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THE TWELVE MONTH SCHOOL YEAR, A STUDY OF THE ADVANTAGES AND DISADVANTAGES OF THE FOUR QUARTER SYSTEM.

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The literature on the staggered four quarter system is reviewed, and the advantages and disadvantages of the system are discussed. (HW)
THE TWELVE MONTH SCHOOL YEAR

A Study of the
Advantages and Disadvantages
of
THE FOUR QUARTER SYSTEM

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FORWARD

Much interest was created in the year-round school after recent legislation made such organization possible. This interest permeated the Office of the Cook County Superintendent of Schools and what began as a general bulletin on the subject has culminated in this paper.

Most of the inquiries received by the office were from people concerned with increasing school enrollments and how the school year could be reorganized to avoid building programs. Whereas some districts are not affected by increasing enrollments and could open its schools to 100% enrollment the entire year, this paper is written more to the possibility of avoiding building programs by staggering the enrollment over the year.

My thanks to all my colleagues in the County office for their suggestions, criticisms, and help in preparing this report. Also, thanks to the many who aided in its preparation with ideas and suggestions. It is hoped that the reader gains a deeper insight into this problem and he may then approach it with a keener perspective.
I. INTRODUCTION

The Illinois 75th General Assembly passed Senate Bill 1496 which the governor signed into law that makes it possible for school boards to adopt a 12 month calendar.

The new law reads:

"Any school district may, by resolution of its board, operate one or more schools within the district on a calendar of 12 months or 235 days of actual pupil attendance computable under Section 18-8. Under such plan, no student shall be required to attend class for more than 3 consecutive quarters. Any board which operates under this section shall devise a method of apportioning its students so that each grade affected thereby will have at all times an enrollment of approximately 75% of the students eligible to attend."

Furthermore, the section of the code about the school age for a child entering school was amended to read:

"...provided, further, that in any school district operating on a quarterly basis, children who will attain age 6 within 30 days after the commencement of a quarterly term shall be entitled to attend school upon commencement of such term."

Many educators, school board members, and parents have expressed interest in these changes in the law. The history of the 12 month school year and the advantages and disadvantages of it will be the major concern of this paper. A district contemplating adoption of the quarter plan should appoint a committee to study it in relation to that particular district. Such a report may serve as a point of departure for such a committee. It is hoped that the committee would study the advantages for the district along with the disadvantages. Ways of overcoming or minimizing the disadvantages should be considered. Recommendations resulting from the investigation should reflect upon the problem as it relates to that district.

The term all-year school may mean:

"(a) operation of the schools on a four quarter system with rotating attendance; (b) operation of the schools throughout the year; (c) summer school to supplement the regular school year for makeup work, acceleration, enrichment, camps, and recreation programs; (d) an extended-service term for teachers, with emphasis on inservice growth and school improvement activities; or (e) a variation or combination of the types listed above."

This paper will concern itself with the first part of the definition, namely, a four quarter system with rotating attendance.

A quarter plan usually means dividing a year equally into four periods with approximately 75% of the student body attending any one period. Teachers could be employed for an entire year, nine months, or shorter periods of time mutually agreed upon by the teacher and the school board.

The four quarter plan is not new. Bluffton, Indiana, used it from 1904 to 1915. Other school systems that have tried it were: Mason City, Iowa; Gary, Indiana; Eveleth, Minnesota; Omaha, Nebraska; Newark, New Jersey; Albuquerque, New Mexico; Ardmore and Tulsa, Oklahoma; Nashville, Tennessee; Amarillo and El Paso, Texas; and Ambridge and Aliquippa, Pennsylvania. All abandoned the plan.
Aliquippa considered the plan successful from an economy standpoint. "Savings on capital outlay for new schools and the related savings (especially debt service) resulted in an estimated savings of $282,059 during a seven year period." The board reduced teachers' monthly salaries 5% since most chose to work 12 months. A teacher earning $100 per month would receive $900 for a nine month year. A reduction of 5% would reduce the monthly salary to $95 but over 12 months this would amount to $1140 hence a teacher's yearly salary would increase. This plan did away with the necessity of seeking another employment during the summer months. Also, the plan existed during the depression years when jobs were none too plentiful.

The children of Ambridge and Aliquippa achieved more academically under the four quarter plan than they did under the traditional school year. However, when additional resources became available, these school systems returned to a traditional calendar. Some of the reasons given for abandoning the plan were: (1) difficulty in maintaining the physical plant; (2) increased cost of maintenance which offset other economies; (3) difficulty in assigning vacation periods for both teachers and students; (4) administrative problems and supervisory tasks were greatly increased; (5) paper work increased tremendously. Other communities have studied it without adopting it. Long Beach, Sacramento, Contra Costa, Los Angeles, San Mateo County and Redwood, California; Fairfield, Connecticut; Montgomery County, Maryland; Dallas, Texas are a few.

The study in Fairfield, Connecticut, in 1952, found that a needed $5,000,000 building program would cost the taxpayers " $368,750 a year for interest, amortization, and operation and maintenance of new buildings." Under the four quarter plan the operational expense (including air conditioning) was estimated at $81,900 a year resulting in a savings of $286,000. However, they did not adopt the plan.

A Los Angeles study found that the 12 month school was "too costly, had too much public resistance and too many administrative problems." The State Department of Education in Florida turned down the 12 month plan because actual economies would not be realized and additional problems would be created.

A 12 month school year will begin in metropolitan Atlanta, Georgia in September, 1968, contingent upon the availability of state money. The systems are the cities of Atlanta, Decatur, Marietta, and the counties of Fulton, DeKalb, Cobb, Gwinnett, and Clayton. The plan will operate only in the high schools. All students "will be required to attend school for all of the first three quarters." Then, they can voluntarily go to the summer session and any two of the next three quarters. They may also choose "to attend all four quarters and finish high school in three years." A study done in Atlanta, in 1957, showed that it would cost more to operate on the four quarter plan than to build the new schools. The cost under the quarter plan would have been $8,804,000, whereas the traditional school year, with new construction included, would have cost $7,617,000. Fulton County estimated the cost at $2,772,500 for the four quarter plan as compared to $2,098,000 under the traditional calendar. DeKalb County figures were $2,280,000 for 12 months as opposed to $1,714,000. The plan was turned down as too costly.

The fact that these districts in Georgia are preparing to adopt the quarter plan in the education of youth strongly suggests educational values that may be overlooked in a desire to economize. What Georgia is planning calls for more...
money - not less! The voluntary selection of quarters by students and allowance of attendance in all four quarters does not indicate that economy is needed as far as classrooms are concerned. This development bears close scrutiny from the educational world.

II ADVANTAGES OF THE 12 MONTH SCHOOL PLAN

The previous section presented a brief background of 12 month plans that have been tried. Many advantages are evident under such a system in regard to: year around building utilization; teacher benefits; pupil benefits; book and equipment usage; and benefits to business and industry. The advantages will be discussed more fully on the following pages.

UTILIZATION OF BUILDINGS

A district could increase its enrollment by one third by using present facilities. A district that has what is considered as a maximum enrollment of 2000 pupils now, for example, could add 1000 more before considering a new building program. Only three-fourths of the enrollment would be in class at any one time. At first, with only 2250 pupils in school, some rooms may stand empty or be utilized in some other fashion. When the enrollment reaches a total of 4000, only 3000 would be in attendance placing a district at a point of needing to add classrooms.

FEWER TEACHERS WOULD BE NEEDED

If all teachers chose to work all year, the size of the faculty could be cut by one-fourth. A staff of 100 earning an average salary of $7200 for 9 months would cost $720,000. Under a 12 month contract, a staff of 75 earning an average of $9600 would cost $720,000. Individual teacher's salaries would be tremendously increased. Some would be out of jobs. The first to go would be those who are not fully qualified. Normal turnover would find others leaving who would not be replaced.

There would be nothing to prevent the school board from reducing the rate of pay. The board may decide that an average salary of $9000 might be sufficient for a start. Thus, they would provide for a cushion for unforeseen expenses.

ECONOMIC STATUS OF THE TEACHER WOULD BE ENHANCED

Presently, teachers are part time employees. They find themselves the victims of an unusual type of lockout each summer. Few have the opportunity to continue the practice of their profession during the summer.

Employment for the entire year would allow a teacher to practice his profession full time. He would not have to seek a summer job to tide him over until school reopened. Paying a teacher at his current monthly rate in employment for 12 months instead of nine would increase his salary by one-third and would place him in a competitive economic position with many professions.
A teacher, working all year in his profession, would relieve the crush on the labor market each summer. People who cannot teach would be more successful in getting a summer job if teachers were not competing against them.

**THE EDUCATIONAL PROGRAM WOULD BE IMPROVED**

A district that adopted the quarter plan could retain its entire staff. The faculty could be utilized along traditional class, or pupil load formulas. With 75% of the faculty handling all classes, the remaining faculty could work on other things. These could include:

(a) participation in inservice training workshops with small group interaction.

(b) involvement in curriculum development work to improve a certain area of the curriculum.

(c) research, gather material, observe, experiment and make a contribution in whatever area the research might be in.

(d) formation of a substitute teacher pool. This would eliminate the need for outside substitutes and be a budget saving in this respect. Teachers would stand to gain much from a substituting experience. A deeper understanding of what is needed by a substitute would make the teacher a better planner in respect to his class.

(e) assistance to teachers on projects where their particular specialty might aid the pupils.

(f) tutorial service for youngsters having difficulty in certain areas of a subject. For example, a third grade transfer-in has not had new math. One-to-one assistance would help make the transition.

(g) administration aid. Supervision of playgrounds, lunchrooms or study areas could relieve the teachers actively engaged in class instruction of these chores.

(h) attendance at a college.

The faculty may be utilized along different lines and the entire force may have class assignments. These assignments would be fewer since more teachers are involved with fewer students thus allowing all teachers more time away from the class each day. With a few exceptions, the ideas advanced above could be done by all teachers the year around.

**TEACHER SHORTAGE COULD BE ALLEVIATED**

The need for employing teachers who are not fully qualified would be eliminated. Vacancies that occur in the classroom during the year could be filled by someone on the staff who is not assigned a class. The superintendent could search out a qualified person to replace the teacher who took the class assignment and hire him immediately, regardless of the time of year. The new teacher could then go through an orientation period that permits him to learn
school procedure, meet supervisory personnel, and become acquainted with teacher colleagues. He would become part of the system before actually stepping before a class. The urgency of replacement would be gone. In case of emergency, the Superintendent would have a reserve to call upon in the ranks of the 25% not directly engaged in class instruction.

FEWER TEXTBOOKS WOULD BE NEEDED

Textbooks would be needed for only 75% of the total district enrollment. This would result in another budgetary saving. The textbooks would be in full use all year-round.

MORE UTILIZATION OF LIBRARY MATERIALS AND EQUIPMENT WOULD BE POSSIBLE

The easing of building needs would be accompanied by less demand on library materials and equipment. The ratio of books per pupil would be raised immediately with one-fourth less demanding them. Not a single addition need be made to the library to accomplish this.

Also, the demand upon equipment decreases. This could lead to another savings in the budget if a district has enough equipment to serve 75% of total enrollment. The savings would affect such things as audio-visual equipment, lab apparatus, and even classroom furniture costs.

GUIDANCE COUNSELOR RATIO REDUCED

If the total school enrollment were 3000 pupils and the school had six counselors, the ratio of pupils to counselor would be 500 to 1. A 25% reduction in enrollment reduces that ratio to 375 to 1 without the addition of a single counselor. High schools eyeing recent developments of the North Central Association criteria might find this to be significant.

CHILDREN WOULD ENTER SCHOOL AT A TIME CLOSEST TO THE LEGAL AGE OF ENTRANCE

At the present time a child must have attained the legal age for entrance into school by December 1. Those born on, or after December 3rd must wait until the following September to enter. Also, children who have birthdates late in November fulfill the legal requirement but still may not be ready for school. Primary teachers have deplored this fact for years. Under the new law, a child would enter school in a given quarter if his birthdate came within 30 days of the beginning of that term. Those who fail to attain the legal age for one quarter would have only a short wait of not more than two months to be eligible to enter the next quarter.

BUSINESS AND INDUSTRY COULD WORK OUT VACATION SCHEDULES OVER THE ENTIRE YEAR

Business and industry might welcome the opportunity to plan their vacation schedules over the year instead of just the summer months. If the 12 month school year were to become prevalent over the nation, the tourist business would increase, thereby aiding the nation's economy.
EMPLOYMENT OPPORTUNITIES DURING VACATION PERIOD WOULD BE GREATER FOR YOUTH

A student interested in working would stand a better chance of getting a job if he did not have to compete with all the students of his age. The labor market would not be flooded at any one particular time of the year. Presently, many youngsters hold part time jobs with the result that they cannot participate in extra curricular activities or maybe at the expense of lower grades due to the lack of time to study. The student probably could earn more by working full time for a shorter period of time.

TEACHERS COULD ATTEND REGULAR SESSIONS OF COLLEGE

Since many colleges have adopted a quarter system, teachers could attend a session almost any time during the year. Attendance during a regular session might permit a teacher to take required courses not offered during the summer term.

SHORTER COURSES COULD BE DEVELOPED

Courses could be modified to fit a quarter instead of a semester or full year. Instructional time could be lengthened during the day and a student could spend more time on fewer subjects. This would mean fewer preparations for the student allowing for a more in-depth study. Finishing a course at the end of a quarter, even in a year's study such as English, would permit a fresh start, perhaps with a different teacher or even retaking the course if results warranted it.

PUPILS COULD BE MORE EASILY ACCELERATED OR RETAINED

The shorter unit of time allows more flexibility as far as acceleration or retention of pupils is concerned. A student who has done poorly for various reasons, could repeat the course after the quarter in which the poor work was done. Absence due to illness might place the student behind his class. Reassignment into another group just starting, or not as far advanced, would be possible.

A student may also find it easier to accelerate his studies by voluntarily enrolling in each quarter during the year. Some high school students today are carrying five subjects and going to summer school with the result that they are graduating at the end of six semesters. To some, this head start may be an important concern. The rigidity of the lock step could be broken by an ambitious student.
III DISADVANTAGES OF THE 12 MONTH SCHOOL PLAN

There are disadvantages to all proposals. The chances of implementing a new proposal are slim if the disadvantages outweigh the advantages. However, good planning takes all the disadvantages into consideration in order to meet and overcome or minimize them before they loom up too large. Some of the disadvantages to the 12 month plan are presented on the following pages.

EDUCATIONAL COST GO UP

Most studies on the 12 month school year have found that it will cost more money. Salaries make up a major part of the annual operating budget of a school district. Raising teachers' salaries one-third would push that part of the budget upward. A cutback in the number of staff members would hold the line budget-wise but such a reduction would negate some other advantages as well as incidental savings mentioned earlier.

MAINTENANCE COST UP

Most maintenance in schools is done when the schools are closed. Ordinary clean-up procedures take place after school hours each day and would continue. Larger maintenance jobs involving the washing of light fixtures, walls, painting, scrubbing and waxing the floors have been done during the vacation times. Many schools have a custodian on duty during the day who can do little but spruce up the halls, dispense milk, clean up the lunch room or accidents, wash windows, and cut the grass during the school day. A night man comes in at the end of the day to sweep, dust, empty trash, and clean the washrooms. One man can handle so many rooms, washrooms and offices before a second man is added. The larger maintenance jobs reserved for vacations would require extra crews to come in. The night man could not do it. Overtime pay would be required for the day man to work extra hours to get the job done or they would have to work on week-ends. The maintenance of buildings seems to be one of the major problems that developed in the school districts that tried the 12 month calendar.

STATE AID NO LARGER

The district that switches over to the quarter system would have to keep separate attendance records for each of the four groups. The best six months attendance of each of the groups would be selected and then added together to be submitted. It would be advisable to start a quarter system in June so that the school year would be completed by the May 31st deadline for state aid claims. The district would receive about the same amount of money for the 12 months as it would under a 9 month calendar.

A district that has only a couple of its schools on the 12 month system would experience even more difficulty in presenting its claim.

LARGE ENROLLMENTS NEEDED FOR SUCCESSFUL ROTATING ATTENDANCE

A school would have to have at least four sections of each grade level. One fourth would be off each quarter. Different groups would be at different levels. Those just beginning school would find it extremely difficult. Those entering the second quarter would be three months behind; those entering the third quarter would be six months behind the first group, and three months behind the second group; those entering the fourth quarter would find themselves
nine months behind the first group, six months behind the second group, and three months behind the third group.

Scheduling problems for hard-to-till subjects would arise. Some high schools have difficulty finding enough students to take physics or Latin for a year. This problem would not be eased if all who are interested in taking those courses are not scheduled to begin the same quarter. Would there be enough to offer the course at the beginning of each quarter?

The report on the 12 month calendar completed in Florida suggested the following as minimum attendance figures: elementary schools, 24 teachers and 720 pupils; junior high schools, 50 teachers and 1500 pupils; secondary schools, 80 teachers and 2400 pupils.25

CERTAIN TIMES OF THE YEAR REGARDED AS UNDESIRABLE FOR VACATIONS

Winter may not be the best time of the year for vacation. Once a pupil was locked into the quarter system of advancing through school, he would be required to have his vacation the same quarter every year.26 The law does not allow for required attendance for longer than three consecutive quarters. He may voluntarily elect to go to the fourth quarter in order to change his vacation quarter. Soon everyone would be back on summer vacations.

QUARTERLY ENTRANCE WOULD CREATE PROBLEMS FOR BOTH PARENT AND SCHOOL

Since a child would be allowed to enroll during the quarter he had reached the legal age or was within 30 days of attaining it, it would be entirely possible for a parent who has four children to have each with a birthdate in a different quarter. Thus, this family would have children starting school at four different times during the year. Also, the vacations would be such that one of the children would be home all year around.27 There is no pattern to birth dates over a year. This inconsistency would serve as a problem for teachers as well as administrators.

Table I below gives the number of children in a typical school district, whose birthdates fell in different quarters over a three year span.28

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If the quarter system had been started in the district in 1965, one can see the effects. In some quarters there would be very large classes, in others very small. The small school would never have enough students to form a class of economic size. With a staggered start, children could not be placed into other classes that have been going on for three months.

Finally, four different starting dates for school will mean there will be four different graduation times. Pupils now in school could have their schedules worked out so that they would finish before the beginning of the fall term. However, children entering first grade at the start of different quarters, would finish the eighth grade at different times during the year. For example, children entering school in the September 1968 quarter would finish eighth grade in August 1976; those entering the December 1968 quarter would graduate in November of 1976; the March 1969 beginners would finish in February of 1977; and the June 1969 entrant would graduate in May of 1977. The children starting school in December or March would finish the grade school education at odd times during the year. If the high school is not on the quarter system also, this could create serious gaps in the child's education. The past few years have witnessed the abolition of mid-year graduation in favor of one a year. Problems that brought about this change to one graduation a year would crop up again.

TRUANCY WOULD INCREASE

When one-fourth of the pupils are on vacation, the temptation to be truant will rise. With a large group of legitimately vacationing children on the street, the truant would have little trouble hiding. Truant officers would find their jobs tremendously hampered.

TRANSFER PROBLEMS

The mobility factor of the present day population finds the American family one that is moving periodically. A child may not have much trouble transferring into the quarter system school, but one transferring out to a traditional calendar school might be faced with a serious gap in his education by such a move. If he were in the group originally scheduled for vacation the first three months of a new grade, and then moved to another school district the fourth month, the student would be thrust into a position of being three months behind everyone else.

INTERSchOLASTIC SPORTS AND EXTRA-CURRICULAR ACTIVITIES PROBLEMS

Student participation in interscholastic sports might be jeopardized by his being on vacation during a particular time of the year. Unless all schools adopted a quarter system, it would not be fair to allow one school to have its teams practice during normal school hours if they "happened" to be on their vacation quarter while other schools held practices after school hours.

Music groups, debate teams, and dramatic groups would find it necessary to reorganize at the beginning of each quarter. The directors and sponsors of such groups would certainly not enjoy the breaking up of their groups each three months.

TEACHER RECRUITMENT WOULD BE DIFFICULT

Teachers are usually on the market for new jobs that begin in September of each year. If they are under contract to teach in one district, they cannot
break the contract in the middle of the year to take a new job in a school that is on a quarter system. Recruiting at different times during the year would be much more difficult in that the supply would not be present to meet the demands of a quarter system. 31

IV CONCLUSION

Innovation is a key word in education today. In the search for improvement of a child's education, almost everything has been done in the framework of the nine month calendar. That which has been done over an entire year involved only a small number of children.

The disadvantages are formidable. The law is rather inflexible. Possibly certain changes in the law are necessary. For those who feel that three months vacation is too long any time during the year, the 12-4 plan developed by Mary Liebman of McHenry, Illinois, might be more acceptable. This plan is actually a trimester with the year divided approximately into three sixteen week periods. The pupil would attend for 12 weeks and have four weeks vacation. The three month vacation is spread over the year. The difficulty in this plan is the terminology of the law. An interpretation recognizing this as a type of quarter system would help.

The requirement of 185 days of attendance may have to be reduced. Inservice teacher workshops may no longer be deductible from required days of pupil attendance if these are held on school days for those not teaching that particular quarter. The present law allows a school board to end school after 176 days of pupil attendance has been accomplished. Ten school holidays along with traditional days at Thanksgiving and Christmas may make it difficult to get the required number of days in the calendar under the quarter system.

Presently, the school district may select the best six months of attendance out of nine to file for state aid claim. That is two-thirds of the school year. If a school district could select the best eight months (2/3) of its 12 month calendar, there might be more incentive for a district to seek ways to overcome the disadvantages of the all year school.

It has been said that one studies history to avoid the mistakes of the past. The history of the year-round school has shown that for one reason or another school districts have not found this system sound enough to retain. Many things of lasting value have traveled the early route of failure. Unless school districts are willing to delve deeper into the reasons for these early failures and study all the ramifications of the twelve month plan over a reasonable period of time, they, too, will fail in their efforts of attaining a workable solution. In this paper an attempt has been made to raise questions which need further study. Also, the slant has been directed toward school districts contemplating the 12 month school year as a way of reducing overcrowded conditions. For a district that could take care of 100% enrollment in a year around school, many of the questions raised would present little difficulty in overcoming.
FOOTNOTES


2. Ibid. Chap. 122 Sec. 10-20.12.


4. Ibid. p. 3.

5. Ibid. p. 3.


8. Ibid. p. 4.

9. Ibid. p. 4.

10. Ibid. p. 4.


12. NEA Research Memo, p. 4.


14. Ibid. p. 38

15. NEA Research Memo, p. 2.


17. Ibid. p. 37.

18. Ibid. p. 38.


20. Ibid. p. 38.

21. Ibid. p. 38.


23. Ibid. p. 40.
24. Ibid. p. 40.
26. Ibid. p. 39
27. Ibid. p. 39
28. The figures are from a Cook County school district used by their permission.
29. NEA Research Memo, p. 5.
31. Ibid. p. 39.
BIBLIOGRAPHY

EDUCATION NEWS, January 8, 1968. Vol. 2 No. 1


Nations Schools "Four Quarter Plan Uses Schools All Year-Round" W. Scott Bauman, Associate Prof. of Finance, University of Oregon, Eugene, Ore. Vol. 80 No. 5 Nov. 1967, McGraw Hill Publication


Year-Round School. 1960 American Association of School Administrators. (out of print)

Copies of a more complete bibliography are available by writing the NEA and asking for "References on Length of School Year."