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AUTHOR Cuddy, Edward H.
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ABSTRACT

This indepth study examines literature on the concept of the year round school, the experiences of those who have tried this approach to education, and the recent trends in this direction. Guidelines used in developing the study were (1) past or present experiences with the year round school, (2) format of present year round schools, (3) degree to which year round schools are accepted throughout the United States, and (4) major advantages and disadvantages of the year round school. Included are descriptions of 10 different plans for year round schools, an assessment of year round schools in general, an overall summary, and a bibliography of 59 sources. (Figures 3, 4, 13, 19, and 20 may be of poor quality in hard copy because of marginal legibility). (Author/LR)

THE YEAR-ROUND SCHOOL OR THE RESCHEDULED SCHOOL YEAR

A STUDY FOR THE
BOARD OF EDUCATION
METROPOLITAN SCHOOL DISTRICT
OF WARREN TOWNSHIP
INDIANAPOLIS, INDIANA

BY

EDWARD H. CUDDY
ASSISTANT SUPERINTENDENT
FOR SECONDARY EDUCATION

SEPTEMBER, 1969

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Year-Round School or The Rescheduled School Year

PURPOSE OF THIS STUDY

Understandingly, the subject of year-round school programs encompasses a vast array of data and information. Any examination of this topic, therefore, must be limited to a scope of purpose.

In the early spring of 1969, the Board of Education of Metropolitan School District of Warren Township directed the Assistant Superintendent for Secondary Education to conduct a study on "year-round school programs." The following questions were suggested by members of the board as guidelines in developing the study:

1. What are, or were the experiences of school systems or individual schools which have tried year-round schools?

2. What are school districts around the country doing in year-round educational programs?

3. To what degree is the concept of year-round school accepted throughout the United States?

4. What are the major advantages and disadvantages of the year-round school?

The board directed that this subject be a rather in-depth study and analysis of the year-round school, free from personal bias and pre-conceived ideas concerning the many facets of year-round school programs to be found in the literature.

Thus, the basic purpose of this study has been to examine the literature on the subject and relate the concept of year-round school, what the experiences of others who have tried this approach to the task of educating our young has been, and what about the present day trends in this direction.

It has been a laborious task to examine the many plans of year-round school, and all the reading required in searching out information has been stimulating and a rewarding experience to the writer. I only hope that it will be of value to all of us in our varied capacities, who are charged with the responsibilities of providing, directing, financing, and continually searching for new and better ways of teaching and learning, which all adds up to quality education for our boys and girls.

DEFINITION OF TERMS

The term "year-round school" has generally referred to the four-quartered plan, the trimester, the quadrimester, or one of the many rotating, continuous, or modified variations of the basics in these plans, which utilizes school facilities year-round, but does not always provide more days of education for the individual. Some of the plans that seem to get wide coverage in the literature merely do just that - year-round utilization of the school plant facilities, and staff, but no more time actually devoted to educational activities than the traditional 36 to 38 weeks school year. Other rescheduling plans do specifically provide for a longer school year aimed at student acceleration, more diversified offerings for students and primarily just an overall improved educational program of quality and added educational opportunities for all children.

A search of the literature, encounters at professional meetings and a national workshop on the year-round school, has forcibly revealed to the writer that there is still a variety of opinion concerning the exact meaning

of the term "year-round school." The concept differs depending on the arrangements within a given school district. The one common element of all the extended school year programs centers around the more effective use of school buildings, facilities, and licensed personnel. Most year-round school patterns imply a twelve-month operation of the school plant and a twelve-month employment of the majority of the faculty. It is from the perspective of the student schedule that differences emerge.

BACKGROUND

The 180 day school year, used in most school systems in the United States, is in the process of critical review by school boards, educators, politicians, businessmen and the general public. These groups are concerned with the costs of educational facilities, teacher personnel, curriculum and the length of time used by these forces in the total educational processes. Questions are being asked regarding the length of the school year and how can the school year be scheduled or rescheduled to better utilize the costly school buildings and educational personnel in developing the kind of quality educational program to meet the needs of all the children of all the people, and the people themselves.

Is closing down our schools for three months every summer good business and good management? In a time when the necessity for formal education was less acute, the traditional long school vacation during the summer months, when both teachers and students were needed on the farms during the planting,

growing and harvest season, made sense. The struggle for life's subsistence was basic and real. Many observers say that these remnants of an agricultural society no longer have a place in today's society of the atomic age.

The year-round school is not new. As early as 1840, school calendars in cities like Buffalo, Baltimore, Cincinnati, New York and Chicago ran almost the year round. Actually, Buffalo operated its school system for 12 months, Baltimore and Cincinnati for 11 months, New York for 49 weeks, and Chicago for 48 weeks. (56:2)*

By 1915, most of our city schools in the United States were operated on a nine-month basis. A lack of uniformity in the length of the school year has existed throughout the United States for many years. In some areas the school year has covered as much as 10 to 11 months for all children while reportedly Mississippi has been content with an average of only 148 school days. (39)

During the past seventy years, many proposals for extending the school year have been made. The writer was surprised to learn from the literature that back in 1904, Bluffton, Indiana, is credited with the introduction of the four-quarter staggered plan, but abandoned the effort after several years. The Newark, New Jersey, public schools began an all-year education program in 1912 to improve the English language skills of the many children with foreign backgrounds residing in over-crowded and under-privileged neighborhoods. Additional school time during the summer was scheduled to accelerate the

*Number in parenthesis refers to items in the bibliography.

progress of such children. These pupils still had language handicaps when they graduated from high school at the age of twelve and a half as reported by Edwin H. Vause. (56) The plan was abandoned in 1931 because of widespread community dissatisfaction.

Year-round school endeavors, typically seem to have experienced very similar difficulties despite the obvious differences in the communities where they were tried.

In many communities some aspects of a year-round school program are well established. Vocational agriculture programs have operated on a year-round basis in rural areas of the country for the past forty years. Comparable programs have been in operation in vocational home economics and distributive education. Remedial programs, music programs, arts and crafts programs, and recreational programs also have been operating during the summer months in many school districts. (5)

Schools all over the country are faced with problems of growing enrollments, teacher shortages, inadequate facilities, and outdated curricula. Most school districts are not financially able to solve these problems under present tax structures and in many places taxpayers are revolting against skyrocketing costs of education. It is obvious that ways must be found to make better use of the teachers and facilities that are available.

Many school districts have been working independently to find solutions to this problem by extending the school year or developing other ways of using educational facilities and resources more efficiently.

No other people ever demanded so much of their schools as have the American people, and I might add that none other was ever served so well by its schools. Our United States is the oldest democracy in the world and has operated the oldest and best, by all standards, public school system in the world. Now, at a period in time, when change is so rapid in all facets of society, our schools are placed in a crossfire of conflicting demands regarding educational and broad social functions that staggers the imagination. With new demands of industry and the professions, the phenomenal growth of high education, the population explosion, the explosion of knowledge and all the many demands of our modern society in an atomic age has focused the spotlight on the functions of our elementary and secondary schools.

With this brief background in mind, let's take a look at "Year-round School" programs as one proposed way to solve our gigantic educational problems.

PLANS OR DESIGNS FOR YEAR-ROUND SCHOOL

Keeping in mind the definition of terms regarding "year-round school" discussed in the preceding pages, let's take a look at the different plans or designs for year-round school.

TRIMESTER

The trimester plan calls for the division of a longer school year into three terms or trimesters. The recommended trimester program calls for a 70 day trimester and a 210 day school year. See Figure 1. Some educators have shown interest in a 204 day school year which would require a trimester term of 68 days with slightly longer daily class periods. An extra week may be set aside for examinations and registration. (52) However, perhaps the more typical trimester plan divides the calendar year into three equal terms of 75 days each. School is in operation 225 days each year out of a possible 248.

In some districts, credits at the high school level are in trimester units, each unit carrying a half-year credit. The length of the class period is increased so that in 75 days the teacher-student contact time will exceed that now possible on a semester basis. Some pupils in the 9-12 structure could enter college after nine trimesters. Any student at any level during a given year must attend two consecutive trimesters. This plan was initiated at Florida High School, Tallahassee, Florida in the 1962 school year. A similar plan is in operation at Nova High in Fort Lauderdale, Florida.

Figure 1

A Sample Trimester School Calendar

Month	Day	Legend	Days of Schooling	
		Trimester I		
September	6	Start of Trimester I	19	
October	3	No School - Teachers Conference	20	
November	11	No School - Veterans Day		
November	24-25	No School - Thanksgiving Day Recess	19	
December	16	Last Day of School in Trimester I	12	
		Number of School Days in Trimester I		70
		Trimester II		
December	19	Start of Trimester II		
December	26-30	No School - Christmas Recess	5	
January	2	School Reopens After Christmas Recess	22	
February	22	No School - Washington's Birthday	19	
March	17	Last Day of School Before Easter Recess		
March	18-26	No School - Easter Recess	18	
March	27	School Resumes		
April	7	Last Day of School in Trimester II	5	
		Number of School Days in Trimester II		69
		Trimester III		
April	10	Start of Trimester III	15	
May	30	No School - Memorial Day	22	
June			22	
July	3-4	No School - Independence Day Recess		
July	20	Last Day of School in Trimester III	12	
		Number of School Days in Trimester III		71
		Total Number of School Days in 1966-67		210

*Adjustments in opening or closing period may be made to conform with local industrial or business vacation patterns.

A trimester at Nova consists of 70 days with pupils in school from August through June. (22) All of these Florida plans have undergone continual revisions since their original implementation.

The first variation of the longer school year, which apparently operated for two years (39:30) was described in detail in April 1964.(22) The 220 day school year, September through July, was divided into three trimesters. The five daily class periods were 70 minutes long, and there was an optional, early-morning period for club and group activities. Implementation of a non-graded program allowed students to progress at their own rates through a series of gradually rising achievement levels in each subject area. Reportedly, this absence of steep achievement levels allowed the students to move smoothly during the school year from one achievement level to the next, with major regrouping coming at the end of each trimester. Because each subject-group of students, under a team of teachers, contained several levels of achievement, and because each achievement level had demanding requirements both of subject understanding and of self-instruction skills, very few students moved through more than one subject-group during the trimester. It was possible for a beginning tenth-grade student to complete his secondary education in two and one-third years.

Fitzpatrick (39:30) reported that this trimester arrangement was discontinued for several reasons. First, the September-July school year calendar caused a strain on students and teachers because of a lack of extended

vacations from Easter to the end of July. Second, the fact that Nova students were not released until about seven weeks after surrounding schools were dismissed for the summer caused a "tremendous psychological letdown" on the part of the students. Finally, July was the most popular vacation month, and since students were not legally required to remain in school beyond 180 days, some parents exerted pressure to have students released early. Budgeting and teacher certification problems also contributed to the decision to seek another arrangement.

In 1965-66, the length of the school term was reduced to 193 days, with the end of the school year more nearly coinciding with that of schools having a traditional school year calendar. A special "July Program," in which students could participate in such things as seminars and workshops, was initiated. (39)

The most comprehensive description of a trimester plan has come from the New York State Department of Education and the University of the State of New York. Dr. George Thomas, consultant in Educational Research of the New York State Department, was one of the consultants and principal speakers at the Mt. Sequoyah National Seminar on Year-Round Education in Fayetteville, Arkansas last April 27-29 and imparted great bodies of knowledge relating to the whole area of the rescheduled school year and the adding of school time to find innovative ways to really produce curricular change.

An integral part of the New York trimester plan is the "E" or extra term. Many colleges and universities have adopted a form of trimester or

four-quarter organization in an attempt to offer a continuity to their programs and to save space. Unfortunately, they have often had to cope with the problem of unbalanced enrollment during the third and fourth terms. In an attempt to eliminate this problem in the elementary and secondary schools the concept of an "E" term was devised. Through the use of a designated number of "E" terms the enrollments for a given term are equalized. (52)

The "E" term can take on many meanings. "E" can stand for extra education. It can refer to enrichment opportunities or excellence in education. It provides more extra terms during a given sequence of grades. The "E" term concept calls for the acceptance of the fact that a student will have one, two, or three extra terms in which to broaden his curriculum, take a longer time to complete regular courses difficult for him and build up backgrounds in fundamental skills. With good guidance boys and girls can plan more effective programs through the flexibility that "E" terms provide. It is claimed that students who have one, two, or three extra terms of education in three, four or five years can obtain more education without having to give up as much of their summers as they would if they attended summer school. The "E" terms will help many pupils pace their way through school, allowing them to derive more from courses they take and enabling them to add courses otherwise closed to them due to the lack of sufficient terms. The New York plan makes many claims for the "E" term in educational excellence. However, it should be noted that the "E" term

is not unique to the trimester plan as such, since it fits in very well actually with most of the other plans for an extended school year. (52) Basically the "E" term is very closely related to the traditional "summer school" as a part of the traditional nine or nine and one-half months school year.

The New York plan of the trimester offers more variations or different flow of students through the grades or levels than any I have examined. Let me discuss a few of these variations in plans:

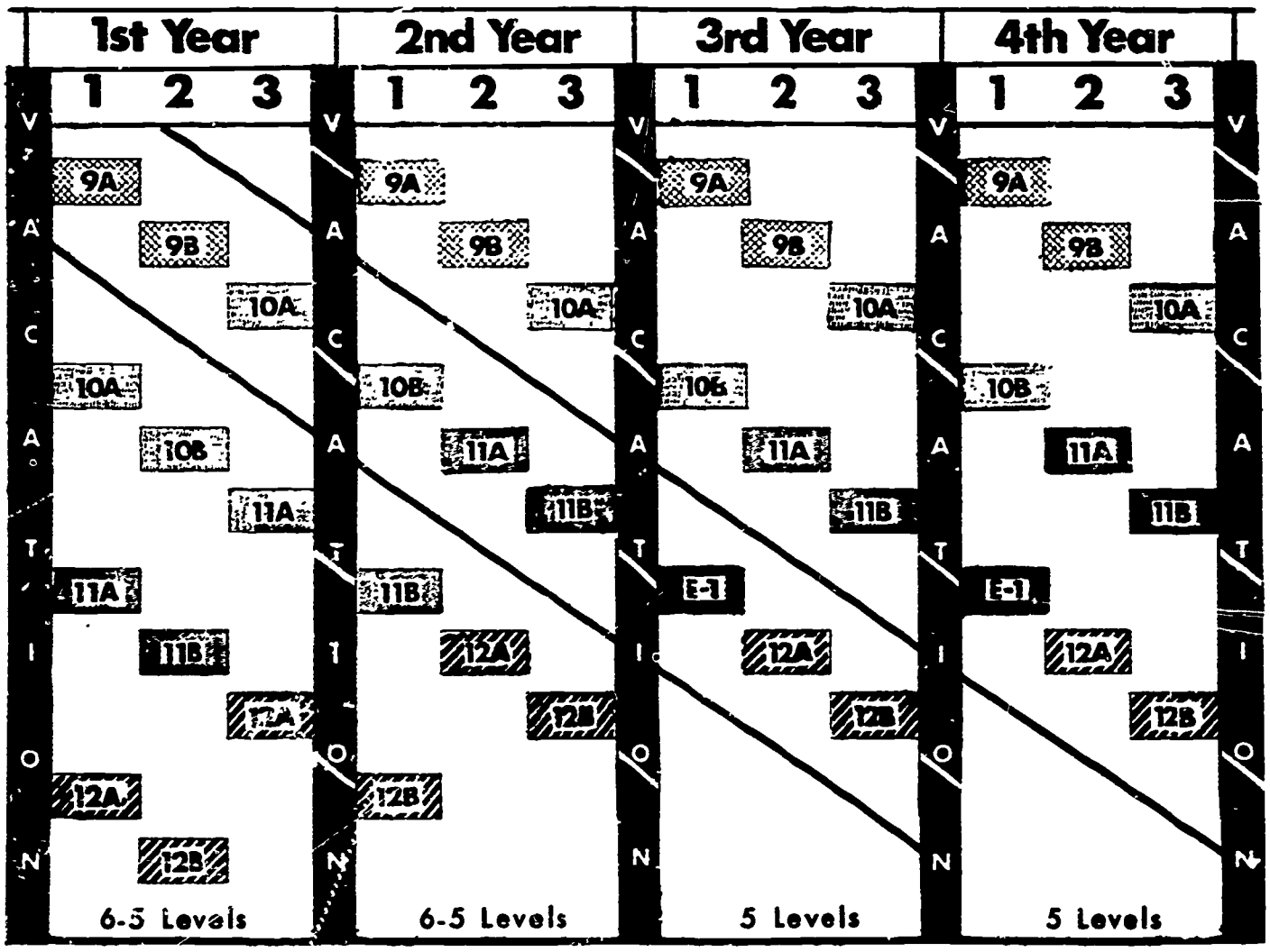
THE THREE YEAR TRIMESTER

The three year trimester plan is one which begins with four grades and reduces to three levels after the fourth trimester, saving one year in four.

Figure 2 shows the flow of pupils through a three year trimester. By following the flow of class "9A" (upper left corner) on a diagonal, it is apparent that a full four grade program plus one "E" term or extra term can be completed in a three year time span. (See Figure 2)

Assuming 300 pupils at each grade level, the school houses 1,200 pupils during the first two terms. With the reduction to three levels in the third trimester, the enrollment is reduced to 900. The entrance of a new ninth grade class in the fourth term increases the enrollment to the original 1,200. However, by the end of this term, the flow pattern permanently decreases the number of levels to three and the enrollment to 900.

Figure 2
Student Flow in a Three Year Trimester Plan



1. On the basis of a ratio of one classroom teacher for each 20 pupils, the reduction in enrollment of 300 students will release 15 teachers.

2. On the basis of a ratio of one classroom for each 25 pupils, the reduction in enrollment of 300 students will release 12 classrooms.

THE FOUR YEAR TRIMESTER

The four year trimester plan, resulting in the saving of one year in five, involves grades 8 to 12. Beginning with five grades, it reduces to four levels after the fourth term. This program provides the same reduction in space and in classroom teachers as the three and five year trimester programs. Pupils in this program have the advantage of two "E" terms. (See Figure 3)

THE FIVE YEAR TRIMESTER

The five year trimester plan is one which begins with six grades and reduces to five levels after the fourth term, saving one year in six. Figure 4 shows the flow of pupils through the five year trimester, with class "7A" (upper left corner) the first to complete the program. Following this class on a diagonal, it will be apparent that a six year program plus three "E" terms will be completed in the span of five extended years.

Assuming 300 pupils at each grade level, the school capacity will be 1,800 pupils for the first two trimesters. With the reduction to five levels in the third trimester, the enrollment is reduced to 1,500. A new

Figure 3

Student Flow in a Four Year Trimester Plan

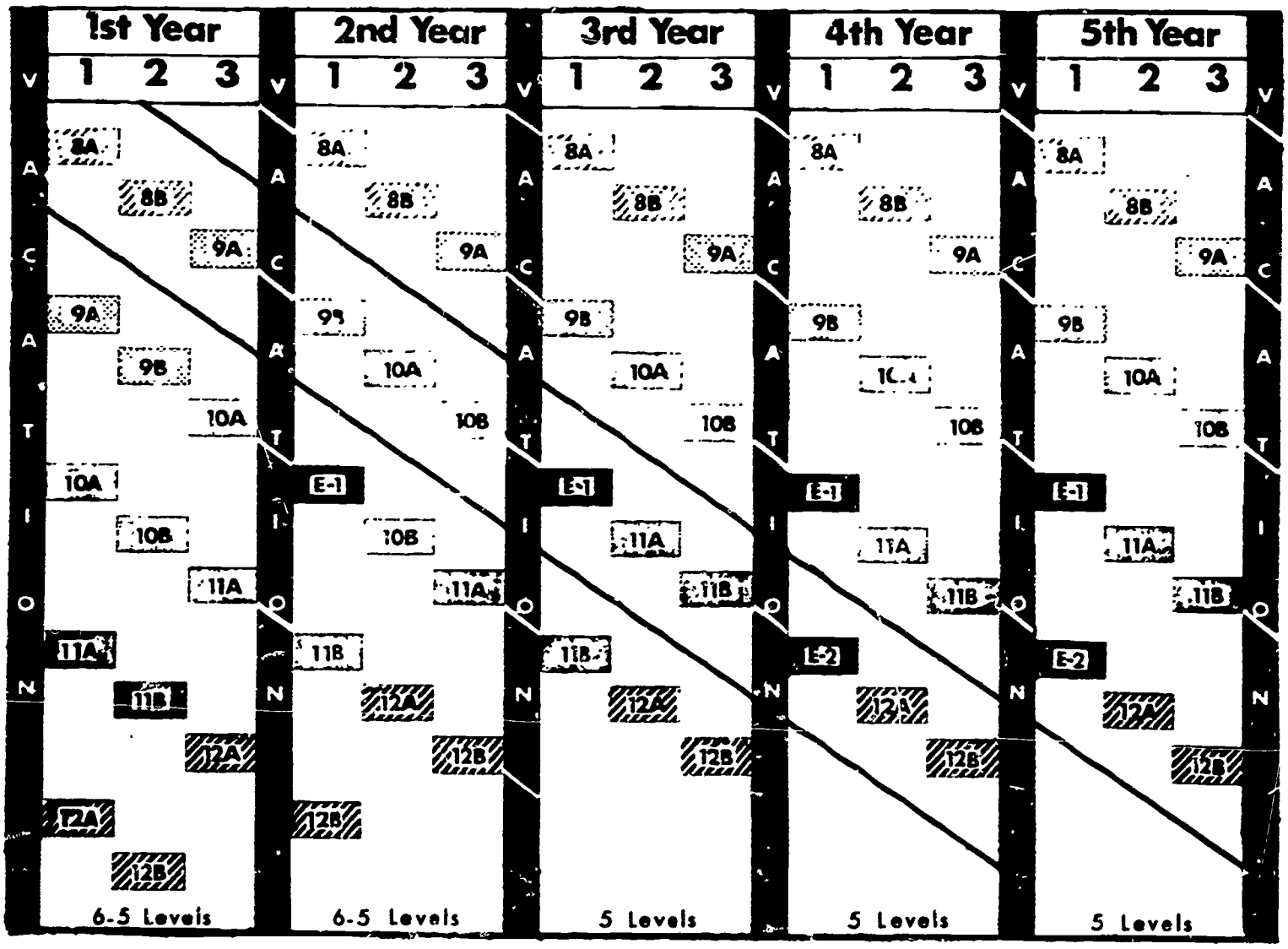
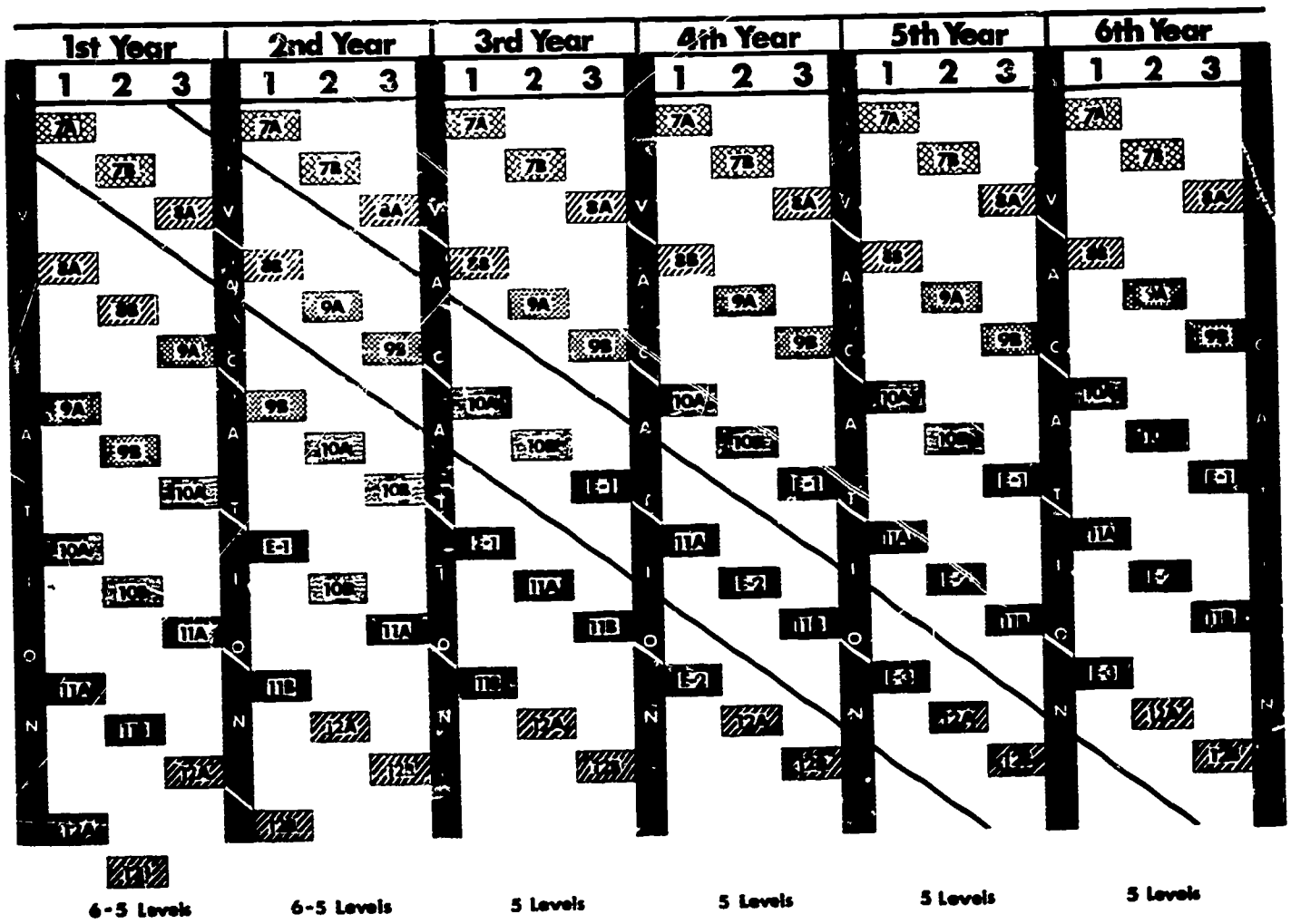


Figure 4

STUDENT FLOW IN A FIVE YEAR TRIMESTER



ninth grade entering in the fourth term raises the enrollment to the original 1,800. However, this figure changes permanently to 1,500 with the reduction to five levels as a result of the flow pattern. On the basis of a pupil-teacher ratio of one to 20, staff will be reduced by 15 teachers. The reduction of 300 students, at the rate of 25 per classroom, will result in a saving of 12 classrooms. The space thus released can eliminate new construction and bond issues supposedly. (52)

THE QUADRIMESTER PLAN

The quadrimester calendar calls for the division of an extended school year into four equal segments ranging from 51 to 55 days in length. The ideal calendar would give pupils and teachers a week's recess at the end of the first, second, and third quarters. The basic quadrimester calendar provides for a 212 day school year. The length of the school year could be shortened by a week if the quarters are cut back to 51-52 days. (Note the sample calendar for a consecutive quadrimester school year, Figure 5).

The quadrimester program differs from most four quarter programs in that pupils are not given the choice of working through three quarters and then having an extended vacation. Each pupil is expected to continue through school for the full 204 to 220 days as called for by a particular school calendar. If he completes a course at the end of the second or third quadrimester the school must be prepared to offer new courses which will meet his educational needs. Pupils completing a course at the end of the third

Figure 5

A Sample Calendar for a Consecutive Quadrimester

Month	Day	Legend	Days of Schooling	
		Quadrimester I		
September	1	School Open for Students		
September	5	No School - Labor Day	21	
October	3	No School - Teachers Conference	20	
November	11	No School - Veterans Day		
November	17	Last Day of School in Quadrimester I	12	
		No. of School Days in Quadrimester I		53
		Quadrimester II		
November	18	First Day of Quadrimester II		
November	24-25	No School - Thanksgiving Recess	7	
December	23	Last Day of School Before Start of Christmas Recess	17	
December January	24-1	Christmas Recess		
January	2	School Reopens After Christmas Recess	22	
February	10	Last Day of School in Quadrimester II	8	
		No. of School Days in Quadrimester II		54
		Quadrimester III		
February	13	First Day of Quadrimester III		
February	22	No School - Washington's Birthday	11	
March	24	No School - Good Friday	22	
April	28	Last Day of School in Trimester III	20	
April May	29-7	No School - Spring Recess	___	
		No. of School Days in Quadrimester III		53
		Quadrimester IV		
May	8	First Day of Quadrimester IV		
May	30	No School - Memorial Day	17	
June			22	
July	3-4	No School - Independence Day Recess		
July	21	Last Day of School in Quadrimester IV	13	
		No. of School Days in Quadrimester IV		52
		Total No. of School Days		212

*Recommended Quadrimester Calendars may provide a week's vacation between each quarter, to give teachers and students an essential break between work periods.

quadrimester begin new courses in the fourth quadrimester which carry over into the next school year. Pupils completing a course at the end of the second quadrimester begin a new course in the third quadrimester. It may be completed in the first quadrimester of the following year or it may be completed during the same calendar year through double period scheduling for one or both of the ensuing quadrimesters. Average and better than-average learners can complete the equivalent of a normal 180 day course in three quadrimesters. Flexibility in scheduling and the lengthening of class periods to equalize instructional time is necessary to do this. Students who work slowly may receive more instructional time through taking courses which have been broken up into shorter learning units or segments, to allow progression at a slower pace. Through the use of the "E" terms it is possible to offer such courses in four quadrimesters instead of three.

Basically, the quadrimester plan has been developed for secondary schools, but it lends itself to an elementary school organizational pattern even more readily than the trimester plan. In either case, the concept of continuous progress will help students and teachers adjust to the new time elements found in the lengthened school year programs. This will be especially true where there is a relationship between the skills and concepts introduced at different learning levels.

The term quadrimester has been used to distinguish the recommended organizational plan from a number of "All Year-Round Plans" which divide the year into four time blocks. One "All Year-Round Plan" calls for the

division of the school year into four quarters with one-fourth of the students on vacation during the fall; another fourth out of school for the winter term, and the remaining students out during either the spring or summer terms. Another plan calls for four equal quarters of twelve weeks and a one week vacation period at the end of each quarter. For the most part students are enrolled for three of the four quarters and sometimes on a staggered plan with an "E" term used at various intervals. Many variations of student scheduling and attendance have been worked out.

The quadrimester plan, on the other hand, provides for one summer vacation period for the entire school with all students have a 4 to 7 week summer time vacation. It has no relationship to the "All Year-Round Plan" which is based upon a system of mandatory, staggered vacations.

As was true with the trimester plan, the quadrimester plan offers variations in the flow of students through the educational mill. Let's take a look at the following designs:

THE FIVE YEAR SECONDARY QUADRIMESTER DESIGN

The five year quadrimester design refers to an extended school year plan which will enable students to complete six full years of schooling in five lengthened school years. In addition, the students have the advantage of two "E" terms to help them pace their instruction and to engage in enriching or broadening activities.

Figure 6 shows the flow pattern of the five year quadrimester design. In studying this figure, the observer is reminded that pupils in grades

Figure 6

Student Flow Pattern in a Five Year Quadrimester Plan

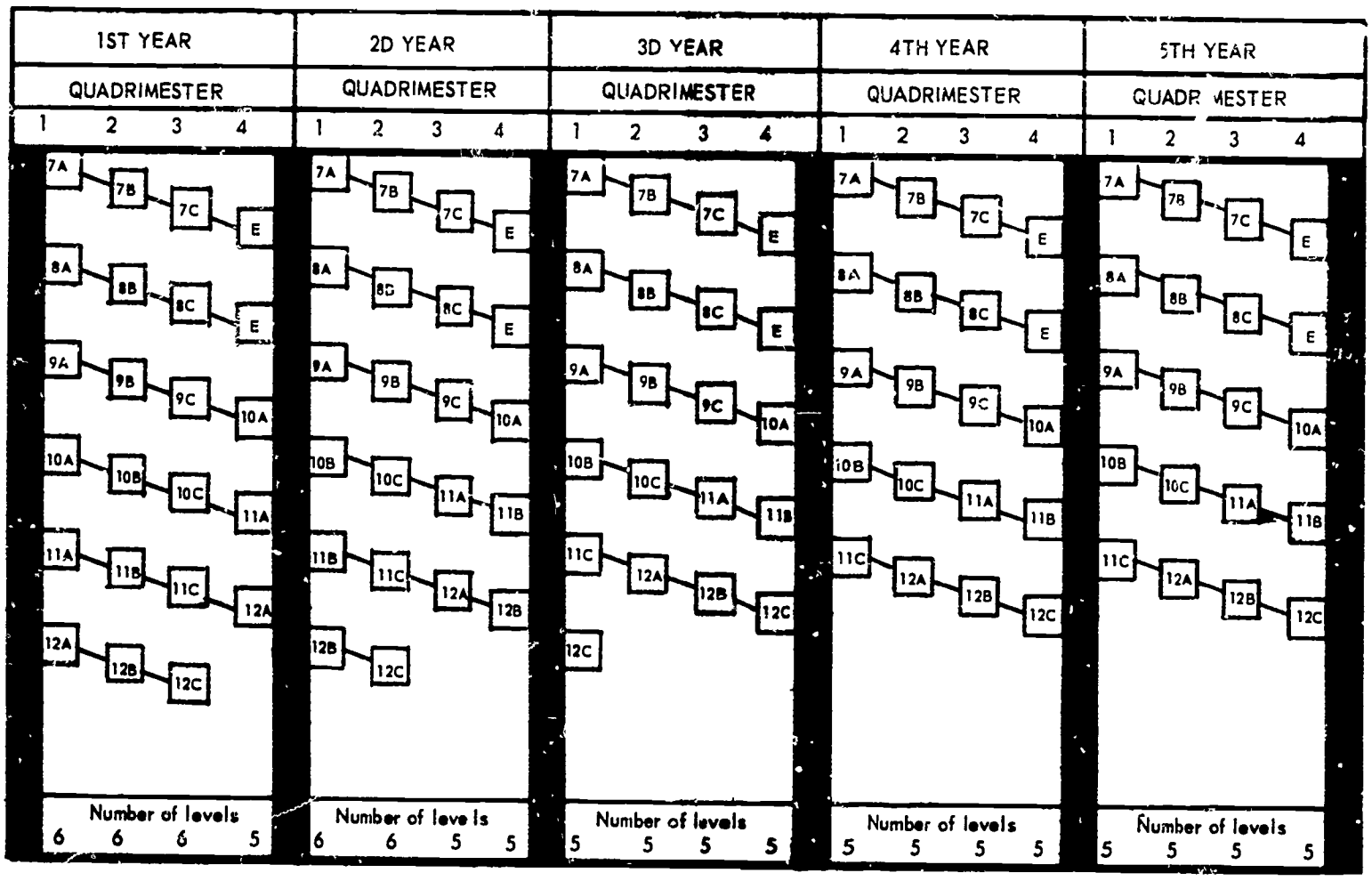
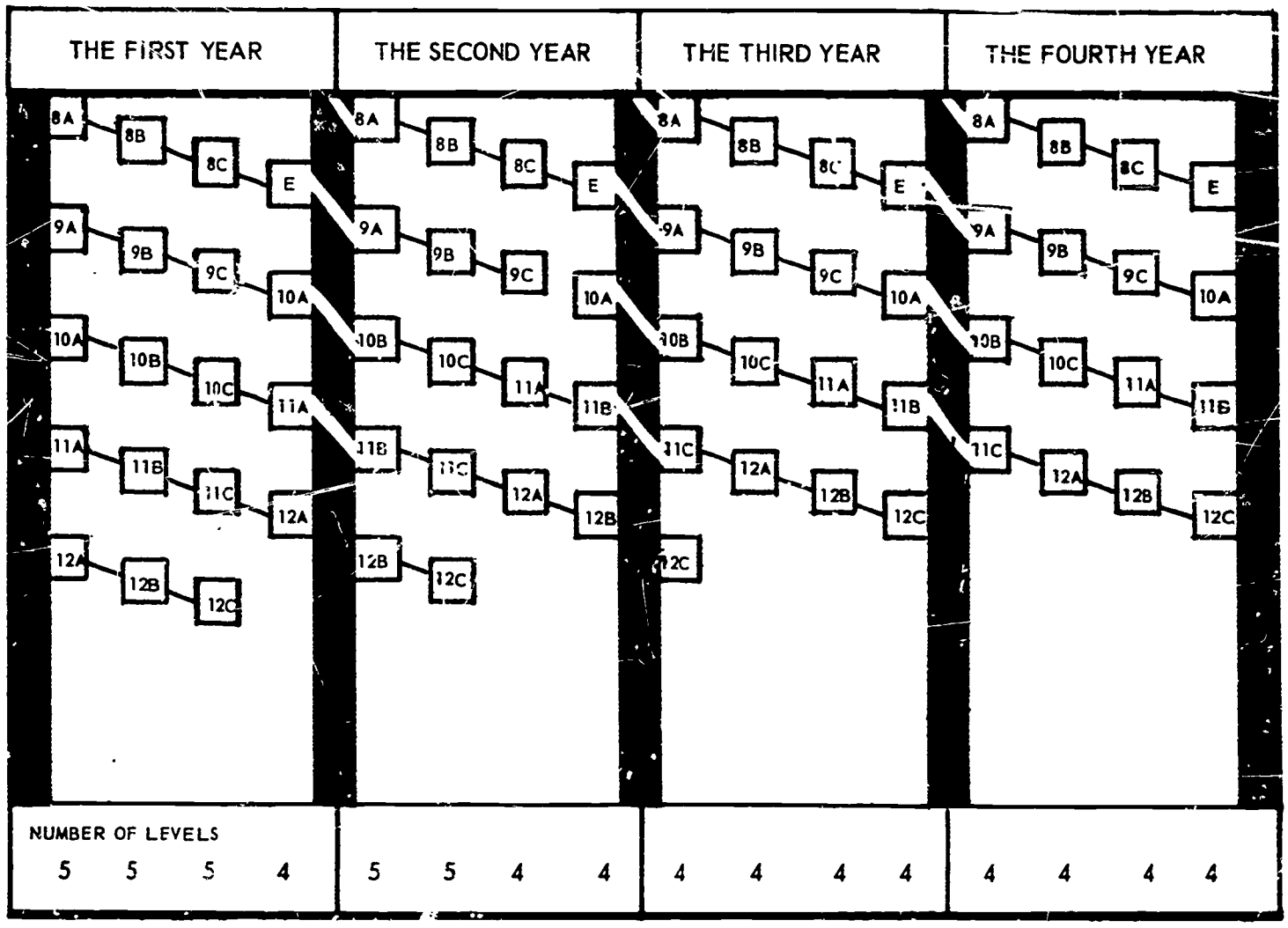


Figure 7

The Four Year Quadrimester Flow Pattern



8 to 12 are in a transition period. Therefore, they do not have the advantages of the "E" terms shown for the first class to complete the full five year quadrimester program.

The consecutive quadrimester design is illustrated in Figures 6 & 7. One can follow the progress of a class through five extended school years to see what happens to the students.

The first class to complete the full six year sequence in five years is the one which starts in the upper left-hand corner. One can follow this class of students as it progresses in a diagonal across the flow chart. The 7A section becomes the 7B section, then the 7C, until after five extended years of schooling the pupils reach 12C (the box in the lower right-hand corner). These pupils will be able to complete six years of schooling in five years, and have the equivalent of two "E" terms to enrich or broaden their curriculum.

The first eighth grade class to start in the quadrimester program will not go through the full flow pattern. As a result, pupils in this class have one "E" term to broaden or enrich their program as they go through their four lengthened school years. This class will complete five years of schooling in four school years or 16 quadrimesters.

The first 9th, 10th, 11th, and 12th grade classes are adjustment classes. They obtain the regular instructional time, but will not have the advantage of "E" terms unless the local school system elects to eliminate some of the current expenses saving for the first two years. In

this case, the 11th and 12th grade pupils can work through a longer school year with the additional time being used as the pupils see fit.

THE FOUR YEAR SECONDARY QUADRIMESTER DESIGN

The four year quadrimester design is a variation which enables average or better-than-average students to complete five full years of schooling in four lengthened school years.

One can follow the progress of the first eighth grade class in the flow chart depicted in Figure 7. The pupils in the 8A class move diagonally across the chart until they graduate at the end of the fourth extended school year. They complete five full years of secondary school courses in 4 calendar years and have the advantage of one "E" term to help pace their progress or to take enrichment or broadening activities.

The reduction in school enrollment takes place at the end of the ninth quadrimester. At this time, the new flow pattern becomes permanent and the five level school reduces to four levels.

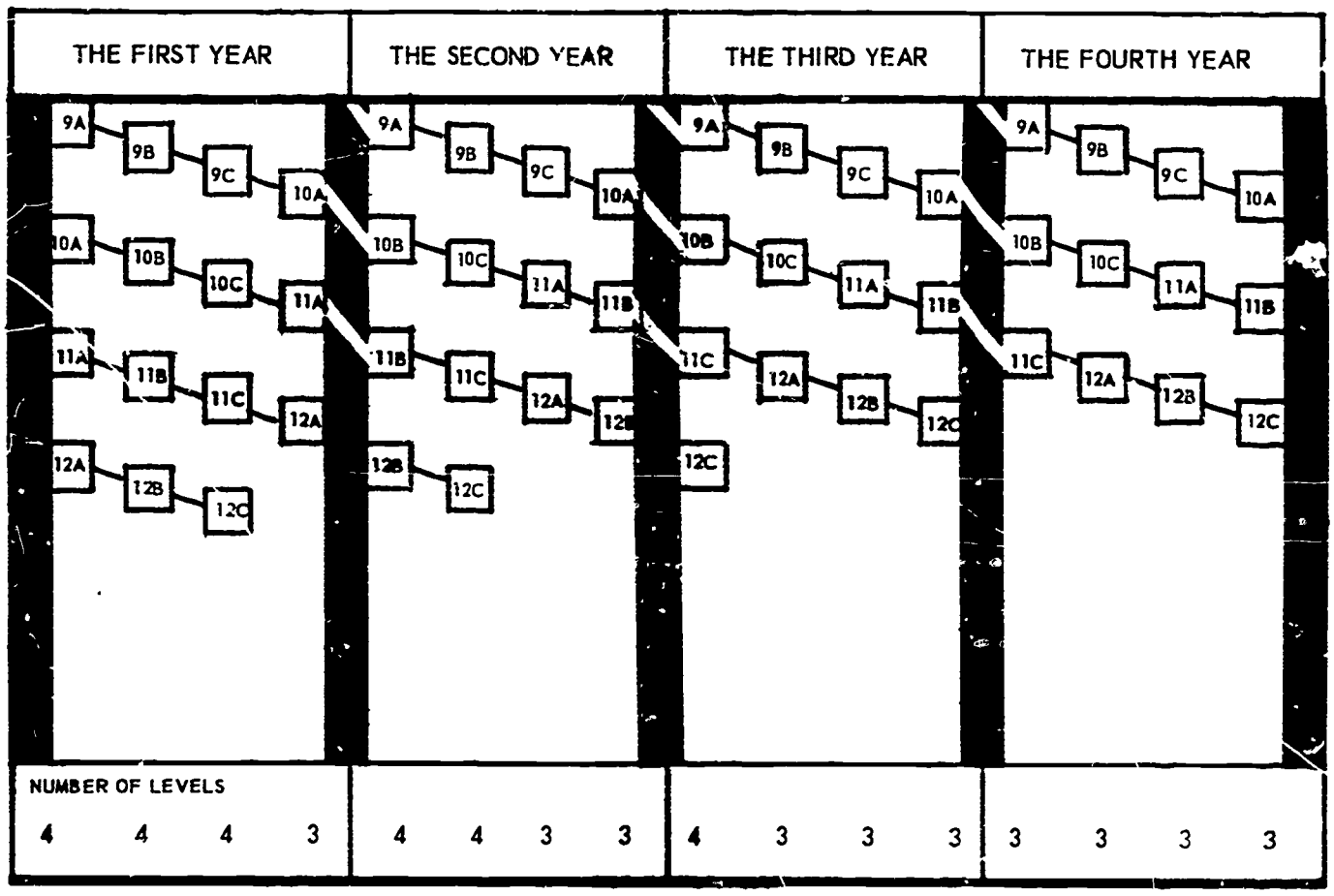
THE THREE YEAR SECONDARY QUADRIMESTER DESIGN

The three year quadrimester design will enable students to complete four full years of schooling in three lengthened school years.

Figure 8 depicts the progress of the first ninth grade class. The pupils in the 9A class move diagonally across the chart until they graduate (12C) at the end of the third extended school year. In this design,

Figure 8

The Three Year Quadrimester Flow Pattern



the students lack the advantage of an "E" term. Therefore, they have less opportunity to take enrichment or broadening courses. Students who fail subjects must take extra courses or work through one or more additional quadrimesters.

The permanent reduction in school enrollment takes place at the end of the ninth quadrimester, when the four level school reduces to three levels.

AN ELEMENTARY SCHOOL QUADRIMESTER DESIGN

Figure 9 shows the flow of students through an elementary school program operating on a quadrimester design.

If one follows the progress of the kindergarten class, shown in the upper left-hand corner of the figure, as it goes to first, then to second and ultimately to the sixth grade, it becomes apparent that the students can complete the seven year elementary school program in the six extended school years. In addition, pupils have the equivalent of three "E" terms to help them over "hard spots," or to enrich and broaden their educational background before they move into the secondary school. The potential reduction in school enrollment takes place at the end of the ninth quadrimester, when the seven levels reduce to six levels permanently.

During the adjustment period, the first 1st grade class completes six years of elementary schooling in five years. In addition, the pupils have the advantage of two "E" terms. The first second grade class completes five years of work in four lengthened years. The pupils also have the advantage

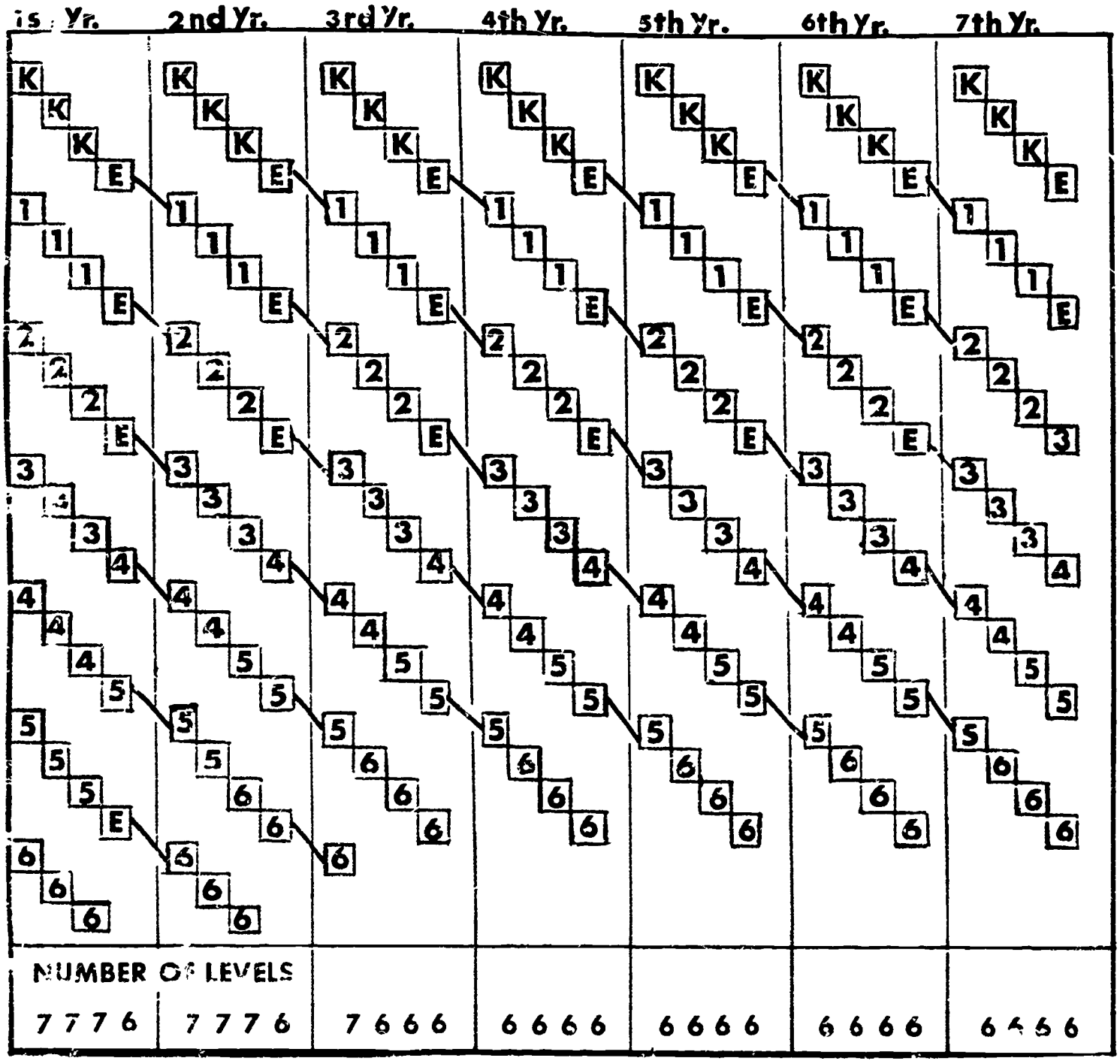
of one "E" term. Ordinarily, the students in the succeeding years work through quadrimesters without the advantage of an "E" term, but an exception was made for the fifth grade class shown in the first column of Figure 9. This class has been given the advantage of one "E" term. These pupils could have been given a second "E" term without upsetting the start of the flow pattern. By the same token, the pupils in the first sixth grade class could have been given the advantage of an "E" term. However, the inclusion of one or more "E" terms for the first, third and fourth grade classes would defer the release of classrooms beyond the two and one-fourth year adjustment period.

Proponents of the quadrimester plan as well as the trimester plan make claims of moderate savings in current expenses after the transition period. They have these savings primarily on the basis of the need for less classrooms due to the reduction in the schools through quadrimester organization.

Generally they hasten to point out that an increase in the current expense budget can be expected for the first and second adjustment years. Then, claims are made that the extended school year plans are less expensive after the transition period has ended than the traditional two-semester nine months school. However, a point brought out repeatedly at the Mt. Sequoyah National Seminar on Year-Round Education was a note of caution that any expectations of savings in school budgets from any plan of extended school year education would be a fallacy and that no school corporation or groups of corporations should enter into a plan expecting to spend less

Figure 9

ELEMENTARY SCHOOL QUADRIMESTER FLOW PATTERN



money. An extended school year costs more money. Knowledgeable consultants at this seminar stressed the idea of selling the extended school year on increased educational opportunities with more and better education for all types of children and not on an economy measure. So, we have diversified and differences of opinions on the quality of education as well as costs of education.

ROTATING OR STAGGERED FOUR-QUARTER PLAN

This plan has been the most studied and the most tried of all the proposed plans. Bluffton, Indiana placed the plan in operation in 1904, but discontinued it in 1915. In the 1920's more than a dozen schools were operating on this plan, but by 1950 only Chattanooga's remained. Probably the two best known experiments were those of Ambridge and Aliquippa, Pennsylvania. By 1956, no cities were known to be operating under this plan. However, the 1960's brought on a great number of school systems moving to the plan. The program of the Metropolitan Five County Plan at Atlanta will be discussed later.

The staggered quarter system, as this plan has been called, is divided into four periods of about equal duration, usually twelve-week periods. The student body of a given school is divided into four groups, with each attending school for a minimum of three quarters. Students would still spend about 180 days in school, as is now the usual case. During any given time

of the year, three quarters of the student body would be in class while one quarter would be on vacation as shown in the figure below:

FIGURE 10

	ATTENDANCE QUARTERS			
Pupil Attendance Group	FALL	WINTER	SPRING	SUMMER
GROUP A	Vacation	School	School	School
GROUP B	School	Vacation	School	School
GROUP C	School	School	Vacation	School
GROUP D	School	School	School	Vacation

In addition to these examples of the operations of this plan, the following cities initiated and discontinued the plan between 1904 and 1950: Gary, Indiana; El Paso, Texas; Amarillo, Texas; Omaha, Nebraska; Albuquerque, Mexico; Tulsa, Oklahoma; Mason City, Iowa; Eveleth, Minnesota; Ardmore, Oklahoma; Minot, North Dakota; and Bayonne, New Jersey.

Since World War II, many communities have studied the feasibility of adopting the rotating four-quarter plan. Among those communities known to have made such studies are Long Beach Public Schools, Sacramento Unified District, Contra Costa Taxpayers Association, Los Angeles City School District (1954), San Mateo County, and Redwood City (1960), California; Fairfield, Connecticut (1952); Polk County, Florida (1966) and the Florida State Department of Education (1956); Atlanta (1957) DeKalb County and Fulton County, Georgia; Montgomery County, Maryland (1961); Cleveland (1957-58) and

Cincinnati (1958), Ohio; South Carolina State Department of Education; and Dallas and Houston School Districts, Texas. (39:12)

In recent years, the rotating four-quarter plan has been adopted, or seriously considered, in Del Campo High School, California; Atlanta, Georgia; and the state of Delaware.

Let's take a look at some of these early plans. The Research Division of the National Education Association has published a Research Summary, copyrighted 1968, which provides a broad look at plans for rescheduling the school year and is by far the finest research that I know that has come from experimentation with "an all-year school" or an "extended school year". I have obtained written permission to reproduce any part or parts of this summary and would like to exercise that freedom in the following paragraphs relating to the rotating or staggered plan.

The plan was adopted in Ambridge in 1930 to handle a large student enrollment while new schools were being constructed. According to the Ambridge school superintendent, the program was unpopular and extremely difficult to administer, and it was discontinued (in 1936) as soon as additional schools were completed.

In Aliquippa, the plan was adopted in 1928 in order to avoid investment in additional school buildings. Attendance quarters were arbitrarily assigned, but requests for changes were considered. A new first-grade section was enrolled each quarter, and there were four promotion

dates. Some pupils were allowed to attend all four quarters, but were not allowed to accelerate more than one year. Pupils who had failed, repeated the quarter which they had failed. Quarters overlapped seasons of the year.

Reports of this experiment indicate that the plan was not detrimental to the pupils' achievement. Nor were fears that pupil achievement and attendance would suffer during the summer months confirmed, at least during the first five years of operation. The January-April quarter showed the fewest pupil failures, while the October-January quarter showed the most failures. First year attendance was highest during the July-October quarter and lowest during the October-January quarter.

From the standpoint of economy, the experiment was considered successful. Savings on capital outlay for new schools and related savings (especially debt service) resulted in an estimated saving of $282,059 during a seven year period, according to the superintendent, H. R. Vanderslice.

Vanderslice also explained that since most teachers chose to work 12 months, the school board decided to reduce teachers' salaries by 5 per cent. This resulted in a saving of $69,200 during the five-month period, and a saving of $96,880 during the seven-year period.

At least during the first year of operation, however, the total 12 month salary was 28 per cent higher than the nine month total.

The disadvantages of the Aliquippa experiment were soon felt. Accordint to Harsell, the disadvantages were these: (a) Building maintenance and

repair without interference with school sessions was virtually impossible. (b) Parents objected to non-summer vacations. (c) Permitting teachers to choose their vacation quarter resulted in a constant changing of classrooms and teachers. (d) The summer quarter showed a let-down in work by both pupils and teachers. According to another source, in small schools there were often as many as three groups at different points in their grade instuction in one classroom. This problem was apparently not as serious if plans had been made for classroom grouping.

Although it took some years to remedy the crisis that had precipitated adoption of the plan, the rotating four-quarter plan in Aliquippa was eventually discontinued. The difficulty in maintaining the physical plant and the increased maintenance costs, which somewhat offset economies, were two major reasons for abandoning it. Additional problems were the difficulty in assigning vacation periods, the increased administrative problems and supervisory tasks, and the increased paper work. By 1938, Aliquippa had decided to return to the traditional nine month school year and to construct the facilities required under the former system.

Renewed interest in the four-quarter school plan was displayed by the Texas Legislature in 1967. A law was passed that permitted schools to experiment with a 12 month school year program to be financed by the State Foundation Program Fund. Provisions were made for pilot programs to operate in a maximum of ten districts with the number of pupils not to exceed 100,000 based on average daily attendance in the preceding school year.

The attendance of eligible pupils was restricted to three quarterly semesters within any 12 month period.

The plan for allocation of state aid was based on the same formula for teachers and pupils that existed under the regular 9 month term... Teachers could teach all four quarters if they eleceted to do so... This act was effective for the 1967-68 school year and subsequent school years... As of this date, no funds have been allocated for implementation of this act.

In 1968 the Texas Governor's Committee on Public School Education in Texas strongly supported the extended school year... Their recommendation included a summer instructional program, with priority given to children from low-income families who are behind their age-grade level in school. They also endorsed state support for any district that elected to operate on a trimester or quarterly year plan. (59)

The Del Campo, California, High School project proposed to divide the school calendar into four quarters of 54-59 days each, with a 3 week vacation between the summer and fall quarters. Most pupils were to attend three quarters, but some would be able to attend all four... The project backed by $145,000 from the California state legislature, was to have begun in May 1966... At that time, the first summer quarter was postponed a year for lack of student interest. By November 1966, the San Juan School board had decided to abandon the project entirely, for reasons of insufficient funds, lack of student interest, and poor support from parents.

The Delaware State Board of Education has authorized a pilot project to begin in the summer of 1968. A 212 day school year is to be divided into four quarters, with students attending three or all four quarters on a rotating basis. If this summer project and the project tentatively scheduled to begin in September 1968 are successful, the State Board may act to implement the program throughout Delaware in 1969-70. Reasons for the Board action were rising classroom construction costs and growing student population, and the increasing competition for academic progress.

Los Angeles conducted an extensive study of the four-quarter plan in 1954. The conclusion was that the all-year school was too costly, met with too much public resistance, and created too many administrative problems to make adoption feasible.

The Florida State Department of Education also concluded that the theoretical economies of the rotating four-quarter plan would not be obtained and that the plan would create additional problems. The Department estimated an annual state-wide saving of $3,882,400 on depreciation and new buildings to be constructed in the future, but it also anticipated the following new expenditures, which would offset the amount saved:

1. The quadrupled number of registrations, promotions, graduations, and examinations would require more staff members and at least double the administrative costs of the large schools.

2. The inevitable reduction in pupil-teacher ratio would increase school costs.

3. The decreased denisty of pupils transported by bus would lead to increased per-pupil transportation costs.

4. The need for air conditioning would result in increased additional capital outlay and operating costs.

Other anticipated problems were lack of time for building repairs and thorough bus overhaul; split families; lack of time for teachers to attend summer school; decline in teacher health; lack of time for teacher pre- and post-school planning; and rise in juvenile delinquency, because teachers would be unavailable to direct extended summer school programs, or their equivalent, for pupils on vacation. (39:13).

Major advantages usually claimed for the staggered quarter:

1. Greater utilization of school facilities was achieved.

2. Each child is guaranteed as much instruction time as is normally given with 25 per cent more students being accommodated.

3. Pupils graduate on schedule.

4. Acceleration and accommodation of the gifted students are made possible.

5. Failing students can repeat work during vacation periods.

6. Expenditures for personnel, new construction, and new equipment will be reduced.

7. Fewer textbooks are needed at any one time.

8. Teachers may work the year around, thus increasing their salaries and reducing the need for additional teachers.

Major disadvantages usually listed against the staggered quarter:

1. Parents object to arbitrary assignments of vacation periods and to vacations other than summer.

2. Maintenance and repair of buildings would conflict with school work.

3. Plan may not work advantageously in elementary schools with less than four sections to the grade and in small secondary schools with less than four sections of a standard course.

4. Some studies indicate that some economies are not as great as they first might appear to be.

5. Difficulties exist in the placement of transfer students.

6. Community recreation programs for out-of-school students do not operate year-round.

At the present time the national spotlight is focused on Atlanta, Georgia, where high schools in eight metropolitan Atlanta school systems are operating on a four-quarter plan. Participating in this metropolitan five-county plan are the following school systems: Atlanta City Schools, Clayton County, Cobb County, DeKalk County, Fulton County, Gweinett County, Decatur City Schools and Marietta City Schools. Presently this is a high school program only. Such a program for the elementary schools is under consideration and will come subsequently.

During my attendance at the Mt. Sequoyah National Seminar on Year-Round Education, Fayetteville, Arkansas, it was my privilege and pleasure to get to know Dr. Reid Gillis, Assistant Superintendent of Atlanta Public Schools, who served as Chairman of the Metropolitan Steering Committee for the Metropolitan Five-County 12-Month School Year Plan and was a Seminar Consultant at the Mt. Sequoyah Seminar. The know-how, experience and enthusiasm of Reid Gillis is truly exciting and since the Metro-Atlanta program is the biggest attempt at year-round education with all its by-products on the national scene at the present time, I would like to add some quotes of

Dr. Gillis and make some comments on this plan regarding future developments.

Dr. Gillis stated at the beginning of his speech, that the most significant statement that he would make about the program would be the first. Here is that first statement: "This program was designed for only one purpose, that is to improve the educational opportunities for our children. It was not designed to save money, save space, or to use the buildings year round. This is a child-centered program. There can be no other reason for developing an educational program. This is a point from which we can work. Otherwise much of what I say will not make sense."

In the beginning of the development of this program, the Atlanta area people learned that the first thing necessary is the philosophy and rationale under which the program is developed. Gillis relates that over a three-year period, system wide committees of all types including subject area committees from all the disciplines were appointed and met regularly throughout the three years. Time was made available for work sessions. Every faculty member was given an opportunity to participate. The committees worked hard at making this so. Consequently, the project received the benefit of everyone's experience and expertise. As we know, involving everyone is not easy, but with working time provided and strong leadership in involving the total personnel, the chances of successful implementation are greatly improved.

Gillis continues, "In our area we found about 25 per cent of our high school enrollment attended summer school. This summer school was an

appendix eight weeks long attached to a regular nine months school year. This program was initially developed for the student who failed and needed to repeat a course. However, we found at this time, of the 25 per cent who attended summer school, 70 per cent were taking new work and there was another group who could not go to summer school because the new course offerings in this summer session were not inviting. Therefore, we saw a need for a program in which courses could be taken any quarter and have the same integrity, character and equality as any other quarter. This was one point which led us to the four-quarter plan."

"Just a word about these quarters. The school year has four quarters of equal time, three of which are required with the fourth quarter optional. We call this the attendance option. Any three of the four quarters will meet state attendance requirements. The student, however, may choose to go to only three quarters, or he may choose to go to all four. To meet graduation requirements from high school it will be necessary for the student to go to school a minimum of three quarters a year for five years (grades eight through twelve). This will not only allow the student to meet high school graduation requirements but he can attain enough credit for college admission. If the student should choose to go four quarters, he may graduate at least one year early or elect 32 quarter courses more than normal."

"To get another technical point out of the way--in Fulton County every child is completely rescheduled every quarter. We have 18 high schools.

The student in these high schools are pre-registered, and a new master schedule is made in which the student can reschedule himself."

"After all this change of the school calendar, what have we done to the child? The significant point here is it really doesn't matter when a kid is in school. What does make a difference is the education and opportunity the student gets when he comes to school." (See Figure 11)

"What does the student get in terms of course structure and content? Is it the same old course in a new package? Not in Fulton County, Georgia. This new calendar... this four quarter plan... this new scheduling procedure... is only a vehicle to put into operation a new curricular concept, a quarter curriculum in which the child is the center."

"It really wasn't difficult to develop the four-quarter calendar in the metropolitan area. The real problem, however, was the curriculum revision, developing a totally new program--a curriculum made up of quarter courses that are terminal at the end of each quarter without regard for sequence wherever possible. That's right, without regard to sequence in 70 per cent of our courses. The student does not schedule for a year course in English, for example... He schedules for one quarter of English... If he passes it, he will take another quarter of English... If he fails it, he can take it over immediately or schedule himself into another course that will more nearly meet his needs."

"Another necessary feature of this program is that the Carnegie Unit has been "thrown out." One of the reasons our students have been hung

Figure 11

FOUR-QUARTER SCHOOL CALENDAR

This is a sample school calendar outlining the four quarters. It is in use this year in the Fulton County school system, Atlanta, Ga., furnished by Douglas G. MacRae, deputy superintendent.

By state law the teachers in this state must work 190 days to fulfill their contracts to qualify for state pay. By the same law the schools must be in operation for the students not less than 180 days to constitute a full year.

Under this four-quarter plan, the 190 days for teachers must stand as a minimum. The 180 days for students is satisfied because the schools will be in operation longer than 180 days under the four-quarter plan.

August 26-30	Preplanning week for teachers
September 3	First day of school
October 4	GEA day
November 25	End of first quarter for high schools
November 26-27	Teachers' workdays
November 28-29	Thanksgiving holidays
December 2	Second quarter begins
December 20-January 1	Christmas holidays
March 5	End of second quarter for high schools
March 6-7	Workdays for teachers
March 10	Third quarter begins
April 4-7-8	Spring holidays
June 5	End of third quarter for high schools
June 6	Workday for teachers
June 9-10-11	Post-planning days for all teachers
June 16	Fourth quarter begins
July 4	Holiday
August 22	End of fourth quarter

Student Class Days—

First quarter	59 days
Second quarter	58 days
Third quarter	60 days
Fourth quarter	50 days

Quarters 1, 2, and 3 will incorporate class periods with 55 minutes net class time. Quarter 4 will have classes with 65 minutes net class time so that instruction time will be equal in each quarter.

up in the school structure is that they were trying to get one Carnegie Unit of credit for one year's work. This is no longer necessary. The student now gets five credit hours for each quarter course completed--or 375 credit hours to graduate."

"Back to the curriculum into which the student can reschedule himself every quarter. As the research was done for this program, we found basically the same structure in all systems involved. Let me use English as an example. In grades eight through 12 the student had to have eight semesters of English. This is a required English course every semester. Every student had to take the same eight semesters of English with few exceptions. Under this new program we have 50 English courses, ranging from a dynamic communications skills course for students in the eighth grade, reading below the fourth grade level to a course in the tragedy of drama for the advanced 12th grader who wants an in-dpeth study of Shakespeare. This same course reorganization holds true for math as well as all other subject areas. In mathematics, courses are developed for students at the eighth grade at a very low level of achievement up to a course in probabilities and a course in creative mathematics for the advanced math student."

"I'm sure the first question to come to mind here is how can we schedule 50 English courses, 45 mathematics courses, 60 social studies courses, and a comparable number of courses in the other disciplines. The answer is obvious: At no time will you schedule all of these courses in a given school at the same time. To the contrary, this is not an opportunity to develop a course structure to meet the needs of the individual school--a tailor-made schedule to meet the needs of the community."(59)

The people in the Atlanta Metropolitan Five-County area are well aware that the four-quarter plan was in vogue in earlier years in several areas of the country. They know that most of the early schemes failed, primarily, because they were directed only at saving money, which they did not do. The plan they have developed is intended to use the four-quarter system as a point of departure for imparting flexibility to curriculum scheduling and truly developing individualized instruction. I have a wealth of material on their experiences to date including rather complete treatises on the plan itself, the creating of a quarterly curriculum and the implementation of the plan. This Five-County Metropolitan Experiment is in the national spotlight presently, and I shall watch this program with intense personal interest.

CONTINUOUS FOUR-QUARTER PLAN

The continuous four-quarter plan differs from the rotating or staggered four-quarter plan in that attendance during all four quarters is compulsory or strongly encouraged. Naturally, in the various experiments with this plan diversity and flexibility in operations has been much in evidence.

Two of the better known experiments with the continuous four-quarter plan were those in Newark, New Jersey; and in Nashville, Tennessee. It appears that both plans were adopted to meet both economy and educational objectives. However, in the case of both plans, attendance was stricly on a voluntary basis.

The Newark plan was in operation from 1912 until the depression years of the 1930's. In years these many adjustments in procedure were made applicable to different schools at different times. In 1915, Newark had 15 all-year schools in operation, including eight elementary, one junior high, one senior high and five vocational and special schools. The voluntary summer quarter was an extension of the school year. The purpose of the program was to reduce retardation and withdrawal among pupils of poor, underprivileged, and foreign-born parents. The plan allowed students to gain one-third of a year credit for summer participation, but, according to the Newark school superintendent, acceleration was not appropriate for participating students. (26)

The Nashville plan, very similar in operation and procedures to the Newark plan began in 1922 and terminated in 1933. Economy was perhaps the major goal, but as is the case with any one of the plans for an extended school year, differentiation in operating plans and claims of other advantages in experimentation come into play. According to reports on the Nashville plan, the experiment was conflicting but the program was generally regarded as unsuccessful and given up after eleven years of operation.

The attendance in summer, or fourth quarter, fluctuated around 50 per cent, with Negro schools showing a higher attendance per cent than that in the white schools. Teacher participation ran as high as 86 per cent.

THE CONTINUOUS PROGRESS PLAN

It seems logical in this presentation of plans or designs for year-round education that the continuous progress or "continuous school year plan" as it is sometimes referred to, should follow the continuous four-quarter plan.

The Continuous Progress Plan is one of the easiest to understand and to administer. While it is customary to think of it as an elementary school plan, it can be adapted to the secondary school. The goal of this extended year program is to save one elementary school year out of six or seven without concern about terms, trimesters, or quadrimesters. Pupils work through sequential phases of the curriculum without excessive time breaks. For example, in a 210 day school year many kindergarten pupils will complete a year's work at the end of 180 days (the length of the regular school year.) Under the Continuous Progress Plan these pupils will devote the last 30 days of the 210 day school year to first grade work. In the second year, they need spend only 150 days more to complete a first grade program. They will, therefore, have 60 days that year to spend on second grade work.

Continuous progress implies a study progression to higher learning levels when children are ready. Thus, intellectually gifted pupils may begin formal reading and number work earlier in the year than less mature individuals. This slower rate of learning will be recognized as the pupils progress from one teacher to the next.

Figures 12, 13 and 14 illustrate this pattern through grade six. Through a program of continuous progress, the average and above-average pupils are able to absorb a portion of the succeeding grade during each of their school years until the sixth year when they are able to round off any fifth grade work which was not completed and then devote the remaining portion of the year, about 180 days, to what was formerly sixth grade work. Six years suffice for what now takes seven years. (52)

The Continuous Progress Plan need not necessarily be classified as a nongraded program because the entire curriculum can be redistributed over six extended years instead of seven shorter ones. However, the success of the Continuous School Year program depends upon the development of a flexibility in the school that will enable boys and girls to progress as fast as they reach a stage of readiness for new learning skills and concepts.

The elementary school with kindergarten was considered a seven-graded school. As a result of the new proposed program, the entire elementary curriculum will be taught in six extended years or levels. A "Learning Level" refers to the scope of work covered in a year which includes a combination of grades. Parents and teachers may continue to refer to "grades" but the meaning will lose significance as pupils complete the work of one grade and begin another during the course of one extended year.

The term "Learning Level" should replace "grade" in defining the work of a longer school year. A pupil who is starting his third year of actual schooling will enter "Level Three" instead of Grade Two.

Figure 12

TIME AND GRADE CONCEPTS IN REGULAR AND CONTINUOUS SCHOOL YEARS PLANS

Regular School Year Plan	Length of the School Year	Continuous School Year Plan	Length of a school Year
Kindergarten	180 days	Level one	180 days
			30 days (210)
1st Grade	180 days	Level two	180 days
			30 days (210)
2nd Grade	180 days	Level three	180 days
			30 days (210)
3rd Grade	180 days	Level four	180 days
			30 days (210)
4th Grade	180 days	Level five	180 days
			30 days (210)
5th Grade	180 days	Level six	180 days
			30 days (210)
6th Grade	180 days		

TOTAL INSTRUCTIONAL DAYS IN THE REGULAR SCHOOL YEAR PLAN
1260

TOTAL INSTRUCTIONAL DAYS IN A CONTINUOUS SCHOOL YEAR PLAN
1260

Figure 13

CURRICULUM ADJUSTMENT NECESSARY TO PROMOTE A PROGRAM OF CONTINUOUS PROGRESS IN AN EXTENDED SCHOOL YEAR

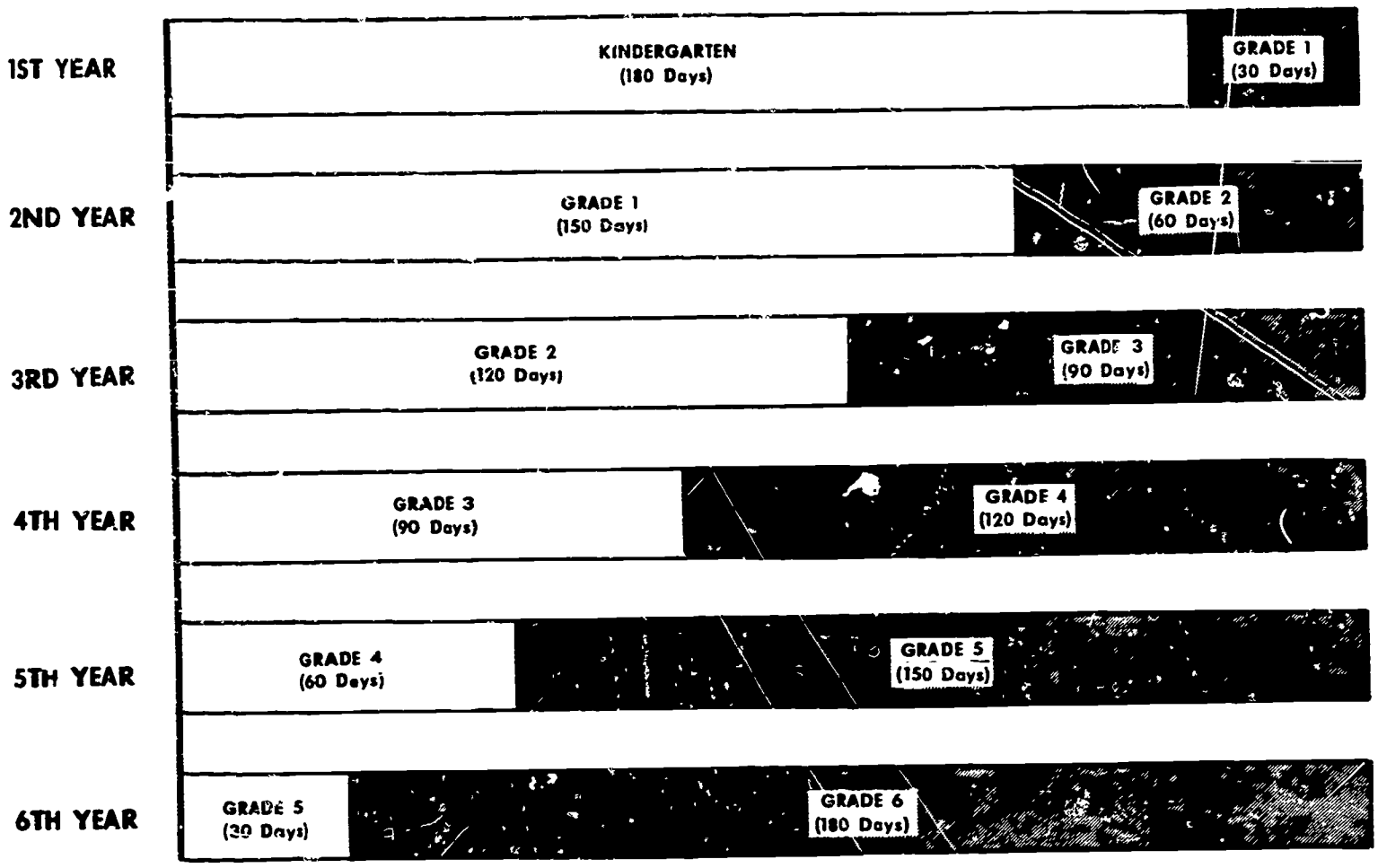
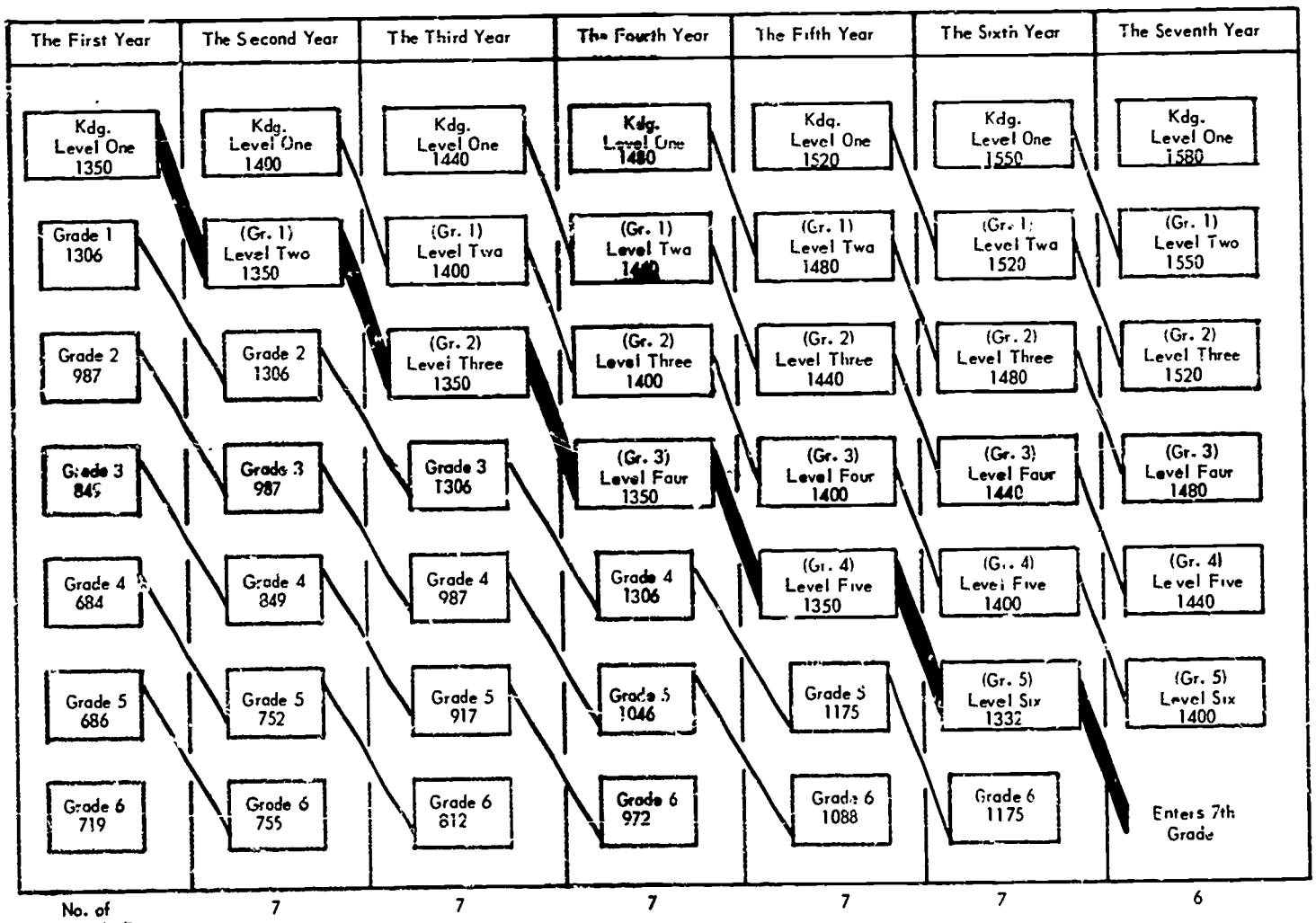


Figure 14

The Flow of Students Through a Program of Continuous Schooling in a Sample School System Based on an Adjusted Straight Line Projection



Potential Saving of 53 Classrooms in the 7th Year, 56 Classrooms in the 8th Year, and 58 Classrooms in the 7th Year.

The length of a Continuous School Year will be determined by the number of grades in the new program. An increase in the number of grades that is included will result in a decrease in the length of the calendar required for equalizing time. A 216 day calendar will be needed to equalize time if one year out of six is to be saved. A 210 day calendar would necessitate the lengthening of the school day in order to equalize time over a six year period. A program including grades K to 8 could be completed with a 203 day extended year program to save one year.

The Continuous Progress Plan does not provide more days than the regular 180 day program if it is limited to the saving of one year in a six or seven year sequence. This is illustrated in Figure 12, which shows the students in the Continuous School Year Plan obtaining the same number of instructional days (1,260) in six lengthened school years as could be obtained in seven regular school years.

Should the length of the school year remain fixed, with the inclusion of additional grades, as seventh and eighth, the pupils would obtain an increase in the total number of days of instruction.

To offer the pupils in grades K-6 a 204-210 day school year, plus a lengthened school day, would give extra instructional time.

For example, the lengthening of a school day by 30 minutes would result in giving children the equivalent of 21 extra days of instruction or the equivalent of a 231 day school year.

Educators can count on a 6 year adjustment period for a Continuous Progress Plan based on saving one year out of seven. This means there will be no enrollment reduction until the seventh year after the program has been introduced. The transition period may be shortened to six years if the introductory year includes first grade pupils as well as kindergarten children.

Figure 14 depicts the progress of pupils in designated grades. The first class to start the program is the kindergarten. This group is shown progressing through levels one to six, at which time it moves on to grade seven, after only six years of schooling. Similarly, the first group of first grade pupils is shown going through to seventh grade in five years. This saving of one year in six will reduce the number of grades or levels in the sixth year. If this class does not have the advantage of the longer school year, the reduction in enrollment, teachers, and classrooms will not take place until the seventh year. However, the cumulative adjustment year costs will be less.

The Continuous Elementary School Year Plan will provide a school system with additional classrooms at the end of a six year adjustment period, if the pupils leaving level six can be provided for in grade seven. The entire elementary school will benefit from the release of the classrooms formerly occupied by sixth graders, but this plan presupposes that the secondary school will be able to house an additional number of students equivalent to an extra class or grade for the next six years.

If a secondary school cannot accommodate the wave of students entering the seventh grade, it may be desirable to temporarily adopt an extended school year program for grades 7 to 12 or grades 9 to 12. If this is done early enough, classroom space can be available when the first continuous progress class leaves the elementary school.

MULTIPLE TRAILS PLAN

The Multiple Trails Plan introduces a new concept of extended year schooling to attain economy or high level achievement. Figure 15 shows four stages or variations of the plan which can be adopted with a rescheduling of the student's day and a longer school year.

The Educational Reserve Bank (Figure 16)

All variations start with Stage I which leads to the release of:

(a) learning time (pupil time)
(b) instructional time (teacher time)
(c) learning facilities (classroom space)

These assets of a hypothetical Educational Reserve Bank can be used to achieve immediate economy or to implement Stages II, III, or IV.

Other extended school year plans show a potential release of classroom space in proportion to the number of students enrolled in one grade or class. Such reduction will be far less than that provided in the Multiple Trails Plan which releases space in proportion to the number of available classrooms and the variation desired.

VARIATIONS OF THE MULTI-MODULAR MULTIPLE TRAILS EXTENDED SCHOOL YEAR PLAN

MULTIPLE TRAILS

STAGE I

Uses periods of variable length and an extended school year to provide equal learning time.

Students will not graduate early, but daily pupil and teacher class loads are lightened.

Will release at least 25% classroom space at no extra cost immediately.

MULTIPLE TRAILS

STAGE II

Pupils start with equal learning time. Students use "E" time to take extra or advanced academic courses leading to acceleration through a standard curriculum.

Reduced student enrollment releases space and teachers after a transition period.

MULTIPLE TRAILS

STAGE III

Students begin with equal learning time, but additional instruction is provided slow progressing students through use of "E" time.

Reinforcement, make-up, correction or enrichment activities are considered extras which will help students graduate within the 13 year cycle.

MULTIPLE TRAILS CONTINUOUS PROGRESS PLANS
STAGE IV

VARIATION #1

Provides continuity of pupil progress based upon recognition of readiness of individual students for new and higher learning experiences with minimal time equalization. Since time is not compacted, pupil and teacher time ("E" time) plus classroom space become available immediately.

Students are not accelerated.

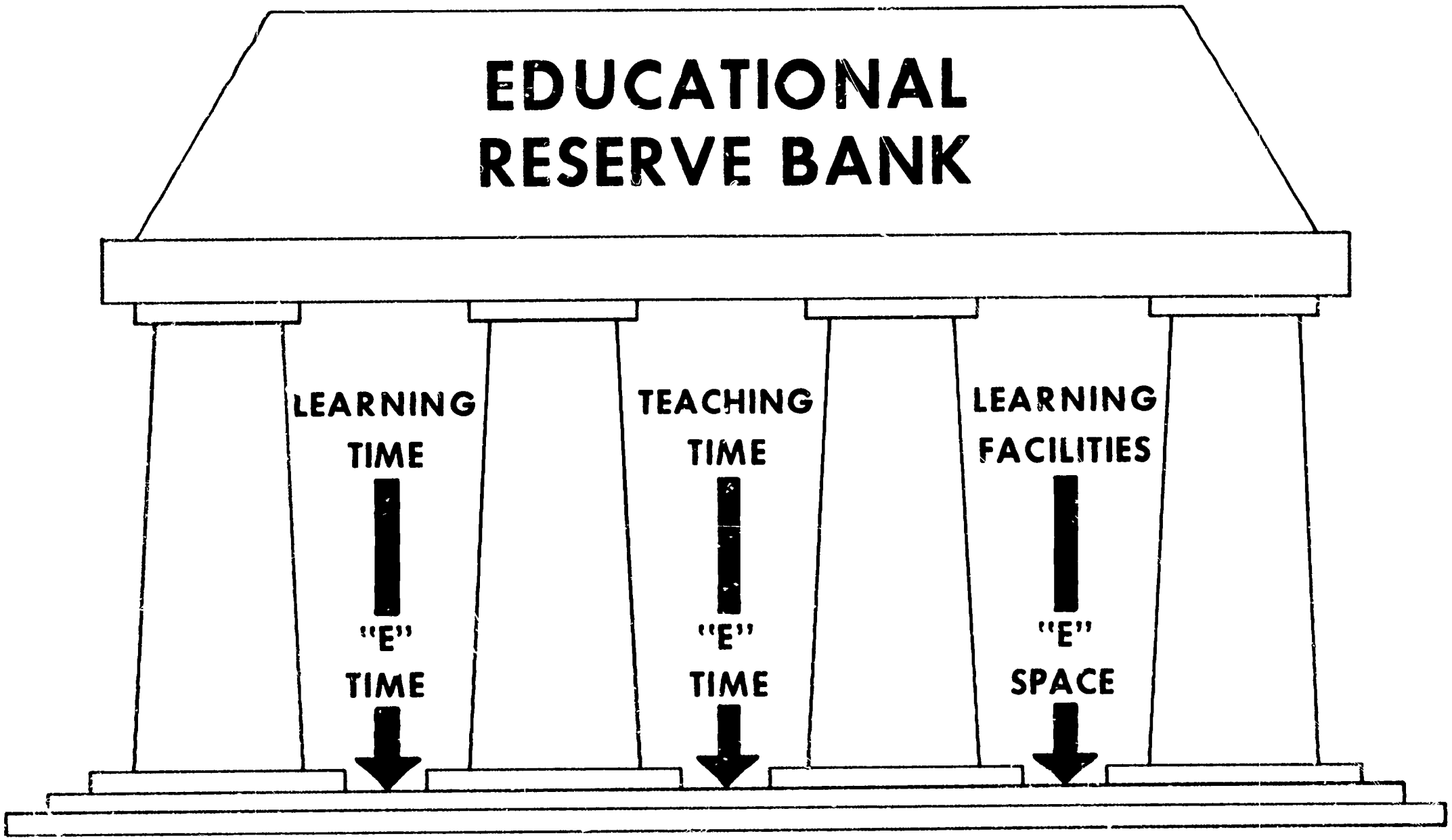
VARIATION #2

Uses "E" time to compact student schedules. Pupils move through a continuous progress program at an accelerated pace, but with all the time they need to gain enrichment or broadening activities.

Reduced student enrollment releases space and teachers after a transitional period.

Figure 16

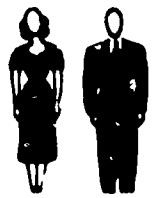
ADOPTION OF TRANSITION STAGE 1 OF THE MULTIPLE TRAILS PLANS LEADS TO THE CREATION OF THE EDUCATIONAL RESERVE BANK



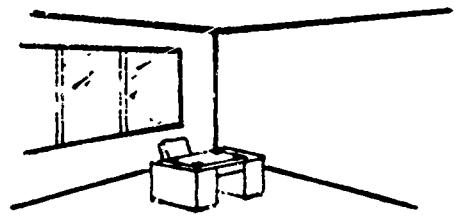
THE ASSETS OF THIS BANK CAN BE USED TO:

1. PROVIDE ADDITIONAL EDUCATION

2. HELP MEET THE NEED FOR CLASSROOM TEACHERS



3. MINIMIZE THE NEED FOR ADDITIONAL NEW SCHOOL CONSTRUCTION



Stage I of the Multiple Trails Plan.

Transition Stage I should always be considered as a base line or projected reference point because it shows how classroom space and teacher time become assets in the first year of operation. A school district can start with Stage I and remain with it indefinitely. Steps can be taken to introduce other stages shown in Figure 15. (53)

Based on an eleven month, or approximately 210 day, school year, this plan provides either a July or August vacation in addition to traditional winter and spring vacations.

It should be noted that the school day, which would be no longer, would be rescheduled into time modules. These modules might be 15-17 minutes long, or up to 30 minutes long, depending on the local school's decision. To make the transition from the regular school year to the multiple trails plan, the current instructional time allotment for a given subject must be equated in terms of the new time modules extending over a 42 week, or 210 day, school year. The number of time modules allotted for each class session depends on the day the class is meeting and the subject under consideration. The rescheduling may provide less instructional time per week in a given subject, but over the extended year, the total yearly instructional time will be equalized. (39:21)

How students use released time depends upon the type of "holding" areas available and the objectives of the school system. "E" time is an asset which teachers and school administrators can capitalize upon to use innovative approaches to the learning process. The new schedule provides scheduling

flexibility through instructional periods varying in length and frequency. (See Figure 17.)

The time equalization process has an immediate impact upon the student's day. For example, a typical junior high school student may go from zero modules of free time to 21 seventeen minute modules of "E" time per week. His number of daily teacher contacts can be reduced from seven to four. Similarly, a college bound junior carrying six subjects with one lab has 31 classes a week. Under Stage I his daily contact is reduced from six or seven teachers to three or four. He has 31 free "E" time modules per week instead of 12 and only has 17 academic preparations per week compared to 29 under the regular school year. (53)

The Release of Classroom Space. Numerous field studies comparing utilization before and after adoption of Stage I shows that the release of "E" space depends upon the number of periods classrooms are used per day and the length of the school day. Essentially, they show:

> (a) a 25 per cent increase in space may be anticipated where classrooms are used eight periods a day. . . .
> (b) a 37 1/2 per cent increase in space may be obtained with a small adjustment in the length of the eight period day.
> (c) a 29 per cent increase may be anticipated where classrooms are used seven periods a day. . . .

Figure 18 illustrates how an art classroom currently used for eight classes per week can with adoption of Stage I be used to house 10 classes per week.

The Release of Teacher Time. Adoption of Stage I immediately changes the nature of a teacher's day and week. Field studies show that a typical teacher currently teaching 25 classes a week plus 5 special assignments could immediately obtain a weekly schedule which reduces her pupil contacts to three classes per day and her weekly work load to 15 academic prepartions. (See Figure 18) In addition, the time equalization process releases sufficient "E" time to provide 33 free modules per week instead of the current 15. (53:60-61)

Field studies show that the Multiple Trails Plan can be used in a regular high school to provide expanded vocational opportunities. "E" time can be used to provide direct work experience or to encourage students to take vocational courses. When the Multiple Trails Plan concept is applied to Board of Cooperative Services Occupational Training Programs, the extension of the school year increases the availability of spaee in the training centers. Thus, more students can take part in vocational programs or more learning time can be provided for students who are normally hard pressed to meet minimal requirements in the regular school year.

When the Multiple Trails concept is included in both the receiving and sending schools, the flexibility of student schedules with new "E" time provisions helps provide adequate lunch or travel time or an opportunity to engage in after school activities.

Potential Impact Upon a School District

Several variations of the Multiple Trails Plan avoid the necessity of a long transition period before economies can be realized. They, also,

Figure 17

A DAILY PUPIL PROGRAM WITH A RESCHEDULING OF THE SCHOOL YEAR

MODULE	PRESENT PUPIL SCHEDULE - COLLEGE PREPARATORY GRADE 11					PROPOSED PUPIL SCHEDULE - TRANSITION #1					TIME
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
1	ENGLISH 11	ENGLISH 11	ENGLISH 11	ENGLISH 11	ENGLISH 11	CHEMISTRY 11	"E" TIME	CHEMISTRY 11	FOR.LANG. III or IV	CHEMISTRY 11	8:30 - 8:47
2											8:47 - 9:04
3											9:04 - 9:21
4	AMERICAN HIST. I	AMERICAN HIST. I	AMERICAN HIST. I	AMERICAN HIST. I	AMERICAN HIST. I						9:21 - 9:38
5											9:38 - 9:55
6						FOR.LANG. III or IV	FOR.LANG. III or IV	MATH 11	MATH 11	MATH 11	9:55 - 10:12
7	MATH 11	MATH 11	MATH 11	MATH 11	MATH 11						10:12 - 10:29
8											10:29 - 10:46
9											10:46 - 11:03
10	FOR.LANG. III or IV	FOR.LANG. III or IV	FOR.LANG. III or IV	FOR.LANG. III or IV	FOR.LANG. III or IV	AMERICAN HIST. I	ENGLISH 11	AMERICAN HIST. I	ENGLISH 11	ENGLISH 11	11:03 - 11:20
11											11:20 - 11:37
12											11:37 - 11:54
13	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	11:54 - 12:11
14											12:11 - 12:28
15	"E" TIME	"E" TIME	"E" TIME	"E" TIME	HEALTH	PHYS.ED.	"E" TIME	PHYS.ED.	AMERICAN HIST. I	HEALTH	12:28 - 12:45
16											12:45 - 1:02
17											1:02 - 1:19
18	PHYS.ED.	CHEMISTRY LAB	HEALTH	CHEMISTRY LAB	PHY.ED.	"E" TIME	CHEMISTRY 11	"E" TIME	"E" TIME	"E" TIME	1:19 - 1:36
19											1:36 - 1:53
20											1:53 - 2:10
21	CHEMISTRY	CHEMISTRY	CHEMISTRY	CHEMISTRY	CHEMISTRY						2:10 - 2:27
22											2:27 - 2:44
23											2:44 - 3:01
Subjects per day	5 + PE	6	6	6	6 + PE	3 + PE	3	3 + PE	4	4	

No. of Free Modules per week 12

No. of Free Modules per week 31

eliminate student acceleration. If adopted, a school district can:

1. Release classroom space in proportion to the number of classrooms involved in the non-accelerated program. This release of space becomes an immediate asset.

2. Release teachers in proportion to the number of teachers not involved in the acceleration or new enrichment and remediation program.

3. Provide classroom space for students where increasing enrollments are creating a serious housing shortage.

4. Provide up to two extra class sections of courses which normally are limited to a maximum of eight in a given classroom.

5. Release classroom space to create special resource laboratories.

6. Release teachers to work on special committees, engage in planning or research, or provide special help to regular and disadvantaged students.

7. Provide extra learning time to students who cannot complete normal courses in traditional time allotments.

8. Reduce the cost of education to the taxpayers.

9. Reduce the number of pupil-teacher contacts per day.

10. Reduce the number of pupil or teacher preparations per week for a designated subject or series of subjects.

11. Expand vocational training programs.

12. Provide students with time to engage in self-directive activities, independent study, or a broadened program of study, enriched or accelerated.

To attain higher educational goals one may have to develop a more sophisticated look at current school operations. For example, scheduling problems can be resolved through the use of computer technology. (53:67-68)

Figure 18

A TYPICAL TEACHER DAY WITH A RESCHEDULING OF THE SCHOOL YEAR

MODULE	PRESENT TEACHER SCHEDULE MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	PROPOSED TEACHER SCHEDULE - TRANSITION #1 MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	TIME
1											8:30 - 8:47
2	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7A	SCIENCE 7B	SCIENCE 7B	8:47 - 9:04
3											9:04 - 9:21
4	TEACHER ACTIVITY	FREE	TEACHER ACTIVITY	FREE	TEACHER ACTIVITY						9:21 - 9:38
5						SCIENCE 7B	TEACHER ACTIVITY	SCIENCE 7C	TEACHER ACTIVITY	SCIENCE 7C	9:38 - 9:55
6											9:55 - 10:12
7	SCIENCE 7B	SCIENCE 7B	SCIENCE 7B	SCIENCE 7B	SCIENCE 7B						10:12 - 10:29
8											10:29 - 10:46
9											10:46 - 11:03
10	SCIENCE 7C	SCIENCE 7C	SCIENCE 7C	SCIENCE 7C	SCIENCE 7C		SCIENCE 7C	TEACHER ACTIVITY	SCIENCE 8B		11:03 - 11:20
11											11:20 - 11:37
12											11:37 - 11:54
13	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	11:54 - 12:11
14											12:11 - 12:28
15	FREE	TEACHER ACTIVITY	FREE	TEACHER ACTIVITY	FREE						12:28 - 12:45
16											12:45 - 1:02
17											1:02 - 1:19
18	SCIENCE 8A	SCIENCE 8A	SCIENCE 8A	SCIENCE 8A	SCIENCE 8A						1:19 - 1:36
19											1:36 - 1:53
20											1:53 - 2:10
21	SCIENCE 8B	SCIENCE 8B	SCIENCE 8B	SCIENCE 8B	SCIENCE 8B	SCIENCE 8A	SCIENCE 8A	SCIENCE 8B	SCIENCE 8A	SCIENCE 8B	2:10 - 2:27
22											2:27 - 2:44
23											2:44 - 3:01
No. of Subjects per day	5	5	5	5	5	3	3	3	3	3	

No. of Free Modules per week 15

No. of Free Modules per Week 33

EXTENDED K-12 PLAN

On the recommendation of the Joint Legislative Committee on School Financing, in 1963 the New York State Legislature combined the goals of educational improvement with that of economy through an amendment to the education law which directed the State Education Department to:

"Design demonstration programs and conduct experimentation to discover the educational, social and other impacts of rescheduling the school year from the present thirteen year system to a twelve or eleven year system, but still providing as many instructional hours or more than are now available under the present thirteen year system." *

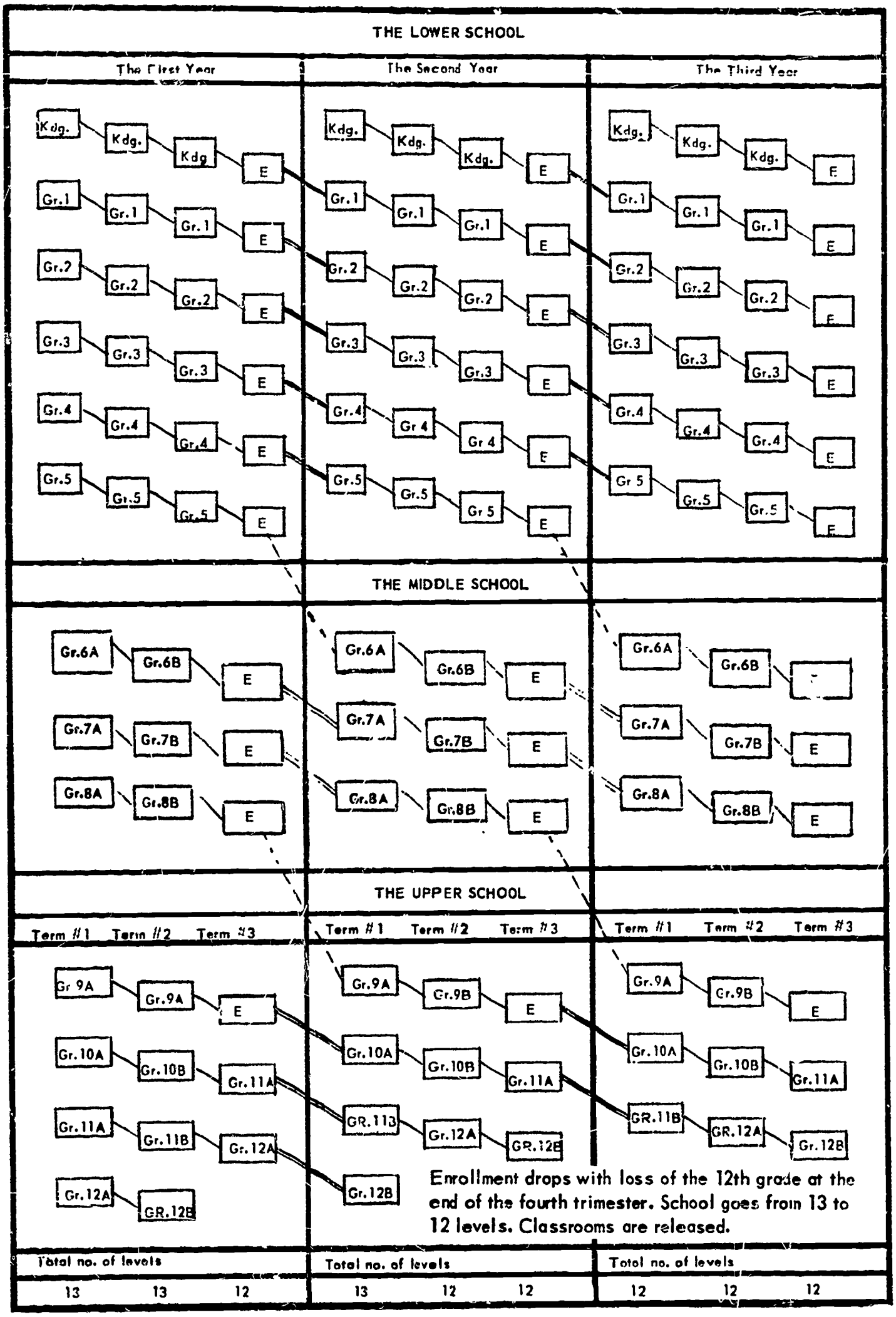
Considerable time and effort was expended on the construction and refinement of workable extended school year organizational plans, one of which was the Extended K-12 Plan. Let's take a look!

The initial mandate to the State Education Department called for a study demonstrating the feasibility of saving one to two years of a 13 year cycle. The Extended K to 12 Plan calls for a partial modification of this objective by specifically limiting the savings to a maximum one year reduction of the child's school life line. With this plan the 13 year cycle is reduced to a 12 year cycle. See Figure 19.

*Education Law, Sec. 3602-a, par. 16. New York State.

Figure 19

STUDENT FLOW PATTERN IN AN EXTENDED K to 12 PROGRAM SAVING ONE YEAR OUT OF THIRTEEN
Variation #5 The Use of A Middle School Organizational Plan



Recommendation: An entire school system may be placed on an extended school year calendar with the understanding that extra time will be used in the elementary school to broaden and enrich the curriculum with chronological age acceleration being limited to the upper secondary school levels, beginning at grade 6 or 7 or 8 or 9.

Assumption. The Extended K to 12 Plan is based on the premise that all children can benefit from an organizational pattern which guarantees them more educational opportunities with little, if any, extra cost to the community. All the pupils in a given school system engage in activities which are continuous in nature for eleven months of the year.

The Extended K to 12 Plan may begin with the adoption of any one of several secondary school extended school year plans such as the trimester, quadrimester, or modified summer segment. Once these programs have become self-sustaining, additional classes or grades may be included in the lengthened school year program until all elementary and secondary school classes have adopted an extended school year program. Since elementary school children do not need to work in a segmented school year, the pattern of organization at lower grade levels will not be the same as that introduced at upper grade levels.

Originally, the K to 12 Plan was based upon the reduction of a 13 year cycle to a 12 year cycle through providing children with 12 extended years of schooling. With the introduction of the Multiple Trails concept

the Extended K to 12 Plan can still release classroom space and teachers, but it need not depend upon student acceleration to achieve desired goals. (53:75)

The Extended K to 12 Plan Can Lead to a New Program Based Upon Continuous Progress

The Extended K to 12 Plan introduces children to a new educational time line, the 210 day school year. While lower grade acceleration will no longer be a prime objective, a measure of acceleration will still be possible for a large segment of the elementary school population. The entire elementary school curriculum can be broadened and enriched to minimize a rapid vertical growth in achievement, but the end result will be a forward movement up the educational ladder. To be effective, elementary teachers should think in terms of true continuous progress.

This concept could be extended to the secondary school with or without the adoption of any other extended school year plan such as those described earlier. With true continuous programs based upon an extended school year, the acceleration could start gradually with the kindergarten and first grade. It would continue through the primary, intermediate and upper grades until it culminates with the absorption of one chronological year of schooling.

Advantages of the Extended K to 12 Plan

The Extended K to 12 Plan requires all pupils to attend school for 12 to 13 lengthened school years. If acceleration is included in the design

adopted;3, 4, or 5 years of the child's educational life line would be used to achieve a reduction in student enrollments and subsequent economies in space, teachers, or dollars. This will enable students to engage in a broader program of studies for 7, 8, or 9 years.

If a non-accelerating plan is adopted, the "E" time will be extended through all grade levels. In this case school boards will realize economies through the early release of space and teachers in each grade level where a multi-modular scheduling pattern is used.

All pupils can derive educational benefits from the extra year or more of education attainable, but the advantage to a potential dropout is especially noteworthy. He can be at least one step or grade higher when he reaches a legal leaving age. Young men and women ordinarily classified as dropouts can graduate under the new program. For instance, a boy who starts kindergarten at age 5 can obtain 275 to 330 extra days of schooling by the time he is 16 years old. Should he elect to leave school early, he could be one to one and one-half years further advanced academically.

The Extended K-12 Plan has the advantage of maintaining a uniform calendar throughout all grades. It also has implications for the school curriculum, because elementary school pupils will have had more, and a greater variety of, educational experience by the time they reach the secondary level. By the end of the sixth grade, the pupil in the traditional 180 day school has had 1,260 days of schooling. Depending upon the length of the extended school year (205, 210, or 215 days) the graduating sixth grade student in

the extended school year program has had 175, 210, or 245 extra days of schooling. The curriculum of the upper grades must be revised to take this into account. If time is saved at the middle school level, students entering the upper school will be a year younger than in the past. This fact may also require curriculum adjustment. (39:32)

The New York State Department of Education estimates that at any one time, 58-75 per cent of the students (K-12) will be using the longer school year to master fundamental skills and concepts and to broaden their backgrounds, while the remaining 25-42 per cent will be using the longer school year to save one year schooling out of 13. The Department believes that this acceleration of the latter group of students will lead to reduced enrollments and a corresponding release of classrooms and teachers. There will be a savings in capital outlay, debt service, and operating costs in addition to reductions in current expenses. (39)

The Florida Educational Research and Development Council studied the feasibility of adopting a similar extended K-12 plan in the schools of Polk County, Florida. (24:39-43) The Council based its analysis on a 210 day school year, with one extra year for enrichment at the elementary level and one year of acceleration through the secondary school. The Council did not specify a particular plan for acceleration; however. Estimated expenditures, if the plan were implemented in Polk County schools, were as follows: initial increase in net school expenditures of 11 per cent, declining only slightly over the first five years; eventual decrease of .72 per cent in total net expenditures.

The Council recommended that the Polk County Board of Public Instruction adopt this plan if it were willing to make major changes in curriculum, enrichment, and acceleration policies. (22:64)

The concept of continued student progress from one learning level to the next is recommended for the Extended K-12 Program's lower grades. In the regular Continuous Progress Plan, the students will follow the regular graded curriculum with modifications being made in terms of rescheduling of time. In the Extended K-12 Program, if the savings of one year in the first six or seven is not planned, it is expected that the entire elementary school curriculum will be broadened to provide a thorough knowledge of fundamental skills and the understanding that is necessary for success at higher grade levels and in life itself.

Since the extended K to 12 plan is based on the saving of one year in thirteen, the new program must support extra salary costs for the teachers of nine extra grade levels during the adjustment year, and eight extra grade levels thereafter. Preliminary cost studies show that the financial savings resulting from the reduction in the size of the teaching staff can provide a 7 to 8 per cent increase in salary and related retirement charges. If teachers receive a salary increase of 10 per cent or more, savings in other current expense items may help to compensate for the deficiency without using the anticipated profits or savings which will accrue to the community in other sections of the school budget. For example, the reduction in school enrollments should have a parallel effect on transportation costs.

Again, the introduction of a Middle School can lead to savings in staff and space over and above those shown for the extended school year program above.

A number of preliminary costs studies show the cost of a 10 per cent salary increase for teachers will increase the school budget by approximately 6 to 7 per cent of the total operating expenditures for the first adjustment year. After this point, the reductions in student enrollment will provide other savings to counterbalance the extra costs. As a result, the program can become a self-sustaining operation.

The new program will release for all school use the classrooms and special facilities formerly used by the 12th grade students. The amount saved in capital outlay, debt service, and operating costs will be related to the number of classrooms and special facilities occupied by the 12th grade pupils.

1. Each classroom saved may result in an annual saving of approximately $1,700 in interest charges.

2. Each classroom saved may result in an annual saving of approximately $2,000 in capital outlay (reduction of principal).

3. The projected saving in special facilities cannot readily be calculated. For example, the reduced enrollment reduces the demands made upon the library, laboratories, special classrooms, the gymnasium, the auditorium, the playgrounds, etc.

By eliminating the need for a new school or addition to the existing plant, the extra cost for added staff and equipment, heat, light, and maintenance will be saved in proportion to the space released by the graduating class. (52:84)

THE TRADITIONAL SUMMER SCHOOL PLAN

A search of the literature reveals that the twelve month school year is emerging in quite a different pattern than those previously discussed. The trend seems to be toward a voluntary summer program. Yesterday, summer school was for the underachiever, the slow learners, or the retarded; today the bright and the average are also being given an opportunity to enrich their programs.

Evidence of the popularity of the summer session was revealed by a survey conducted by the National Education Association in 1966. It was estimated that 18,000 public high schools conducted summer sessions with a total enrollment of about 3 million. No census of elementary school summer sessions has been made, but estimates are that attendance may have reached another million.

A new philosophy behind the purposes of year-round education seems to be emerging. To stimulate growth of summer school programs, educators are beginning to concentrate upon programs of quality education instead of the idea of economy basis on building utilization. The emphasis is now being placed on educational effectiveness. Holmes and Seawell proposed five guidelines that might be used for evaluating the establishment and operation of summer school programs:

1. Enrollment in and attendance in summer school programs should be on a voluntary basis.

2. Financing for summer school programs should be on the same basis as that provided for programs during the traditional school year.

3. The provision of summer school programs must become more a responsibility of the local school board and the central administration than of the individual school units.

4. Summer school programs must be designed to meet the needs of all children, not just those needing remediation or desiring acceleration.

5. In planning summer school programs, a major emphasis should be placed upon developing those areas of instruction and other activities that can be offered better during the summer months. (28:10-12)

The summer seems to offer an unusual opportunity for innovations in the school program. The April, 1967, issue of Nations Schools identified the extended or summer school as one of twenty-seven innovations being practiced in public schools. Five per cent of over seven thousand schools contacted had an extended school year or summer school.

New approaches should be taken in developing summer course offerings. The summer months are particularly appropriate for students to engage in library and scientific research and independent study. The use of language laboratories for those who want to use tapes, the use of science laboratories for those who want to conduct experiments, the use of industrial arts shops for those who wish to experiment and to build, and the use of other special facilities could be provided.

The summer months are particularly appropriate for teachers who want to develop new instructional materials, to experiment with new ways of presenting materials, to develop courses of study, to design new curricula and to experiment with students in new ways of teaching and learning. Control conditions for experimental purposes can be applied appropriately during the summer months.

Elementary and Secondary Education Act -- HEW

Further impetus in summer school projects has been stimulated by federally financed projects. The summer school at Fayetteville, Arkansas is a good example. Here the district established a school in an outgrown high school building for 132 underachievers from the seventh through the ninth grades. The children were bussed in daily from the surrounding area in the county. The relatively large faculty, with one teacher for every three or four students, insured individual instruction in the academic subjects and also allowed time for interviews by counselors and the psychologists to root out the underlying cause for each youngster's lack of progress.

Another example involved students in the heart of Baltimore's inner-city where 570 children from grades three, four, and five attended an elementary school while 125 of their parents attended classes in a junior high school building next door. The purpose of this dual arrangement was to bring the parents into the school circle, to get them interested in education and show them its importance. The student's program called for a basic diet of reading and arithmetic with field trips to points of interest within the area.

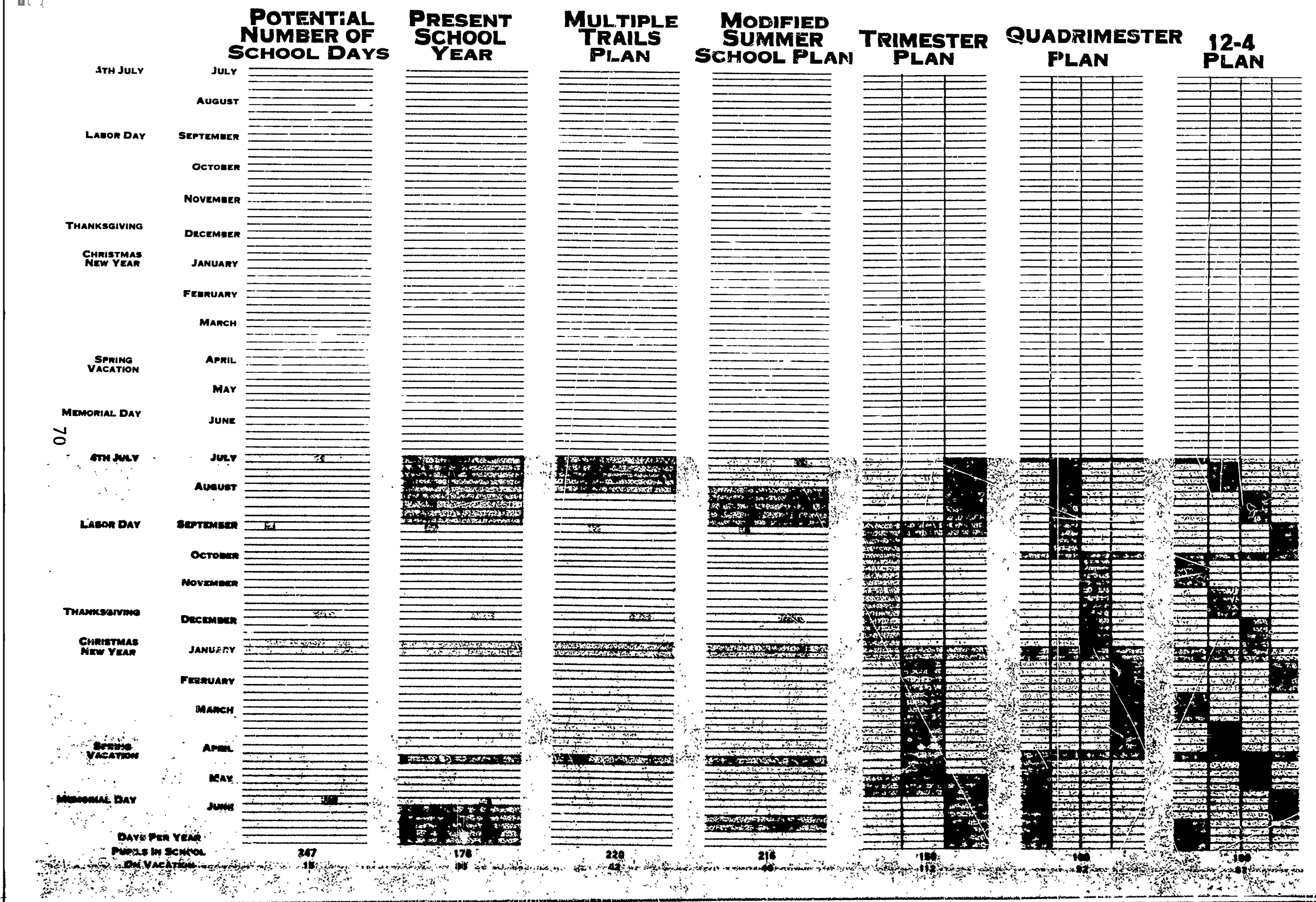
Classwork for the parents consisted of an hour of reading, half hour of arithmetic and an hour of discussion on municipal problems of special interest. Special classes were held for 38 parents who could neither read nor write. Many of them learned to do both within a six-week session.

In Orange County and Anaheim, California, a joint campaign to salvage dropouts was conducted in addition to the regular summer school programs. An evaluation of the program indicated that many of the students had acquired motivations they lacked when they originally became dropouts. One of the most unusual summer schools was conducted on the Alamo Navajo Reservation in New Mexico. Students learned English and Navajo at the same time in the summer in a dormitory setting. Education won many friends among the parents of the children since the youngsters now read the bulletins from the Department of Agriculture and help fill out government forms. ESEA funds have inspired many innovative type enrichment programs throughout the country, especially in poverty areas.

However, summer school is quite common throughout the length and breadth of the United States. It seems that four main purposes for conducting summer schools are most evident: Remediation, Enrichment, Recreation, and Make-up. Other goals or purposes that are becoming more prominent are acceleration and ease of erasing scheduling conflicts in the regular school year. Most summer programs last from six to eight weeks. (Figure 20). Student attendance is voluntary for most summer school programs, but in high school credit courses, a mandatory attendance is required.

The summer session may be financed by the school district or by tuition fees, or by a combination of the two. In Indiana, high school credit courses are reimbursable by the State according to a distribution formula

EXTENDED SCHOOL YEAR PLANS
TWO YEAR CYCLE



based on teacher training and experience, plus an average daily attendance. Also remedial work is reimbursable by the State at the elementary level.

Schoenfeld gives estimated cost for operating a summer program ranging from 4 to 5 per cent to 17 to 18 per cent of the annual budget. (47)

The Florida Educational Research and Development Council studied the feasibility of adopting two variations of a summer program in Polk County, Florida. The Council concluded that a completely voluntary, seven-week summer session which offered make-up, enrichment, and acceleration courses without cost to students would result in a 5.55 per cent increase in net expenditures. A similar program, but compulsory for non-promoted students and voluntary for all others, would result in an estimated 5.70 per cent increase in net expenditures. (24:44)

After studying these and six other school year plans, including the rotating four-quarter, the trimester, and the rotating trimester plans, the Florida Council recommended either of the summer school plans as best if the school board wished to make better use of the school plant, facilities, and school personnel without making major changes in curriculum and administrative organization. (24:63)

Some of the advantages and disadvantages listed for the summer school plan are summarized as follows:

Advantages

1. The plan offers increased educational opportunities without requiring major changes in the curriculum and school organization.

2. Retarded pupils have an opportunity for special assistance and training. This will aid their further development and may decrease pupil grade failure, thus saving the cost of reteaching non-promoted pupils.

3. All pupils may have the benefit of guided leisure time.

4. All pupils may benefit from having an opportunity to take courses not formally offered during the regular school year or courses which might not fit into their regular school year schedules.

5. Teachers may be employed on a year-round basis, thus utilizing their resources for professional work throughout the year and also improving their economic status.

6. There is little difficulty in maintaining the school physical plant, since the entire plant is not required for summer classes.

7. In most instances, participation in summer school is voluntary and does not interfere with family summer vacations.

Disadvantages

1. The summer session increases total educational costs.

2. In most instances the program is optional, and only a small percentage of the school enrollment may choose to participate. Thus, the return on the added investment may be too small to make the program financially feasible

3. Parents may be releasing to the school some functions of child training and care which might better be retained in the home.

Extended Teacher Contracts

Some school systems are beginning to offer extended teacher contracts, with commensurate pay. Although not specifically a plan for rescheduling

the school year, the 11 or 12 month teacher contract is sometimes used in connection with the summer school, as it is in Rochester, Minnesota. (39)

Extended contracts may be offered to all teachers, to a certain number or percentage of teachers, or to all teachers who meet certain requirements, such as a certain number of years of service in the school system. The longer contract may be required of all teachers, but in most instances it is voluntary. These contracts are in contrast to the common practice of employing individual teachers to teach in summer school programs.

Teacher activities during the summer months vary. For example, teachers in Rochester, Minnesota, may elect to: (a) teach in summer school; (b) work in the community recreation program; (c) participate in workshops, curriculum studies, or seminars; (d) work on local studies and research projects; (e) attend summer school; (f) request educational travel; (g) conduct individual research projects. Length of service requirements restrict eligibility for summer school and travel requests. (39)

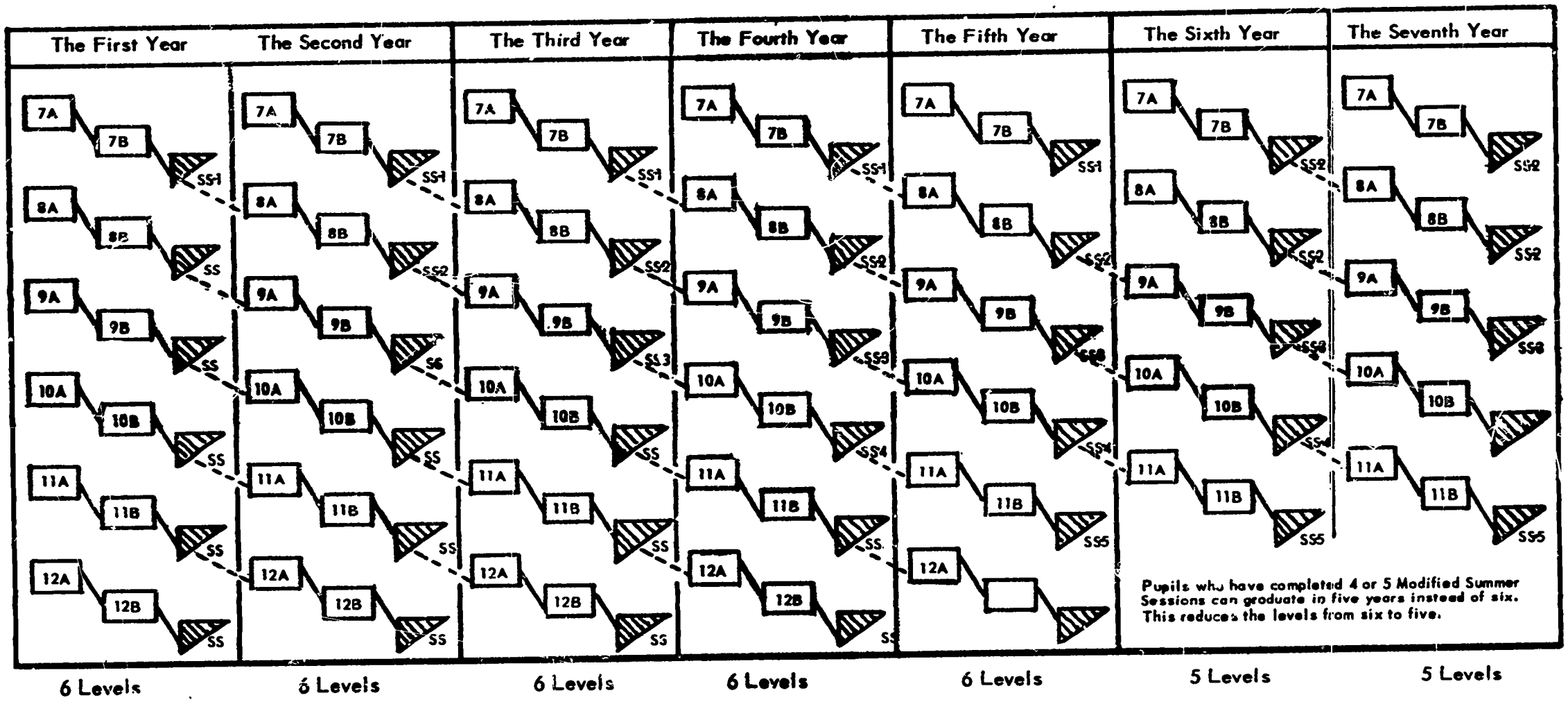
THE MODIFIED SUMMER SCHOOL PLAN

The Modified Summer School Plan is an attempt to deliberately accelerate students through secondary school, by offering more than remedial, make-up, or so-called enrichment courses. The courses selected at this time will be designed for the purpose of allowing them ultimately to do from 4 to 6 years of work in one calendar year less. (52:67-72) See Figure 21.

As far back as 1912, educators were advocating summer school attendance as a way to shorten a pupil's total school life span. Today, summer

Figure 21

The Flow Pattern for a Modified Summer School Program



school interest has increased so greatly that, in 1964, 19 per cent or 248, 132 public secondary school students took part in a summer school program in New York State.

In Indiana, Gerald Carmony, Director OSPI, Division of School Finance, reports that 370,110 students attended classes of some kind during the past summer with 114,275 students attending high school classes for credit. He further states that in addition to the 114,225 students getting credit for high school subjects in state supported programs that 55,551 students were attending remedial classes supported 100% by federal funds and that 168,284 students were receiving instruction supported 100% by local communities.

Carmony emphasizes that the early concept of summer school was a place for slow students to "catch up", but today, the academic oriented student is using the summer to take many courses that fall in conflict with his solid regular school schedule. Typing and Driver Education are two good examples of courses taken by large numbers of students in the summer so that advanced academic courses can be taken in the regular school year.

Much is being done for the slow learner in the summer, and elementary reading programs are expanded greatly in the state of Indiana with hundreds of students advancing in the basic skill of reading to be better prepared to keep the pace of their regular school classmates. Many of these pupils gain two grade levels by their summer school experience.

Carmony, speaking for the Office of Superintendent of Public Instruction in Indiana, points out that too many people feel that all the fine school

buildings that are being constructed are used only nine or ten months of the year and are closed down for the summer. "This is not the situation at all. We are quickly approaching full-time use of our facilities through the summer school approach." He further states "that if we, in Indiana, operated on a quarter basis, as we would if we were to operate regular schools twelve months, we now have more, not less, students attending classes during the summer months."

The reader is referred to the coverage of this area as it applies locally to the topic entitled, "The Year-Round Educational Program in The Metropolitan School District of Warren Township."

It is not easy to predict the effect of the modified summer school upon capital outlay and debt service. As long as the program remains a voluntary one, the number of classrooms released will vary, according to the interests of the students and the nature of the curriculum adjustments made during the regular school year to accommodate students who take advantage of the modified summer plan to accelerate their way through an elementary or secondary school program. Needless to say acceleration might not be the major objective of a school system, even though the system did sponsor The Modified Summer School Plan.

Estimates in one school system were made on the basis of an expected 20 per cent enrollment in the new program, but a second school system projected a 50 per cent enrollment. This could lead to an ultimate saving of classrooms equal to one-fifth to half of a graduating class needs. (52:68)

The summer school approach to the extension of the school year is a simple solution at both the college and high school levels, but the colleges were the first to use the summer school to save time. Each year thousands of college students have completed degrees or made up for deficiencies by going to summer school, whereas high school and even elementary summer schools have offered courses which students ordinarily take in high school, such as typing, driver education, music and art.

Some advanced courses for gifted pupils in areas of science and mathematics can be found, as well as a number of other courses bearing the label "enrichment."

School administrators seem to favor the summer school approach to the extension of the school year for some of the following reasons:

1. The Summer School Plan is voluntary. Nobody stirs the dust in the community as long as the decision to go to summer school is voluntary. Parents may not like th idea of sending a boy to school to make up one or more courses, but it becomes their decision to send him to school. If the action interferes with a family vacation, the pupil is to blame and not the school.

2. Taxpayers do not object to the summer school approach in many school systems because the programs tend to be supported by fees and assessments. Little, if any, tax money is used to support summer school programs. This is especially true where students from outside a district can be charged tuition that will largely pay for the summer school operation.

3. Teachers may choose their own summer activities. School administrators find more volunteers interested in teaching summer school classes than they can usually employ, but there is a large segment of the teaching profession which enjoys long summer vacations. This group may have other interests or jobs to occupy their time. The summer school program that is strictly voluntary does not interfere with their travel, study, hobbies, and rest. Where husbands are working, there may be no incentive for another month's work due to the large amount of taxes that has to be paid as the combined

family income reaches another tax bracket. School administrators do not meet opposition from teachers as long as they do not have to tell them that they will have to work for another 4, 6 or 8 weeks. (See Calendar, Figure 22)

4. Summer schools have been fairly inexpensive operations. Per pupil costs are low because the teachers do not receive the same compensation during summer school that they do during the regular school year. However, such is not the case under new legislation in Indiana. Again the program is not a complete one involving specialists, guidance staff, and even the same school administrators.

5. The status quo does not have to be upset in areas of school administration, curriculum, and public relations. Except for the make-up factor, most summer programs have little impact upon the regular school year operations. Schedules do not become complicated beacsue pupils can remain in regular classes. Since few students in the past have taken advantage of the acceleration option, there has been only one output. School administration can remain uninvolved; where outsiders are employed to operate a summer school program, the normal problems of discipline, curriculum, and staff or parent complaints are removed from the principal's responsibility. Members of the board of education and the superintendent are usually free to consider other matters, since the public is less critical of a summer program than of regular school.

The question is frequently raised: Can the Modified Summer School Be a Voluntary Program?

As long as the program is maintained on a voluntary basis, some administrative scheduling problems will be created. The Modified Summer School Program under consideration will have a greater impact on what happens during the regular school year than has been true of traditional programs. The new program requires that pupils who elect to remain in school during the summer, take new courses.

The issue of compulsory versus voluntary attendance must still be faced. At present, the voluntary program tends to widen the gap between disadvantaged and non-disadvantaged pupils, since the latter group is generally not

Figure 22

A Sample Calendar for a Modified Summer School Year Program *

Month	Day	Legend	Days of Schooling	
September	6	Children Return to School		
September	15	Rosh Hashonah - Optional	18 - 19	
October	3	No School - Teachers Conference	20	
November	11	No School - Veterans Day		
November	24-25	No School - Thanksgiving Recess	19	
Decem[illegible]	23	Last Day of School Before Christmas Recess	16	
December January	23 - 1	No School - Christmas Recess		
January	2	School Reopens	22	
February	13	No School - Lincoln's Birthday		
February	22	No School - Washington's Birthday	18	
March	24	No School - Good Friday		
March April	25 - 2	Easter Recess	17	
April	3	School Reopens	20	
May	29-30	No School - Memorial Day Recess	21	
June	16	Last Day of School for Regular School Year	12	
		Number of Days in Regular School Year		183 - 184
June	19	First Day of Modified Summer School Session	10	
July	3-4	No School - Independence Day Recess		
July	5	School Reopens	19	
August	8	Last Day of Classes	6	
August	9-10	Regents Examination Days	2	
		Number of Days of Schooling in Summer Segment		37
		Total Number of Days in School Year		220 - 221

*A six, seven or eight week summer session may follow the regular school year. This session may begin immediately after the end of the regular school year or it may begin after a week's vacation.

motivated to attend summer school without pressure. This results in a lack of equal educational opportunity for the two groups.

Further study is needed to determine whether the traditional make-up summer school can be fully integrated with the Modified Summer School. Early studies have shown conflicts can develop where the two programs are carried out as parallel but separate operations. In many instances the conflicts are based upon the existence of opposing philosophies of education and a lack of coordination with the ongoing regular school year program.

Pilot programs based on a completely voluntary enrollment have been weakened by last minute student withdrawals due to unexpected failures that require participation in a make-up program instead of an advanced placement program. The loss of these students tends to limit course offerings where minimum enrollments are required. One solution to this problem may lie in the substitution of parallel first-time courses for a make-up course. Another answer may reside in combining the make-up and modified summer school pupils in the same courses.

New York State has done considerable experimentation with the Modified Summer School Program in recent years. At Syosset, in-depth experimentation was set up with participating students separated into three experimental subgroups: (1) fast learners and academically talented students who, by enrolling in three summer sessions, might complete their secondary school education in five years rather than six; (2) average ability students who could possibly accelerate after four sessions of summer school, and (3)

average or above-average ability, non-succeeding students and slow learners, who might be expected to require six or seven years to complete the four-year high school course.

Three control subgroups were chosen from the same seventh grade class. They were matched with the three experimental subgroups on age, I.Q., sex, achievement, test scores, teacher marks, and tracking recommendations, but did not participate in the extended school year project.

Three other subgroups, also matched with the experimental subgroups but one grade ahead of them, and not participating in the extended school year project, were termed comparison subgroups.

Achievement was measured by standardized tests, teacher grades, and Regents Examination scores.

Conclusions drawn from the experiment were largely favorable. Comparisons of teacher grades, Regents Examination scores, and standardized achievement test scores revealed that the experimental group was doing as well as, and in some instances better than, their peers, the control group, and older students, the comparison group. The acceleration of experimental pupils into advanced level courses in the regular school year after they had completed lower level courses during the summer apparently created no academic, social, or emotional problems. It was reported that completion of regular academic courses in six weeks instead of 10 months did not adversely affect depth of pupil learning.

A survey of Carnegie units earned by the end of the third summer session showed that three-fourths of the experimental group could graduate one year early. One-fourth of the control group could graduate one year

early, and about one-tenth of the comparison group could graduate early. It was concluded that average and above-average pupils "can complete six years of secondary school work in five years with approximately the same level of achievement as other pupils."

Cost analysis revealed that full unit courses offered during the summer session cost less than similar courses offered in the regular 10-month school year.

Among teachers there was some negative reaction to the program especially against its non-educational objectives. Parental reaction was favorable.

The researchers concluded that the voluntary nature of the program was detrimental to the implementation and results of the program. (52)

Several other New York State studies show interesting correlations and favorable results generally, but bear restraint because of the nature of experimentation and the "Hawthorne effect."

THE FLEXIBLE ALL-YEAR SCHOOL

The Research-Learning Center at Clarion State College is developing a research-demonstration model of the Flexible All-Year School. When completed in 1970-71 it will provide a program for approximately 300 students ranging from nursery through secondary levels of education with research and exploratory programs on life span education.

The Flexible All-Year School is a unique school design. It is distinctly different from the commonly described year-round programs, such as we are covering in this study.

The Flexible All-Year School is designed to operate all year, in step with other normal services of our society, like the bank, the store, or the service station. In fact, it is designed to function like an educational service station, in such a way that any learner may come to school whenever he needs to, for the length of time he needs to, and take his vacations whenever he needs them for any length of time he needs, provided that if he is within the compulsory school attendance age he must be enrolled during any year at least for the number of days prescribed by law. The hours or time of the day may be flexible as will be the curriculum. There will be no beginning and no ending of the school year. Instruction will be individualized and based on the individual's needs and interests. The school will function as the learning center but the community and all its resources will be considered the "classroom." (36)

Advocates of this type of school claim that such a flexible schedule could be operated only if instruction were individualized, which according to their way of thinking it must be if we are to educate all children and youth. They classify our present system as a failure in meeting our dream in the "American tradition" of giving everybody an "equal chance" and proclaim that American schools are middle-class oriented, and the existing traditional systems are not appropriate to educate all learners.

This system of individualized instruction does not mean that each child works independently, by himself, all the time. To the contrary, some activities an individual can do best by himself; other activities need to be done

in small or large groups. Individualized instruction includes all of these, adapting the activities to the needs of the individual.

With no beginning or ending to the school year, a child may enter school whenever he is "ready." He will not have to wait another year because he was born a few days too late, as some do now.

A child cannot "fail" at the end of the year because there is no end of the year. Nor is there a beginning to be sent back to, to repeat the year.

If illness, conflict with the school, or vacation during the "regular school year" causes a child to be out of school at any time, he can return to school when it is appropriate without the pressure to "catch up before school is out, or fail."

There are no long summer vacations when the children are dumped on the streets with nothing to do. Each child can take his vacation whenever he has something better to do; otherwise, he can stay in school as long as he wants. (36:13)

A child will not automatically remain in school twelve years then be dumped onto the labor market at the end of his senior year. He will remain in school until he has something better to do - whether it is going to college, another training program, work, or some appropriate activity. The transition can be orderly.

Flexible vacation periods for staff members is entirely left to their own descretion.

A married teacher can take her vacation when her husband takes his, any time of the year as vacations of the work force shift. They can also take their children out of school at the time and have a vacation together. (36:15)

The Flexible All-Year School is designed to meet the "special educational needs of the educationally deprived." The program would be individualized and adapted to the needs of each child. The child who learns well, but learns slowly could spend as much time in school as need be. A child whose family is poor (or even rich) and has nothing better to do during the traditional vacation time could stay in school if he preferred. He would not be stigmatized by being in the "slow reading class" or the "remedial class" because in an individualized program they need not even exist.

The Flexible All-Year School is designed to avoid some of the causes of "dropout." A dropout is usually a child who has failed one or more years of school and is failing to keep up with his group. He drops out when he leaves school in conflict with authority (home, school, or the law) and has no chance to come back and make up the time he has lost, or when he establishes out-of-school relationships during the long summer vacation and prefers not to return to school. In the Flexible All-Year School, he could not "fail" a year of school, he could resume his learning where he left off so could return to school anytime, and would not need to be out on the streets during a long summer vacation.

The migrant child whose parents travel with him from place to place in pursuit of farm crop work, and the child whose parents change jobs and move during the school year can make the transition with a minimum amount of difficulty because the "continuity of learning" is within himself, with the school program adapted to his needs.

The affluent child, whose parents take him on a vacation during the school, which is an ever-increasing problem, can be out of school whenever the situation warrants it without leaving gaps in his formal learning.

The gifted child may pursue any significant aspect of learning as fully as he can, and progress as rapidly as he is able. In fact, in this type of environment it may be proved all children really are gifted. This does not mean that the rate of progression will be accelerated so that students will graduate in fewer than the traditional twelve years. This could be done if there is a reason for it, but in general, there is no need to get youth onto the labor market earlier. In fact, the reverse is true. Children should therefore, be encouraged to pursue knowledge in depth in an individualized, ever-branching program rather than following a narrow linear path to early completion with minimum standards. (36:14-16)

At the present time this Flexible All-Year School does not exist in operation but is attracting considerable attention in the literature of extended school year designs.

Advocates of this plan feel that such a school will help solve two great needs of American society. (1) it will facilitate the shift of the vacation schedules of the work-force to help maintain full employment; and (2) it will break the lock-step in education and facilitate an educational system <u>really designed to educate all</u> children and youth. (36)

STRENGTHS AND WEAKNESSES, ADVANTAGES - DISADVANTAGES CLAIMED FOR YEAR-ROUND SCHOOL

Throughout the pages in this study covering the 10 different plans of year-round school, certain advantages or strengths of individual programs have been weighed and compared against certain disadvantages or weaknesses of these same programs. Now, in this separate treatment of strength-advantages versus weaknesses-disadvantages of these several plans, I would like to take the liberty to list the many statements found repeatedly in the literature that may in some degree apply to all plans discussed in the study with the reservation that these are most often mentioned with the 12-4 plan in mind. Needless to say, many ambiguities, dubious, indeterminate, facsimile and partial duplications will be readily noticeable in the list. Certainly no attempt has been made to place these advantages-strengths or disadvantages-weaknesses in any order of sequence, priority or importance.

ADVANTAGES - STRENGTHS

1. Right at the start, year-round school boosts utilization of our multibillion dollar educational enterprise from 75 per cent to 100 per cent. It reduces classroom and other plan needs by at least 20 per cent; it permits accelerated programs that actually chop time off the number of years a youngster spends in school; it puts education into the 20th Century--the idea of closing the schools in summer was devised when Americans were farmers and youngsters were needed in June, July and August to help in the fields.

2. Most suggested plans, some of which already have been use-tested, release classroom space through staggered or sequential pupil

attendance patterns, or through acceleration, or both. This obviously reduces the need for new construction and lowers the pressure for additional taxes. Less property has to be removed from the tax rolls to provide adequate space when new construction becomes necessary for the district.

3. Most plans invite a complete restructuring of the curriculum to make it more flexible, effective and relevant. This re-evaluation of the total school program, as Atlanta is demonstrating, can result in far more effective use of our already established capacity to teach. This is one of the most significant of the possible dividends to be expected from any year-round school plan.

4. Virtually all year-round plans make it possible but not mandatory for ambitious, highly motivated teachers--especially men--to be employed 12 months a year at commensurately higher salaries (therefore, of course, not as many full-time teachers will be required to staff any system; result: fewer and, hopefully, better teachers, with the current teacher shortage diminished accordingly).

5. The absence of the father from thousands of inner city families has created a need, more crucial than ever, for more male teachers in both elementary and secondary schools. It can be met by offering men teachers the full time employment at full time compensation possible with the year-round school plan.

6. Flexibility in the teacher contract--permitting teaching loads of one quarter, two quarters, three or four quarters (in any of the quarter systems plans, for example)--can hardly help but better meet the employment needs of many teachers, especially women, than does the present inflexible nine or ten month contract.

7. Offering year-round employment with full year teaching loads reduces the number of new teachers who must be trained each year mostly at public expense.

8. Most suggested year-round schedules result in lower teacher retirement plan costs with consequently diminished demand on taxes to support such plans. Current plans attempt to provide comfortable full-time retirement benefits for persons who annually work only nine months or so. Under a year-round plan only those teachers electing a year-round job would receive full retirement benefits.

Others choosing to work shorter periods would be recipients of lower but somewhat comparative retirement benefits.

9. Year-round plans with sequential enrollment eliminate the once-a-year enrollment lockstep by enabling a child to enter school at the beginning of the new period nearest his birthday, thus reducing the wide gap in intellectual development that currently exists at early grade levels and makes for a faulty start in formal education for so many children.

10. Since most subject matters would necessarily be split into smaller segments, the cost of repeating would be less.

11. Most year-round plans offer far better vacation employment opportunities for students than exist under today's nine-month calendar, which floods the youth employment market in June, July, and August. Business and industry could stagger vacation periods better for employees with children.

12. Many juvenile authorities agree that a year-round school pattern would tend to reduce the delinquency that historically crests in the late summer months when all youth are out from under the stabilizing influence of school.

13. School house vandalism which peaks during the long idle summer, would be virtually eliminated in some areas, greatly reduced in others.

14. Acceleration is much more readily accomplished by high achievers in all year-round plans.

15. Under any plan of sequential attendance, fewer textbooks, reference books, less laboratory equipment, fewer teaching machines and language laboratories are required to serve total enrollment of any district (only 66 to 80 per cent of enrollment would be in school at any one time).

16. Children could enter at any one of four times during the year.

17. By entering school at any of the four times of the year, the immature child could enter school 4 or 8 months later. Otherwise in a self-contained situation, a youngster would have to be enrolled only in September and would sink or swim by pure chance in some instances.

18. There would be fewer repeaters according to some of the experts.

19. School systems differ. One system may have a half year promotion system while in another, a child spends a full year at a particular grade level.

20. Older students could find jobs because only 1/4 would be seeking jobs at any one time.

21. Authorities believe it would curb juvenile delinquency. Not all 46 million children would be out of school at the same time, with many of them inactive, bored, driven to mischief.

22. Fewer dropouts due to smaller classes.

23. Those wishing extra help could attend all 4 quarters while others could attend all 4 quarters in order to finish school sooner.

24. Would benefit teachers financially. Teachers could work 11 months and have one full month off plus a full quarter off every 2 or 3 years.

25. Retirement costs will substantially decrease because we will have less teachers doing more work.

26. Teacher shortage will be eased as fewer teachers will be needed, thus relieving pressure of the teacher shortage.

27. Less money needed for buildings & equipment.

28. Federal funds would increase if schools were used in the evening for the disadvantaged, science, art courses, etc.

29. We cannot afford to have 80 billion dollars worth of schools open 30% of the time.

30. Resorts would not be crowded all at once. Public facilities would have a more efficient year-round use.

31. Theoretically would save 25% to 33% in capital outlay.

32. Would reduce the normal requirement of teachers by 25% to 33%.

33. Would increase the annual salaries of teachers employed the year-round by about 20% to 25%.

34. Some pupils could accelerate by attending school all year round. Knowledge needs of youth requires more time in school.

35. In financial emergencies, would be preferable to double sessions.

36. Could and did save money for some districts. If money was the main reason for instituting the plan, then we could say that at least the plan was successful for certain school districts.

37. Fewer textbooks, less equipment, and the like are needed at any one time.

38. More frequent evaluation of pupil?

39. 25% less teachers needed - reduces or eliminates the need to hire less qualified teachers.

40. More efficient use of the school is made on a year-round basis. For example, a traditional 600 pupil capacity school could service four groups of 200 pupils each during any single school year.

41. The school would be better equipped to handle the individual needs of pupils. Special classes could be set up during the four week vacation periods to give remedial help to slow learners or enrichment work to high ability pupils. Some youths could reduce the number of years in school.

42. Teachers would be able to earn more money. They would not need to seek summer employment.

43. During the four week vacation periods, a number of teachers would be available to work in capacities such as substitute teacher, remedial teacher, curriculum development, counseling, etc.

44. This form of organization would relieve some of the urgency surrounding a school building program and allow construction to progress at a slower pace.

45. The four week pupil vacation periods would allow the teacher greater opportunity to plan work and gather material which would result in an improved program.

46. The attendance area could be divided into four geographic areas, thus permitting all children within any given family to be on vacation at the same time.

47. A four week period would be available each year during which major building maintenance could be accomplished.

48. The extended school year plan makes possible curricular innovations geared to the individual pupil's achievement and rate of achievement. Summer months could be more productively used by students and staff.

49. Acceleration is possible for mature, gifted students. Additional time for remediation and enrichment is available.

50. Additional time is made available beyond the traditional 180 days, permitting additional emphasis on basic studies. A better basic education can be provided.

51. The school plan is available, fully equipped and ready for use. School operating costs can be reduced.

52. Most overhead costs would continue to be the same whether the schools are opened or closed during the summer months.

53. Fixed charges, such as insurance, interest, and capital outlay costs remain fairly constant, whether schools are open or closed.

54. A teaching staff is already employed. Teachers would be helped financially by a few additional months of employment.

55. Most younsters of school age, particularly in our towns and cities, are without constructive direction during the out-of-school months.

DISADVANTAGES - WEAKNESSES

1. Pressures of year-round schooling may be injurious to students.

2. Non-air conditioned buildings are already too hot during some months. Summer attendance would require air conditioned schools, thus adding to costs. Maintenance costs necessarily increase because the plant is in steady use.

3. The "sanctity" of the American family summer vacation is a major roadblock. Many parents dislike the thought of children taking vacation during unconventional seasons of the year. Family vacations may be disrupted.

4. Most recreational and resort facilities are geared to traditional summer vacations.

5. Industry and business is geared to summer employment of students.

6. Extra-curricular activities would suffer. Coordinating and planning for extra-curricular activities, which are often geared to season (e.g., sports, music, drama), are difficult. The quality of performance in extra-curricular activities may decrease.

7. Schools with small enrollments would have trouble offering advanced courses. A minimum school enrollment must be maintained so that each class has a teacher and so that class sizes may be fairly uniform. This is difficult, and combination classes and fluctuating class sizes may result.

8. A number of administrative problems would develop with transportation, maintenance, community use of schools, etc.

9. Administrators need the summer to plan, schedule, hire, vacation, etc.

10. Staff opportunities to attend college, man recreational positions, etc., would be reduced.

11. Building being used for longer periods during the course of the year, thus floors, furniture, books, desks, numerous sundry items need to be replaced more often.

12. Forced vacations, difficulties for families in planning vacations together and types of vacations. A family could and would be forced at times to take a vacation in the winter thus recreational pursuits are very limited at this time. Many parents dislike the thought of children taking vacation during unconventional seasons of the year. Family vacations may be disrupted.

13. Some of the financial savings come about at the expense of the salaries of teachers thus poor morale of teachers and other staff members.

14. Pupils have to adjust to other new pupils, teacher schedules, etc. more often. Time is wasted when pupils must adjust to new classmates, schedules, and teachers several times a year.

15. Burden of administration and supervision increased due to new pupils coming into the clasroom constantly.

16. Difficult to conduct classes during hot summer days. Hot weather not as conducive to teaching and learning as more desirable temperatures may be.

17. Teachers have no time to improve in their knowledge and teaching methods due to the effect that they neither have the time nor the energy to attend classes. Summer study and travel for teachers would be eliminated. (The countering argument is that teachers may be given more sabbatical leaves.)

18. Youngsters not in school tried to influence others to skip. Truancy delinquency might increase since the one-fourth of pupils on vacation might tend to influence those in school to skip classes. Also, teachers would not be available to conduct the equivalent of extended summer sessions for pupils on vacation.

19. A youngster may have one teacher for 9 months then a youngster may have one teacher for a few months.

20. It would seem that the necessity to divide an attendance area into geographic sections would present a multitude of problems when attempting to insure a balanced K through 6 class load... If the resulting class loads were below or above the suggested levels, the plan would become either economically or educationally inefficient. It would also be difficult to define these sections in a rapidly developing area. The same problems and multitudes of others in matters of educational efficiency and economy would also exist at the secondary level.

21. It was found that under the plans considered, the school was not completely empty at any time during the year. Thus, major repairs and maintenance would have to be accomplished when children are attending school. ....

22. It would seem that most of these plans would tend to rule out the use of the school facilities and playground for any sort of vacation recreation program as is now provided by the Department of Parks and Recreation..

23. Most of these plans may hamper a teacher's effort to do graduate work at a university during his vacation period, as graduate courses are usually more than four weeks long.

24. Increased administrative and supervision problems involving transfers of students, scheduling of enrichment and extra-curricular activities.

25. Some difficulties may arise in scheduling in elementary schools with less than three sections to the grade or in secondary schools with less than three sections to the standard high school subject.

26. It has been stated that a 600 pupil capacity school could service 800 pupils under the plan. This is not completely true since the plan calls for some rooms to be set aside and used by slow or fast learners getting supplemental help during a four week vacation period. Thus, the total capacity of the school at any given time is reduced by an amount relative to the number of rooms to be used in this manner.

27. Many studies have shown that the cost of operating a rotating four-quarter school is greater than the cost of constructing and operating a traditional nine or 10 month school.

28. Maintenance of the school plant without disturbing school sessions is difficult because schools are constantly in session. Major cleaning and repair of buildings may have to be done at night, or on week ends, thus requiring overtime pay and adding to costs.

29. Accelerated replacement of textbooks and other instructional materials would offset any savings resulting from a decrease in the number in use at any one time.

30. The burden on administration and supervision is greatly increased; additional staff may be needed to handle quarterly enrollments, scheduling, graduation ceremonies, and the like. Extended vacations for such key staff as principals might be difficult to arrange.

31. Before the plan could become self-sustaining, one-fourth of the students would have to attend school continuously for 18 months.

32. Pupil transfers to and from traditional nine and 10 month schools in other districts are difficult.

33. Because school busses are in use year-round, their maintenance and overhaul is difficult.

34. Because the density of pupils from any given area is reduced, the per-pupil transportation costs increase. (The countering argument is that all children from one neighborhood may be assigned the same schedule.)

35. Teachers' mental and physical health may not withstand the pressure of year-round employment.

36. It is thought that winter is no time for a child's vacation. For many pupils, summer camp and other experiences would be eliminated. (The countering arguments are: the child would be able to participate in other seasonal activities, such as winter sports, or, pupil vacation quarters may change from year to year. The latter, however, would require pupils to be in attendance over more than three consecutive quarters.)

37. Community agencies which "gear up" for summer programs and services would have to maintain their programs year-round, thus adding to their costs.
Most communities which have operated under the rotating four-quarter plan or have studied its feasibility have concluded that its disadvantages outweigh its advantages. Other systems are looking at modifications of the plan which are more similar to a traditional nine month school year, divided into three quarters, plus a voluntary summer fourth quarter.

THE YEAR-ROUND EDUCATIONAL PROGRAM IN
THE METROPOLITAN SCHOOL DISTRICT OF WARREN TOWNSHIP

Advocates of Year-Round Schools are saying that our present arrangement of the time for school and vacations is a heritage from the days when most men were farmers. They say we have reached a new era now in which approximately 50 per cent of our population lives in cities and that much thought but little action has been given to the abandonment of the outmoded tradition of the 180 to 190 day school year. To these individuals, the present system of a nine-month school year and a three-month vacation is a luxury our urban society can no longer afford.

The term "Year-Round School" has been used to identify a wide, and sometimes confusing, variety of programs for the extension of the school year at both the elementary and the secondary levels. However, an examination of the literature reveals quite readily that the patterns for many of these programs are not always concerned with full year-round schedule for both students and faculty. In fact, most of the plans actually involve the year-round operation of school facilities with perhaps a significant portion of a faculty on a 11-month basis or as sometimes stated, a 12-month basis with a month's vacation. In the great majority of the plans described in the literature, student attendance is still limited to the traditional 180 days or so and in some patterns, even fewer days.

Labels placed on these plans for the extension of the school year are many and varied; therefore, no attempt will be made here to list all the various patterns to be found. The most often discussed plans are listed as: Trimester, Quadrimester, Staggered or Rotating Quarters, Continuous Four Quarters,

Multiple Trails, Extended K-12 Plan, Traditional Summer School Plan, Modified Summer School Plan, Continuous Progress Plan and the Flexible All Year School.

It is safe to speculate that the pattern of any given year-round school program is limited only by the particular needs of a school district and the ingenuity of the person or persons whose task it is to design and set up the local program. For example, some programs consistently described as year-round schools are simply an expansion of the traditional voluntary summer school and involve no marked departure from present school practices. The foregoing leads me to a description of the year-round educational program of the MSD of Warren Township.

The school year for all students, elementary and secondary, in the MSD of Warren Township is a mandatory 9 1/2 months, comprising 38 weeks. This arrangement places elementary students in school classrooms for 178 days and secondary students for 177 days. All teacher contracts are written for 190 days. Obviously, then, our school facilities are in full use for 9 1/2 months of the calendar year. However, let us not make any assumptions that the story of education for our youngsters and licensed personnel, as well as the use of school facilities, is forgotten for the remaining 2 1/2 months of the year. Such is not the case at all.

In the 1969 elementary summer school program, 399 students, grades 1-6, received instruction and were directed in some way by 28 of our regular licensed elementary teaching staff, representing 8 different schools, 2 Warren Central High School students serving as librarians, and an elementary school principal

and his regular school secretary. The program which ran for 6 weeks had for its purpose enrichment and remedy, not advancement.

By utilizing pre-enrollment information, classes were grouped at each grade level according to ability. There were three sections of each grade level with the exception of grade six which had two sections. Five classes of remedial mathematics and four classes of remedial reading were conducted. Eight special teachers were involved in the two areas. Because a large number of students attended both remedial math and remedial reading classes, they spent only 2 hours daily with the regular classroom teacher.

The elementary summer school staff conducted 13 field trips with a total of 872 students participating. Five hundred and ninety-two miles were traveled in reaching such interesting places as: Indianapolis Zoo, Children's Museum, Weir Cook Airport, Monument Circle, Ellenberger Park, Museum of Indian Heritage, Indiana State Museum, Metamora, Indiana (Whitewater Canal), Indian Village, Benjamin Harrison Memorial Home, and Allison's Powerama.

The summer library for the elementary program was conducted by two Warren Central High School graduating seniors who checked out 1712 titles in the 29 days that this special service was provided. Daily hours were from 8:00 A.M. to 1:00 P.M. The library consisted of approximately 1800 volumes especially selected for the summer elementary program.

The Creekside Gardens Project provided interesting and worthwhile work experiences in gardening for 128 students from nine elementary schools. Activities were oriented around collecting plants, learning about flowers, weeds,

pests, care of tools, etc., and enjoying the sheer joy and marvel of watching Mother Nature at work. Students learned from their work virtues such as patience, cooperation, responsibility, joy of working, teamwork, pride, loyalty, discipline, and fellowship.

The Summer Recreation program, starting June 9 and running through July 25, had a total enrollment of 1250 students, both elementary and secondary, with an average daily attendance of 710. This program provided part-time work for at least 12 of our licensed staff and 6 Warren Central High School students serving in cadet assignments. The program was located at five different school sites, and was operated during the hours of 8:30 A.M. to 11:30 A.M. and 1:00 P.M. to 4:00 P.M. In addition to all the many regular recreational activities that might be expected in a good program, this program served a total of 247 boys in a weight lifting program for body building and 28 obese boys and girls working in a weight control program. The program ran for seven weeks.

The Boys 4-H Club boasted a membership of 170 with a combined total of over 350 projects in the various clubs. The Girls 4-H Club had 216 enrollees in its summer activities. The facilities of 6 MSD of Warren Township buildings were used in this program. Two members of the regular teaching staff structured and gave leadership supervision to the total program which culminated in a 2-day Warren Township Exhibit, July 24-25; the Marion County Fair, Aug. 4-10; and the Indiana State Fair, Aug. 22-30. This program covered the entire summer as far as meetings were concerned but in reality many projects are year-round endeavors.

The Secondary Summer School program involved a total of 462 students (270 boys - 192 girls), and provided summer employment for 24 licensed staff members. The program lasted eight weeks, with 40 class sessions of 2 hours each for each course. Most students were enrolled for 2 courses for which they were in class from 8:00 A.M. to 12:00 Noon, Monday through Friday, June 9 through August 1. Courses offered in the program included English I, II, III, IV, V, VI: General Mathematics I, II; Algebra I, II; Astronomy I; Biology I, II; Computer Mathematics I; Physical Science I, II; Health and Safety; United States History I, II; Typing I, II; Machine Shop I, VI; and Driver Education. These were credit courses taken by students for different reasons but mainly to enrich and advance their secondary school course offerings.

Many times scheduling conflicts are solved for next year by summer school attendance. Our high school requires 36 credits to graduate (the state requires only 32 credits). However, the typical Warren Central High School graduate will have 40-41 credits. Some students will have had as many as 46 to 48 credits at graduation time. Actually then, course-wise, the typical Warren Central High School graduate will have had the equivalent of five years secondary school training and some typical graduates will have had the equivalent of six years training if we consider 8 credits a year as a norm. A minority of students are enrolled in summer school to make up course failures from preceding semesters.

Seven students completed their graduation requiprements this summer.

All last summer's Secondary School classes (except Machine Shop) were held at Woodview Junior High School because of the construction program at Warren Central High School.

The six weeks summer music program enrolled a total of 931 students, grades 6-12. These students were instructed by the regular band and orchestra directors of our secondary schools.

Thirty secondary students toured Europe, 14 in a study group led by two of our teachers, 12 in pleasure tours, led by two of our teachers, 3 students with family tours, and one student with 488 DeMolays from all over the country.

Eleven boys worked with different camps and workshops sponsored and directed by the Fellowship of Christian Athletes during the summer months.

Three girls and four boys from the high school participated in Girls' State and Boys' State respectively and one boy attended a workshop in Student Council Affairs.

Six girls attended a cheerleaders' camp and one girl stayed all summer to teach at the camp. Seven students participated in Journalism Institutes on two different university campuses for two-week periods each.

These statistics bear witness that great numbers of our students are certainly a part of interesting and rewarding summer time educational activities. Needless to say, we haven't mentioned such wonderful experiences as church camps, church schools, National Science projects, Future Homemakers, National Forensics, Boy Scouts, Girl Scouts, summertime athletic programs of varied types, family vacations, and just plain work experiences in many different types of endeavors.

Sponsorship and direction of some of these programs are provided for solely by the schools; others come only partially under school administration. Others are completely divorced from the schools. However, when all these golden opportunities for our young people are totaled and when percentages of participation are noted, we get some realization of the tremendous year-round educational program that is provided and made available to the youth of the Metropolitan School District of Warren Township.

SUMMARY

In the course of this study the writer has read so many contradictions with relationship to the topic of year-round schools that trying to bring it all into some kind of meaningful summary poses quite a task. There are so many conflicting views to weigh the merits of--so much research and so many promising practices--that sometimes the mind gets lost in the "shuffle." The literature reveals so many unclear, conflicting claims in strengths and weaknesses of the various designs, that forming a valid judgment in this respect is certainly not easy. Any discussion or discourse on year-round schools brings into focus a whole array of educational philosophies that would fill volumes on the subject and its by-products.

Some writers have suggested that year-round school programs will cure all our major social problems, save billions of dollars at the same time, and set the stage for relevant curricular and instructional revisions that may yet rescue (from extinction) our decadent, wasteful, inadequate, incapable and irrelevant schools, with their horse and buggy school calendars.

Other writers have suggested just as vehemently, that the school calendar is just fine as it is, that too much pressure now is being put on youngsters in the modern school, and that talk of year-round schools is pure nonsense - just another crazy innovation that those "kooks" down at the school office have thought up.

Perhaps the absence of a precise definition for a year-round school has led to much of our confusion. Perhaps also, the variety of motives and goals of

those who have employed the different plans of year-round schools has accentuated the confusion. Some plans appear to be dedicated to the purpose of saving money, while others appear to be designed to accelerate the educational process.

To arrive at some truths, perhaps we can agree, that the school year as we know it now, took shape when the agrarian society of our country needed manpower during the summer months. A search of the literature establishes this as a fact.

Another fact established in the literature is that early attempts to implement an extended school year were established primarily with the saving of money as the motive. Since these experiments were more expensive, not less, and since patrons, students and teachers were dissatisfied with all the multiplicity of problems in the mechancis of a year-round program, they were discontinued and classified as failures.

From the literature, agreement might also be reached that the most prominent of all the plans or designs in rescheduling the school year, other than the traditional or modified summer school, was and is the Rotating Four-Quarter Plan, which divides the school year into four 12-week quarters. The number of cities actually operating under this plan reached its peak around 1925 when thirteen systems were reportedly using it. Today, several systems are moving toward adoption of this plan. The state of Delaware has the plan under consideration as a state-wide innovation. However, at the moment, all eyes are on the five countywide area of Atlanta, Georgia, where the four-quarter plan is actually in its second year of implementation at the secondary school level. This program

has attracted national interest and assuredly has generated exciting imagination, innovation, and enthusiasm in the Atlanta area. As in the case of Atlanta, it might be safe to say that most systems now considering year-round schools are primarily interested in educational objectives with secondary goals of achieving economies after surviving the transitional and adjustment year.

Perhaps the following truths might be agreed upon as self-evident:

1. The knowledge explosion
2. The population explosion
3. Growing school enrollments due to holding power of our schools
4. Rising construction costs
5. Need for more expensive specialized equipment in education
6. Individual differences of students, academically, socially, economically, and morally
7. The need for increased educational opportunities
8. A school dropout - a social problem
9. Need for improvement, enrichment and broadening of instruction
10. Need for curriculum revision and updating
11. Broader use of professionally trained teachers and specialized personnel
12. Need for more time use of school facilities
13. Trends and forces of inflation
14. New discoveries in techniques of teaching and learning
15. Rapidity of change in modern society
16. New technological developments
17. Computerized technology
18. Growing problems in human relations

Taking a broad look at these acceptable truths, and by no means is there any inference that the list is conclusive, it becomes apparent that we in education are faced with tremendous problems. Perhaps the rescheduling of the school year is one attempt at a solution, partially anyway. Since most school-community situations are singular-each system having unique needs, opportunities, and capabilities-any one school system cannot expect to find pre-packaged answers

to its particular problems. Clearly defined objectives, tailored to the specific situation, must be taken into account. Year-round school is not a panacea. Unquestionably, the topic of year-round school has a definite place in future considerations of modern public education. My question is: How about year-round education? It seems to me there is a tremendously big and significant difference.

Steps have already been taken by a number of school systems nation-wide, as well as a few Indiana systems, to set up study committees to explore the available information on year-round schools. Many state and local governmental units are strongly proposing study and reassessment of the feasibility of year-round school or if not to this degree, at least plans for a greater use of educational facilities and instructional personnel. Many view this proposal as a must if we are to meet the challenge of a rapidly changing society.

Many advocates of year-round school are contending that it is no longer a question of extending the school year, the question is how? The National School Calendar Study Committee, 2015 Kenwood Parkway, Minneapolis, Minnesota, a non-profit organization, distributes materials about year-round school programs and provides speakers for interested groups across the country. George M. Jensen, former member of the Minneapolis Board of Education for fifteen years, who served as president for twelve of those years, is now the organizing chairman of the NSCSC. Mr. Jensen, a professional engineer, has been a prolific writer on the subject of year-round school programs and since retirement in 1967 has devoted his time and energy to developing the concept of year-round school programs.

Another lay person who has been very instrumental in promoting the year-round school philosophy is Mrs. Charles Liebman, 410 G. Ridge Road, McHenry, Illinois, a non-professional educator, who has given of her time and money the past ten years, writing and speaking on behalf of the extension of the school calendar in the form of the 12-4 plan.

Several years ago President Eisenhower named eleven leading citizens to a "Commission on National Goals--Programs for Action in the Sixties." In their report, "Goals for Americans," a thorough study covering a number of subjects in depth, including education, under the heading "Innovations in Education," they said, "All the organizational arrangements, all the methods and procedures that characterize American education today, were originally devised to help us accomplish our purpose. If they no longer help us, we must revise them. . . .

In seeking the most effective ways to accomplish our educational purposes, we are going to have to take a flexible and experimental view of many established practices (such as the fact that) most school 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 sum through better utilization of present plant, equipment and personnel will be money saved. . . ."

Advocates of year-round schools strike hard at our so-called short school calendar. When America is compared with other countries in terms of days in the school year, this country's record is found to be among the poorest. A

study of 51 countries shows an average elementary school year of 210 days and an average secondary school year of 204 days. The average school term in Indiana and the United States as a whole is slightly more than 180 days.

COUNTRY	ELEMENTARY SCHOOL DAYS	SECONDARY SCHOOL DAYS
China	252	240
Austria	240	240
Czechoslovakia	240	240
Denmark	240	240
Venezuela	236	236
U. S. S. R.	228-234	228-234
West Germany	233	233
Netherlands	200-240	233
Norway	228	228
Poland	220	220
Rumania	216	222
Sweden	214	214
Australia	213	213
Japan	210	210
Greece	210	190
India	200	200-210
Finland	200	185
United States	180	180
France	185	185
Ecuador	170	165
Italy	154	154

It would be a naive understatement to say that we live in an age when criticisms and protests are very much in vogue. However, to some extent, criticism can be good for education. However, to be constructive, the facts must be presented accurately, within confined context and without emotional overtones. Criticism should always be to improve, not to hinder nor to destroy. It is heartwarming to note that the National Association of Jr.-Sr. High School Principals (have chosen for the seventies to start talking about,) "What's Right With American Education."

Although it is not within the scope of this study to make personal recommendations, I would not want to leave the subject without mentioning at least these precautions. Tremendous and dynamic forces within our society are at work that are and will continue affecting the length of our school time and the employment of that school time. Certainly, the existing educational facilities and instructional personnel must be utilized to the fullest extent if we are to meet the challenge of a rapidly changing society. To philosophize on the many innovations possible within our educational institutions, including the rescheduled school year, it seems I'm repeatedly haunted by an old song of my youth which goes something like this:

I'm forever blowing bubbles,
Pretty bubbles in the air.
They fly so high, nearly reach the sky,
Then like my dreams, they fade and die.
Fortunes always hiding, I've looked everywhere.
I'm forever blowing bubbles,
Pretty bubbles in the air.

Maybe in many ways we could draw an analogy between these words and thoughts and educational innovations that seem to fly high for awhile, then fade away. Nevertheless, we keep searching everywhere, as certainly we should and must continue to do if we are to meet the educational crises and demands that society has placed upon our schools.

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