides on the merits of the four-quarter plan.

One final point that should be taken into consideration concerns the long-range cost of constructing buildings for a four-quarter school year. Any new additions in buildings and sites under a four-quarter plan would have to consider the fact that a building designed for two semesters would have the capacity for twenty-five per cent more youngsters under a four-quarter plan. It is reasonable then to expect that the cost of school buildings under a four-quarter plan would be twenty-five per cent cheaper than constructing them for a regular school year.

TABLE XI

THE STATE EQUALIZED VALUATION OF THE PORT HURON AREA SCHOOL DISTRICT PROJECTED FOR THE THIRTY YEARS REQUIRED TO RETIRE A BOND OF \$13,216,000 AND THE BONDING MILLAGE NEEDED EACH YEAR.

Academic Year	State Equalized Valuation	Millage Needed
1969-70	\$194,171,144	5.1 mills
1970-71	198,598,246	5.0
1971-72	203,126,286	4.9
1972-73	207,757,565	4.8
1973-74	212,494,438	4.7
1974-75	217,339,311	4.5
1975-76	222,294,647	4.4
1976-77	227,362,965	4.3
1977-78	232,546,841	4.3

TABLE XI Continued

Academic Year	State Equalized Valuation	Millage Needed
1978-79	\$237,848,909	4.2 mills
1979-80	243,271,864	4.1
1980-81	248,818,462	4.0
1981-82	254,491,523	3.9
1982-83	260,293,930	3.8
1983-84	266,228,631	3.7
1984-85	272,298,644	3.6
1985-86	278,507,053	3.6
1986-87	284,857,014	3.5
1987-88	291,351,754	3.4
1988-89	297,994,574	3.3
1989-90	304,788,850	3.2
1990-91	311,738,036	3.2
1991-92	318,845,663	3.1
1992-93	326,115,344	3.0
1993-94	333,550,774	3.0
1994-95	341,155,732	2.9
1995-96	348,934,083	2.8
1996-97	356,889,780	2.8
1997-98	365,026,867	2.7
1998-99	373,349,479	2.6

#### Community Reaction to the Four-Quarter Plan

A. Introduction: Upon the completion of the first phase of the study, a report was made to the Port Huron Area School District Board of Education in which the findings of the study were presented. This report was made on September 29, 1969. A summary of this presentation appears in the appendix of this report. Basically, the report indicated that the findings were indicative of the educational, physical, and economic feasibility of the four-quarter plan of school year operation if the following ten conditions were to be met:

1. Curriculum adjustments and revision;

2. Equal enrollment in each quarter, with student vacations distributed throughout the year;
  3. Community acceptance and support;
  4. Staff acceptance and support;
  5. Support and assistance of business and industry;
  6. Improvements made in some school buildings, including the installation of air conditioning equipment;
  7. Some additional operating millage;
  8. Phasing out of smaller, less efficient school buildings;
  9. Necessary revisions in state school laws and regulations;
- and,
10. A revised maintenance program for school buildings.

The report was carried by the local radio stations and the local newspaper, the Times Herald. Throughout the study, the Office of Research and Evaluation attempted to keep the public informed of the progress being made through the use of radio and the local newspaper. On October 13, 1969, a tabloid was published as a supplement to the Times Herald in which the plan was described in detail.

Aside from the above, a total of more than thirty-five meetings were conducted by the Director of the Office of Research and Evaluation in which parent groups, service clubs, business groups, teacher groups, student groups, and school district operational employee groups were informed of the findings of the study.

The independent public relations firm of Ned S. Hubbell & Associates was then contracted to complete a survey of the community in order to determine the latter's reaction to the plan studied.

The report on the community survey was made to the Board of Education on January 19, 1970.

B. Procedure: Seven hundred two randomly selected, registered voters of the Port Huron Area School District were interviewed by a team of trained enumerators. The interviews were completed on December 13, 1969. The sample size selected assured representation at the 0.95 level of confidence.

Of the seven hundred two registered voters interviewed, four hundred twenty-four were from the City of Port Huron (60.4%), and two hundred seventy-eight were from the townships (39.6%). This sample contained two hundred ninety-five voters who had children currently enrolled in the public schools, two hundred fifty-two others who formerly had children enrolled in the Port Huron Area Schools, and one hundred fifty-five who had pre-school age children, children enrolled in parochial schools, and voters with no children.

Classification of the answers was done by the director of the survey, Mr. Ned S. Hubbell. Tabulations were made by electronic data processing equipment.

C. Findings: The following findings are based upon the data gathered through the use of the survey instrument used during the interviews:

1. In responding to the question aimed at discovering whether or not the respondent had heard about the study, 94% gave an affirmative answer with only 4.8% saying they had not heard of the study.

2. When asked to describe the four-quarter plan as they understood it, 82% were able to describe it with 17% apparently misunderstanding it.



3. When asked if they understood the four-quarter use of schools would cost the taxpayers the same as, more than, or less than they are presently paying in taxes to operate the schools, 64% indicated they thought it would be costlier, 10% thought it would cost less, and 16% indicated that the plan would cost the same as the regular school year. Ten per cent could not say.

4. Forty-seven per cent of all respondents indicated they would be in favor of the plan if it were to be adopted compared to 37% who indicated opposition to the plan, and 16% who could not commit themselves at this time. Parents were more opposed to the plan than non-parents with 46% voicing opposition to it compared to 41% who favored it. Men were more favorable to the plan than women. While 54% of the men favored it, only 42% of the women were in favor of the plan. Younger respondents were more favorable to the plan than their older counterparts. While 50% of those under the age of thirty favored it, 46% of those between the ages of thirty and fifty favored it.

5. Those favoring the plan gave the following reasons for their support:

- a. Better utilization of buildings (32%).
- b. The plan presented a more economical solution than that of buildings and sites (26%).
- c. Better utilization is predicted as a result of this plan (15%).
- d. The plan might tend to reduce juvenile delinquency (8%).
- e. Other varied reasons (12%).

6. Those opposing the plan gave the following reasons for their opposition:

- a. Vacation problems created by the plan (73%).
- b. Anticipated higher taxes and costs (12%).
- c. Other reasons (15%).

7. Those opposed to the plan were asked to suggest other means of alleviating the overcrowdedness in the Port Huron Area School District. Forty-two per cent of those opposed could not offer any other suggestions compared to 24% who suggested building more facilities, 8% who suggested increasing the class size, and 6% who suggested going on double sessions. Twenty per cent offered miscellaneous alternatives.

C. Summary: Generally, registered voters in the district reveal a slight margin of support for such a plan, based upon what they now know of year-round schools, but the number of "undecided" respondents could tip that support should they decide against such a plan.

Parents of children now in school are not as supportive, with a slight majority in opposition to year-round school. Men tend to favor year-round schools more than women. Younger voters are also more favorable than those age thirty to fifty, and less opposition to year-round schools was indicated by older voters who no longer had children in school.

Respondents who favor year-round schools cite two major reasons: "better utilization of existing school buildings" and "a more economical solution than building additional schools."

Changes in the traditional vacation pattern produced the primary reason for opposition to year-round school by those voters opposed. Two-thirds of the parents of school-age children who were opposed to the

plan cited "vacation problems" as their major reason.

No single alternate solution other than year-round schools was suggested by voters. When asked for other suggestions, almost one-half of all survey respondents, and one-third of the parents, could make no such suggestion. Slightly less than one-quarter of the registered voters indicated support for a bond issue to build additional schools as an alternative solution.

Almost all of the respondents had heard about the proposed study of a four-quarter plan and a great majority could describe it briefly enough to indicate general understanding of such a plan. Two-thirds of the parents and 63% of all respondents understood the proposal well enough to know that such a plan would result in more school operating taxes than they are now paying.

D. Conclusions: Based upon the findings presented earlier, the following conclusions are warranted:

1. While a slight tendency to support the four-quarter plan of school year operation with an assigned vacation is evidenced, those who are yet undecided could offset such support if they decided later to oppose such a plan.

2. Parents of children in school are less supportive of the plan than those without children in school, mainly due to their concern for the assigned vacation and the resulting changes in their pattern of living.

3. The support evidenced for such a plan seems to stem from voter concern over a need to find the most economical solution possible to solve school enrollment problems and to utilize the existing school

buildings longer rather than finance the construction of the needed additional sites and buildings.

4. A large percentage of voters opposed to year-round schools is evidence of a "wait and see" attitude rather than the acceptance of any other proposed solution to the school district's enrollment problems.

#### Business and Industrial Community Reaction to the Four-Quarter Plan

A. Introduction: In its attempt to familiarize the business and industrial community with the findings of the first phase of the feasibility study of the four-quarter plan of school year operation, the Port Huron Area School District, through the cooperation of Mr. Daniel Hines of the Detroit Edison Company, was able to get together with nineteen employers representing a cross-section of the major industrial and business concerns of the Port Huron Area School District. The meeting was held on Tuesday, December 9, 1969. At this meeting the plan was explained, and questions and concerns raised by the group were attended to. It was agreed by this group that a questionnaire would be mailed to each individual in attendance eliciting the reactions of that individual and his company to the plan. A questionnaire was mailed on Friday, December 12, 1969. Fifteen people responded to the questionnaire. Those fifteen people represented eighteen of the business and industrial establishments of the Port Huron Area School District. The questionnaire and the tally of the responses to the different items on the questionnaire appear in the appendix of this report.

B. Findings: The following findings are based upon the data gathered through the use of the above-mentioned questionnaire:

In responding to a question asking the employer to indicate the projected impact of the four-quarter plan on his company's use of seasonal employees, six reported that the plan described would have no effect on their operations in this area. Two employers indicated that the plan would have little effect because they either relied very little on the use of seasonal employees or because they were heavy users of co-op students, the latter program being unaffected by the four-quarter plan. One employer reported that the traditional back-to-school August peak in sales volume and seasonal extras would disappear; yet, this same employer indicated that "this would not be an insurmountable problem." Two employers indicated that they relied heavily on college students during the summer when most of their own personnel take their vacations. Accordingly, they could no longer count on college people for seasonal employees and would need to find seasonal employees year-round or they would not need to hire as many during the summer as they usually do. This procedure would then tend to reduce their expenses. One employer foresaw an improvement in this area.

In responding to a question asking the employers to assess the effect the four-quarter plan might have on the vacation schedules of their employees, eleven of the respondents projected that the four-quarter plan would create no problems for their operations. Five of those eleven employers projected benefits and improvements in their operations as a result of the plan. Some of the projected improvements included an increased ability to spread out vacations and a reduction in the additional help that might be needed as a result of spreading the vacations throughout the year. Four employers foresaw a negative effect on their operations

as a result of the four-quarter plan. Two of those four employers indicated that the plan would result in a disruption of their program. One indicated that this plan would result in great difficulties as far as fire and police employees were concerned. Another employer, where the majority of his employees are working wives, expressed concern about the difficulty of coordinating the vacation schedules of both children and husbands. According to that employer, the plan might force his company to "grant vacations to people when we need them most."

The employers were asked to assess the impact the four-quarter plan of school year operation might have on their overall business operations. Ten of the respondents projected no ill effects as a result of the four-quarter plan. Of those ten, six predicted possible improvement in their overall operations. Three employers indicated that the effects would not be significant. One employer, a retailer, indicated that the plan might result in severe curtailment of August and September back-to-school promotions. According to this employer, the loss of business would not be regained at the other three quarters. Another employer indicated that the greatest effect would be mostly due to individual employee vacations, most of whom are women, with resulting problems in the attempts at coordinating the vacations of wives, husbands, and children. The four-quarter plan, according to this employer, could reasonably cause "extremely high work absenteeism."

Other effects reported by the respondents included the following comments:

1. "The plan would limit the quality of manager I could attract to Port Huron. Apt to end up with only older men who have grown children."

2. "It would probably serve more children on this system than we are doing now."
3. "Better use of public facilities."
4. "One of the most important aspects is the continued concentration on improvement of operation of such a plan after it becomes effective to reduce overall costs."
5. "The four-quarter plan would probably require more activities for children during the winter months."
5. "Some families might have difficulty knowing where to go and what to do during winter vacations."
7. "Winter vacations would most likely be more expensive than summer vacations...."
8. "Would children on vacation tend to loiter in the school area?"
9. "A child in his immediate neighborhood could possible lose his playmates."

When asked if they favored the plan for the Port Huron Area School District, six favored the plan without any reservations. One gave a qualified yes; one responded by saying, "Possibly;" one would be in favor of the plan if the quarters would be optional; five indicated they were not in favor of the plan; and one indicated he needed more information to be able to decide.

The reasons given for favoring the plan included:

1. The plan, as they understood it, would be more economical than that of constructing the new buildings, and thus would save the taxpayer some money.
2. Better utilization of buildings and teachers, and greater

efficiency.

3. The vacation schedules that would spread the vacations throughout the year.

4. The plan has the potential for improving the quality of education.

Those not in favor of the four-quarter plan gave the following reasons for their attitude:

1. "The disruptive effect and resulting confusion are not worth the savings envisioned by the plan."

2. The four-quarter system would appear to be a temporary solution serving to delay the capital outlay for needed buildings.

3. The negative response of the employees with whom the plan was discussed by the responding employer.

4. The fear that youngsters on a four-quarter plan would have a hard time being integrated into a regular school program upon transfer out of the district.

5. One respondent indicated that if the only reason the plan would be implemented is a financial one, then he would be against the plan.

The responding business and industrial representatives offered the following alternatives to resolving the overcrowded conditions in the Port Huron Area School District:

1. "An entirely new way to finance public schools must be found. Property tax is not the answer."

2. "I feel that the people will support the financial needs of the school when they finally identify with the need. The community will



support facilities needs when they feel the time is here."

3. "It appears that the majority of taxpayers would rather spend money for other things ahead of education and apparently aren't real concerned about the quality of education. I have reluctantly concluded that the only way the problem will be solved is through the levying of a state income tax for education."

4. "Re-evaluation of the entire school program. Reduce all spending to an accepted commercial level. Earmark sufficient money for continuous long-range building programs."

5. "A scheduling of capital improvements."

C. Conclusions: The above findings warrant the following conclusions:

1. The business and industrial representatives surveyed appeared to be cognizant of and concerned about the needs of the school district.

2. More of the business and industrial leaders surveyed appeared to favor the four-quarter plan of school year operation than to oppose it.

3. Those in favor of the plan are basing their judgment upon the implications the four-quarter plan of school year operation has for reducing overcrowdedness, for improved efficiency, for better utilization of buildings and staff, for its economy, and for the potential the plan appears to have for the improvement of the educational program in the Port Huron Area School District.

4. The respondents not in favor of the plan appear to base their opposition on the effect the plan would have on the vacation schedules of their employees, the fear that youngsters transferring out of the

system would have difficulty adjusting to the regular school year in other school districts, and because of their concern that the four-quarter system might end up to be temporarily delaying the capital outlay for needed buildings.

#### Certified Staff Reaction to the Four-Quarter Plan

A. Introduction: It has been the policy of the Office of Research and Evaluation throughout the feasibility study of the four-quarter plan of school year operation to keep the staff of the Port Huron Area School District informed of the progress of the study. The Port Huron Education Association, through the cooperation of its president, Miss Mary Pochodylo, was helpful in its suggestions and in assisting to disseminate the findings to the staff concerned. At the conclusion of the first phase of this study, an abstract of the findings was sent to every individual teacher. Aside from this, a copy of the tabloid which appeared in the Port Huron Times Herald on October 13, 1969, was mailed to each teacher in the school district. Staff meetings covering every school in the district were conducted to inform the staff of the findings of the first phase of the study and to respond to their questions and concerns. Aside from the above, copies of the first phase of the study were made available to any staff member desiring a more detailed explanation of the study and its implications.

With the task of dissemination completed, a questionnaire was designed with the cooperation of the Port Huron Education Association. The purpose of the questionnaire was to elicit the reactions of the teaching staff to the four-quarter plan. Attached to the questionnaire, each staff member received an explanation of the plan in a question-and-answer format.

A copy of the questionnaire and the dissemination instruments appear in the appendix of this report.

The questionnaire was sent to the teachers on December 10, 1969. Five hundred seventy-one elementary, intermediate, and high school teachers, counselors, and consultants responded to the questionnaire, an eighty-nine per cent return. The data gathered through the use of the questionnaire were analyzed through the facilities of the data processing department of the Port Huron Area School District.

B. Findings: The following findings are based upon the data gathered through the use of the above-mentioned survey instrument:

1. Of the 571 respondents, 264 were elementary teachers, 274 were intermediate and high school teachers, and 33 were counselors, speech therapists, social workers, and consultants.

2. Of those responding, 188 were male, 370 were female, and 13 did not indicate their gender.

3. Two hundred eleven of those responding indicated that they had had less than five years of teaching experience, 113 had from six to ten years of teaching experience, 96 had between eleven and fifteen years of experience, and 134 were with sixteen or more years of experience. Seventeen staff members did not respond to this item on the questionnaire.

4. Of the 571 respondents, 186 were under thirty years of age, 224 were between thirty and fifty years old, 131 were over fifty, and 29 did not respond.

5. In responding to a question aimed at their understanding of the four-quarter plan of school year operation and its cost to the

taxpayer, 12% of those responding thought the cost would be the same as that of the regular school year, 63% thought it would be costlier, 14% indicated it would cost less, and 11% could not say.

6. When the staff was queried as to whether or not they favored the four-quarter plan, 34% of those responding said yes, 39% said no, 26% could not say, and 1% did not respond to this question. Of the male staff members responding to this question, 49% favored the four-quarter plan compared to 29% who opposed it. Among the female staff members, on the other hand, 45% opposed the plan and 26% favored it. Elementary staff members, in responding to this question, opposed the plan 53% to 21%. Intermediate and high school staff members, on the other hand, favored the plan with a 45% to 27% ratio.

While 44% of those teachers under the age of thirty appeared to favor the plan as compared to 32% in that age group who opposed it, teachers between the ages of thirty and fifty and those over fifty years of age appeared to reject the plan. In the age group of thirty to fifty, 33% of those teachers favored the plan compared to 44% who rejected it. Those over fifty years of age indicated through their responses that 24% were favorable to the plan compared to 44% who did not favor it.

The data are also indicative that teachers with less experience in teaching appeared to be more favorable to the plan than those with a greater number of years in the system. Those with less than five years of experience voted 41% for the plan and 33% against it. Those with six to ten years of teaching experience favored it by 42% to 40%. Those with experience ranging from eleven to fifteen years rejected the four-quarter

plan with a ratio of 43% to 28%. Those with more than sixteen years of teaching experience rejected the plan with a ratio of 46% to 24%.

7. When asked whether they would continue working for the Port Huron Area School District if the four-quarter plan were to be adopted, 54% of those responding indicated a willingness to continue working under such a plan. Eight per cent of the total staff gave a definite no to this question while 36% indicated that they could not say at the present time.

8. When asked to indicate their preference for the number of quarters they would prefer to be contracted for if the four-quarter plan were to be adopted, 74% of those responding indicated a preference to work three quarters; 16% preferred to work all four quarters.

It is interesting to note that in responding to this question, 36% of the male respondents preferred to be contracted for four quarters compared to 6% of the female staff members who preferred to work all four quarters.

In responding to the above question, it is also interesting to note that, while only 9% of the elementary teachers preferred to be contracted for four quarters, 22% of the intermediate and high school teachers preferred to be contracted for four quarters.

The data obtained also suggest that more of the teachers with less experience preferred being contracted for four quarters than their counterparts with more teaching experience. While 21% of the teachers with less than five years of teaching experience preferred to work four quarters, 14% of the teachers with six to ten years of experience, 16% of those with eleven to fifteen years of teaching experience, and

15% of those with sixteen and more years of teaching experience showed that preference.

While 20% of those teachers under the age of thirty preferred to work all four quarters, 18% of those between the ages of thirty and fifty, and 12% of those over fifty preferred to work all four quarters.

8. When asked which quarter they would select as a vacation quarter if they had a choice in that selection, 66% of the staff responding chose the summer quarter, 12% chose the fall quarter, 11% chose the winter quarter, and 4% chose the spring quarter for a vacation. Seven per cent of those teachers did not respond to this question.

When comparing the responses of the elementary teachers to those of the intermediate and high school teachers on the above question, it must be noted that a proportionately greater number of intermediate and high school staff selected the fall and winter quarters than did their counterparts at the elementary level. While 6% of the elementary teachers selected the fall quarter for a vacation, 19% of the intermediate and high school teachers selected the fall quarter. While 9% of the elementary teachers selected the winter quarter for a vacation, 14% of the intermediate and high school teachers preferred the winter quarter for a vacation.

Male and female teachers differed in their responses to this question, as well, with proportionately more females choosing the summer quarter for a vacation than were males. While 56% of the male respondents selected the summer quarter for a vacation, 70% of the female respondents chose that quarter for a vacation.

Differences in response to this question were also discovered that were dependent upon the age of the responding staff member. While 62% of the teachers under the age of thirty selected the summer quarter for their vacation, 64% of the teachers between the ages of thirty and fifty preferred the summer quarter for their vacation, and 73% of those over fifty selected the summer quarter for their vacation.

In responding to the above question, 60% of the teachers with less than five years of teaching experience preferred a summer vacation quarter compared to 67% of those with six to ten years of teaching experience, 69% of those with eleven to fifteen years of teaching experience, and 70% of those with more than sixteen years of teaching experience.

9. Those who opposed the plan based their opposition on the following reasons, listed in the order of prevalence:

- a. Worry about having to transfer to other buildings and rooms. (Elementary teachers were most vehement concerning this area.)
- b. Preference for a summer vacation and other problems arising from the coordination of vacations and the assignment of a vacation quarter to the teacher.
- c. The inadequacy of curriculum planning under the four-quarter plan.
- d. The contention that the plan represents a "temporary solution."
- e. Fear that the plan would increase personal family life problems and create discord in the community.

- f. The contention that the plan is not workable at the elementary level.
- g. The belief that Port Huron's weather is not conducive to such a plan.
- h. The plan could create more and newer problems.
- i. Dislike for piloting such a plan.
- j. The absence of four-quarter plans operating successfully in the country.
- k. The belief that the plan is too complicated.
- l. Anticipated truancy and "visiting problems of vacationing students."
- m. The belief that too little thought was given to children in planning.
- n. The fear that recreation problems would arise out of this plan.
- o. The belief that the plan is too costly.
- p. Dislike for air conditioning.
- q. Fear that school spirit would be destroyed under such a plan.
- r. Concern with building maintenance and the effect the plan would have on those buildings.
- s. Problems envisioned for new entries into the district.

C. Conclusions: The following conclusions are based upon the findings gathered through the survey instrument utilized:

- 1. Although the data gathered indicate that 34% of those



certified staff members were favorable to the four-quarter plan while 39% rejected it, the fact that 26% of those responding were not willing to commit themselves to accepting or rejecting the four-quarter plan for the Port Huron Area School District is indicative of a sizable minority who did not feel sufficiently ready to form an opinion. Assuming that the majority of the teachers do not favor the plan would be erroneous simply because 39% does not constitute a majority. The ultimate test will have to come when those 26% who could not say whether they supported or rejected the plan will be ready to express their opinion. This conclusion is supported by the conclusions that follow.

2. Male staff members appeared to be more favorable to the plan than female staff members. While 49% of the males favored the four-quarter plan, 26% of the females favored it.

3. Elementary staff members appeared to be more opposed to the plan than their counterparts at the intermediate and high school levels. While 21% of the elementary staff favored the plan, 45% of the intermediate and high school staff favored it.

4. The data also warrant concluding that younger staff members were more favorable to the plan than older staff members. While 44% of those under the age of thirty indicated they favored the plan, 33% of the thirty to fifty age group favored it, and 24% of those over fifty gave a favorable response to the plan.

5. Certified staff members with less experience in teaching appeared to be more favorable to the plan than those with a greater number of years experience. Thirty-three per cent of those with less than five years experience rejected the plan compared to 40% of those

with six to ten years of experience, 43% of those with eleven to fifteen years of experience, and 46% of those with more than sixteen years of teaching experience.

6. In spite of the fact that 39% of those responding disapproved of the plan, 54% indicated a willingness to continue working if such a plan were to be adopted. So while the data do not indicate a majority of teachers in support of or against the four-quarter plan of school year operation, the data suggest that the majority of the teachers would be willing to work under such a plan.

7. With 74% of the staff responding indicating a preference to work three quarters, it would be safe to assume that the majority of the teachers would prefer not to work all four quarters if such a plan were to be adopted. The data also support the conclusion that more than one third of the male staff would prefer being contracted for four quarters of work compared to 6% of the female staff members, and that more teachers at the intermediate and high school level would be willing to work for four quarters than would be the case at the elementary level.

The data also warrant concluding that more younger and less experienced teachers would be willing to work for four quarters than their older, more experienced counterparts.

8. The majority of the staff would prefer a summer quarter for a vacation if given a choice. This conclusion is made in spite of the fact that male, intermediate and high school, younger, and less experienced staff members appeared to choose the summer quarter for a vacation less frequently than did their older, more experienced, female, elementary counterparts.

## CHAPTER V

### SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

#### The Problem

The reason for this study arose out of the concern of the Port Huron Area School District for alleviating present and anticipated overcrowdedness in its existing facilities.

The Port Huron Area School District, serving 15,100 youngsters in grades K through twelve during the 1969-1970 academic year, has experienced an increase of over six hundred students in the past three years. This increase amounts to twenty classrooms. The Regional Planning Commission of St. Clair County figures indicate that the Port Huron Area School District's population will experience an increase from 59,389 in 1966 to 76,241 by 1980. The Detroit Water Plant now under construction in the Lakeport area of the Port Huron Area School District, together with expansions of the Mueller Brass Company (the largest employer in the district), appear to promise that the school district will have to do something, and rather urgently, to resolve the problem of overcrowdedness.

Evidence of the overly crowded facilities of Port Huron are manifested through the use of twelve portable classroom units in the district, the use for the third year in a row of some of the facilities of the Salvation Army Citadel to house the overflow from the Port Huron High School, and the reopening of the Gardendale School to house three fifth grade sections bussed from their regular attendance areas to that

facility because of the overcrowded situation in their own home schools.

With a state equalized valuation of \$194,171,000 and an operating levy of 25.5 mills, Port Huron Area School District electors have a fine history of supporting their schools. Since 1962, two elementary schools with eighteen rooms each, one intermediate school for five hundred students, and one high school for eighteen hundred students were erected in the district. These and other additions to existing facilities were the result of a 1962 \$6,575,000 bond issue.

In spite of those additions, and because of the continued increase in enrollment, the district is faced again with the need for a major building program. It is with that purpose in mind that the Port Huron Area School District Board of Education presented an \$11.8-million bond issue to the electors on December 17, 1968. With this package, thirty-three classrooms were to be replaced, forty-five additional classrooms were to be built, together with a seventeen-room elementary school building and an eleven-room elementary school building, and a five hundred-pupil intermediate school building. Other additions and conversions were to include libraries in every elementary school, gymnasiums in every elementary school, and other needed remodeling in the existing school buildings. An eighteen hundred-student high school also constituted part of the above-mentioned bond issue. This proposal was defeated by a wide margin by the voters who, like other voters throughout Michigan and the United States, reflected the general attitude of a public objecting to increasing taxes and the spiraling costs of education.

In spite of the defeat of the bond issue, the need for more classrooms has remained and, in fact, has become more aggravated. Immediate

steps must be taken to alleviate the building overcrowdedness in our two high schools and several of our elementary schools.

Since necessary facilities cannot be provided in time to meet expanding enrollments, and since the public is demanding more effective utilization of the schools, it is our obligation to try and explore other means of reducing overcrowdedness without impeding the educational development of our youngsters. It is with the above in mind that the Port Huron Area School District explored the feasibility of extending the school year.

The study attempted to explore all available quarter plans of school year operation for the purpose of adapting the most economically, educationally, and physically feasible plan for the Port Huron Area School District. Having reviewed the available research and literature on year-round school operations, one is led to the conclusion that, in spite of the fact that nearly all four-quarter plans of year-round schools have been discontinued, and in spite of the fact that feasibility studies have shown their disadvantages outweighing their advantages, interest in the year-round schools continues. Six studies are presently in progress in Michigan with funds provided by the Michigan State Legislature. The unfortunate thing about the literature available on the topic is that there is little factual information provided through that literature. The quarter plan has been debated between 1924 and 1931, and between 1947 and 1953 when building costs were spiraling and the student population was growing. There is little factual data and less research to support the opinions or the proposals offered concerning year-round school in general and the four-quarter plan in particular. At the time of the

writing of this report, only two school districts in the nation are operating a form of a four-quarter plan. Those two school districts are the Fulton County Schools and the Atlanta Schools of Georgia. Public resistance to year-round schools was a serious problem in the past. This problem may prove to be less serious today than it was thirty years ago. Efficiency and accountability sum up the demands of the voting public. The change from an agrarian past to an urban present necessitates a new look at the rationale for leaving school buildings idle during the summer months. Regular school year operations continue to operate as though the preservation of our society depended upon our students being in the fields for two months in every year. Our students, in fact, are assigned a summer vacation under our present system and are pushed onto the streets with little to do. Schools under an agrarian type of society were never intended to be closed in order to give youth time for idleness. It was intended to provide them with meaningful work experiences. The four-quarter plan of school year operation, according to its advocates, might accomplish this aim by keeping schools open on a year-round basis.

With the above in mind, the Office of Research and Evaluation of the Port Huron Area School District undertook to explore thoroughly the feasibility of all available four-quarter plans for the Port Huron Area School District. The plan that had to be investigated had to be one which would maintain and/or improve the present educational quality of our program. This plan had to relieve the present and expected overcrowdedness of the schools of our district. The overall cost of the plan to be thoroughly explored had to be equal to or less than the cost

incurred through the acquisition of the sites and the construction of the buildings and facilities needed to relieve our congested schools.

In order to do the above, the study attempted to answer the following questions:

1. What implications will this plan have for curriculum development?
2. What will be the calendar for assigned vacation plan?
3. How may elementary school children be assigned to schools and to classes within the school?
4. Can intermediate school students be scheduled on an assigned vacation plan?
5. Can high school students be scheduled on an assigned vacation plan?
6. How will vacations be assigned to pupils?
7. How will vacations be assigned to staff?
8. Can the school buildings be maintained?
9. What will the cost of maintenance be?
10. Can students be properly transported?
11. What will be the cost of transporting students?
12. What use of the present schools will achieve maximum economy?
13. What professional staff will be needed?
14. What non-professional staff will be needed?
15. How will the food services program of the Port Huron Area School District be affected by the four-quarter plan?
16. What changes in purchasing procedures will be needed?
17. What year-round recreational and cultural opportunities are

available in Port Huron?

18. What effect will the plan studied have on the music program of the Port Huron Area School District?

19. What implications will this plan have for the Division of Personnel Administration of the Port Huron Area School District?

20. What effect will the four-quarter plan have on the Port Huron Area School District athletic program?

21. What implications does the four-quarter plan have on scheduling, graduation, the beginning date of school, transfer of youngsters in and out of the school district, job opportunities for students, special programs, vacations of principals, guidance and counseling, and other curricular details?

22. What implications will the plan have for the professional development of the teachers of the Port Huron Area School District?

23. What will be the total cost of the assigned vacation plan?

24. Will the public in the Port Huron area accept the assigned vacation plan?

25. Will the parents of the Port Huron Area School District children accept the assigned vacation plan?

26. Will the business and industrial community accept and support such a plan?

27. Will the staff of the Port Huron Area Schools accept the assigned vacation plan?



Design of the Study

In order to answer the questions posed by the problem under study, three calendars were constructed in which the year was divided into four quarters, each with sixty student-teacher contact days. Those calendars suggested took into consideration the legal holidays, teacher institute days, and winter and spring vacation days to which all youngsters and teachers were entitled.

Using the 1969-1970 enrollment figures a simulation of the placement of elementary, intermediate, and high school youngsters was made. Schedules for students of Port Huron Northern high and Washington intermediate schools were simulated with the assistance of the data processing department. Those simulations were based on a randomly-assigned vacation. The placement and scheduling simulations were conducted in order to permit the determination of the professional staff needed to carry out an instructional program of a four-quarter plan of school year operation. Another purpose of the simulations was that of determining the most efficient use of buildings and the most convenient method of transporting youngsters.

The assistance of the supervisors of maintenance, food services, purchasing, and transportation were enlisted to respond to the questions posed by the study.

The total cost of the assigned vacation quarter plan of year-round schools was computed from the above information for the school years 1968-1969 and 1969-1970. These figures were compared with the costs of the regular school year program for the above-mentioned two academic years.

In order to determine the reaction of the community to the plan, an independent public relations firm was contracted. The survey was conducted after efforts were made to disseminate the findings of the first phase of the study to the public through the use of public meetings and the mass media.

The reaction of the business and industrial community comprised part of the second phase of the study. Nineteen business and industrial leaders, representing firms employing more than seventy-two hundred employees, were polled for their reaction to the proposed plan.

The reaction of the Port Huron Area School District's certified staff to the plan was ascertained by the Office of Research and Evaluation. This was accomplished by sending a questionnaire to each certified staff member, excluding administrators, eliciting their reactions to the plan.

### Conclusions

The following conclusions can be drawn from the findings reported in Chapter IV:

1. The four-quarter plan of school year operation appears feasible for the Port Huron Area School District educationally, physically, and economically, if the following conditions are met:

a. Curriculum revision and adjustment. It is evident that since the plan calls for the youngster to attend three sixty-day quarters instead of the traditional two ninety-day semesters, curriculum revision must accompany the move to the proposed plan. If such condition is to be met, it must be understood that the reorganization and refinement of curriculum will necessitate that content within each discipline in our

program of instruction will have to be evaluated as to its relevance. This procedure would force addition, deletion, and/or rewriting where needed. Through curriculum reorganization, a wider offering of courses tailored to meet the individual youngster's ability, aptitude, and interest would be possible. If the four-quarter plan is to provide an escape from the rigidity imposed by the present organizational pattern, then it is imperative that the process of curriculum revision have as its main goal the provision for flexibility in the alternatives available to the youngster.

Curriculum revision would allow for each quarter to stand as an autonomous unit; thereby allowing for subject matter to be scheduled without regard to sequence whenever and wherever possible. If we are to be truly intent on meeting the wide range of needs dictated by the equally broad range of abilities, aptitudes, and interests of our youngsters, then it would seem logical that greater diversification would provide our youngsters with this opportunity and provide us with a way to fulfill our obligation.

With the curriculum overhauled, the resulting product, with objectives written in behavioral terms, would allow us to objectively evaluate the effectiveness of the methods and processes designed to meet those instructional objectives. With the increased diversification in curriculum offerings within each subject matter area, opportunities for enrichment, remediation, and acceleration are increased tremendously. In short, the newly-revised curriculum must have the potential for individualizing instruction and for making the educational program of each youngster more relevant and thus more meaningful in the latter's

development as a full participant in our democracy.

b. Equal enrollment in each quarter. One of the criteria that had to be met in any plan contemplated for the Port Huron Area School District was that it would alleviate overcrowdedness. The four-quarter plan of school year operation would save space when one-fourth of our students are on vacation during each quarter. This procedure would provide for three-fourths of the student population to be in school at any one time. By having three-fourths of the student population in attendance during any one quarter with the other one-fourth on vacation, the capacity of our buildings would be increased by twenty-five per cent. Port Huron High School, for example, constructed to house 1800 youngsters will, under such a plan, be able to house 2400 youngsters. Because of the fact that Michigan's climate is known for its severe winters, it would be safe to assume that if the vacation quarter were to be made optional, the three-fourths of our student population that would be needed to attend a summer quarter would not be realized. In order to assure an equal distribution of enrollment in each of the four quarters, the study must assume that vacation quarters will be assigned randomly.

c. Improvements must be made in some of the school buildings. The maintenance department estimates that maintaining the buildings needed for a four-quarter plan of school year operation would require the addition of five men to the present maintenance crew. Aside from the above requirement, this same department, while assuming that the total maintenance staff would be able to keep the buildings in good condition, will not be able to bring the buildings presently in less

than standard condition up to standards without additional funds. The estimated cost over a five-year period is \$600,000. Aside from the above, it is imperative that, if we are to expect youngsters to learn and teachers to teach during the summer quarter, air conditioners must be installed in all the buildings of the school district. The cost of installing air conditioners where needed was estimated at \$300,000.

d. Smaller, less efficient school buildings must be phased out. In order to maximize the efficiency of the four-quarter plan of school year operation, the findings of this study warrant concluding that the following buildings be phased out: Allendale, Campau, Charles Gratiot, Cleveland, Fillmore, Lakeport, Tyler, and Wadhams. In this process, the Charles Gratiot-Fort Gratiot complex would be converted into an intermediate school, while the Garfield elementary and intermediate school complex would be converted into an elementary building. With those conditions met, it is estimated that the remaining facilities would house seven hundred more elementary youngsters, one thousand more intermediate youngsters, and six hundred more high school youngsters without overcrowding.

e. Revisions in state school laws and regulations must be made. One of the most difficult tasks encountered in the study was that of establishing a school calendar based on four quarters, each with sixty student-teacher contact days. When one considers that the school year has a maximum of two hundred sixty-one potential student-teacher contact days, one begins to recognize the enormity of the problem of fulfilling the State Department of Education rulings on the length of the school year. If the youngsters are to attend three sixty-day

quarters, it will become obvious to the reader that only twenty-one days will be allowed for legal holidays, teacher in-service days, student record days, and winter and spring vacation days.

The State Board of Education has proposed certain amendments to the Child Accounting Rules for the purpose of qualifying for school aid. Paragraph 3 of Rule 1 concerns itself with the criteria for determining membership for a school district maintaining school during the entire school year. It proposes that membership be determined by the number of pupils legally enrolled at the close of school on the following days: fourth Friday in July, fourth Friday in October, fourth Friday in January, and fourth Friday in April. Section 1 of Rule 14 requires the school district to provide a minimum of one hundred eighty days of student instruction in order to qualify for state aid without penalty. Section 2 of the above rule pertains to school districts operating under a four-quarter plan. This same rule goes on to prescribe a four-quarter calendar of school year operation.

The above rules hinder rather than facilitate the process of initiating a four-quarter plan of school year operation. By imposing a calendar on school districts studying the feasibility of a four-quarter plan of school year operation, the physical feasibility of implementing such a plan would become next to impossible. The proposed calendar under Rule 14 appears to have been arbitrarily designed without any effort at considering legal holidays, in-service days, vacations, and even the number of days of instruction possible within each of the four quarters proposed. By insisting that membership be based on the counts on the days proposed in Section 3 of Rule 1, the State Department

of Education is again arbitrarily, and without regard to the problems encountered in constructing a calendar based on four quarters, forcing those school districts to abandon their efforts in implementing a four-quarter school year.

Our suggested calendars take into consideration the criteria mentioned above as well as the existence of a master agreement with the Port Huron Education Association and with other bargaining units representing the operational staffs of the Port Huron Area School District. Suggested calendar "C" also takes into consideration public acceptance by allowing a twelve-day vacation for all youngsters sometime during the summer, thus making the assignment of vacation quarters more palatable.

With the above in mind, the Office of Research and Evaluation concludes that unless the State Department of Education becomes more flexible in their above-mentioned rulings, the implementation of a four-quarter plan of school year operation would not be feasible. Insisting that each student get the minimum of one hundred eighty days of instruction, regardless of the fact that a school district may desire to go on a four-quarter plan, further restricts the construction of a workable calendar. The author is not aware of any research evidence supporting the hypothesis that youngsters would learn more in one hundred eighty days than they would if they were in school for one hundred seventy-five days.

The feasibility of continuing with our present varsity athletic programs is predicted on the assumption that the State Department of Education would reconsider its eligibility rules in order to allow for youngsters on vacation who are pre-registered to enroll during the

following quarter to be entitled to play and practice during the vacation to which they are assigned, if they so desire. It is assumed, then, that the above eligibility rules would have to be re-evaluated to allow for exceptions in the case of schools attempting a four-quarter plan of school year operation.

f. Additional operating millage must be levied. The findings warrant concluding that the cost of operating a four-quarter school year is 3.87 mills more than the cost of operating a regular school year program for the first year of operation. About 1.5 mills of this increase is due to the necessity of installing air conditioning in the existing facilities. Accordingly, after the first year of operation, the cost of the four-quarter plan was figured at 2.49 mills above and beyond the amount levied for a regular school year type of operation.

It is important, however, to compare this added cost to the cost incurred in building and operating the facilities needed and recommended by the Board of Education in December of 1968. The cost of retiring a bond issue needed to construct the buildings and additions needed in our schools was computed to be equivalent to 3.8 mills per year for thirty years. The cost of operating the new facilities would amount to 1.8 mills per year.

g. Community acceptance and support must be obtained. The four-quarter plan of school year operation studied requires a radical change in vacation patterns for all of those in the community. It not only affects the children of the school district; it also affects the parents, their friends, and the total community. With the above in mind, it is essential that the community understand the plan and its



implications. It is also germane to the success of such a plan that the community accept it and support it. It is also important to remember that if the community proves supportive of the plan, that the total community be involved in preparing and planning for its implementation.

The support and assistance of business and industry in the Port Huron Area School District are essential because of the implications the plan has on their vacation schedules and overall business operations. Accordingly, it is imperative that business and industrial representatives accept the four-quarter plan because of its educational and economic potential.

h. Staff acceptance and support must be secured. It goes without saying that the four-quarter plan of school year operation affects the work schedule of the total certified staff and the work schedule of many of our operational staff members. The implications the plan has for curriculum improvement are very essential for the plan's success. It is thus imperative that all staff members, certified and non-certified, understand the plan. It is equally important that those employees of the school district are supportive and willing to endure the pains and headaches essential in curriculum building and administrative planning.

2. Based upon the data gathered through the use of the community survey, it appears logical to conclude that there is a slight tendency to support the four-quarter plan of school year operation among the community. Since sixteen per cent of those interviewed could not say whether they favored or disfavored the plan, it is then obvious that such a small undecided minority could easily upset such support if they

decided later to oppose such a plan. The evidence also indicates that parents of school children are less supportive of the plan than those without children in school. Those supporting the plan appear to base their support on their concern to find the most economical solution possible to solve school enrollment problems and to utilize the existing school facilities more efficiently.

3. Data gathered through the survey of business and industrial representatives are suggestive of the group's concern for and cognizance of the needs of the school district. More of the business and industrial leaders surveyed appeared to favor the four-quarter plan of school year operation than to oppose it. Those favoring the plan based their rationale upon the plan's potential for reducing overcrowdedness, for improved efficiency, for better utilization of buildings and staffs, and upon the promise the plan has for the improvement of the educational program in the Port Huron Area School District. Those among the business and industrial representatives not favorable to the plan based their opposition on the effect the plan would have on the vacation schedules of their employees and on the fear that youngsters transferring out of the system would have difficulties adjusting to the regular school year in other school districts.

4. Data gathered through the use of the certified staff survey warrant the following conclusions:

a. Although the data gathered show that 34% of the certified staff members were favorable to the four-quarter plan while 39% rejected it, the fact that 26% of those responding were not able to commit themselves to accepting or rejecting the plan is indicative of a sizable

minority who presently appear not ready to form an opinion. It cannot be assumed that the majority of the teachers do not favor the plan simply because 39% does not constitute a majority. The ultimate test will come when the 26% who could not form an opinion are ready to express their reaction to the plan.

b. Male staff members appear to be more favorable to the plan than their female counterparts.

c. Elementary staff members appear to be more opposed to the plan than their counterparts at the intermediate and high school levels.

d. Younger and less experienced staff members appear to be more favorable to the plan than their older, more experienced counterparts.

e. Seventy-four per cent of the staff members prefer working three quarters, suggesting that the majority would prefer to have a quarter of vacation time.

f. The data suggest that the majority of the staff would prefer a summer quarter for a vacation, if given a choice.

g. Male, intermediate and high school, younger, and less experienced staff members appear to choose the summer quarter for a vacation less frequently than do their older, more experienced, female, elementary counterparts.

5. The sizable minorities among the community at large and among the certified staff members who could not say whether they supported or rejected the plan coupled with the experiences of the writer based upon meetings, speaking engagements, and formal and informal interviews with

these groups, suggest the following conclusions:

a. A "wait and see" attitude prevails among those minorities who could be looking to the state for an educational reform program that would include a provision for aid to school districts for capital improvements. Another reason might lie in the above groups' lack of recognizing the magnitude of classroom shortage in the school district. A third explanation could very well be due to the decision on the part of some not to make up their minds until the Board of Education decides on what course of action is to be taken.

b. In spite of the efforts of the Office of Research and Evaluation to keep the public in general and the staff of the school district in particular informed of the progress of the study, and its purposes, its procedures, and its findings, there is sufficient subjective evidence to warrant concluding that more must be done to disseminate the findings of the study and their implications.

#### Recommendations

The findings and conclusions presented earlier in this report warrant certain recommendations. It must be understood that those recommendations are predicated upon the assumption that the Board of Education is the final arbiter in deciding whether the Port Huron Area School District should adopt the four-quarter plan of school year operation with an assigned vacation as an alternative solution toward resolving the present and anticipated overcrowding in the schools of the district. Thus the recommendations included are presented with the above assumption in mind and are intended only as a guide to the Board of Education in their attempts at arriving at their decision. With this

in mind, the following recommendations are made:

1. A major concern of the certified staff of the school district at all levels of instruction is that of curriculum and the implications the four-quarter plan appears to have for its improvement. A primary conclusion of the study is that a four-quarter plan cannot be contemplated without regard to curriculum revision. It is with the above in mind that the Office of Research and Evaluation would recommend that curriculum revision and a plan providing for its effective accomplishment should be developed immediately with the cooperation of the administrative and teaching staffs and the involvement of parents and board members, as well as students representing our high schools. The plan should provide for the time, the funds, and the expert help needed to accomplish this very essential task.

2. The plan's potential for increasing the capacity of the existing facilities of the school district is predicated upon the ability of the school district to achieve a distribution of youngsters in attendance during each of the four quarters. This distribution would allow for a maximum of twenty-five per cent of the total enrollment to be on vacation during a particular quarter. Without the above assurances, the plan would be self-defeating and would constitute no solution to the problem of overcrowdedness. It is then recommended that a parent preference poll be distributed to each family with youngsters attending school in the Port Huron Area School District asking them to rate their preferences for a vacation quarter. The purpose of this survey would be that of finding out definitely what those choices might be. No parent can be assured of getting his first choice. Instead of arbitrarily

and randomly assigning vacation quarters for youngsters without finding out what the preferences are, the random assignment can be in using the preferences as a guide. A copy of the proposed poll appears in the appendix of this report.

3. In order to achieve the effectiveness desired, the buildings the study found inefficient for the purpose of the plan must be phased out. Parents of children affected must be informed and advised. Transportation policies must be revised for the purposes of accommodating those youngsters.

4. The departments of transportation and maintenance have indicated the necessity of a central garage and warehouse, particularly for a four-quarter plan of school year operation. Since funds have already been allocated for the purpose of constructing a central garage and warehouse facility, it is then recommended that immediate steps be taken to construct the above-mentioned facility as a basic step toward making the four-quarter plan of school year operation feasible.

5. Some of the buildings that would be operational under the four-quarter plan would need to be brought up to standards advocated by the maintenance department. The cost of this operation is estimated at \$600,000. Because of the difficulty of implementing this recommendation during the period of one year, it is recommended that a five-year program be planned and implemented which would fulfill this requirement. Aside from the above, it is recommended that the buildings in use be air-conditioned in order to facilitate learning and teaching during the summer season. The cost of such an endeavor is approximately \$300,000.

6. One of the processes of bringing the existing buildings up to

standards must include the improvement of the food services facilities in some of the buildings. In spite of the fact that the number of youngsters that would be served daily on a year-round basis would be less than the number served daily under the regular school year, the fact that food services would have to be operational on a year-round basis would make those expanded and modernized facilities, which are desirable now, become imperative under a four-quarter plan.

7. The Child Accounting Rules proposed by the state department relative to the length of the school year, the four-quarter calendar, membership counts for the purpose of reimbursement, and athletic eligibility rulings must be revised to allow the Port Huron Area School District, and any school district in Michigan contemplating such a plan, the flexibility necessary to make such a plan realistically feasible.

8. Since it appears that the four-quarter plan during the first year of operation would cost about 3.87 mills more than the cost of a regular school year program and 2.5 mills in succeeding years, it is imperative that we compare this cost to the cost incurred through the construction of the classroom additions and buildings needed to resolve our overcrowded conditions. As concluded earlier, the cost of operating on a four-quarter plan appears to be about three mills cheaper than the alternative of buildings and sites. This difference in favor of the four-quarter plan, though small, must be understood by the total community and must also be weighed against some of the obvious disadvantages necessitated by the change to a four-quarter plan.

9. On September 29, 1969, a report on the first phase of the study was given to the Board of Education. In that report, it was stated that

community acceptance and support of the plan studied would be essential to its success. Because of the radical changes in patterns of living as a result of assigning vacations for a four-quarter plan of school year operation, it is imperative that the Board of Education seek the greatest possible support for the plan before deciding to implement it. In spite of the fact that the community survey shows a tendency to support the plan, the fact that sixteen per cent of those interviewed could not say whether they supported or rejected the plan is indicative of a sizable minority that could easily upset such a support if they decided to oppose the plan. It is with the above in mind that the writer recommends that the public be continually kept up to date with the progress of the study of the feasibility of the year-round school concept. It is obvious that some of those who are still unable to decide on whether or not they favored the plan need more information about the plan, its objectives, and its educational, economic, and physical implications for them and their youngsters. Accordingly, the school district must not abandon its dissemination of information procedures that have been in effect throughout the study. Business and industrial representatives should be informed of all the findings, and the support of the total business and industrial community should be sought if the Board of Education decides on implementing the plan.

10. A plan that has an effect on the employment conditions of all the employees of a school district must have the support and acceptance of all those employees. Accordingly, it is essential that the total staff of the school district, certified and non-certified, be kept informed of the developments taking place relative to the four-quarter



plan of school year operation. In spite of the efforts of the Office of Research and Evaluation to keep the certified staff informed of the objectives and the findings of the study, the writer is convinced that there is a sizable number of certified and non-certified staff members who are still uninformed or misinformed about the plan and how it affects them in their own particular positions. This is evidenced during the many meetings the Office of Research and Evaluation has conducted to inform the staff of the findings of the study. The Port Huron Education Association has been very cooperative and willing to assist in informing the teachers of the study. This cooperation and involvement must be sought again and continued if the Board of Education is interested in implementing such a plan.

11. As stated earlier, the four-quarter plan affects all segments of the community. The parochial schools of the district, if they are to continue to benefit from the auxiliary services of the district, must adapt to the anticipated changes. St. Joseph school, benefiting from the Shared-Time Program at the Washington school is of major concern. It is thus recommended that the Board of Education advise the parochial schools of the district of the plan and its implications for their own programs of instruction.

APPENDIX A

A STUDY OF THE FEASIBILITY OF THE FOUR-QUARTER PLAN  
OF SCHOOL YEAR OPERATION -- A PROPOSAL

PORT HURON AREA SCHOOL DISTRICT  
Gerald S. DeGrow, Ed.D., Superintendent

OFFICE OF RESEARCH AND EVALUATION

A STUDY OF THE FEASIBILITY OF THE FOUR-QUARTER PLAN  
OF SCHOOL YEAR OPERATION

A Proposal

Submitted to: The Department of Education  
State Board of Education  
Lansing, Michigan

Date Submitted: January 17, 1969

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### THE COMMUNITY:

The Port Huron Area School District is composed politically and geographically of the City of Port Huron and the following adjacent governmental units: Port Huron Township; Fort Gratiot Township; major portions of Kimball Township, Burtchville Township, Grant Township, Clyde Township, Kenockee Township, and Wales Township. Voters in these areas approved annexation to form this enlarged school district in 1961, and approved a 6.5-million dollar bond issue to provide needed facilities.

The area served by the Port Huron Area Schools is equal to one hundred seventeen square miles. The 1966 school census puts the population served at more than 59,000 people composed of approximately 16,000 families.

Port Huron is located in the eastern part of Michigan on the St. Clair River. It is approximately sixty miles northeast of Detroit and seventy miles east of Flint. As shown on the attached state map, Port Huron is part of a nine-county area (shaded) which comprises sixty per cent of the total population of the state. If one considers the area in a one hundred mile radius of Port Huron (dotted), this percentage would increase to sixty-eight per cent of the total population. In view of these facts, it is apparent that Port Huron would serve well as an exemplary school district whose findings would be readily demonstrated to about two-thirds of the total population of the State of Michigan.

The community served by the Port Huron Area Schools has a non-white population equivalent to 4.5 per cent. The age distribution,



according to the 1966 school census, is as follows: 0-4 years, 5,653; 5-18 years, 16,346; 19 years and over, 37,390. By 1970, age distribution projections, according to the latest county study, are as follows: 0-4 years, 6,044; 5-14 years, 11,739; 15-19 years, 6,407; 20 years and over, 39,086.

With a state equalized valuation of \$188,463,000, the Port Huron Area School District has a fine history of supporting its schools. Since 1962, two elementary schools with eighteen rooms, one intermediate school for five hundred students, and one high school for 1,800 students were erected in the district. Aside from the above additions to one high school, two intermediate schools, and four elementary school buildings were also built. Those additions were a result of a 1962 \$6,575,000 bond issue. Aside from the above facilities, the voters added to better serve the youngsters of the school district, the following projects have or are in the process of being built: county library completed in 1968; a mental health clinic completed; a civic auditorium; a civic arena; county health department; county jail facilities; a Y.M.C.A. building; public housing for senior citizens, 104 units; public housing for poor families, 60 units; additions to Port Huron and Mercy hospitals; technical building for the St. Clair County Community College; a library science building for the St. Clair County Community College; and the St. Clair County Community College urban renewal project.

The Port Huron Area School District is served educationally by the Port Huron Area Schools which offer a program of education for 15,000 students extending from kindergarten through twelfth grade.

There is also a parochial school system for kindergarten through twelfth grade with about 3,000 students. The St. Clair County Community College has an enrollment of about 2,000 students. To serve those students, the Port Huron Area School District has twenty-one elementary schools, six intermediate schools, and two senior high schools. The Port Huron area pupil enrollment has experienced an increase of over six hundred students in the past three years. This increase amounts to twenty classrooms. The regional planning commission figures indicate Port Huron Area School District's population will increase from 59,389 in 1966 to 76,241 in 1980. The Detroit water plant operation in the Lakeport area of Port Huron will bring in about four hundred families over the next four years, attracting residential growth in that area. With the above in mind and with the existence of some thirty-three classrooms in the district that are educationally inadequate and constitute safety hazards, according to current standards, the Port Huron Area School District presented an 11.8-million dollar bond issue to be voted on by the electors on December 17, 1968. With the 11.8-million dollars, thirty-three classrooms were to be replaced, forty-five additional classrooms were to be built, together with a seventeen-room elementary school building, and an eleven-room elementary school building, as well as a five hundred pupil intermediate building. Other additions and conversions were to include libraries in every elementary school and gymnasiums in every elementary school, and other needed remodeling in the school buildings. The 11.8-million dollars was also to be used partially to build an 1800 student high school.

This proposal was defeated by the voters who, like other voters throughout Michigan and the United States, reflected the general attitude of a public objecting to increasing taxes and the spiraling costs of education.

#### THE PROBLEM:

The needs of the Port Huron Area School District have remained the same in spite of the fact that the voters have rejected the bonding issue. Immediate steps must be taken to alleviate the pending overcrowding at our two high schools and several elementary schools. Two of our elementary schools are still as inadequate as they were when the bonding proposal was formulated. They do not meet the safety standards desired; and it is our contention that the condition of the buildings makes them educationally inadequate. Since necessary facilities cannot be provided in time to meet expanding enrollments and since it is obvious that the public is demanding more effective utilization of the schools, it is our duty to try and explore other means of reducing the crowding problems without impeding the educational development of our youngsters. It is with the above in mind that the Port Huron Area School District is exploring the feasibility of extending the school year.

#### REVIEW OF THE LITERATURE:

One of the most commonly discussed possible solutions to the shortage of adequate school facilities lies in extending the school year. For many years, proposals have been made to extend the school year. Those proposals have been advanced for several reasons. The most common of those is that which emphasizes better and more efficient utilization of school plant, personnel, and instructional materials.



A survey of literature indicates that the subject of the all-year school was debated considerably between the years of 1924 and 1931, and again between 1947 and 1953, and again in the 60's; at times when building costs were spiraling and while the school population was growing.<sup>1</sup>

According to the N.E.A. Research Division, school districts in California, Connecticut, Massachusetts, Arizona, and Maryland were known to have appointed committees to study the feasibility of extending the school year. More recently, the communities of Durrand, Royal Oak, and Plymouth, Michigan, have conducted studies into the feasibility of a year-round school organizational structure. The State of New York has been quite active in the past two years in its attempts at extending the school year and more efficiently utilizing its facilities and staffs.

By fully and continually utilizing existing school buildings and facilities instead of constructing new plants to accommodate the increasing public school population, a considerable amount of savings could theoretically be realized, according to the proponents of the extended school year. Other economies that could be realized include savings on debt service; cost of utilities; maintenance; insurance; and state tax on bonds.

Advocates of the year-round school maintain that the problem of teacher shortage could be somewhat resolved if those already employed

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<sup>1</sup>National Education Association, The All-Year School, A Report Prepared by the N.E.A. Research Division (Washington: National Education Association, January, 1962), p. 2.

served on a year-round basis.<sup>1</sup> With the teachers working on a year-round basis, it is claimed that not only would the savings accrued help to increase teachers' salaries, but the fact that the teachers would be working on a full-year basis would eliminate the necessity for them to hunt around for temporary employment during the summer months. With the teachers' salaries and morale improving, their effectiveness should logically be enhanced.

A nationwide sample of superintendents' opinions in 1958 showed sixty-five per cent of them favoring extending the traditional nine-month school year.<sup>2</sup> On the other hand, seventy per cent of the American parents, according to a Gallup survey conducted in 1961, appeared opposed to the longer school year for grade school pupils, while sixty-four per cent of them opposed the longer school year for high school students.<sup>3</sup>

The term "all-year school" may indicate a four quarter system with rotating vacations, a twelve-month school, a summer school, an extended service term for teachers, a trimester plan, a quadrimester plan, a twelve-four plan, or a multiple trails plan. Literature on the year-round school concepts refers to those plans or combinations thereof.

Since it is the intent of the Port Huron Area School District to study the feasibility of implementing the four quarter plan of year-

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<sup>1</sup>Ibid.

<sup>2</sup>"Lengthening the School Year," Nation's Schools 62: 6, December, 1958.

<sup>3</sup>George Gallup, "Parents Veto Longer Terms for Students," The Minneapolis Sunday Tribune, April 16, 1961.

round school organization, it is considered useful to review some of the research and literature relating to this topic. Shoenfield and Schmitz indicate that it is very difficult to generalize about the all-year school.<sup>1</sup> The only system with an inherent capability of producing economy, according to Shoenfield and Schmitz, is the four quarter system with the rotating attendance.

The first four quarter plan was put into operation in Bluffton, Indiana in 1904. It was discontinued in 1915.<sup>2</sup> During the 1920's, more than a dozen school systems were operating on an all-year basis. By 1930, this number had been reduced to six; and by 1950, Chattanooga was the only school operating with a four quarter plan. The two best known experiments with the four quarter plan were those conducted by Ambridge and Aliquippa, Pennsylvania. The former was abandoned in 1936, and the latter in 1938.<sup>3</sup>

The Aliquippa experiment proved successful, according to the superintendent of schools. Savings on capital outlay for new schools and related services, especially debt service, resulted in savings for the school district. The two primary reasons for scrapping the Aliquippa experiment were listed to be the difficulty of maintaining the physical plant and the increased costs of maintenance.

The Fairfield Citizens School Study Council, Connecticut, reported

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<sup>1</sup>Clarence A. Shoenfield and Neil M. Schmitz, Year-Round Education (Madison, Wisconsin: Denbar Educational Research Services, Inc., 1964) p. 10.

<sup>2</sup>N.E.A., loc. cit.

<sup>3</sup>Ibid.

in 1952 that a needed 5-million dollar building program would cost taxpayers \$3,678,750 a year.<sup>1</sup> The cost of operating the schools on the four-quarter plan was estimated by the same study at \$82,000 a year, a savings of \$286,800 a year during the period when building program costs were being repaid.

Atlanta, however, concluded that the four-quarter plan would cost more to operate than the cost of building new schools.<sup>2</sup> The Atlanta study found that the four quarter plan would cost 8.8-million dollars; while the traditional school year, including the cost of new construction, would cost 7.6-million dollars. Los Angeles conducted an extensive study of the four quarter plan in 1954 and concluded that the all-year plan was too costly, was resisted by the public, and caused too many administrative headaches.<sup>3</sup> The Florida State Department of Education decided against the all-year school plan in 1956 because actual economies would not be realized and additional problems would be created.<sup>4</sup>

According to the 1968 N.E.A. Research Division, no four quarter plans were in operation throughout the United States in 1962. However, the picture appears a little brighter for the four quarter plan.

<sup>1</sup>"The Twelve-Month School Year: Will It Solve Your Building Problems?", School Management, Vol. 1, (September, 1957), pp. 22-25.

<sup>2</sup>ibid., p. 82.

<sup>3</sup>Los Angeles Board of Education, The All-Year School, A Report Prepared by the Los Angeles City School District's Committee to Study the All-Year School (Los Angeles: Board of Education, July, 1954).

<sup>4</sup>Florida State Department of Education, The All Year School, Tallahassee, April, 1957.

Atlanta, Georgia, has adopted a four quarter plan beginning with the fall of 1968.<sup>1</sup> Other variations attempted include the Nova High School plan operating on a trimester basis. As a result of a recent New York State experimental project of the rescheduling of the school year, twenty-two school districts in the State of New York and sixty school districts in other states are now seriously considering adoption of a longer school year.<sup>2</sup>

According to the four quarter plan, students do not attend twelve months. Three-quarters of them, however, would be in school at all times; and one-quarter of them on vacation at all times. The year is divided into four quarters and each pupil would attend three of these four. A school that was built to handle six hundred pupils could take care of eight hundred, increasing the total capacity of the school by one-third. Vacations could be staggered January through March, April through June, July through September, and October through December. Other variations are subject to the needs of the school district. According to the advocates of the plan, the four quarter, staggered attendance plan does not deprive the child of any instructional time and avoids the need for double shifts and for newer buildings. The four quarter plan ideally would increase the efficiency in the utilization of staff. It provides teachers with the same vacation plan as that of the children and with the option of working three extra months per year.

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<sup>1</sup>National Education Association, "The Rescheduled School Year," NEA Research Bulletin, Vol. 46, No. 3, (October, 1968), p. 70.

<sup>2</sup>Ibid.

Changing the organizational pattern of the school into four quarters and utilizing the building plant and equipment on a year-round basis provides the pupils with the opportunity to make up work lost because of extended absence. With teachers working the year-round, teacher shortage problems would be reduced and the summer employment problem teachers usually encounter would be eliminated.

According to W. Scott Bauman, if seventy-five per cent of the student population is in school at any one time, schools could reduce their staffs by twenty-five per cent; thus retaining the best teachers.<sup>1</sup> According to Bauman, a twenty per cent increase in average salaries, combined with a twenty-five per cent reduction in teaching staff, results in a ten per cent net reduction in the total instructional payroll.<sup>2</sup> Bauman goes on to contend that the Ambridge and Aliquippa school experiments discovered that the children achieved more under the quarterly plan than they did under the conventional one.<sup>3</sup>

Jeri Engh contends that the flexibility of the four quarter plan would help increase the holding power of schools.<sup>4</sup> Year-round operation provides professional prestige and pay, according to Engh.<sup>5</sup>

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<sup>1</sup> W. Scott Bauman, The Flexible System: An Economic Analysis of Advantages of the Quarterly Calendar in Public Schools, (Toledo: University of Toledo, Business Research Center, 1966).

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Jeri Engh, "The Case for Year-Round Schools," Saturday Review (September 17, 1966), p. 141.

<sup>5</sup> Ibid.

Opponents of the Four Quarter Plan with Rotating Attendance contend that the savings theoretically realized are more than offset through increased maintenance costs, increased teacher salaries, and the accelerated replacement of textbooks and other instructional materials.<sup>1</sup> Other criticisms of the four quarter plan include the problems of adjusting pupil transfer in and out of the district, difficulties in carrying out extracurricular activities, and the expected resistance of parents to a change in their mode and pattern of life and vacation schedules.

With all the above in mind, and in spite of a 1958 report by the Department of Education of the State of Minnesota claiming that those who have tried the four quarter plan have abandoned it and those who investigated it, rejected it, the Port Huron Area School District proposes to explore the feasibility of implementing this plan in its schools.

#### PURPOSE OF THE STUDY:

The purpose of the proposed study would be to investigate the feasibility of extending the school year through a four quarter plan with rotating attendance. Although the four quarter plan would be the basic area investigated, other plans for the extension of the school year will also be examined.

#### LIMITATIONS:

The study in its investigation will limit itself to those plans that

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<sup>1</sup> National Education Association, loc. cit., p. 5.

are credited with alleviating overcrowding problems without resorting to addition of school plants.

METHOD OF INVESTIGATION:

The study will be conducted by the Office of Research and Evaluation of the Port Huron Area School District in cooperation with the Office of Program Development.

Each of the following areas will be investigated thoroughly and analyzed to determine the feasibility of adopting the four quarter plan with rotating attendance for the Port Huron Area School District:

1. Scheduling: The problems encountered in scheduling students at the elementary, intermediate, and high school levels will be investigated. Simulations will be attempted in this area to come up with the most educationally feasible schedule possible.
2. Cost: Projected increases in costs due to the retention of teachers an extra two months, additional costs due to changes in maintenance schedules, overtime pay for maintenance, food services personnel, and other personnel will be computed.
3. Transportation: The problems encountered by the transportation department in terms of increased work load, changed routes, and other problems will be analyzed and investigated.
4. Purchasing Procedures: Amending present purchasing procedures will be studied to cope with the changed organization.
5. Entry and Leaving Procedures: The problems associated with youngsters transferring from a school operating on a four quarter plan to a school operating on the regular schedule will be studied carefully. The problem of a student entering from a regular school plan to a four



quarter plan will also be analyzed.

6. **Community Support:** The attitudes of the community toward the four quarter plan will be polled by an independent agency.

7. **Teacher Personnel Demands:** The number of teachers needed for each grade level and each subject matter area in our schools would have to be figured out to determine our needs and the savings, if any.

8. **Administration and Supervision:** New problems in the areas of administration and supervision that could arise from the implementation of a four-quarter plan would have to be looked at carefully and seriously.

9. All disadvantages associated with the four quarter plan, as quoted by the literature, would also be investigated.

10. Other plans for extending the school year as a means of alleviating overcrowding problems would also be investigated and their applicability to the Port Huron situation would be thoroughly analyzed.

To do the above, the following will be contracted:

1. Bureau of School Services, University of Michigan, Ann Arbor, Michigan. It is anticipated that the above bureau would provide the technical and consultant help desired.

2. Ned Hubbell & Associates--Public Relations Consultants. This public relations firm will be contracted to conduct a survey of community attitudes toward the proposed plan.

3. A project director.

4. A secretary.

Other personnel involved will include:

1. The Assistant Superintendent for Instructional Administration.

2. The Assistant Superintendent for Business Administration.
3. The Executive Director, K-8 Program.
4. The Director for Program Development.
5. The Administrative Assistant for School Community Relations.
6. The Supervisor of Data Processing.
7. The Director of Research and Evaluation.

TIME TABLE:

The study will commence immediately upon approval of the proposal submitted. It is anticipated that the study will be completed by September 1, 1969.

ANTICIPATED OUTCOMES:

It is hoped and anticipated that the intended study will provide a definite answer to our overcrowded schools. Our student enrollment has been steadily rising and is expected to continue rising. In the past four years, our student population has increased from 14,033 to 14,970. By 1973, it is expected that the intermediate students now in school will increase our high school enrollment to 4,450, thus definitely requiring a third high school. Over six hundred new jobs will come into our community during the next three years due to expansions at Mueller Brass Company, Chrysler Corporation, and the extensive Detroit Water Plant Operation. The necessity for finding a solution to our problem is immediate. If it is educationally, economically, and politically feasible to implement a four-quarter plan or another plan to serve our purposes and allow us to utilize our present facilities more efficiently and yet effectively than we are at the present, it is the intention

to recommend this plan to the Port Huron Area School District Board of Education for possible adoption.

PROJECTED BUDGET NEEDS:

Contracted Services	\$5,500	
Project Coordinator	2,000	
Secretary (3/5 time, 6 months)	1,638	
Director of Research (2/5 time, 9 months)	5,700	
Director of Program Development (1/2 time, 1 month)	708	
Supplies	350	
Dissemination of Information	1,500	
Travel	<u>1,804</u>	
Total Projected Budget Needs		<u>\$19,200</u>

APPENDIX B

RESOLUTION--THE BOARD OF EDUCATION,  
PORT HURON AREA SCHOOL DISTRICT

R E S O L U T I O N

BY

BOARD OF EDUCATION, PORT HURON AREA SCHOOL DISTRICT


ST. CLAIR COUNTY, MICHIGAN

It was moved by Member Weiss, seconded by  
Member McKinnon that the following resolution be adopted:


BE IT RESOLVED by the Board of Education, Port Huron Area School District, St. Clair County, Michigan, that Gerald S. DeGrow, Ed.D., Superintendent of the Port Huron Area School District, be authorized and empowered to apply to the Michigan State Department of Education for a grant to study the feasibility of extending the school year.

Yeas 7  
Nays 0

The foregoing is hereby certified to be a true and correct copy of a resolution adopted by the Board of Education of the Port Huron Area School District, St. Clair County, Michigan, at a regular meeting held the 20th day of January, 1969, at 7:30 p.m.

  
Secretary, Board of Education

Subscribed and sworn to before me this 21st day of January,  
1969, A. D.

  
Bethene M. Leader, Notary Public  
St. Clair County, Michigan  
My Commission Expires July 26, 1970

APPENDIX C

MICHIGAN DEPARTMENT OF EDUCATION,  
LETTER OF APPROVAL OF PROPOSAL

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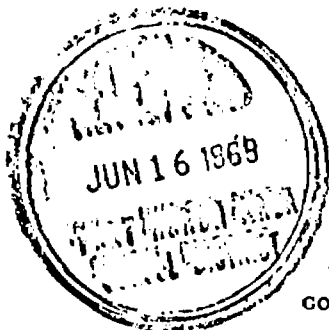
STATE OF MICHIGAN  
DEPARTMENT OF EDUCATION

Lansing, Michigan 48902



IRA POLLEY  
Superintendent of Public Instruction

June 13, 1969



STATE BOARD OF EDUCATION

- PETER OPPEWALL  
President
- THOMAS J. BRENNAN  
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- EDWIN L. NOVAK, O.D.
- GOV. WILLIAM G. MILLIKEN  
Ex-Officio

Mr. Gerald S. DeGrow, Supt.  
Port Huron Area School District  
509 Stanton St.  
Port Huron, Michigan 48061

Dear Mr. DeGrow:

Enclosed is State Warrant No. EI 49411 in an amount of \$17,000 covering partial payment of your grant award for an extended school year feasibility study.

Your total award is \$19,200 and final payment will be made upon notification from the Bureau of Educational Services that you have submitted an acceptable study report.

Should you have questions concerning the monetary amounts involved, please contact this office.

Sincerely yours,

*Robert Hornberger*

Robert Hornberger, Director  
Department Services Division  
Bureau of Administrative Services

STATE OF MICHIGAN  
ALLISON GREEN, STATE TREASURER  
LANSING

WILLIAM G. MILLIKEN  
GOVERNOR

PAY TO THE ORDER OF  
PORT HURON AREA SCHOOL DISTRICT

No. EI49411

ACCOUNT NUMBER  
10111

EXACTLY \$ 17,000 00/100 DOLLARS

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KNOW YOUR ENDORSEER REQUIRE IDENTIFICATION  
STATE TREASURER'S WARRANT

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APPENDIX D

PROPOSALS APPROVED BY THE  
MICHIGAN DEPARTMENT OF EDUCATION

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Michigan Department of Education

M E M O R A N D U M

March 25, 1969

TO: Members of the State Board of Education

FROM: Ira Polley, State Superintendent of Public Instruction

SUBJECT: Report on Grants to School Districts for the Conduct of  
Feasibility Studies for the Extension of the Regular School Year

Summary of Background Information

The State Legislature, through Act 312, P.A. 1968, appropriated to the Michigan Department of Education a line item in the amount of \$100,000. The indicated amount was followed by a paragraph describing the purpose:

"Grants to school districts for feasibility studies to be conducted by districts for extending the regular school year beyond the present required amount of time. No one district's grant to exceed \$20,000. No grant shall be made for summer school programs. Grants shall be made in accordance with rules of the State Board of Education."

On November 22, 1968, a public hearing was held on proposed rules as authorized by the Board. The Board adopted the rules on December 10, 1968, as slightly modified in terms of testimony presented at the hearing, and these were then submitted to the Director of the Legislative Service Bureau and the State Attorney General, with a request that immediate effect be given to them.

On March 12, 1969, the State Board of Education took action to finally approve the rules for this appropriation as reviewed by the Legislative Service Bureau and the Attorney General for the purpose of filing in the State Administrative Code.

The notices sent to school districts on December 18, 1968 contained the following paragraph:

"...The apparent legislative intent for appropriating \$100,000 for the conduct of feasibility studies for the extension of the regular school year was to determine ways to promote educational and economic efficiency. Since the total appropriation is relatively small, the total number of study grants will be limited necessarily. For this reason, each district receiving a grant will, in all probability, be a typical example of a large number of similar districts. At the same time, the composite of grants approved is expected to include a variety of designs for extending the school year even though a single grant may focus primarily on one design..."

#### Applications Received

A total of 47 school districts submitted applications for a grant in a requested amount varying from a low of \$800 in one district to \$25,111 in another. The total sum requested by the 47 applicants exceeded \$600,000. The contents of the applications varied from a few pages setting forth limited information about the minimum essentials listed in the rules to an elaborate research design prefaced with a sophisticated review of the literature on the subject. The selection of four which showed great promise of useful results and high probability for local implementation was relatively easy. The identification of thirty applications which indicated, in the judgment of the staff, very little preliminary study, little or no specificity in what was proposed for study, and very little evidence of community support, was also rather easy. However, the selection of those to award grants from the remaining 13 applications required extensive staff study and analysis in light of their similarities and in view of the small amount of remaining monies.

Proposals were funded which most adequately met the criteria set forth in Rule four of the rules which were adopted by the Board of Education. Rule four was stated as follows:

- "Rule 4. An application shall be in writing, and shall include the following information:
- (a) Description of the local school district, the community, and the students that would be served by an extended school year.
  - (b) Description of need, purpose, assumptions, organization, study procedures, time schedule, anticipated outcomes, and personnel with responsibility for conduct of a feasibility study.
  - (c) Budget needs, indicating the allocation of funds necessary for a feasibility study.
  - (d) Description of a plan to disseminate the feasibility study findings, to other Michigan school districts, and to the department.
  - (e) Evidence of local commitment to a feasibility study."

Attached you will find a list of the districts to which grant awards are awaiting the completion of final technical steps for filing in the State Administrative Code for immediate effect. This list also includes a brief description of the proposed studies.

Recommendation

I recommend that the State Board of Education receive this staff report of the grants to be made to school districts for the conduct of feasibility studies for the extension of the regular school year in accordance with the legislative appropriation and provisions of Act 312, P.A. 1968.

Report on Grants to School Districts  
for  
Feasibility Studies of Extending the School Year

I. Brief Description of Feasibility Studies Funded

UTICA COMMUNITY SCHOOLS

Proposal - A proposal to study the four quarter plan.

Reasons Selected

This proposal was prepared in an excellent fashion, giving evidence of extensive considerations given to basic assumptions, purpose, organization for the study and local commitment. It is apparent that a great deal of study had already been done in community and teacher association involvement and in the review of the literature relating to the subject.

Budget

\$22,500 requested. \$3,000 travel item was not approved. Final grant \$19,500

NORTHVILLE PUBLIC SCHOOLS

Proposal - Proposal to study the four quarter plan

Reasons Selected

This proposal had a very strong emphasis upon cost factors involved in extending the school year on a four quarter basis. Purposes and assumptions relating to the study were very clearly stated. There was evidence of previous study of many other plans by the district before their decision to study the four quarter plan in depth.

Budget

\$25,115 requested. \$4,500 travel item not approved. Publication costs reduced by \$1,050. Final Grant \$19,565.

ANN ARBOR PUBLIC SCHOOLS

Proposal - Proposal to study a Split Trimester Plan

Reasons Selected

This proposal was the only one submitted to study this pattern. Further, the study proposal is very well stated in both short range and long range purposes, and in the assumptions basic to the study. The organization to conduct the study seems especially strong, including a steering committee, a study coordinator, an instructional feasibility study team, a class scheduling team, a community survey team, and a feasibility study team.

Budget

\$20,000 requested. \$1,500 for steering committee travel not approved.  
Final grant - \$18,500

PORT HURON AREA SCHOOL DISTRICT

Proposal - Proposal to study the four quarter plan.

Reasons Selected

This proposal provides one of the best reviews of other extended school year studies as a basis of planning the proposal. In addition, its commitment to study scheduling, cost, transportation, purchasing procedure modifications, entry and leaving procedures, community support, teaching personnel demands and administration and supervision gives evidence of high likelihood of a sophisticated resulting report and of subsequent local implementation of the conclusions.

Budget

\$23,700 requested. \$2,500 travel item not approved. Project director's salary modified by \$2,000. Final Grant - \$19,200. - 17,000

OKEMOS, HASLETT, EAST LANSING - Submitted by Okemos District

Proposal - The proposal was to study the feasibility of having three high schools in three different districts operate on four twelve-week quarters, with breaks between. Five different patterns within the four-twelve plan will be studied. These are (1) three traditional quarters in school and one out of school, (2) three traditional quarters and one for special interest, work or study, (3) four quarters of combined school or work experience, (4) four quarters of combined school and special interest, and (5) four academic quarters.

Reasons Selected

This proposal gave evidence of an imaginative study in analyzing several different patterns within a basic plan and in the study of combining resources of three local districts which have commonalities of problems. Evidence of board of education support of the study in each of the three schools districts was provided.

Budget

\$19,600 requested. \$2,000 travel not approved. Final grant \$17,600

FREELAND COMMUNITY SCHOOL

Proposal - Proposal was to study and to put into operation a trimester program.

Reasons Selected

This proposal gives evidence of a great deal of study already completed

## EXTENDED SCHOOL YEAR FEASIBILITY STUDY EXPECTATIONS

Port Huron Area School District  
509 Stanton Street  
Port Huron, Michigan 48061

### Study Purposes

1. A four quarter plan with rotating attendance will be investigated.
2. Other plans for extension of the school year will be examined.

In both purposes, only those plans that are credited with alleviating overcrowding problems without resorting to addition of school plants will be investigated.

### Expectations of this study

1. The problems encountered in scheduling students K through 12 will be identified and investigated.
2. Simulation scheduling runs will be made as a means of developing the most educationally feasible schedule possible. The process and results will be described and reported.
3. A projection of all costs related to extending the school year will be made for each plan studied, especially to the four quarter plan. The costs included will be for:
  - a. Teacher salaries
  - b. Maintenance costs due to changes in scheduling of maintenance
  - c. Overtime costs for maintenance, food services, and other personnel
  - d. Additional costs for transportation (implied)

4. The problems of transportation will be analyzed, investigated and reported. These will include:
  - a. Amount and nature of increased work load
  - b. Route changes
  - c. Maintenance changes of busses (implied)
  - d. Other problems
5. A study of changes in purchasing procedures as related to changes in organization will be made and reported.
6. A study will be made of the problems encountered by students transferring in and out of a four quarter plan district.
7. A study of the attitudes of the community (and its sub-group components) toward the four-quarter plan will be conducted, analyzed and reported. The procedure of polling done by an independent agency is anticipated.
8. A study will be made as to the number of teachers needed for each grade level and each subject area under the four-quarter plan. The results of this needs study of instructional personnel will be analyzed and either additional financial costs or savings will be determined.
9. New problems in administration and supervision resulting from the implementation of the four quarter plan will be identified and described.
10. All disadvantages of the four quarter plan as quoted in the literature will be investigated. Any strategies or feasible plans developed for resolving these disadvantages will be reported (implied).
11. Other plans for extending the school year as a means of alleviating overcrowding problems will also be investigated and the applicability to the Port Huron schools and community would be analyzed and reported.

APPENDIX E

CORRESPONDENCE,

MICHIGAN HIGH SCHOOL ATHLETIC ASSOCIATION



COPY

July 18, 1969

Mr. Allen W. Bush  
State Director for Athletics  
Department of Education  
Lansing, Michigan 48902

Dear Mr. Bush:

Reference here is made to my telephone conversation of today with Mr. Vern Norris concerning the implications of the year-round feasibility study, which our district is undertaking, on the eligibility of youngsters to participate in varsity athletics.

We are committed to the four-quarter plan with mandatory vacations. This plan is the most economically feasible and educationally sound plan fitting the immediate and long-range needs of our school district. If students are to be assigned their vacation without exemptions made for those participating in football, basketball, baseball, and other varsity athletics, it would seem logical that a number of those youngsters eligible would not be able to participate in those sports activities under the present eligibility rules since their vacation schedule would force them to be on vacation during the season of that particular sport.

Because of the implications of this on our present athletic program, and because of the fact that the present eligibility rules appear to be unfair to our youngsters and to our coaches under the plan contemplated, we are requesting that eligibility rules be reconsidered and an exemption made to allow for the feasibility of implementing the plan developed. Since our youngsters would be pre-registered, it would be safe to assume that the youngster is enrolled in school on a year-round basis and should be entitled to play and practice during the vacation he is assigned to.

Since our attendance during any three quarters would be one-quarter less than our total enrollment taken on a year-round basis, continuing with the present eligibility rules could change our classification as well.

With the above points in mind, it is our hope that consideration be given to our request at your earliest convenience so that we can pursue our study as planned.

If you have any questions, I would appreciate your contacting my office.

Sincerely,

Sami J. Alam, Ed.D., Director  
for Research and Evaluation

STATE OF MICHIGAN  
DEPARTMENT OF EDUCATION

Lansing, Michigan 48902



IRA POLLEY  
Superintendent of Public Instruction

July 22, 1969

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Mr. Sami J. Alam  
Director for Research and Evaluation  
Port Huron Area School District  
509 Stanton Street  
Port Huron, Michigan 48060

Dear Mr. Alam:

This is to acknowledge your communication regarding implications of the year-round feasibility study which your district is making.

As Mr. Norris indicated to you on the telephone, Eligibility Rules for year-round school programs have been considered by the Executive Committee at previous meetings. It was their decision at that time to wait until schools actually began such a program and answer the questions which arise from the implementation. We can submit the question to the Executive Committee at its next meeting in August; however, I believe that it would be beneficial to have additional information so that they can consider it more carefully.

You indicate you are committed to a four-quarter plan with mandatory vacations. When will the plan become effective? Who determines when the students have vacations? What are the periods of enrollment? When will the quarters begin and end? How many quarters will a student need to complete his normal high school education? Will he be allowed to accelerate or will he be allowed to take two vacation periods successively?

Will coaches and students be allowed to participate in their sports while on vacation? Will the student have a choice of vacation periods?

I am certain our Executive Committee will be able to work out some successful arrangement whereby the participating students will not be penalized because of a system established at the local level. On the other hand, there must be sufficient safeguards to protect the competitors who are in other systems. We do not want to reach a situation whereby the coach and football players all take vacations during the football season and do nothing but participate in football. I am certain that is not what you have intended; however, our concerns must be with the protection of every child and school system.

Mr. Saml J. Alam

-2-

July 22, 1969

There have been allowances made for students participating while not being enrolled in school. For example, students have been allowed to participate during Christmas vacations and other school year vacations. In addition, the Upper Peninsula schools play one or two football games each fall prior to school actually being in session. They have not been penalized because they were not enrolled in school at the time of participation.

As indicated above, it would be appreciated if you could be more explicit in the actual outline of the scheduling of individuals and the staff. After we get the additional information from you, it will be presented to the Executive Committee for consideration.

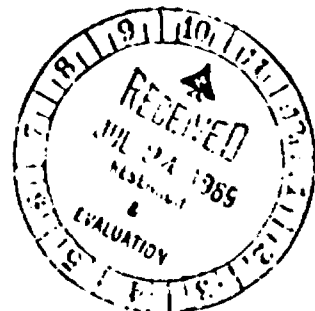
Sincerely,



Allen W. Bush, State Director  
Michigan High School Athletic Association

AWB:db

cc: Gerald S. DeGrow, Superintendent  
Port Huron Public Schools  
Port Huron, Michigan 48060



COPY

July 31, 1969

Mr. Allen W. Bush, State Director  
Michigan High School Athletic Association  
Department of Education  
Lansing, Michigan 48902

Dear Mr. Bush:

Dr. Alan is on vacation and he asked me to respond to your letter of July 22, 1969.

Our year-round school plan is a part of a feasibility study. The information you provide us may, in part, help determine whether our plan is indeed feasible. July 14, 1970 is the target date for implementing, should our program prove feasible. Vacation quarters will be assigned by the school district when each student enters school, and, in most cases, not changed thereafter. In any event, participation in sports will not be a valid reason for a change of vacation dates. The first quarter should begin on July 14, 1969 and continue as shown below:

- 1st quarter, July 14 - October 6, 1970
- 2nd quarter, October 7, 1970 - January 14, 1971
- 3rd quarter, January 15, 1971 - April 8, 1971
- 4th quarter, April 19 - July 13, 1971

Each quarter has sixty school days, so three quarters supplies one hundred eighty days of school. Each student is required to attend three quarters and vacation on the quarter assigned. Grades nine through twelve would be achieved in four calendar years of three quarters each -- a total of twelve quarters of attendance and three quarters of vacation. Acceleration is not a part of our present plans, but the future may see this position reconsidered, if our plan is both feasible and implemented.

Students will have to take their vacations in the quarter assigned. A student who is on vacation in January 15 to April 8, the third quarter, will continue in succeeding years to vacation on the third quarter. He may not vacation on two successive quarters.

Coaches will not work during their vacations, but may choose to work all four quarters of the year. Since he will be paid for the fourth quarter, he will

Letter to Mr. Bush  
July 31, 1969  
Page Two

be expected to carry the same teaching assignments which our present policy provides for coaches during the regular school year. Students may not choose their vacations. We would expect, on the average, that about twenty-five per cent of the boys who could otherwise qualify for the varsity would be on vacation for some part of the season. We are asking permission to allow such boys to play even though they are not attending classes.

It is hoped that the information above will facilitate a, hopefully, favorable decision on the part of the Executive Committee. If you require further information, please contact us.

Sincerely,

George Baker  
Feasibility Study Coordinator

GB/rc

STATE OF MICHIGAN  
DEPARTMENT OF EDUCATION

Lansing, Michigan 48902



IRA POLLEY  
Superintendent of Public Instruction

August 19, 1969

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*Ex-Officio*

Mr. Saml J. Alan  
Director for Research and Evaluation  
Port Huron Area School District  
509 Stanton Street  
Port Huron, Michigan 48060

Dear Mr. Alan:

The Executive Committee reviewed the request of the Port Huron Schools for consideration of the extended year program. The Committee appreciated there materials which had been forwarded from Port Huron but feels that it needs additional information and study before defined Rulings may be projected.

Because there are a number of school districts within the state that are considering the possibility of a similar program, but each one is somewhat different from the one projected in Port Huron, it is felt those districts should be contacted and comparisons made among the projected ideas.

The Committee wants to be certain that any Regulation recommendations that are made will protect the youngsters in your school system as well as protect those who are in conventional school systems. They want to insure, as nearly as possible, equality of competition and circumstances for competing schools. We may be asking you for additional information as the Committee studies the projected changes.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Allen W. Bush".

Allen W. Bush, State Director  
Michigan High School Athletic Association

AWB:ct

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APPENDIX F

BOARD NOTES, SEPTEMBER 29, 1969

# Board Notes

September 29, 1969

Year-around schools, under a proposed four-quarter plan, were described Monday night in a special report to the Board of Education. Dr. Sami J. Alam, Director of Research, reported that a feasibility study of a Four-Quarter Plan indicates this type of operation is feasible if a number of conditions are met.

Those conditions, Dr. Alam said, include:

- \* Curriculum adjustments and revision;
- \* Equal enrollment in each quarter, with student vacations distributed throughout the year;
- \* Community acceptance and support;
- \* Staff acceptance and support;
- \* Support and assistance of business and industry;
- \* Improvements made in some school buildings, including the installation of air conditioning equipment;
- \* Some additional operating millage;
- \* Phasing out of smaller, less efficient school buildings;
- \* Necessary revisions in state school laws and regulations;
- \* A revised maintenance program for school buildings.

Last night's report was the first part of a study that has been underway in the Port Huron Area School District since January. Investigation of the possibility of operating schools under a Four-Quarter Plan is being made as one possible solution to the school district's growing problem of lack of classroom space.

Port Huron Area Schools are one of six projects financed by the State to study possible use of year-around schools. The next phase of the feasibility study is a thorough assessment of staff reaction to the plan after intensive information efforts are made within the staff. In addition, the firm of Ned S. Hubbell & Associates, Inc., was contracted Monday night to conduct a public opinion survey of citizen reaction to this Four-Quarter Plan. The firm will conduct personal interviews of 766 registered voters in the school district, based upon a probability sampling, and make a report of the results of the survey to the Board of Education on December 15, 1969.

Dr. Alam reported that more millage than is now being levied would be necessary to finance year-around school operations under such a Four-Quarter Plan, but less millage than that required to build necessary new schools. His study indicated 3.89 additional mills would be required in the first year of a Four-Quarter Plan, with 1½ of those mills financing installation of air conditioning equipment in the schools. After that first year, 2.49 mills would be required each year, above that now being levied. These millage figures, though, are based upon today's financial picture. Changes in State financing of schools, to be described Wednesday night by Governor Milliken, could change these projected millage costs.

Complete copies of the 100plus page report are available for study in the office of Dr. Alam.



APPENDIX G

MEETINGS CONDUCTED BY THE OFFICE OF RESEARCH AND EVALUATION  
INTENDED TO ACQUAINT THE PUBLIC WITH THE FINDINGS OF THE STUDY

Meetings Conducted by the Office of Research and Evaluation  
Intended to Acquaint the Public with the Findings of the Study

Roosevelt Elementary School P. T. A. Group

Lakeport Elementary School P. T. A. Group

Jefferson Elementary School P. T. A. Group

Fillmore Elementary School P. T. A. Group

McKinley Elementary School P. T. A. Group

Wadhams Elementary School P. T. A. Group

Michigamme Elementary School P. T. A. Group

Keewahdin Elementary School P. T. A. Group

Washington Intermediate School P. T. A. Group

Garfield Intermediate School P. T. A. Group

McKinley Elementary School Parent Advisory Council

Thomas A. Edison Elementary School Parent Advisory Council

Harrison Elementary School Parent Advisory Council

Jefferson Elementary School Parent Advisory Council

Allendale, Ruth Bacon, Negaunee, Sparlingville, and Wadhams elementary  
schools staffs

Fillmore, Garfield, Jefferson, Harrison, and McKinley elementary schools  
staffs

Fort Gratiot, Howard D Crull, and Garfield intermediate schools staffs

Chippewa, Kimball, and Washington intermediate schools staffs

Campau, Thomas A. Edison, Charles Gratiot, Keewahdin, and Lakeport  
elementary schools staffs

Cleveland, Grant, Roosevelt, and Woodrow Wilson elementary schools staffs

Port Huron High School staff

Port Huron Northern High School staff

Parent Teacher Advisory Council

Port Huron Northern High School Student Council

Port Huron High School Student Council

Garfield Intermediate School Student Council

Parent Advisory Council

Administrative Advisory Council

Operational Employees Advisory Council

Superintendent's Executive Advisory Council Committee

St. Clair Area Association of Principals

Michigan State University Supervising Teachers Workshop, February 17,  
1970, at Frankenmuth, Michigan

Michigan Year-Round School Conference, September 23 and 24, 1969, at  
Port Huron, Michigan

Business and Industry Leaders, Businessmen's meeting

Noon Optimist Club

Breakfast Optimist Club

Aside from the above, several informal discussions were held with staff members, parents, and other interested citizens. A tabloid describing the plan appeared as a supplement to the Port Huron Times Herald on October 13, 1969. At least ten radio programs were devoted to describing the plan and the community survey.

APPENDIX H

THE COMMUNITY SURVEY--THE QUESTIONNAIRE

PORT HURON AREA SCHOOL DISTRICT PUBLIC OPINION SURVEY

1. The Port Huron Area Schools are studying ways to solve problems of increasing enrollments and the need for more classroom space. One of those ways is a study of a 4-quarter, year-round school plan. Have you heard about this study?

(A) \_\_\_\_\_ Yes                      (B) \_\_\_\_\_ No                      (C) \_\_\_\_\_ Cant' say

2. (If familiar with it) Can you generally describe the 4-quarter plan, as you understand it?

3. As you understand it, would the 4-quarter use of schools cost taxpayers: the same a, more than, or less than they are now paying in taxes to operate the schools?

(A) \_\_\_\_\_ Same              (B) \_\_\_\_\_ More than              (C) \_\_\_\_\_ Less

(C) \_\_\_\_\_ Can't say

4. If such a year-round plan were to be adopted, would you be in favor of it?

(A) \_\_\_\_\_ Yes                      (B) \_\_\_\_\_ No                      (C) \_\_\_\_\_ Can't say

5. May I ask why you (favor) (are opposed to) this plan?

6. (If opposed) What other way would you suggest be followed to solve the problem of increasing school enrollments?

(A) \_\_\_\_\_ Build more schools                      (B) \_\_\_\_\_ Double sessions

(C) \_\_\_\_\_ Increase class size

(D) \_\_\_\_\_ Other: \_\_\_\_\_

APPENDIX I

THE BUSINESS AND INDUSTRY SURVEY--THE QUESTIONNAIRE

191

COPY

December 15, 1969

address

-  
-  
-

Dear Sir:

As agreed upon at our breakfast meeting of Tuesday, December 9, I am attaching a questionnaire for you to state your reactions to the four-quarter plan of school year operation as studied by the Port Huron Area School District.

I hope that by this time you will have had the opportunity to reflect upon the plan and its ramifications for your type of business operation. I also hope that you will have had the time to discuss this plan with your colleagues at work.

In responding to the attached questionnaire, I would appreciate your frank and specific reactions as well as your effort to return the questionnaire in the self-addressed, stamped envelope to my office by Monday, December 22.

Let me take this opportunity to thank you for your concern, interest, and cooperation.

Sincerely,

Sami J. Alam, Ed.D., Director  
for Research and Evaluation

SJA/rc

att. and enc.

PORT HURON AREA SCHOOL DISTRICT BUSINESS AND INDUSTRY SURVEY

1. What impact would the four-quarter plan of school year operation have on the following aspects of your business operation?
  - a. Use of seasonal employees:
  - b. Vacation schedules of your employees:
  - c. Overall business operations:
  - d. Any other aspects you deem of importance:
2. If the four-quarter plan were to be adopted, would you be in favor of it?
3. If answer to question two is yes, would you please state your reason(s) for your approval.
4. If answer to question two is no, would you please list your reason(s) for your disapproval of such a plan.
5. If opposed to such a plan, what other way would you suggest be followed to resolve the problem of increasing school enrollments in the future?



APPENDIX J

THE BUSINESS AND INDUSTRY SURVEY--LIST OF REPRESENTATIVES POLLED

200

193

Industry and business representatives attending informational breakfast meeting at Holiday Inn, Tuesday, December 9, 1969, regarding the Four-Quarter Plan and Its Feasibility for the Port Huron Area School District

Chester Fike, Personnel Director, Port Huron Paper Company

Earl Hagen, Manager, Sears, Roebuck Company

James Bruton, Manager, J. C. Penney Company

Kenneth Mudie, Thumb Area Manager, Detroit Edison Company

Daniel Hines, District Manager, Detroit Edison Company

Herbert Gilroy, Personnel Director, Prestolite Company

Richard Whitford, Personnel Director, Mueller Brass Company

John Wirtz, President, Wirtz Manufacturing Company

Charles Reid, Manager, K-mart Store

Roy Gilliom, Director, Y. M. C. A.

Robert Morris, Personnel Director, Dunn Paper Company

Robert Ray, District Accounting Manager, Michigan Bell Accounting Office

Gerald Bouchard, City Manager, City of Port Huron

Glen London, President, London Farm Dairy, Inc.

Robert Guest, Manager, Morton Salt Company

Donald Hansen, Administrator, Port Huron Hospital

Dr. Gerald DeGrow, Superintendent, Port Huron Area Schools

Dr. Sami Alam, Director for Research and Evaluation, Port Huron Area Schools

Daniel Nicholas, Division Manager, Southeastern Michigan Gas Company

Richard Bruce, Plant Supervisor, Hallett Manufacturing Company

John Shier, General Manager, Acheson Colloids Company

APPENDIX K

THE CERTIFIED STAFF SURVEY--THE QUESTIONNAIRE

202  
195

MEMORANDUM

To: Teachers, Counselors, Consultants  
By: Dr. Sami Alam, Director for Research and Evaluation  
On: December 12, 1969  
Re: The Four-Quarter Plan

The second phase of our study of the feasibility of the four-quarter plan of school year operation requires assessing your attitudes and reactions to such a plan. We have endeavored to inform you by all possible means of the findings of our study. The four-quarter plan is one possible solution to the problem of overcrowdedness being felt in our school district. The problem is critical and promises to be more acute in the immediate future.

With the above in mind, the attached questionnaire is intended to elicit your reactions to this plan. I have also attached more information about the plan and how it affects you as a refresher in case there are certain concerns and questions that have not been adequately answered. I would be thankful if you would fill out the attached questionnaire as completely, as accurately, as specifically, and as frankly as you can and return it to me through your building principal by Wednesday, December 17, 1969.

Please return the questionnaire to your building secretary or principal, making sure your name is checked off their list as you return the questionnaire. I am confident that you would want to be heard on this very important issue. Thank you for your cooperation.

SA: rc  
at: questionnaire  
information

Port Huron Area School District  
Office of Research and Evaluation  
December 12, 1969

QUESTIONS AND ANSWERS ABOUT THE FOUR-QUARTER PLAN OF SCHOOL OPERATION  
FOR THE PORT HURON AREA SCHOOL DISTRICT

Q. Why are we interested in the four-quarter plan?

A. Our student population has been increasing at the rate of two hundred youngsters per year. In the next three years, Port Huron will have enough students to fill two more elementary buildings, a new intermediate school, and a third high school. The pinch is on in both high schools and some of the elementary schools. The voters of the school district defeated a millage election to raise the money to build the additions needed. One way of relieving the threatened overcrowding is by making more efficient use of our present buildings. The four-quarter plan has the potential of improving the present educational program, reducing the overcrowdedness--all at a cost less than that incurred in the building and sites proposal.

Q. How can the four-quarter plan save space?

A. At present, all children go to school for one hundred eighty days and all vacation for about ninety days in the summer. While these schools stand empty, they are not contributing to the education of our children. If the school year were divided into four quarters of sixty days each, then one hundred eighty days of school could be offered in three quarters. By having one-fourth of the students on vacation each quarter, there would be only three-fourths as many children in school at any one time. Accordingly, the capacity of

buildings in use would be increased by twenty-five per cent. A building constructed to house 1800 students will be able to house 2400 youngsters under a four-quarter plan because only 1800 will be in school at any one quarter, while six hundred are on vacation during any one quarter.

Q. When would the quarters begin and end?

A. Because of the required one hundred eighty days of student-teacher contacts dictated by law, the job of building a suitable calendar is very cumbersome. The following model calendars are presented as suggestions:

Plan A. First quarter: July 14 to October 6  
 Second quarter: October 7 to January 13  
 Third quarter: January 14 to April 19  
 Fourth quarter: April 20 to July 13

Plan B. First quarter: July 1 to September 24  
 Second quarter: September 25 to December 23  
 Third quarter: January 2 to March 30  
 Fourth quarter: March 31 to June 30

The above two calendars provide for the following days off: Labor Day, 2 Institute Days, 2 days at Thanksgiving, 11 days at Christmas, 10 days at Easter, Memorial Day, and the Fourth of July.

Plan C. First quarter: July 1 to September 23  
 Second quarter: September 24 to December 21  
 Third quarter: December 28 to March 23  
 Fourth quarter: March 24 to June 17

Plan C provides for the following days off: Labor Day, 2 Institute Days, Thanksgiving Day, Christmas vacation December 22 through December 27, New Years holiday December 31 through January 1, Easter vacation Good Friday through the day after Easter, June 18 through June 30, and Fourth of July.

The above days, with the exception of the Institute Days, are also off days for all teachers. It must be understood, however, that special legislation is possible to make the calendar more palatable to teachers, students, and parents by exempting districts piloting such a program from the one hundred eighty day requirement.

- Q. How would the students know which of the four quarters would be their vacation quarter?
- A. A quarter would be assigned as a vacation quarter to each student randomly.
- Q. What about families with more than one child?
- A. All the children in a particular family would be assigned the same vacation quarter.
- Q. What about teachers' vacation quarters?
- A. Under this plan, teachers will be contracted for a minimum of three quarters. Those willing to work four quarters would be encouraged to do so with overtime pay. The teachers' vacation quarters at the elementary level is dependent upon the vacation quarter the grade level section is assigned. The intermediate and high school teachers' vacation quarters are dependent upon the needs as reflected by students' requests and the schedule derived from those student requests.
- Q. Why does the plan call for the assignment of vacations?
- A. The economy of the plan rests upon the condition that twenty-five per cent of the students are on vacation each quarter. With vacation patterns established, and knowing Michigan's climate, it is generally accepted that most people would prefer a summer vacation, a preference

which would be defeating to the economy of the plan. A youngster's vacation period can be changed under this plan every fourth year.

Under special conditions and circumstances, a child's vacation period can be changed if the superintendent approves the request.

Q. What implications does the plan have for curriculum improvement?

A. The plan provides for a more flexible, more comprehensive way of providing for our youngsters and by revising our present curriculum and organizing it into a four-quarter program. For the purposes of simulating schedules at the high school and intermediate levels we have initially taken two semester courses to be equivalent to the course content of three quarters. Accordingly, the course content in each subject matter area for each quarter must be redefined. The Fulton County School District has discovered that in revising their high school curriculum, more than seventy per cent of their courses were found to be non-sequential in nature in grades seven through twelve. The same school district estimates that approximately four hundred different courses will be available covering all instructional areas when the program is fully operational. The plan calls for a revision and reorganization of the program curriculum which would base the latter on the establishment of a twelve-month school term. This twelve-month school term is divided into four quarters of equal length and equal instructional quality. The plan has the built-in capacity to improve curriculum in the following ways:

(1) Reorganization and refinement of content would force all subject fields to evaluate, add, delete, and/or rewrite where needed. (2) A revision makes possible a wider offering of courses. (3) Each



quarter stands as an autonomous unit--subject matter can be scheduled often without regard to sequence. (4) Subject areas can be offered in small parcels with a quickened pace for students and teachers. (5) Programs can be better tailored for individuals. (6) Students can obtain a broader base of knowledge. (7) More depth is possible in areas of interest. (8) There is greater opportunity for remedial and/or make-up work. (9) Students can complete requirements and go to college earlier if they wish. (10) Failing students have an immediate opportunity to drop or repeat courses. (11) Poor students do not have to be lost from the very first of the year.

Q. What other advantages does the plan appear to possess?

A. Other advantages of the four-quarter plan include: (1) Increased capacity of school buildings. (2) Increased job opportunities for youngsters by having only twenty-five per cent of those competing for jobs on vacation during the same term. (3) The current social climate demands greater return from the tax dollar and better utilization of buildings and facilities. (4) A reduction in the number of youngsters on the streets during the summer months. (5) Ties in more closely with the colleges and universities. (6) Reduces vandalism. (7) Employment of a year-round nature for teachers may attract more men in the field. (8) With the District able to offer more pay for a longer work year for the teacher, the District can attract more competent people to teach.

Q. Does the plan call for air conditioning the buildings for summer use?

A. Yes.

Q. Is the elementary teacher guaranteed the same room after returning from her vacation quarter?

A. Since a different teacher will have to be teaching during that quarter, there can be no guarantee for the teacher on vacation to return to her room. The plan, however, guarantees that teachers return to their same buildings after the completion of their vacation. In spite of the fact that the plan calls for teachers at the elementary level to be contracted to teach a certain grade level, it must be understood that once the assignment is made to a building that the elementary teacher is guaranteed that assignment.

Q. What about intermediate and high school teachers?

A. The plan calls for the contracting of intermediate and high school teachers for a minimum of three quarters to teach a certain subject matter area. Although it is anticipated that those teachers, once assigned to a building, will remain in that building, the plan does not guarantee this type of arrangement.

Q. How much does the plan cost?

A. The expenditures budgeted for 1968-69 and 1969-70 were worked out by both the regular school year and the four-quarter plan of operation. The results show that had the school district gone on a four-quarter plan during the 1968-69 school year, the cost to the taxpayer would have been an extra 3.5 mills in operational levy. Of those 3.5 mills, 1.5 would have gone toward air conditioning the school facilities. For the 1969-70 school year the cost to the taxpayer would have been 2.5 mills above and beyond what is

being levied presently. On the other hand, the cost of constructing the facilities needed to alleviate overcrowdedness amounts to an average bond levy of 3.8 mills for thirty years. In addition to that, 1.8 mills in extra operational levy would be required to maintain the new facilities.

Q. What are the implications of this plan for professional development of teachers?

A. Since teachers under this plan are to be contracted for three quarters, the plan adopted appears to be feasible in the case of the teachers pursuing their education at colleges using the quarter plan. Under this circumstance, a teacher can enroll in college during the vacation quarter to which that teacher is assigned. There is no apparent solution to the case of the teacher pursuing his education in a college that does not have the quarter plan, except to enroll in evening classes.

Q. When will the plan go into effect?

A. It is important to remember that this is a study that was responsible for coming up with a four-quarter plan. It is anticipated that the second phase of the study, including community reaction, teacher reaction, and business and industrial reaction, would be completed by January 15. The Board of Education is the body that decides on whether or not to adopt such a plan. If the plan is to be adopted, it could not go into effect from a realistic point of view without proper planning for curriculum revision and implementation. This process will require at least one year. Accordingly, it would be very difficult to begin with such a plan before the 1971-72 academic

year. Under ideal conditions, that is money and time and expert help are available promptly upon the Board's decision, it is conceivable that the plan could go into operation before the 1971-72 academic year.

- Q. How are teachers' own youngsters scheduled for their vacations?
- A. The plan envisioned makes it logical to conceive of the youngster(s) being teamed with their parents for the same vacation quarter.
- Q. How does this plan affect the teachers' salary?
- A. According to this plan, teachers working for four quarters will be paid approximately twenty-six per cent more than those working the three quarter school year. It is important to remember that this item is something that will be renegotiated under such a plan.

PORT HURON AREA SCHOOL DISTRICT CERTIFIED STAFF SURVEY

Grade level or subject taught: \_\_\_\_\_

Number of Years Teaching Experience: 0-5 years \_\_\_\_\_  
6-10 years \_\_\_\_\_  
11-15 years \_\_\_\_\_  
16 or more \_\_\_\_\_

Sex: \_\_\_\_\_ M \_\_\_\_\_ F

Age: under 30 \_\_\_\_\_  
30-50 \_\_\_\_\_  
over 50 \_\_\_\_\_

1. Can you briefly describe the four-quarter plan studied in Port Huron, as you understand it?
  
  
  
  
  
  
  
  
  
  
2. As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, or less than they are now paying in taxes for the total educational costs of their youngsters?  
  
a. same \_\_\_\_\_ c. less than \_\_\_\_\_  
b. more than \_\_\_\_\_ d. can't say \_\_\_\_\_
  
3. If such a plan were to be adopted, would you be in favor of it?  
  
a. yes \_\_\_\_\_ b. no \_\_\_\_\_ c. can't say \_\_\_\_\_
  
4. If such a plan were to be adopted, would you continue working for the Port Huron Area School District?  
  
a. yes \_\_\_\_\_ b. no \_\_\_\_\_ c. can't say \_\_\_\_\_
  
5. If answer to previous two questions are in the negative, would you please clearly state your reasons for opposing this plan?

6. If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

a. one quarter \_\_\_\_\_  
b. two quarters \_\_\_\_\_

c. three quarters \_\_\_\_\_  
d. four quarters \_\_\_\_\_

7. If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

a. summer quarter \_\_\_\_\_  
b. fall quarter \_\_\_\_\_

c. winter quarter \_\_\_\_\_  
d. spring quarter \_\_\_\_\_

APPENDIX L

THE COMMUNITY SURVEY--A TALLY OF THE RESPONSES

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The Community Survey--A Tally of the Responses

1. The Port Huron Area Schools are studying ways to solve problems of increasing enrollments and the need for more classroom space. One of those ways is a study of a 4-quarter, year-round school plan. Have you heard about this study?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
Yes	93.7%	96.6	95.3	93.0
No	4.8	2.0	3.7	5.3
Can't say	1.5	1.4	1.0	1.7

2. Can you generally describe the 4-quarter plan, as you understand it?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
Understands it	81.8%	87.5	83.0	81.2
Misunderstands it	17.1	12.5	16.3	17.3
Can't say	1.1	--	.7	1.5

3. As you understand it, would the 4-quarter use of schools cost taxpayers: the same as, more than, or less than they are now paying in taxes to operate the schools?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
More than	63.8%	66.1	63.0	64.2
Less than	10.0	10.2	13.7	7.3
Same	15.7	16.9	15.3	16.0
Can't say	10.5	6.8	8.0	12.5

4. If such a year-round plan were to be adopted, would you be in favor of it?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
Yes	47.0%	41.4	54.3	41.6
No	36.8	45.8	33.0	39.4
Can't say	16.2	12.8	12.7	19.0

Support or opposition to year-round schools, by age group:

	<u>Yes</u>	<u>No</u>	<u>Can't say</u>
Under 30	50.0%	36.4%	13.6%
30 to 50	45.5	41.9	12.6
50 to 65	48.6	34.3	17.1
65 and older	46.7	23.3	30.0



## 5. May I ask why you (favor) (are opposed to) this plan?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
(Favoring)				
Better utilization of buildings	39.3%	34.8	45.4	33.3
More economical solution than building	25.6	33.9	27.3	23.9
Better instruction	15.0	15.2	9.9	20.1
Other varied reasons	11.8	11.0	6.8	17.0
Reduce delinquency	8.4	5.1	10.6	5.7
(Opposing)				
Vacation problems	56.5	66.2	55.2	58.1
Summer difficult	16.2	15.4	12.5	18.7
Higher taxes, costs	12.3	6.1	16.7	9.0
Other reasons	15.0	12.3	15.6	14.2

## 6. If opposed, what other way would you suggest be followed to solve the problem of increasing school enrollments?

	<u>All Respondents</u>	<u>Parents</u>	<u>Men</u>	<u>Women</u>
Cannot offer suggestions	42.1%	38.6	39.8	43.4
Build more schools	23.9	26.6	25.8	22.6
Miscellaneous alternatives	19.6	21.5	17.2	21.2
Increase class size	8.2	7.0	10.2	7.1
Double sessions	6.2	6.3	7.0	5.7

APPENDIX M

THE BUSINESS AND INDUSTRY SURVEY--A TALLY OF THE RESPONSES

The Business and Industry Survey--A Tally of the Responses

Number Responding: 15

1. Projected impact of the four-quarter plan on:

a. Use of seasonal employees:

1. "We do not use excessive high school age students for seasonal although some are used. Their availability would increase but their parents and the parents of younger children availability would drastically decrease."
2. "Would not affect our seasonal employees."
3. "Would reduce the need for seasonal employees."
4. "No effect--do not hire younger than high school graduate."
5. "Probably not a significant factor. We are heavy co-op users and I imagine we would continue under a four-quarter system."
6. "Traditional 'back-to-school' August peak in sales volume and seasonal extras would disappear. The clothing industry and retail clothing stores are traditionally 'geared' to this peak--not an insurmountable problem."
7. "This would not affect us because we use only college students as vacation relief employees during the summer."
8. "We would need to find seasonal employees year-round. Could no longer count on college people for 'seasonal employees.'"
9. "Some problems--but not serious."
10. None. - 3
11. "Should improve."
12. "We use mostly college students during the summer when most of our own personnel take their vacations. We would not need to hire as many during the summer as we usually do. This would tend to reduce our expenses."
13. "Would probably have little effect since we use very few seasonal employees."

## b. Vacation schedules of employees:

1. "No severe problems in this respect and possibly a more year-round vacation request. Less additional help might be needed if the total number of vacations were spread throughout the year."
2. "Would be especially difficult with police and fire employees, and others."
3. "Would tend to lower vacation peaks and make vacation scheduling easier."
4. "Confusion."
5. "Not a problem--already spread throughout the year, but could be a problem to our employees. The senior people have priority over summer vacation months."
6. "This would undoubtedly create many problems--most of our people are working wives who would have to coordinate with vacation schedules of both children and husbands--it might mean that we would be forced to grant vacations to people when we need them most--however, there are some advantages in this area."
7. "The plan would help us tremendously because it would enable us to spread the vacations throughout the whole year. As it stands now, most of our vacations are crowded into two months."
8. "No problem. This could be arranged."
9. "It would help us in our vacation scheduling. This would give us the entire year for vacations, instead of just the summer months."
10. "Completely disrupt our program."
11. "Would help to spread out vacations."
12. "It will affect the scheduling of vacations here; however, our labor agreements are flexible, and this will not be an operational problem."
13. "It would spread the vacations more throughout the year which would be of help to us. We are on an anniversary basis in determining the vacations and the four-quarter plan might cause a little difficulty in adjusting to it."

14. "A four-quarter plan might tend to spread out vacations. The thing that would be very bad would be a scheduling calling for two weeks in the summer for school vacation."
15. "Would not affect us under our present vacation system."

c. Overall business operations:

1. "Severe curtailment of August and September back-to-school promotions. This loss of business would not be regained at the other three quarters. Buying practice would certainly be confusing to all merchants of school children needs."
2. "No."
3. "Should improve business operation."
4. "Probably can work out to accommodate program."
5. "Not significant."
6. "Not any serious effect."
7. "It would enable us to keep skilled men on the job. Presently, with vacations, we depend heavily on semi-skilled vacation relief employees. With the proposed plan, our operations would be enhanced."
8. "This would give us more market because it would be steady, year-round."
9. "I don't think it would make any appreciable difference."
10. "Would be mostly due to individual employees' vacations; also, approximately fifty per cent of our employees are women, and their children being home on school vacations on a staggered basis would cause extremely high work absenteeism."
11. "Possible improvement."
12. "None that we are now aware of at this time."
13. "The four-quarter plan would probably not affect our overall operations appreciably. It might tend to make our patient load more evenly distributed which would be good."
14. "Probably very little effect."

15. "Would probably help us by not having vacation requests as heavy during July and August."

d. Other effects:

1. "Limit the quality of manager I could attract to Port Huron. Apt to end up with only older men who have grown children."
2. "A question I would like to raise is whether or not the individual student would stay with the scheduled quarter off for as long as he attends schools in this district. Could these quarters be changed? Also, if the family moved to another state, where would the student stand in relation to the new school system?"
3. "It would probably serve more children on this system than what we are doing now."
4. "Better use of public facilities."
5. "Of the most important aspect is the continued concentration on improvement of the operation of such a plan after it becomes effective to reduce overall costs."
6. "The following comments or questions do not pertain to the hospital operations as such but they were items that were brought up by our department heads when we had the discussion. I am listing them here as I thought you might be interested in them.
  - a. 'The four-quarter plan would probably require more activities for children during the winter months.
  - b. 'Some families might have difficulty knowing where to go and what to do during the winter months.
  - c. 'Winter vacations would likely be more expensive than summer vacations since a family might not be able to camp along the way.
  - d. 'Would children on vacation be allowed the use of the school grounds as a playground? If so, would it cause disturbances and, if not allowed, would it greatly reduce opportunities for children for playing?
  - e. 'Would children on vacation tend to loiter in the school areas?
  - f. 'A child in his immediate neighborhood could possibly lose his playmates.'"

## 2. Is employer in favor of the plan?

- a. Yes. - 6
- b. No. - 4
- c. "Possibly."
- d. "Yes, if the quarters would be optional. Otherwise, no."
- e. "Qualified yes."
- f. "Not at present."
- g. "I don't really know at this point--more information needed."

## 3. Reasons for being in favor of the plan:

- a. "Purely economic--2.7 mills versus 5.9 mills."
- b. "The biggest reason is the scheduling of vacations. Another is the fact that more efficiency would follow with the year-round use of the facilities."
- c. "We agree we need better schools, etc. I would vote yes if the expenses are projected accurately. I don't see how we can use less teachers to teach more children in smaller classes. Teacher salaries will have to be raised dramatically."
- d. "If optional it would have many advantages: number of subjects, etc. It would be positive for schools, staff, and community."
- e. "Better utilization of buildings, teachers, and support staff. From the information presented so far, it appears to be a more economical operation."
- f. "It looks like it would be best for the community. It would be less expensive in the long run and it would be better utilization of the facilities."
- g. "Lower long-term costs."
- h. "I believe it a matter of economics. It would give better utilization of the school buildings if nothing else. This is the first plan that I have heard that will cut costs and not affect the quality of education."
- i. "Tax saving. Improved teacher/pupil ratio. Shorter semesters to aid the failing student. Possible addition to curriculum. Improved vacation scheduling."

- j. "To make better use of the present facilities. To provide a better education for our children by reducing classroom student size."

4. Reasons for not being in favor of the plan:

- a. "Personal opinion is I believe if plan is thought to be salvation for only five to ten years, the resulting confusion in operation would be more troublesome than practical. It appears the plan is not strong enough, nor long enough."
- b. "I'm not sure the confusion and disruptive effect on peoples' lives and customs is worth the saving."
- c. "If we are doing this only because of finance, I am against the program."
- d. "This may be a temporary economically advantageous plan but I don't feel it is a permanent solution. Also, I don't think it is consistent with furnishing top quality education."
- e. "May I point out that I live in Marysville; therefore, I would not be affected personally and maybe can be most objective in my approach. Additional cost and extreme hardship on plant operation. Extreme negative response I received from those people I discussed this program with. I personally am not convinced the comparative savings is actually as great as may be indicated at this time."
- f. "All of our management people are likely to transfer out of the Port Huron area within the next five to six years and new managers will be coming in. Unless our children can be integrated into a comparable grade level in suburban Detroit, this plan has no appeal. It will possibly make it more difficult for us to attract managers who are willing to transfer into the Port Huron area. If my children were going to be here forever, I would have no problems."
- g. "The four-quarter system is only a temporary expedience, serving to delay the capital outlay for needed buildings. I would prefer to see a scheduling of capital outlay on the basis of an increase in the tax rate amount to 1-1/2 to 2 mills the first time around, and repeating the process in 3 to 4 years. I realize it probably would be cheaper to build all the new buildings now instead of in the future; however, I am also convinced the voters are not prepared to accept a 5 to 6 mill increase at this time."

5. Alternative means to resolve overcrowding in Port Huron Area School District, if opposed for four-quarter plan:

- a. "Cannot comment until the state decides what the situation will be when a school aid bill is finally passed."



- b. "An entirely new way to finance public schools must be found. Property tax is not the answer."
- c. "I feel the people will support the financial needs of the school when they finally identify with the need. The community will support facilities needs when they feel the time is here."
- d. "It appears that the majority of taxpayers would rather spend money for many things ahead of education and apparently are not real concerned about the quality of education. I have reluctantly concluded that the only way the problem will be solved is through the levying of a state income tax for education."
- e. "Re-evaluate entire school program. Reduce all spending to an acceptable commercial level. Earmark sufficient money for continuous long-range building programs."

Comments:

"A survey of employees showed a majority opposed to the four-quarter plan because of vacation problems such as:

'What will my son do in a winter vacation while his buddies are in school?

'My wife will be climbing the wall with five kids home during the winter.

'We camp with other families during the summer.'

etc. When asked if they would support a millage for additional school buildings rather than the four-quarter plan, about half reluctantly agreed and the other half wanted half-day sessions as a means of solving the space problem."

APPENDIX N

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES

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**FOUR-QUARTER PLAN  
Teacher Questionnaire**

**Tally of Responses**

Grade Level or Subject Taught:	elementary	264	46%
	intermediate or high school	274	48%
	other	32	6%
	no response	1	

Sex:	male	188	33%
	female	370	65%
	no response	13	2%

Number of Years Teaching Experience:	0-5 years	211	37%
	6-10 years	113	20%
	11-15 years	96	17%
	16 or more	134	23%
	no response	17	3%

Age:	under 30	186	33%
	30-50	224	39%
	over 50	131	23%
	no response	30	5%

**Question 2:**

As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, or less than they are now paying in taxes for the total educational costs of their youngsters?

same	68	12%
more than	360	63%
less than	80	14%
can't say	55	10%
no response	8	1%

**Question 3:**

If such a plan were to be adopted, would you be in favor of it?

yes	194	34%
no	224	39%
can't say	148	26%
no response	5	1%

## Question 4:

If such a plan were to be adopted, would you continue working for the Port Huron Area School District?

yes	309	54%
no	47	8%
can't say	204	36%
no response	11	2%

## Question 6:

If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

one quarter	5	1%
two quarters	22	4%
three quarters	422	74%
four quarters	94	16%
no response	28	5%

## Question 7:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

summer quarter	375	66%
fall quarter	70	12%
winter quarter	64	11%
spring quarter	20	4%
no response	42	7%

APPENDIX O

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES  
BASED ON THE INSTRUCTIONAL LEVEL TAUGHT

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FOUR-QUARTER PLAN  
Teacher Questionnaire

Tally of Responses Based on the Instructional Level Taught

Question 2:

As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, less than they are now paying in taxes for the total educational costs of their youngsters?

<u>elementary</u>	same	39	<u>intermediate and high school</u>	same	28
	more than	155		more than	178
	less than	38		less than	39
	can't say	25		can't say	28
	no response	7		no response	1
<u>other</u>	same	1			
	more than	26			
	less than	3			
	can't say	2			
	no response	0			

Question 3:

If such a plan were to be adopted, would you be in favor of it?

<u>elementary</u>	yes	57	<u>intermediate and high school</u>	yes	124
	no	140		no	73
	can't say	63		can't say	76
	no response	4		no response	1
<u>other</u>	yes	13			
	no	11			
	can't say	8			
	no response	1			

Question 4:

If such a plan were to be adopted, would you continue working for the Port Huron Area School District?

<u>elementary</u>	yes	121	<u>intermediate and high school</u>	yes	165
	no	30		no	16
	can't say	107		can't say	38
	no response	6		no response	5
<u>other</u>	yes	22			
	no	1			
	can't say	9			
	no response	1			

## Question 6:

If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

<u>elementary</u>	one quarter	1	<u>intermediate and high school</u>	one quarter	
	two quarters	12		two quarters	
	three quarters	205		three quarters	19
	four quarters	24		four quarters	6
	no response	22		no response	
<u>other</u>	one quarter	2			
	two quarters	1			
	three quarters	20			
	four quarters	9			
	no response	1			

## Question 7:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

<u>elementary</u>	summer quarter	192	<u>intermediate and high school</u>	summer quarter	16
	fall quarter	16		fall quarter	5
	winter quarter	23		winter quarter	3
	spring quarter	8		spring quarter	1
	no response	25		no response	1
<u>other</u>	summer quarter	20			
	fall quarter	2			
	winter quarter	4			
	spring quarter	2			
	no response	4			

APPENDIX P

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES  
BASED ON THE SEX OF THE RESPONDENT

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FOUR-QUARTER PLAN  
Teacher Questionnaire

Tally of Responses Based on Sex of Respondent

Question 2:

As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, or less than they are now paying in taxes for the total educational costs of their youngsters?

<u>male</u>	same	18	<u>female</u>	same	48
	more than	123		more than	229
	less than	28		less than	50
	can't say	19		can't say	35
	no response	0		no response	8

Question 3:

If such a plan were to be adopted, would you be in favor of it?

<u>male</u>	yes	92	<u>female</u>	yes	96
	no	55		no	168
	can't say	41		can't say	101
	no response	0		no response	5

Question 4:

If such a plan were to be adopted, would you continue working for the Port Huron Area School District?

<u>male</u>	yes	119	<u>female</u>	yes	180
	no	12		no	35
	can't say	56		can't say	145
	no response	1		no response	10

Question 6:

If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

<u>male</u>	one quarter	2	<u>female</u>	one quarter	3
	two quarters	1		two quarters	21
	three quarters	115		three quarters	298
	four quarters	67		four quarters	24
	no response	3		no response	24

## Question 7:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

<u>male</u>	summer quarter	105	<u>female</u>	summer quarter	260
	fall quarter	37		fall quarter	32
	winter quarter	26		winter quarter	38
	spring quarter	8		spring quarter	11
	no response	12		no response	29

APPENDIX Q

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES  
BASED ON THE AGE OF THE RESPONDENT

FOUR-QUARTER PLAN  
Teacher Questionnaire

Tally of Responses Based on Age of Respondent

Question 2:

As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, or less than they are now paying in taxes for the total educational costs of their youngsters?

<u>under 30</u>	same	29	<u>30 to 50</u>	same	20
	more than	106		more than	157
	less than	29		less than	32
	can't say	22		can't say	15
	no response			no response	8
<u>over 50</u>	same	14	<u>age not</u>	same	5
	more than	80	<u>given</u>	more than	16
	less than	15		less than	4
	can't say	14		can't say	4
	no response	1		no response	

Question 3:

If such a plan were to be adopted, would you be in favor of it?

<u>under 30</u>	yes	81	<u>30-to 50</u>	yes	73
	no	60		no	98
	can't say	44		can't say	53
	no response	1		no response	8
<u>over 50</u>	yes	31	<u>age not</u>	yes	9
	no	56	<u>given</u>	no	10
	can't say	40		can't say	10
	no response	4		no response	1

Question 4:

If such a plan were to be adopted, would you continue working for the Port Huron Area School District?

<u>under 30</u>	yes	88	<u>30 to 50</u>	yes	125
	no	23		no	13
	can't say	70		can't say	85
	no response	5		no response	9
<u>over 50</u>	yes	79	<u>age not</u>	yes	16
	no	6	<u>given</u>	no	4
	can't say	40		can't say	9
	no response	6		no response	1

## Question 6:

If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

<u>under 30</u>	one quarter	9	<u>30 to 50</u>	one quarter	2
	two quarters	10		two quarters	7
	three quarters	129		three quarters	165
	four quarters	38		four quarters	39
	no response			no response	11
<u>over 50</u>	one quarter	1	<u>age not given</u>	one quarter	2
	two quarters	4		two quarters	1
	three quarters	108		three quarters	19
	four quarters	15		four quarters	2
	no response	3		no response	5

## Question 7:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

<u>under 30</u>	summer quarter	116	<u>30 to 50</u>	summer quarter	143
	fall quarter	34		fall quarter	24
	winter quarter	20		winter quarter	26
	spring quarter	8		spring quarter	8
	no response	8		no response	23
<u>over 50</u>	summer quarter	95	<u>age not given</u>	summer quarter	21
	fall quarter	10		fall quarter	2
	winter quarter	16		winter quarter	1
	spring quarter	2		spring quarter	2
	no response	8		no response	3

APPENDIX R

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES  
BASED ON THE YEARS OF TEACHING EXPERIENCE OF THE RESPONDENT

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FOUR-QUARTER PLAN  
Teacher Questionnaire

Tally of Responses Based on Years of Experience of Respondent

Question 2:

As you understand it, would the four-quarter use of schools cost the taxpayers the same as, more than, or less than they are now paying in taxes for the total educational costs of their youngsters?

<u>0 to 5 years</u>	same	36	<u>6 to 10 years</u>	same	13
	more than	117		more than	31
	less than	1		less than	10
	can't say	1		can't say	9
<u>11 to 15 years</u>	same	4	<u>16 and up</u>	same	13
	more than	64		more than	88
	less than	21		less than	17
	can't say	5		can't say	11
<u>experience not indicated</u>	same	2			
	more than	10			
	less than	2			
	can't say	2			

Question 3:

If such a plan were to be adopted, would you be in favor of it?

<u>0 to 5 years</u>	yes	87	<u>6 to 10 years</u>	yes	48
	no	70		no	45
	can't say	53		can't say	20
<u>11 to 15 years</u>	yes	27	<u>16 and up</u>	yes	31
	no	41		no	60
	can't say	28		can't say	39
<u>experience not indicated</u>	yes	1			
	no	8			
	can't say	8			

## Question 4:

If such a plan were to be adopted, would you continue working for the Port Huron Area School District?

<u>0 to 5 years</u>	yes	105	<u>6 to 10 years</u>	yes	69
	no	25		no	10
	can't say	77		can't say	32
<u>11 to 15 years</u>	yes	59	<u>16 and up</u>	yes	71
	no	3		no	7
	can't say	34		can't say	51
<u>experience not indicated</u>	yes	5			
	no	2			
	can't say	10			

## Question 6:

If such a plan were to be adopted, how many quarters would you prefer to be contracted for?

<u>0 to 5 years</u>	one quarter	2	<u>6 to 10 years</u>	one quarter	1
	two quarters	10		two quarters	5
	three quarters	144		three quarters	88
	four quarters	41		four quarters	16
<u>11 to 15 years</u>	one quarter	1	<u>16 and up</u>	one quarter	1
	two quarters	1		two quarters	4
	three quarters	75		three quarters	106
	four quarters	15		four quarters	19
<u>experience not indicated</u>	one quarter	0			
	two quarters	2			
	three quarters	9			
	four quarters	3			

## Question 7:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

<u>0 to 5 years</u>	summer quarter	127	<u>6 to 10 years</u>	summer quarter	76
	fall quarter	41		fall quarter	8
	winter quarter	20		winter quarter	17
	spring quarter	10		spring quarter	2
	no response	13		no response	10
<u>11 to 15 years</u>	summer quarter	66	<u>16 and up</u>	summer quarter	94
	fall quarter	9		fall quarter	10
	winter quarter	11		winter quarter	15
	spring quarter	2		spring quarter	6
	no response	8		no response	9



## Question 7 continued:

If you had a choice about a vacation quarter, which quarter would you choose? (Please refer to the suggested calendars.)

<u>experience</u>	summer quarter	12
<u>not indicated</u>	fall quarter	2
	winter quarter	1
	spring quarter	13
	no response	2

APPENDIX S

THE CERTIFIED STAFF SURVEY--A TALLY OF THE RESPONSES  
TO QUESTION NUMBER FIVE

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FOUR-QUARTER PLAN  
Teacher Questionnaire

Tally of Responses to Question Number Five

Question 5:

If answers to previous two questions are in the negative, would you please clearly state your reasons for opposing this plan?

<u>Number Giving This Reason</u>	<u>Reason</u>
63	1. Don't want to change buildings or rooms and lose equipment.
51	2. Prefer summer vacation.
30	3. Difficulty coordinating vacations.
29	4. Lack of curriculum planning.
23	5. Only a temporary solution.
21	6. Need time off during summer to rest.
21	7. Increase personal family life problems.
20	8. Personal reasons; college courses; etc.
20	9. Create discord in the community.
18	10. Not feasible at elementary grades.
17	11. Climate is not conducive to such a plan.
12	12. Creating more and new problems.
10	13. Don't want to pilot such a program.
10	14. It hasn't worked anywhere else.
10	15. Recreation problems.
10	16. Too complicated and confusing.
9	17. Dictated assignment of vacations.

**Number  
Giving  
This  
Reason****Reason**

- |   |  |
|---|--|
| 9 | 18. Truancy, "visiting" problems of vacationing students.  |
| 9 | 19. Too little thought given to children in planning.  |
| 6 | 20. Too costly.  |
| 5 | 21. Don't like air conditioning.   |
| 5 | 22. Friendships and school spirit would be destroyed.  |
| 4 | 23. Building maintenance would suffer.   |
| 3 | 24. Difficulty involving new transfers mid-year. Do they start at the beginning?                                   |
| 2 | 25. Staggered vacations mean children at staggered levels, creating social problem between youngsters of same age. |
| 1 | 26. Double sessions would give fuller use of buildings.  |

APPENDIX T

BOARD NOTES, JANUARY 19, 1970

Communication - The Secretary read a letter addressed to Mr. William Cottingham, Supervisor of Transportation, from Mr. Charles E. Ash, Director of the Department of Public Works County of St. Clair, thanking him for his cooperation during the closure of Krafft Road.

Shortage of Classrooms - Dr. DeGrow stated that there is a shortage of classrooms at the present time, with two rooms in the Salvation Army building being rented, eleven portable classrooms in use and the Fillmore School is not the right physical plant for students, as it was built in 1880. There is a new building project by the Grant School, apartments may be built in that area and a major industry may come to town. He gave four solutions, as follows: (1) Year-round school, (2) New buildings, (3) Double sessions, (4) Crowd in; he feels that Nos. 3 and 4 are wrong.

Report of Ned S. Hubbell & Associates on opinions of registered voters concerning Year-round School - 702 registered voters were interviewed from the registered voters list of the school district, 295 have children in school, 252 did have, and 155 with no children in school. 93.7% had heard about year-round school, with 81.8% able to describe it and 63% knowing that it would cost more, but not as much as a bond issue. Of the persons interviewed, the responses were as follows: 47%-yes, 36.8%-no, 16.2% can't say, regarding year-round school. The people in favor of year-round school felt that there would be better utilization of the present school buildings and a more economical solution than building new schools. People were opposed mostly because it would change their vacation periods. 43% of persons interviewed said they received their information from the newspapers and 22.9% said that they received their information from pupils. The survey indicated that the Board of Education and the administrators were doing a better than average job and the teachers were rated even higher. There were 117 criticisms on both curriculum and school management.

REPORT OF DR. SAMI ALAM ON THE OPINIONS OF THE CERTIFIED STAFF AND THE BUSINESS AND INDUSTRY CONCERNING THE FOUR-QUARTER PLAN OF SCHOOL YEAR OPERATION.

The surveys indicate inconclusive support or rejection of the proposed operation of year-round school. Five hundred seventy-one teachers and fifteen business and industrial leaders employing more than 7,100 employees responded to the survey. While 32% of the certified staff members favored the proposal, 39% opposed it, and 26% were uncommitted at this time. Forty per cent of the business and industrial representatives surveyed supported the plan while 33% objected to it, 13% gave qualified endorsements, and another 14% were uncommitted. Staff members opposing the plan indicated that vacation problems and possible room and building assignment changes were among their principal objections. Male staff members were more receptive to the four-quarter plan than were female staff members. Intermediate and secondary staff members endorsing the plan (45%) were greater than elementary staff members (21%). Most staff members would continue working in the district if such a plan were adopted, and 67% expressed a desire to work three of the four quarters. Sixty-six per cent of the staff indicated a choice of summer vacations.

Sixty-seven per cent of the business and industrial representatives said they felt the plan would have no effect on their business operation, and 40% of them indicated the plan would have little or no effect on the use of seasonal employees. Twenty-six per cent of those businessmen indicated the plan would create problems in scheduling vacations, especially those firms that employ a large number of women.

Incinerator Bids for Fillmore and Kimball Schools - The Board of Education recommended that all bids be rejected. For the remainder of the school year, the pickup  
ice will be used for wastepaper, using a large steel, locked box. This service  
will be contracted for on a temporary basis only.

APPENDIX U

PARENT PREFERENCE POLL



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# Port Huron Area Public Schools

Administrative Offices, 509 Stanton Street  
Port Huron, Michigan 48060

Telephone Yukon 4-3101

Division of Research  
Dr. Sami J. A.

## Parent Preference Poll

Dear Parents,

Would you take a few minutes to fill out this brief questionnaire?

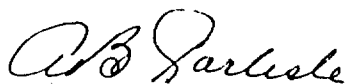
As you probably know, your Board of Education is making a careful study of how to solve the serious need for more classroom space. One way to meet that need is to build additional facilities. Another possible solution is through the year-round (four quarter) use of schools.

Under such a proposal, which we are still examining, each student would be in school the same amount of time as he is now, but vacation schedules would vary. Children in the same family, under year-round schools, would have the same vacation period if the family so desired. Not all children would have the summer quarter for vacation as they do now.

If such a plan for year-round schools were to be adopted, we would first have to know **YOUR PREFERENCE** for the vacation period for each of your children.

Please help us in this study by filling out the questionnaire on the next page. Show your vacation preferences for each child in your family. Then tear off the form and have one of your children return it to his teacher by March 9, 1970. We need the vacation preferences of every family in the school district in order to study the complete possible vacation schedules.

Thank you for your help in this survey, an important part of our study. Your preferences will advise us whether we can effectively schedule all students in four vacation periods.



A. B. Carlisle, President  
Board of Education



Gerald S. DeGrow, E.d D.  
Superintendent of Schools

PLEASE FILL IN PAGE 3 -  
HAVE ONE CHILD IN YOUR  
FAMILY TAKE IT TO HIS TEACHER

BY MARCH 9, 1970

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## EXPLANATION and INSTRUCTIONS

If year-round school operation was established, each child would attend school the same length of time as he does now, but in 3 60-day quarters of the year instead of the present 2 semesters. In addition, each child would have one quarter (60 days) free for a vacation period. These vacations would vary so that no more than three-fourths of all public school children would be in school at one time. In addition to a full quarter of vacation, each child would also be on vacation:

- Labor Day
- Thanksgiving Day
- 5 days for Christmas
- 2 days for New Year's
- 4 days for Easter
- Memorial Day
- 2 days for teachers' in-service education
- 1 day (two half-days) for student records
- 12 summer vacation days (June 18-30th)
- Independence Day

### TENTATIVELY, THE SUGGESTED 4 QUARTERS:

QUARTER "A" — July 1 to September 24  
 QUARTER "B" — September 25 to December 22  
 QUARTER "C" — December 27 to March 22  
 QUARTER "D" — March 23 to June 17

ON THE NEXT PAGE, fill in the name, grade level, and school of each child in your family who attends public school. Then indicate your vacation preferences for that child. Your first choice for vacation should be marked No. 1 opposite the quarter in which you prefer this vacation. Your second choice for vacation for that child would be marked No. 2; your third choice, No. 3; and your fourth choice, No. 4. Show four vacation choices, or preferences for each child. Fill in a box for every child in the family. The sample below shows how vacation preference might be marked:

### SAMPLE:

LAST NAME	FIRST NAME
CHILD'S NAME <u>Smith, Sammy</u>	
GRADE LEVEL <u>4</u>	SCHOOL <u>W. Wilson</u>
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. <u>3</u>
Quarter B: Sept. 25 to Dec. 22	No. <u>1</u>
Quarter C: Dec. 27 to March 22	No. <u>4</u>
Quarter D: March 23 to June 17	No. <u>2</u>

**COMPLETE THE NEXT PAGE; FILL IN VACATION PREFERENCES FOR EACH CHILD. TEAR OFF FORM AND RETURN TO SCHOOL BY MARCH 9, 1970.**



LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

LAST NAME	FIRST NAME
CHILD'S NAME _____	
GRADE LEVEL _____	SCHOOL _____
(School Quarter)	(Vacation Preference No.)
Quarter A: July 1 to Sept. 24	No. _____
Quarter B: Sept. 25 to Dec. 22	No. _____
Quarter C: Dec. 27 to March 22	No. _____
Quarter D: March 23 to June 17	No. _____

## SELECTED ANNOTATED BIBLIOGRAPHY

Allen, James E., Jr. "The All-Year School," School Management (February, 1966), 86-156.

An interview with James E. Allen, Jr., Commissioner of Education, New York State, who endorses a booklet that urges school board members and superintendents to seriously consider implementing extended school year programs. Allen's education department has outlined five basic designs for extending the school year: (1) the trimester plan, (2) the quadrimester plan, (3) the extended K-12 plan, (4) a two-semester plan plus modified summer school, and (5) the continuous school year plan. Also, Allen and Dr. Lorne Woollatt of the New York State Department of Education answer questions concerning the extended school year.

American Association of School Administrators. Year-Round School (Washington, D. C.: the Association, a department of the National Education Association, 1960), 26.

The booklet offers a brief history of the year-round school. This booklet identifies and reviews a number of year-round programs that have existed. In each instance, basic problems and issues that must be dealt with in developing a year-round school program are enumerated.

Bauman, W. Scott. The Flexible System: An Economic Analysis of Advantages of the Quarterly Calendar in Public Schools (Toledo: Business Research Center, College of Business Administration, University of Toledo, 1966), 8.

Considers the need for economy and for improving instructional effectiveness. Areas of savings are seen as: (1) instructional salaries, 10%; (2) textbooks, supplies, etc., 5%; (3) plant operation, 20%; (4) insurance and other fixed charges, 20%; (5) interest on school debt, 25%; (6) pupil transportation, 5%. Total operating expenditures (above), 91.1% and (7) capital outlay, 25%. Total expenditure (includes all above), 11.8%.

He expects the cost of administration, plant maintenance, and other programs to remain about the same.

Expected benefit to children are to be due to: (1) better quality of instruction (less teachers so keep the better teacher); (2) relief from crowded conditions (suggests that class size will be reduced):

Berman, Harvey. "Do Our Schools Need More Time?" American School Board Journal (November, 1957), 35-36.

A review of the four basic plans to extend the school year: (1) The four-quarter plan involving staggered vacations during the entire year; (2) The extended school day in which school would be held from 8:30 to 5:30; (3) The popular eleven-months system in which schools could run on a double session without lengthening the school day; (4) The all-year school in which the school would be kept open the entire year.

Bienenstok, Theodore. "Resistance to an Educational Innovation," Elementary School Journal 65 (May, 1965), 420-28.

Tells of public resistance to acceleration plan for pupil achievement (grades 3-8 in five years of school) in New York. Resistance seemed to be based on the following: (1) Plan did not consider the good of the child in view of parents as it was presented; (2) parents distrusted acceleration; (3) plan was not presented as a well thought idea--seemed vague; and (4) source of the plan was seen as state legislature, not state education department. But the department's personnel presented the plan and community had assumed that it was a department plan at first.

Bullock, Robert P. "Some Cultural Implications of Year-Round Schools," Theory Into Practice 1 (June, 1962), 154-61.

The school year, the author maintains, is a "nine-month whole;" staggered school attendance would be a disruptive influence on students, teachers, and family life. Mr. Bullock is professor of sociology and anthropology at Ohio State University.

Cammarota, Gloria; Stoop, John A.; and Johnson, Frank R. Extending the School Year (Washington, D. C.: Association for Supervision and Curriculum Development, a department of the National Education Association, 1961), 28-30.

This booklet, published by the Association for Supervision and Curriculum Development of the NEA, is basically concerned with voluntary summer programs. It specified several and evaluates each in view of the qualities ASSCD would like to see in a summer program. Improvement of the school program is the only concern of the author. No mention of fiscal saving is made.

Cardozier, V. R. "For a 210-Day School Year," Phi Delta Kappan (March, 1957), 240-242.

V. R. Cardozier, specialist in education with the National Cotton Council of America at Memphis, Tennessee, claims that a 210-day school year makes the educational needs of children a prime consideration and has the additional quality of feasibility. Cardozier states that the current nine-month year is relatively new and that the extension to a ten and one-half month year would set the stage for year-round pay for teachers. He also claims that air-conditioning will soon be a common feature of schools to offset school attendance in hot weather.

Cardozier claims that we cannot expect to succeed with the adoption of a twelve-month plan, even if it could be successfully defended, because teachers, parents, and children will not accept it. He asserts that if educational leaders will support the ten and one-half month plan, which is more acceptable to the public, it will be adopted with a minimum of difficulty.

Caswell, Hollis L. "A Study of Nashville's All-Year School," Peabody Journal of Education, Vol. 8, No. 6 (May, 1931), 317-47.

Nashville Schools had established a four-quarter plan with

the summer as an extra voluntary quarter. About 50% of the pupils attended the summer quarters from 1924-1930.

Referring to elementary children in grades 4 and 5: "In fact with each succeeding quarter of attendance achievement lowers." That is, it falls behind achievement of children with the same number of quarters of education, but without summer work. This difference is claimed statistically significant. "It is the judgment of the writer that rapid advancement by summer quarter attendance followed by failure has resulted in great injustice to numerous children."

Clarke, W. F. "All-Year Elementary Schools," Elementary School Journal 22 (December, 1921), 286-89.

In the opinion of the author the all-year elementary school was favorable in almost every instance in Duluth, Minnesota in the course of several years use there. It started as a catch-up situation for failures but evolved into 70% participation from all students. The summer program, or quarter, was modified to run only in the morning however.

Derthick, L. A., et al. "The Year-Round School," School Life 40 (October, 1957), 8-10.

The 12-month school was discussed by a panel of four leading American educators during the NEA Convention in Philadelphia, Pennsylvania on July 3, 1957 for transcription and broadcasting over stations of the Westinghouse Broadcasting Company. L. G. Derthick, U. S. Commissioner of Education, was the moderator. Other participants were Philip J. Hickey, president of the AASA; Martha Shull, president of the NEA, 1956-57; and T. M. Stinnett, executive secretary of the National Commission on Teacher Education and Professional Standards. The major areas discussed were concerned with classroom shortages; saving money; reactions of parents, teachers, and pupils; and acceleration against enrichment. The general trend was the feeling that much more study was needed.

Engh, Jeri. "Why Not Year-Round Schools?" Saturday Review 49 (September 17, 1966), 82-84.

A number of school systems have, in the past, attempted year-round operation. Public objections were always raised, however, and the plans always failed. But today a growing number of colleges throughout the country are adopting programs that operate throughout the year, and summer programs at the elementary and secondary level are taking on many of the characteristics of the regular school year --more often giving bright students an opportunity to pursue their academic interests, rather than merely providing remedial work for those who have failed. Therefore, year-round operation of the schools has again become a possibility. Here the author explores some of the benefits that might accrue from such a plan. The author is a free lance writer who has worked actively with a new organization, the National School Calendar Study Committee, that is devoted to stimulating discussion and study of the idea. The author claims

that the following basic principles seem clear: (1) Year-round operation eliminates the waste of shutting down multi-million-dollar buildings and equipment for three months every year--and whatever eliminates waste reduces cost. (2) Much of the school budget is already on a year-round basis: administration, insurance, maintenance. (3) Any increased administrative or maintenance expense can be balanced against the accompanying construction savings. (4) By cutting enrollment one-fourth, the four-quarter plan likewise cuts equipment, textbook, and teacher needs by one-fourth.

Fawcett, Novice G., et al. "The Year-Round School," Theory Into Practice (June, 1962), 121-75.

A series of articles by various individuals concerning different phases of the all-year school program. Probably the most extensive report out by 1962.

The series begins with an article entitled "The Dilemma of the Year-Round School" by Shirley Lipson, associate editor of Theory Into Practice. This article is literally from its title.

The second article is entitled "A New Challenge to Education" by Novice G. Fawcett, president of Ohio State, who indicates the changes that our educational system has undergone in the past to meet new social conditions and new requirements. Current needs, he maintains, can be met best by developing year-round school programs.

The third article in the series is "The Los Angeles Study of Year-Round Operation" by John Lombardi, president of Los Angeles City College. No recommendations were made and no action taken by the Board of Education.

The next was "Calendar Possibilities for Year-Round Schools" by Robert E. Glaas, principal of Mansfield High School, Mansfield, Ohio. He presents four calendar plans that might be used or considered by a school contemplating year-round operation.

The fifth in the series was "Is Year-Round School Operation Economical?" by H. Thomas James, associate professor of education at Stanford. He critically examines the financial implications of year-round school programs. He challenges the widely held idea that greater economy can be achieved through such programs.

The sixth was "Maintenance and Operational Costs Involved in a Year-Round Program" by E. B. Sessions, associate professor in the Bureau of Educational Research and Service at Ohio State. This survey of school business officials indicates that economies in school-building construction in a year-round program are offset by increased costs for maintenance and operation.

The seventh was "Some Cultural Implications of Year-Round Schools" by Robert P. Bullock, professor of sociology and anthropology at Ohio State. The author maintains that the school year is a "nine-month whole;" staggered school attendance would be a disruptive influence on students, teachers, and family life.

The eighth was "The Value of an Independent Summer Program" by Robert S. Gilchrist, superintendent of schools, University City, Missouri, and Edwin R. Edmunds, director of summer school, University City. The authors maintain that a good summer pro-



gram, independent of the regular school curriculum, can offer both remedial and enriched instruction that would be impossible in an all-year school program.

The ninth was "The Extended School Year: A Teacher's View" by Joseph O'Rourke, Latin teacher at Central High School, Columbus, Ohio. The author argues for the educational advantages that year-round operation could provide--increased opportunities for individualized instruction and a consequent rise in teacher status.

The last was "Year-Round School: A Review Essay" by Walter G. Hack, assistant professor of education at Ohio State. A survey of the literature of the year-round school.

Fitzpatrick, William J. "The All-Year School, Pro and Con," School and Society 86 (April 26, 1958), 191-92.

William J. Fitzpatrick of Seton Hall University takes the affirmative for all-year schools but gives a short summary of the advantages and disadvantages. (A report on actual school programs and bibliography on the all-year school may be found in W. J. Fitzpatrick's "A History of Summer Schools in the United States from 1900 to 1953," unpublished Ph.D. thesis, New York University, 1956.)

Flemming, Arthur S. "Our Schools Should Be Open All Year," Good Housekeeping (April, 1963).

Arthur S. Fleming, Contributing Editor of Good Housekeeping and formerly Secretary of Health, Education and Welfare, asserts that the nine-month school year for high-school and college students is outmoded. He says that the nine-month school year should be replaced by a twelve-month year. Fleming states that it is clear that students should not take four years to complete programs that could be completed in three years.

Florida Educational Research and Development Council. Year-Round Schools for Polk County, Florida: A Feasibility Study (Gainesville: Florida Educational Research and Development Council, College of Education, University of Florida, 1966), 71.

This is a report of a study that Florida Research and Development Council for the Polk County Schools made on the subject of year-round school. The study recommends the adoption of a voluntary (or compulsory, for failures) summer school for remedial, enrichment, and accelerated study. The study does not recommend the adoption of either an accelerated plan or a plan involving staggered vacations. These last two plans are considered as: (1) educationally doubtful; and (2) economically costly.

Holmes, George W., III; and Seawell, William H. "The Extended School Year--Is It Administratively Feasible?" High School Journal (March, 1964).

Holmes and Seawell contend that the extended school year has been and is entirely feasible. They also assert that to give school administration a reasonable chance for success in organizing extended school programs, serious consideration should be

given to the following ideas:

(1) Existing status should be studied and revised so that legal status of summer schools and other forms of the extended school year might be clarified.

(2) The state should provide state financial support for the program.

(3) Informing the lay public that improved programs of public education means that greater proportions of available funds must be provided.

(4) The extended school year means a way of providing for the horizontal broadening of educational experiences.

(5) The traditional concepts of the school year are no longer valid in today's world.

Hoover, Dennis. "Year-Round Classes Seen Around Corner," The Dallas Morning News (December 19, 1966).

Year-round operation of the public schools in Texas and other states may be just around the corner. Growing numbers of professional and lay education leaders say the traditional summer shut-down of buildings, equipment and teaching is a waste that taxpayers and the nation can no longer afford. They point out that all-year utilization of school plants could:

(1) Save millions of dollars in school construction outlays.

(2) Conserve scarce teacher talent.

(3) Expand educational opportunity for pupils.

All three are viewed as imperatives as the educational demands of the space age accelerate. The quarterly system, rather than the trimester or other plan of year-round operation, seems to be generating the most interest. Adoption of the four-quarter system would immediately expand a school buildings' capacity by one-third.

Dr. W. Scott Bauman, associate professor of finance at the University of Toledo, has made perhaps the most complete study of the nation's public schools quarterly system's advantages. He estimates that had the nation's public schools been using this plan in fiscal 1960 capital expenditures would have been cut 25 per cent, operating expenditures 9 per cent. Total savings would have been almost \$2 billion. Teachers would find themselves, at last, in a full-time profession at full-time pay. A nonprofit citizens' group, the National School Calendar Study Committee, has been formed to stir interest in year-round school programs. Its founder and organizing chairman is George M. Jensen, a corporation president who served five terms as president of the Minneapolis, Minnesota board of education. Many believe that year-round school would lessen juvenile delinquency, since only one fourth of pupils would be free of school discipline at a time. Jensen said most superintendents around the country still look askance at the year-round calendar, but an increasing number favor the proposal.

The quarterly plan has been discussed for decades but seldom tried. The most prominent trials were in two small Pennsylvania districts, Aliquippa and Ambridge, in the 1930's. After a few years both districts returned to the traditional system. Why? "These districts deviated from the standard pattern because of critical building shortages," said Jensen. "The communities were

forced to accept a change in customs without being sold on how the new system could strengthen education. It was hard for one district to do it while the rest remained in their old, comfortable pattern."

There is evidence that ease of travel and affluence are changing the traditional reverence for "summer vacations only." Jensen said businessmen with whom he's discussed the year-round school idea are intrigued by it and believe it merits serious investigation.

Is summer a poor time to study? "Most of the available evidence suggests that summer study and teaching are not necessarily debilitating; indeed the opposite can be true," report authors Schoenfeld and Schmitz in their book Year-Round Education.

Some school districts may be too small to justify separate pupil groups in each grade, notes Dr. Bauman. He suggests alternatives such as consolidating small school districts. Rockville, Maryland school officials are studying still another year-round proposal, called "twelve-four." As under the quarterly system schools would operate 48 weeks a year. Each student would attend school 36 weeks or 180 days, on a schedule of 12 weeks of classes followed by 4 weeks of vacation the year round.

In Flint, Michigan, more children and adults are using the school buildings after hours than during regular school hours, reports "American School and University."

Hoover, Dennis. "Year-Round School Use May Ease Room Problem," The Dallas Morning News (December 18, 1966).

John W. Gardner, U. S. Secretary of Health, Education, and Welfare, states, "Most school and college buildings stand unused after 4 p.m. every weekday, all day Saturday, and throughout the summer. In the 1960's the nation will have to spend in the neighborhood of \$25 billion on elementary and secondary school construction. Anything that can be done to diminish this through better utilization of present buildings will be money saved."

In an era of exploding educational needs many leaders say the traditional extravagance of idle public school plants has got to go. One currently discussed proposal to end this waste is the four-quarter school calendar.

School-building dollars now are being wasted in appalling stacks. Yet the majority of taxpayers, who own the school systems, appear to think nothing of allowing their huge capital investment to gather dust at least 70 per cent of the time.

Among leaders beginning to recognize that a horse-and-buggy schedule of school operation no longer suffices are members of the Texas Board of Education. The board recently made three recommendations to the legislature meeting in January that involve fuller use of school plants: (1) One proposal aims at increasing summer school enrollment by providing state financial support for these programs. (2) A second proposal is for state aid to finance pilot programs testing the feasibility of a longer school day. (3) The Board's third proposal is for state aid to finance pilot programs extending the school year to 10 months.

Some 40 U. S. colleges and universities now have formal plans for operating their campuses around the calendar--as contrasted

with a much larger number that offer traditional summer sessions.

Imhoff, Myrtle M., and Young, Wayne. "School Organization," Review of Educational Research 29 (April, 1959), 160-61.

Imhoff and Young report that an increase in enrollments has revived interest in the all-year school. Most of the writings have been opinions, including lay opinion. The issues seem to group themselves into three possibilities: (1) Using the school plant during the summer to enrich the program. (2) Carrying on the program throughout the year. (3) Organizing the school on a four-quarter basis, each pupil attending three quarters.

In their opinion, the outstanding research study on the all-year school was conducted by Los Angeles City School District in 1954. A committee of educators analyzed the advantages and disadvantages of the four-quarter system. They found it too costly, had too many administrative problems, and would benefit only 5.3 per cent of the pupils in the elementary schools. They also reported the results of the opinion poll in 1955 involving superintendents where 70 per cent were opposed to a quarter system.

Irons, H. S. "Utilizing Buildings and Instructional Materials 12 Months Annually," The American School Board Journal 88 (March, 1934), 17-19.

H. S. Irons, principal of Junior and Vocational High School, Ambridge, Pennsylvania, describes the 12-month operation of schools in Ambridge. He asserts that the all-year use of school buildings and equipment is successful, but that it is too early to say whether or not the 12-month plan is working. However, he did note that no failures had resulted in any major aspects of administration. The Ambridge Plan is a four-quarter plan similar to that of Aliquippa, Pennsylvania.

James, H. Thomas. "Is Year-Round School Operation Economical?" Theory Into Practice 1 (June, 1962), 141-47.

In general, no. Notes that interest in the four-quarter plan rises and falls with population pressure and suggests that current interest is due to die out. He suggests that there is a long-term trend toward a longer school year. He notes 160 days before World War I, about 200 days now, perhaps 220 days by 2000 A.D.

Jensen, George M. "Businessman Urges Better Return for Our Educational Dollar," The Employer (July, 1965).

George M. Jensen, president of Tem-trol Corporation of Minneapolis, Minnesota, maintains that the present school calendar is hurting the teacher, unfair to the student, and contributing substantially to our school tax problem. He also asserts that a modern, year round school calendar is best because its flexibility gives the student a better break, it affords full professional status to the teacher, and it gives taxpayers a breather. Jensen further advocates that such a year-round calendar would cause a decline in juvenile delinquency and that organizations such as the

Boy Scouts, Girl Scouts, etc. would have no trouble adapting to a new schedule. He thinks more people could be handled on such a new calendar.

Jensen says that with a new calendar, most firms could schedule their vacations throughout the year, and so do without disrupting the operations of the firm. It might also mean hiring few, if any, vacation replacement people, this for the reason that they would be scheduling vacations throughout the entire year and not trying to cram them all into a 90-day period and still stay open.

Jensen states that a national organization is needed to provide an intensive study of all facets of school calendars by both professional and lay authorities. The results of these studies will be carefully analyzed and made available to interested individuals and groups across the country. Jensen and other persons have organized in Minnesota the National School Calendar Study Committee as a step in the direction of a national group.

Johnson, Russell. "What Are the Evidences of Need for a Year-Round Educational Program?" Bulletin of the National Association of Secondary-School Principals, 37 (April, 1953), 325.

A summary of a presentation by Russell D. Johnson, assistant superintendent of schools, Granite City, Illinois. Johnson argues for an extended school year on the basis of: (1) utilization of building facilities; (2) overcrowding; (3) teachers' salaries; (4) recreation; (5) parental vacations; (6) out-of-class learning activities; (7) work-experience programs; (8) both parents working; (9) quarterly system; and (10) teachers' leaves.

Lombardi, John. "The Los Angeles Study of Year-Round Operation," Theory Into Practice (June, 1962), 131-35.

In 1904, the first quarter system was introduced at Bluffton, Indiana. The plan was most popular between 1910 and 1940. Newark found that the cost of the all-year school was greater than that of the traditional nine-month school. Other problems of past users included parental objections to vacation times and difficulty in keeping buildings in repair.

MacPherson, Vernon D. "Keeping Schools Open All Year," The Nation's Schools 56 (September, 1955), 51-54.

A discussion of the report of the committee to study all-year schools for Los Angeles. MacPherson points out that the study was suggested by the taxpayers. He cites the experiences in other cities, particularly on the four-quarter plan. It was also noted that the four-quarter plan did not solve the over-crowding problem. There seemed to be no major enrollment problems arising out of an all-year school. There was noted an increased cost of maintenance. Los Angeles did not consider the change to an all-year situation worth the effort.

May, Frank B. "Year-Round School: A Proposal," Elementary School Journal 61 (April, 1961), 388-93.

Suggests a four-quarter plan of eleven weeks each, not staggered, with two weeks vacation between quarters. Children attend all quarters. It will cost! Plan has many "pie-in-the-sky" speculations.

National Elementary Principal. "If You're Interested in the All-Year School," National Elementary Principal 41 (April, 1962), 46-49.

This article is based on Research Memo 1962-2, January, 1962, prepared by the Research Division of the NEA. The slant is from the need for facilities and qualified teachers. The article gives a brief historical background. The rest of the article is then spent in describing three plans: (1) Four-quarter rotating plan; (2) Regular school throughout the year; and (3) An extended summer school program. The article gives the advantages and disadvantages of each.

Nation's Schools. "All Year School Can Wait, 2 of 3 Schoolmen Assert," Nation's Schools 73 (March, 1964), 84.

Two out of three administrators stand firmly opposed to all-year school, many because they think teachers need a full summer's break in the classroom schedule. Based on a four per cent proportional sampling of 16,000 school administrators in fifty states, this survey brought a sixty per cent response.

Nation's Schools. "Lengthening the School Year," Nation's Schools 62 (December, 1958), 6.

A nationwide sampling of superintendents' opinions by The Nation's Schools.

1. Should the length of the school year be extended beyond the traditional nine months or 36 weeks?

Yes - 65%      No - 35%      No opinion - 2%

If so, how many days would you add?

5 - 3%      20 - 56%      100 - 1%

10 - 28%      30 to 40 - 8%

15 - 3%      60 - 1%

2. Should the traditional school day of 5-1/2 to 6 hours be lengthened?

Yes - 38%      No - 60%      No opinion - 2%

If so, how much time would you add?

30 min. - 25%      1 hr. - 43%      2 hrs. - 7%

45 min. - 19%      90 min. - 6%

3. Should the school program be lengthened by scheduling classes on Saturday (other than extracurricular activities)?

Yes - 2%      No - 97%      No opinion - 1%

4. What do you think of Calvin Grieder's proposal for a longer school year consisting of two semesters of 100 school days each?

Approve - 16%      Disapprove - 82%      No opinion - 2%

5. What do you think of his proposal for four terms of 50 school days each?

Approve - 17%      Disapprove - 77%      No opinion - 6%

Sessions, E. B. "Maintenance and Operational Costs Involved in a Year-Round Program," Theory Into Practice 1 (June, 1962), 148-53.

Asked fifteen school business managers in Ohio and fifteen around the country about cost of maintenance and operation of a year-round school (plan not specified). Answers indicate year-round operation was possible, but at an increased cost. Increase is estimated at 20 to 30 per cent. This does not include increase in non-teaching employees, cost of administration, transportation of pupils, or air conditioning.

Thomas, George I. Extended School Year Designs (Albany: University of the State of New York, State Education Department, January, 1966), 126.

Trimester achieves six years of 180 day year schooling in five years using a longer day, and possibly more days. Total number of hours of instruction to be the same in each plan for time period involved. Subject to similar comments as the Continuous Program plan.

Quadrimester is very similar to the trimester plan except that acceleration is stressed. "Average and better than average learners can complete the equivalent of a normal 180 days course in three quadrimesters." As in the trimester, day is lengthened as well as the year to provide the same numbers of hours of instruction as present 180 day plan.

The modified summer plan may stress acceleration or may be a "painless transition move toward a trimester or quadrimester plan." Similar criticism as previous plans. It will probably not produce fiscal savings in the first three or four years.

The extended K-12 plan is actually a combination of several previous plans with the idea of saving time only in the secondary school. Savings are modest (1 year in 13) and the basic intent is to devote extra time to mastery of basic curricula and remedial (where needed) programs.

Time. "All Year Cure All?" Time 71 (March 10, 1958), 67.

A report on a proposal to make the schools in Davidson County, Tennessee four-quarter schools. Would not recommend the four-quarter program to schools with less than 540 pupils for elementary and 1600 for secondary. They found that their greatest problem would be an arbitrary vacation quarter assignment for each pupil.

University of the State of New York, and The State Education Department. Economy and Increased Educational Opportunity Through Extended School Year Programs. Albany: University of the State of New York, August, 1965.

This booklet contains a brief, clear outline of the ideas expressed by George I. Thomas in Extended School Year Designs. Each depends for acceleration for its economy. There is a good comparative table as a center-two-page spread.

Vanderslice, H. R. "The All-Year School in Aliquippa, Pennsylvania,"  
Elementary School Journal 30 (April, 1930), 576-85.

Reasons given for a staggered quarter plan: (1) need for more classroom space; (2) desire to secure greater use of school plants; (3) belief that many children in congested areas need school year-round, i.e., there isn't anything else for them to do. Aliquippa definitely used the four-quarter staggered vacation plan. "From the beginning, the privilege of attending during the four quarters has been given to pupils who request it when the size of the sections permits and when the needs of the pupils seem to justify the request.."

Vanderslice, H. R. "Five Year's Experience with the All-Year School,"  
Elementary School Journal 34 (December, 1933), 256-68.

After five years, Vanderslice maintains that there had been a savings to the district, attendance was virtually the same in each quarter, the fourth quarter (April-July) had the highest grades.



## BIBLIOGRAPHY

- Alan, R. E. "Calendar Possibilities for Year-Round Schools," Theory Into Practice 1 (June, 1962), 166-69.
- American Association of School Administrators. "Resolutions," Your AASA in 1957-58 (Washington, D. C.: the Association, a department of the National Education Association, 1958) 267-70.
- \_\_\_\_\_. Year-Round School (Washington, D. C.: the Association, a department of the National Education Association, 1960) 26.  
Excerpts: Education Digest 26 (February, 1961), 8-10; NEA Journal 50 (May, 1961), 55-56.
- American School and University. "News: California Tries Year Round High School; Idea Gaining Popularity at College Level," American School and University 38 (February, 1966), 80.
- American School Board Journal. "Let's Look Before We Leap," American School Board Journal (October, 1959).
- \_\_\_\_\_. "Oppose 12-Month Plan," American School Board Journal (February, 1956).
- Atlanta, Georgia, Board of Education. Board of Education Study of 12-Month School Year (Atlanta, Georgia: Board of Education, 1957).
- Bauman, W. Scott. The Flexible System: An Economic Analysis of Advantages of the Quarterly Calendar in Public Schools (Toledo: Business Research Center, College of Business Administration, University of Toledo, 1966), 8.
- \_\_\_\_\_. "Four-Quarter Plan Uses Schools All Year Long," Nation's Schools 80 (November, 1967), 69-70.
- Bendicksen, Perry. "Extend the School Year?" Instructor 75 (November, 1965), 98, 134.
- Berman, H. "Do Our Schools Need More Time?" American School Board Journal 135 (November, 1957), 35-36.
- Beat, John W. "Year-Round School Program," School Executive 73 (October, 1963), 56-59.
- Better Schools. "Summer Schools Get a Face Lifting," Better Schools 4 (May, 1958), 5-6.
- Bienenstok, Theodore. "Resistance to an Educational Innovation," Elementary School Journal 65 (May, 1965), 420-28.

- Borel, William P., and Blackmon, C. Robert. "Year-Round School: Innovation or Trend?" Boardman (October, 1967), 2, 5-8, 22-27.
- Boutwell, W. D. "What's Happening in Education? Courses in Summer?" National Parent-Teacher 52 (May, 1959), 20.
- Brown, Robert S. "A Possible Solution to Emergency School Housing Problems," Ohio Schools 34 (May, 1956), 22-23.
- Bruce, W. C. "Year-Round Schools," American School Board Journal 141 (October, 1960), 40.
- Bullock, Robert P. "Some Cultural Implications of Year-Round Schools," Theory Into Practice 1 (June, 1962), 154-61. Condensed: Education Digest (November, 1962), 26.
- California Schools. "Extending the School Year," California Schools (February, 1968).
- California Teachers Association Journal. "All Year Schools O.K. But Not On Quarter-Plan," California Teachers Association Journal (March, 1952).
- Cammarota, Gloria; Stopps, John A.; and Johnson, Frank R. Extending the School Year (Washington, D. C.: Association for Supervision and Curriculum Development, a department of the National Education Association, 1961) 28-30. Condensed: Education Digest 28 (November, 1962), 26-28.
- Cardozier, V. R. "For a 210-Day School Year," Phi Delta Kappan 38 (March, 1957), 240-42.
- Caswell, Hollis L. "A Study of Nashville's All-Year School," Peabody Journal of Education, Vol. 8, No. 6 (May, 1931), 317-47.
- Changing Times. "Use the Schools the Year Round," Changing Times (April, 1956).
- Childhood Education. "When a Twelve-Month Plan is Carried Out," Childhood Education (February, 1952).
- Childress, Jack R., and Phillipi, Harlan A. "Administrative Problems Related to the 11- or 12-Month School Year," High School Journal 47 (March, 1964), 230-37.
- Christian Science Monitor. "Focus on Education," Christian Science Monitor (June 30, 1969), 1.
- Cincinnati Public Schools, Department of Research, Statistics, and Information. A Brief Inquiry into the Four-Quarter School (Cincinnati: Board of Education, March 11, 1957), 7.

- \_\_\_\_\_. The Four-Quarter School Year: A Status Report with Pertinent Applications to Cincinnati (Cincinnati: Board of Education, August, 1958), 76.
- Citizens' Committee of the Sequoia Union High School District. The Four-Quarter Plan and Other Methods of High School Plant Utilization (Redwood City, California: Sequoia High School District, Board of Education, 1960), 95.
- Clark, Dean O. "Why Not an 11-Month School Year?" School Executive 77 (March, 1958), 61.
- Connecticut State Department of Education, Bureau of Research and Statistics. Full Use of Educational Facilities (May, 1957).
- Contra Costa County Taxpayers Association. "The All-Year School, A Critical Review," Research Bulletin No. 18 (February, 1956).
- Cory, Robert T. "Parents Evaluate an Eleven-Month Program," Education 87 (November, 1966), 167-70.
- Crawford, Robert M. "Advantages and Disadvantages of the Twelve-Month School Year," Bulletin of the National Association of Secondary-School Principals 42 (April, 1958), 232-34.
- Croft Educational Services. "Administration: New York City Plans Three-Term High School Year," Education Summary (April 1, 1966), 2.
- \_\_\_\_\_. "Trends and Issues: Bandwagon for the Extended School Year," Education Summary (May 1, 1968), 1.
- \_\_\_\_\_. "The 12 Month School: Six Possible Arrangements," Education Summary (October 1, 1967), 3.
- Deacon, James M. "Year-Round Program," Bulletin of the National Association of Secondary-School Principals 40 (April, 1956), 88-90.
- Dean, Stuart E. "School Year," Elementary School Administration and Organization. U. S. Department of Health, Education, and Welfare, Office of Education, Bulletin 1960, No. 11 (Washington, D. C.: Superintendent of Documents, Government Printing Office, 1960), 39-41.
- Derthick, L. G., et al. "The Year-Round School," School Life 40 (October, 1957), 8-10.
- Education News. "Last Minute News: Extended Year for Teachers Proposed," Education News 2 (February 5, 1968), 6.
- \_\_\_\_\_. "Last Minute News: Texas Town Tries Year-Round School," Education News 2 (January 8, 1968), 1.

- \_\_\_\_\_. "No Moonlighting, Board Says; Pays Staff To End It," Education News 2 (February 5, 1968), 17.
- Education Testing Service. "Year-Round Classes," Education Recaps 7 (December, 1967), 1.
- Educational Leadership. "Packing Them In," Educational Leadership (October, 1954).
- \_\_\_\_\_. "Year-Round Programs and Professional Service," Educational Leadership (February, 1951).
- Educator's Dispatch 19 (December 1, 1963), 3-4.
- Engh, Jeri. "Why Not Year-Round Schools," Saturday Review 49 September 17, 1966), 82-84.
- Farrand, Wilson; and O'Shea, M. V. "The All-Year Schools in Newark," School and Society 23 (April 10, 1926), 462-69.
- Faunce, Roland C. "Twelve Months of School," Bulletin of the National Association of Secondary-School Principals 36 (January, 1952), 25-29.
- Fawcett, N. G. "New Challenge to Education," Theory Into Practice 1 (June, 1962), 125-30.
- Fitzpatrick, Dave. "Why Nova School Switched to Three 70 Day Trimesters," Nation's Schools 77 (April, 1966), 30-34.
- Fitzpatrick, William J. "All-Year School, Pro and Con," School and Society 86 (April 26, 1958), 191-92.
- Flint Public Schools. An Analysis of the Four-Quarter Plan of School Operation (Flint, Michigan: Board of Education, August, 1955), 25.
- Florida Educational Research and Development Council. Year-Round Schools for Polk County, Florida: A Feasibility Study (Gainesville: Florida Educational Research and Development Council, College of Education, University of Florida, 1966), 71.
- Florida State Department of Education. The All-Year School. Tallahassee: the Department, April, 1957. 13.
- Friggens, Paul. "Year-Round School," National Parent-Teacher 53 (April, 1959), 7-9.
- Frost, Joe L. "Time to Teach," Texas Outlook 51 (October, 1967), 34-35, 62.
- Page, Kelton. "Longer School Year," Minnesota Journal of Education 44 (October, 1963), 12-14.

- Gaumnitz, Walter H. "Underbuilt or Underused?" Clearing House 30 (January, 1956), 275-79. Condensed: Education Digest 21 (April, 1956), 13-15.
- George Peabody College for Teachers, Division of Surveys and Field Studies. The All-Year School of Nashville, Tennessee. Field Study, No. 3. Nashville: the College, 1931. 60.
- Georgia Alert. "Twelve-Months School Approved," Georgia Alert (October-November, 1967).
- Gilchrist, Robert S., and Edmunds, Edwin R. "The Value of an Independent Summer Program," Theory Into Practice 1 (June, 1962), 162-65.
- Gillis, Reid. Oral presentation to members of a conference on all-year schools held by the Michigan State Department of Education, May 27, 1969.
- Glass, Robert E. "Calendar Possibilities for Year-Round Schools," Theory Into Practice 1 (June, 1962), 136-40.
- Glencoe Public Schools. Some Facts About the Glencoe Plan. Glencoe, Illinois: Board of Education. 14.
- Greene, Tom. "Georgia Schools Plan 12-Month Year," Education News 2 (January 8, 1968), 9.
- Grieder, Calvin. "Let's Lengthen the School Year," Nation's Schools 62 (August, 1958), 28-29.
- Guba, Egon G. (ed.). "The Year-Round School," Theory Into Practice 1 (June, 1962), 121-75.
- Hack, W. G. "Year-Round School: A Review Essay," Theory Into Practice 1 (June, 1962), 170-75.
- Hamann, H. A. "Breakthrough of Tradition," Wisconsin Journal of Education 94 (March, 1962), 15-16.
- Harbo, A. F. A Longer School Year: All-Year School--and Other Plans to Extend the School Year. Research Project No. 12. St. Paul: Minnesota State Department of Education, 1958. 17.
- Hartsell, Horace C. "The Twelve-Month School," Bulletin of the National Association of Secondary-School Principals 37 (December, 1953), 18-33.
- Hayward, S. "Traditional and Newly Emerging Approaches to Year-Round Education," Liberal Education 52 (May, 1966), 218-28.
- Henderson, H. "Why Close Schools in Summer?" Collier's 137 (June 22, 1956), 92-97.

- Hicks, Maynard. "The Stevenson Story," American School Board Journal 149 (August, 1964), 57-58.
- Holmes, George W., III; and Seawall, William H. "The Extended School Year --Is It Administratively Feasible?" High School Journal 47 (March, 1964), 224-29.
- Holton, Samuel M. (ed.). "Extended School Year," High School Journal 47 (March, 1964), 224-63.
- Hull, Dan J., and Wright, Grace. The All-Year School. A Bibliography Circular No. 470 Revised. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1956.
- Imhoff, Myrtle M., and Young, Wayne. "School Organization," Review of Educational Research 29 (April, 1959), 160-61.
- Instructor. "Want to Try It--Rush Henrietta School Did and It Works," Instructor (March, 1958).
- Irons, H. S. "Utilizing Buildings and Instructional Materials 12 Months Annually," American School Board Journal 88 (March, 1934), 17-19.
- Irwin, Constance, et al. "Year-Round School Program," NEA Journal 45 (February, 1956), 82-84.
- James, H. Thomas. "Is Year-Round School Operation Economical?" Theory Into Practice 1 (June, 1962), 141-47.
- Jensen, George M. "Education's Fantastic Coffee Break," Means 3 (October, 1964), 15.
- \_\_\_\_\_. Let's Update Our School Calendar. Minneapolis, Minnesota: Twin City Federal Savings and Loan, 1965.
- Journal of Education. "The All-Year School," Journal of Education (December 5, 1919).
- \_\_\_\_\_. "The All-Year School," Journal of Education (August 13, 1925).
- \_\_\_\_\_. "The All-Year School," Journal of Education (October 18, 1926).
- Journal of Health-Physical Education-Recreation. "Should the School Year Be Lengthened? What Effect Would This Have on the Programs of Health, Physical Education, and Recreation?" Journal of Health-Physical Education-Recreation 32 (January, 1961), 6,8.
- Kletz, R. R. "How Long Should the School Year Be?" Pennsylvania School Journal 107 (May, 1959), 374-76.
- Lombardi, John. "The Los Angeles Study of Year-Round Operation," Theory Into Practice 1 (June, 1962), 131-35.

- Los Angeles City School District, Committee to Study the All-Year School. The All-Year School. Los Angeles: Board of Education, July, 1954. 81.
- MacPherson, Vernon D. "Keeping Schools Open All Year," Nation's Schools 56 (September, 1955), 51-54.
- Martin, J. V., and Caughey, D. "Sound-Off! Twelve-Month School Program Should Be Put Into Effect." Instructor 69 (March, 1960), 8.
- Martin, John S. A Report to the Atlanta Board of Education Concerning A Four-Quarter Instructional Program. An Unpublished Report of Atlanta Public Schools, Georgia. February, 1968. 33.
- May, Frank B. "Year-Round School: A Proposal," Elementary School Journal 61 (April, 1961), 388-93.
- Maynard, Zollie M., and Bailey, Thomas D. "Summer School with a Difference!" NEA Journal 46 (May, 1957), 297-99.
- McCarty, Donald J. "Is the All-Year School the Answer?" Administrator's Notebook 6 (February, 1958), 1-4.
- Mervun, Willard V. "A Trimester Plan," American School Board Journal 146 (April, 1963), 15.
- Michigan Education Journal. "12-Month Positions," Michigan Education Journal 45 (September 1, 1967), 27.
- Miles, Dorothy. "Lexington's Year-Round School," American School Board Journal 124 (March, 1952), 27-28.
- Montgomery County Public Schools. The Twelve-Four Plan. Rockville, Maryland: Board of Education, June 13, 1961. 6.
- Moon, James V. The Year-Round School for All? A Paper Read at the Annual Convention of the National School Boards Association, Minneapolis, Minnesota, April 25, 1966. 9.
- National Association of Secondary-School Principals. "A Twelve-Month Program in Gladewater High School," Bulletin of the National Association of Secondary-School Principals (November, 1948).
- \_\_\_\_\_. "Extended Session Schedule," Bulletin of the National Association of Secondary-School Principals (September, 1969).
- \_\_\_\_\_. "The All-Year School," Bulletin of the National Association of Secondary-School Principals (October, 1926).
- \_\_\_\_\_. "What Are Evidences of Need for a Year-Round Educational Program," Bulletin of the National Association of Secondary-School Principals (April, 1953).

National Education Association. What About a Year-Round School? Washington, D.C.: the Association, April, 1965. 6.

National Education Association, Research Division. The All-Year School. Washington, D.C.: the Association, July, 1958. 10.

\_\_\_\_\_. "Average Length of School Term in Days, 1957-58" (Table 16), Rankings of the States, 1961. Research Report 1961-R1. Washington, D. C.: the Association, January, 1961. 14.

\_\_\_\_\_. "Employment for Teachers," NEA Research Bulletin 45 (March, 1967), 22-24.

\_\_\_\_\_. The Rescheduled School Year. Research Summary 1968-S2. Washington, D. C.: the Association, 1968. 39.

National Education Association, Research Division, and American Association of School Administrators, Educational Research Service. Extended-Year Contracts for Teachers. Washington, D. C.: the Service, September, 1964. 7.

\_\_\_\_\_. Number of Days in School Year, 837 Urban Districts over 2500 in Population. Educational Research Service Circular No. 3. Washington, D. C.: the Association, March, 1960. 47.

\_\_\_\_\_. Status of Year-Round School Programs: Length of Year for Professional Employees in City School Systems. Educational Research Service Circular No. 7. Washington, D. C.: the Association, August, 1952. 21.

National Education Journal. "Teachers Role in All-Year Program," National Education Journal (November, 1948).

National Parent-Teacher. "Shall We Change the School Calendar?" National Parent-Teacher 52 (October, 1957), 12-14, 35.

National School Public Relations Association. "Cleveland Debates Year-Round School Proposal," Education U.S.A. (April 2, 1958), 1.

\_\_\_\_\_. "Eight High Schools in the Atlanta, Georgia, Area Will Begin Year-Round Operation Next September," Education U.S.A. (November, 1967), 68.

\_\_\_\_\_. "In the Good Old Summertime," The Shape of Education for 1965-66. Washington, D. C.: the Association, a department of the National Education Association, 1965. 45-48.

\_\_\_\_\_. "News Front: An 11-Month School Year Is Recommended in a Four-Year Study by the New York State Education Department," Education U.S.A. (April 1, 1968), 170.

Nation's Schools. "Administrators Dispute Arguments for All-Year School," Nation's Schools (June, 1951).



- \_\_\_\_\_. "All-Year School Can Wait, 2 of 3 Schoolmen Assert," Nation's Schools 73 (March, 1964), 84.
- \_\_\_\_\_. "Lengthening the School Year; Superintendents' Opinions," Nation's Schools 62 (December, 1958), 6.
- \_\_\_\_\_. "Los Angeles Rejects Plan for Keeping Schools Open Year Round; Calls It Costly, Inconvenient," Nation's Schools 55 (February, 1955), 120, 122.
- \_\_\_\_\_. "Superintendents Reject All-Year School Plan; Opinion Poll," Nation's Schools 55 (May, 1955), 6.
- \_\_\_\_\_. "Trimester Plan Makes Nova Novel," Nation's Schools 73 (April, 1964), 84-88.
- Ogden, Clyde L. "The Four-Quarter Plan...How Practical an Idea?" American School Board Journal 133 (August, 1956), 3, 19-21.
- Ohio Schools. "A Possible Solution to Emergency School Housing Problems," Ohio Schools (May, 1956).
- Oldham, Francis H. "Length of the School Day and the School Year," Bulletin of the National Association of Secondary-School Principals 46 (September, 1962), 94-98.
- O'Rourke, Joseph. "The Extended School Year: A Teacher's View," Theory Into Practice 1 (June, 1962), 166-69.
- Palm, Reuben R., and Ylvisaker, H. L. "How Effective Is the All-Year Secondary School?" Bulletin of the National Association of Secondary-School Principals 34 (April, 1950), 63-73.
- Parent's Magazine. "Pro and Con--The Year-Round School," Parent's Magazine (June, 1958).
- Penk, G. L., and Varner, G. F. "Let's Look Before We Leap," American School Board Journal 139 (October, 1959), 21-22.
- Pennsylvania Department of Public Instruction, Office of Public Information. News release from Oil City, Pennsylvania, June 16, 1967.
- Phi Delta Kappa. "Progress in Lengthening the School Year," Phi Delta Kappan 42 (October, 1960), 31.
- Phillips, Howard F. "Advocating a 12-Month School Year," Pennsylvania School Journal 115 (October, 1966), 74.
- Post, Alan A. "The All-Year School," Legislative Analysis for the California State Legislature, (October 23, 1958).

- Review of Educational Research. "The All-Year School," Review of Educational Research (June, 1931).
- \_\_\_\_\_. "School Organization; the School Year and Day," Review of Educational Research (April, 1969).
- Rich, K. W. "Present Status of the All-Year Secondary School," California Journal of Secondary Education 31 (January, 1956), 18-24.
- Richmond City Schools. A Report on the Possible Operation of the Richmond Secondary Schools on a Four-Quarter Plan. Richmond, California: Richmond City Schools.
- Ridgeway, John M., Superintendent of Schools, Lexington, Kentucky. Letter to NEA Research Division. February 18, 1958.
- Rothwell, Angus B. "What Is Meant by Extended School Year?" Wisconsin Journal of Education 98 (May, 1966), 8-9.
- St. Mary, Maurice E. "Eleven Months for School Administrators," American School Board Journal 136 (June, 1958), 27-28.
- Sarner, D. S. "Why 180 Days of School?" Clearing House 34 (November, 1959), 181.
- Schoenfeld, Clarence A., and Schmitz, Neil. Year-Round Education: Its Problems and Prospects from Kindergarten to College. Madison, Wisconsin: Dembar Educational Research Services, 1964. 111.
- Scholastic. "Twelve Month School Year? Pro and Con Discussion," Scholastic 68 (May 3, 1956), 7-8.
- School Executive. "The All-Year Program," School Executive (April, 1949).
- \_\_\_\_\_. "The All-Year School," School Executive (November, 1930).
- \_\_\_\_\_. "Summer Use of School Facilities," School Executive 74 (July, 1955), 62-71.
- \_\_\_\_\_. "Year-Round School," School Executive (December, 1945).
- \_\_\_\_\_. "Year-Round School Program," School Executive (October, 1953).
- School Life. "All-Year Schools Have Many Advantages," School Life (May, 1923).
- \_\_\_\_\_. "Omaha High Schools on All-Year Plan," School Life (October, 1925).
- School Management. "All-Year High School--Experiment Ends in Failure," School Management 10 (November, 1966), 73.

- \_\_\_\_\_. "The All-Year School: Time for a New Look," School Management 10 (February, 1966), 72-86, 146-51, 154, 156.
- \_\_\_\_\_. "Are Year-Round Schools the Answer to Overcrowding?" School Management 4 (November, 1960), 25, 28.
- \_\_\_\_\_. "Florida Says 'No' to the All-Year School," School Management 1 (November-December, 1957), 45-47.
- \_\_\_\_\_. "The How and Why of 12-Month Contracts for Teachers," School Management 1 (November-December, 1957), 20-23, 72-74.
- \_\_\_\_\_. "The Twelve-Month School Year: Will It Solve Your Building Problems?" School Management 1 (September, 1957), 22-25, 82-84.
- Sessions, E. B. "Maintenance and Operational Cost in a Year-Round Program," Theory Into Practice 1 (June, 1962), 148-53.
- Shane, Harold G., and Polychrones, James Z. "Organization of the Elementary School--Length of Elementary Education," Encyclopedia of Educational Research. 3rd ed. New York: Macmillan Co., 1960. 424-45.
- Smith, Ralph V.; Flory, Stan; and Bashur, Rashid. Community Organization and Support of the Schools. Birmingham, Michigan: Birmingham Public Schools, 1963. 119.
- Southern Education Report. "The Calendar Is Being Changed, Too," Southern Education Report 3 (October, 1967), 26-27.
- Sternig, John. "Roundup on the Year-Round School," NEA Journal 47 (January, 1958), 46-48.
- Taylor, John. "Delaware Puts All-Year School on Trial," Education News 2 (February 5, 1968), 18.
- Thomas, George I. An Introduction to the Multiple Trails Extended School Year Plan. Albany: University of the State of New York, State Education Department, Office of Research and Evaluation, 1968.
- \_\_\_\_\_. Economy and Increased Educational Opportunity Through Extended School Year Programs. Albany: University of the State of New York, State Education Department, Office of Research and Evaluation, August, 1965. 18.
- \_\_\_\_\_. Extended School Year Designs. Albany: University of the State of New York, State Education Department, Office of Research and Evaluation, January, 1966. 126.
- \_\_\_\_\_. Setting the Stage for Lengthened School Year Programs. Albany: University of the State of New York, State Education Department, Office of Research and Evaluation, March, 1968. 113.

- Thomas, Maurice J. "Returns on a Year-Round Investment," Educational Leadership 5 (April, 1948), 459-64.
- Time. "All Year Cure-All?" Time 71 (March 10, 1958), 67.
- Tucson Public Schools Year-Round School Committee. Report of Year-Round School Committee. Tucson, Arizona: Board of Education, 1961. 50.
- Turbeville, Gus. "A Sociologist Looks at the Twelve-Month School Year," Peabody Journal of Education 42 (November, 1964), 182-86.
- U. S. News and World Report. "Year-Round Schools--An Idea That's Coming Back," U. S. News and World Report 42 (March 1, 1957), 32-34.
- University of the State of New York, and the State Education Department. Economy and Increased Educational Opportunity Through Extended School Year Programs. Albany: University of the State of New York, August, 1965.
- Urbana Community Schools, School District #116. The All-Year School. Urbana, Illinois: Board of Education, January 24, 1958. 10.
- Vanderslice, H. R. "The All-Year School in Aliquippa, Pennsylvania," Elementary School Journal 30 (April, 1930), 576-85.
- \_\_\_\_\_. "Five Year's Experience with the All-Year School," Elementary School Journal 34 (December, 1933), 256-68.
- Wagner, P. B. "Twelve-Month School," Bulletin of the National Association of Secondary-School Principals 40 (April, 1956), 218-20.
- Weaver, A. D. "Trimester Comes to Illinois," Illinois Educator 51 (April, 1963), 330-32.
- Wenger, Marjorie A. "Glencoe's Summer Program Has Two Aims: Competence and Enrichment," Nation's Schools 64 (October, 1959), 58-63.
- Willard, Hal. "New Education Plan Is Proposed," Washington (D. C.) Post and Times Herald. June 11, 1958.
- Williams, Robert F. "Year-Round Use of Schools," Virginia Journal of Education 50 (March, 1957), 13-14.
- Wright, Grace. All-Year School. Circular No. 470, Revised. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1958. (Offset.)
- Wyman, Raymond. "Full-Employment of Teachers and Schools," American School Board Journal 135 (July, 1957), 25-26, 67.
- "Year-Round School," Theory Into Practice, Vol. I, No. 3, Bureau of Educational Research and Service, Ohio State University, June, 1962.