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ABSTRACT

Reasons for the present emphasis on all-year operation of schools differ from those prevailing 30-40 years ago. During the depression emphasis was on economy. Recently, a more sensible reason for an extended school year is coming into focus--the year-round school has educational value. It is not just something to be considered in order to save money, though that certainly is one of the criteria. The year-round operation of the public schools is necessary for meeting the educational needs of an urban society. After a lengthy review of the research on and practice with the extended school year, the author presents extensive findings in favor of the extended school year. He addresses such areas of concern as academic achievement, remedial programs, graduation rates, mental health, student maturity, student social needs, handicapped children, and college admission. (Author/IRT)

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EXTENDED SCHOOL YEAR PROGRAMS:
THE EFFECTS ON ACHIEVEMENT AND
OTHER PHASES OF STUDENTS' LIVES

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Chapter 1

INTRODUCTION

The practice of a long summer vacation during the school year had its origin in our earlier agrarian life when children were needed on the farms during the planting and harvesting seasons. Also during this period, the demands for organized educational experiences were less insistent. Children developed an understanding of community life through actual work experiences, rather than by attending school. June, July, and August--these are the months when most school plants are closed and standing idle. These are the months when a million teachers are out of work or temporarily employed. These are the months when millions of children throughout the nation have time on their hands. This is traditional.

The traditional school year is denounced by some as failing to utilize fully the community's school facilities and equipment, the pupils' time, and the teachers' professional expertise. The almost universal practice of leaving school facilities idle at a time in our history where every available resource is needed is being carefully re-examined and debated. There is an ever-increasing number of children, and a shortage of financial resources, facilities, and personnel to meet the needs of these children. Social and economic changes are increasing the demands placed on all of our

schools. Therefore, more pupils must be provided more education. The level of educational attainment of every student must be brought to the highest possible level for his potential. A variety of vocational offerings must be provided the approximately fifty percent of pupils who do not go beyond high school. There is also a widely recognized need to improve the economic and professional status of teachers. Extended school year plans would provide a solution to these problems, and make fuller use of our school facilities.

Extended school year plans can provide communities with the extra classrooms and special facilities needed to expand present programs. The lengthened school year can provide a more desirable learning environment to children receiving only part-time schooling or working in overcrowded or obsolete classrooms.

Extended school year plans offer a basis for more quality education and added educational opportunities for all children. They can have particular impact on disadvantaged children through the provision for extra instructional time that is needed for their success in academic and non-academic fields.

Chapter 2

ANALYSIS OF THE PROBLEM

The present emphasis on all-year operation of schools is for different reasons than those prevailing thirty to forty years ago. The emphasis during the depression was upon economy. The year-round school was emphasized during the post World War II days for a variety of reasons. There was an impending shortage of school plant facilities. Costs of education were rising. More recently, we are coming around to a more sensible reason for an extended school year. That is, the year-round school does have educational value. It is not just something to be considered in order to save money, although that certainly is one of the criteria. The year-round operation of the public schools is necessary for meeting the educational needs of an urban society.¹

A purpose of American schools is to afford complete opportunity for the individual to develop his full potential capabilities for himself and society. This purpose cannot be effectual as long as custom limits opportunity and restricts individual growth by part-time operation of the schools. "Only when opportunity exists continuously, winter and summer, spring and fall, at the service of every pupil when and as he or she needs it, will our ideal be fulfilled."²

A classroom is a cheerful and comfortable place for a child in summer. The child in school during the summer months has the advantage of the services of school physician and nurse, and of the health directors. He has the advantage of a balanced meal at the noon hour and the use of the school's playground facilities. From the standpoint of health, he should be better off than the child who stays at home, particularly when the home is such as is often found in a congested area of a large city. He is in less danger of accident, and is less likely to neglect himself in the matter of personal cleanliness. School buildings are cooler in summer than most homes. The walls are thick, the rooms are spacious, and ventilation is at its best.³

Can children take a longer school year? The answer must be "Yes." This is evident in the thousands of children who voluntarily attend elementary and secondary schools each summer making their total school year longer than most extended school year plans. Also, the experience of European schools refutes the argument that teachers and students cannot take a longer school year. A study on the length of school in fifty-one countries of the world showed an average elementary school year of 210 days and an average secondary school year of 204 days. The average school year in the United States is 180 days.⁴

The longer school year would directly affect students. On the assumption of a revised and improved curriculum, the various plans would enable students to master fundamental

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skills and take remedial work, to take additional broadening or enriching courses, to lighten class loads, to complete advanced level programs, or to study special vocational subjects.

It has been suggested that the longer school year would increase pressure and be detrimental to their mental and physical health. The countering argument is that classroom pressures might be decreased because elementary school children have extra time in which to master fundamentals and secondary school students may use their extra time for remedial work or for reducing their class loads. The extended school year plans do not eliminate school-year or summer vacations. In fact, "Results of experimental programs in New York suggested that 'involvement in an active summer program is not detrimental to children's health.'"⁵

A longer school year with short vacations during the year has much in its favor. Studies of extended school year programs in Newark, New Jersey and Nashville, Tennessee showed that the children who participated suffered no ill effects. As a matter of fact, medical officials reported that the children were healthier than those who roamed the streets or went to the beaches during the summer. Apparently, the regularity of school routine, a good physical education program, and a well-balanced meal at lunchtime were contributory factors. This was especially significant for those children whose parents were not at home.⁶ H. W. Rafferty, in Nation's Schools, July, 1951, says the following of a

twelve-month school year: "What a youngster does with summer hours is of great social importance. If adult education is an insurance against anti-social behavior, summer education is equally important for children."⁷

As an integral part of extended school year designs, acceleration has additional implications for pupils. Are pupils mature enough to graduate early? Will they be able to find jobs and enter college? If they finish the secondary school course in the middle of the academic year, will they be able to enter college at that time? "The New York State officials answer these questions affirmatively, but emphasize their recommendation that no pupil accelerate more than one year."⁸

It has been suggested that today's pupils are more physically, sexually, and academically mature than those of a generation ago; thus, acceleration may be advantageous.

James L. Allen, Jr., New York State Commissioner of Education

...holds that maturity is not necessarily related to the number of years spent in school. Emotional and physical maturity generally does not increase between the ages of 17 (when most accelerated pupils would graduate) and 18 (when most pupils now graduate).⁹

The question of maturity will be raised, regardless of whether the extended school year program is being sponsored for secondary school or college level programs. It is a question which is difficult to answer, because people will not agree on a definition of maturity, since the individual who is mature in one area may not be as mature in others.



The individual's readiness to face life's problems depend upon a combination of inherited factors and acquired experiences. One may have the potential for growth to higher maturity levels, but a lack of broad, rich experiences will limit the nature of his growth patterns. Many young people have to break with home and school ties if they are to rise above a growth plateau. Therefore, a delay in the independence process by requiring another chronological age of schooling will not perceptibly change their approach to new problems as those encountered in marriage, college, the army, the world of work, or general everyday living.¹⁰

Modern high school students are successfully working with materials and concepts formerly introduced and taught at college levels. Young elementary school students have repeatedly shown their ability to understand materials and principles formerly reserved for junior and senior high school pupils. In a sense, academic maturity levels are changing because boys and girls are maturing earlier than they did forty or fifty years ago.

Maturity and years of schooling are not necessarily related. Parents and school board members are often shocked when they are shown the achievement range of pupils in a given class. There may be a range of five years in a fifth grade class and six years in a sixth grade class with a steady increase in the spread as students reach higher grades. The problem becomes complicated by the fact that achievement ranges overlap for pupils in different grades and subjects.

Thus, academic maturity does not coincide with a given number of years of schooling in the case of all children.

There is a similar overlapping in the areas of social, emotional, physical, mental and sexual maturity. The range of maturity in each area continues to spread until the word "mature" loses definition when applied to 16-, 17-, 18-, and 19-year olds. At this stage, some young people will stand out as either mature or immature individuals, but the majority will be beyond classification in terms of total maturity. With all the variations in their growth patterns, it will be virtually impossible to assume that students will attain final or complete maturity by attending high school for one additional year.

If time spent in school is the maturation factor, the extended school year graduate should be more mature because he will have been exposed to 2,520 nonweighted extra days of instruction in twelve extended school years, compared to 2,340 in thirteen regular school years.¹¹ Time in school, not number of years in school, may be considered a part of the maturation process, but time in itself may be less important than the nature and quality of the individual's school experiences. Many young people reach a maturity plateau which they cannot leave until they can acquire new educational experiences. Remaining another year in their own high school will not be as stimulating as going on to institutions of higher learning, such as a vocational school, a community college, or a liberal arts college.¹²



Studies have shown that high school graduates who have had a good academic background will have no difficulty with college level course work if they undertake it at the age of seventeen instead of eighteen. If pupils encounter difficulty in college, it is due to factors other than chronological age.¹³

Few high school graduates of tomorrow can expect to sit back and say "My education is behind me." To do so will be to stagnate. If they intend to find success in life, they will have to forego some freedom because of the pressures to have them acquire more knowledge and higher level skills. They will find, for example, that industry spends billions of dollars annually in school incentive and job training programs. Again, many of them will find job opportunities in many fields will be closed unless they go to a community college or vocational training school.¹⁴

If people accept the fact that a high school education is no longer the end of the road, that education for many must continue, not because of extended school years, but in spite of them, the saving of one chronological year in the present 8 to 12 program may become more meaningful and realistic.

Chapter 3

REVIEW OF RELATED RESEARCH

Bressey and Fleisher

Bressey and Fleisher made studies of the status of alumnae of large numbers of women who were graduated in an accelerated program. On the basis of such characteristics as entrance tests, grades, and courses of study, these women were matched against controls who matriculated in a non-accelerated or regular program.

Ten years after graduation, on the average, the "accelerates" as compared to the controls had obtained a significantly higher number of advanced degrees; and a significantly larger number of the accelerates were working after having been married. A slightly higher percentage of the non-accelerates were married, and a slightly higher percentage of the accelerates had been divorced; but these differences were small. Both groups participated to about the same degree in community activities. These studies led Fleisher and Bressey to conclude that many students of ability can complete a four-year program in less time with no unfortunate consequences.¹⁵

Atlanta, Georgia

In speaking of the four-quarter system in Atlanta, Georgia, Reid Gillis says

I promise you that this is the philosophy behind the program; there is one purpose: THE PURPOSE OF THIS PROGRAM IS TO IMPROVE THE EDUCATIONAL OPPORTUNITIES OF OUR CHILDREN. It is NOT a program to save money; it is NOT a program to utilize the facility; it is NOT a program to schedule children into a space-saving master schedule; and it is NOT a program to allow flexible vacation patterns. It IS a program to improve the educational opportunities of our children.¹⁶

Mr. Gillis went on to say that in the Metropolitan Atlanta area, school personnel found that they had a nine month school year with an appendix of about six to eight weeks during which students attended half a day and paid a tuition. Students went to summer school programs, which had been designed forty or fifty years ago, to repeat courses which they had failed during the year. But a strange thing happened. The school personnel, in investigating this program, found that twenty-five percent or more of the high school pupils in the area were going to summer school, but that seventy percent of these summer school students were taking new work. This summer school was no longer a place for students who had failed and needed to repeat courses. It had become a place for the pupil who really wanted to improve his education, to take advanced work, to get ahead. So, said Mr. Gillis, "...the basic rationale at this point was to develop a program that would give kids an opportunity for year-round education."¹⁷

Florida Schools

Since 1947, Florida has had a type of year-round school program. This modified all-year program was made possible by an act of the legislature that provided for the employment of one out of every eight teachers for the eleventh and twelfth months. These teacher units were to be used almost entirely for additional educational experiences for young people. Some contend that the philosophy is sound; that it enables students to pursue a variety of interests in depth, where opportunities are lacking during the regular school year. They further observe that teachers do a better job in the summer program, partly because attendance by students is voluntary and the teachers are challenged to make their programs appealing so that regular attendance can be assured. These advocates of summer programs point with pride to attendance figures which indicate that as high as sixty percent of the regular year's enrollment have participated in the summer program voluntarily.¹

The Nova Schools in Fort Lauderdale, Florida have been attempting a more sophisticated form of year-round operation. The teachers in the Nova system give the following advantages to year-round school programs:

Elementary Programs:

1. Students forget over the long summer.
2. Time is available for laboratories and resource center activities.
3. Students have time for mastery of skills instead of being "passed on" when not ready.

4. Increasing amount of knowledge that must be taught.

Secondary Programs:

1. More creating and writing time is made available.
 - Students need more time for the additional experiences they need and desire.
2. A long summer would break the continuity of Lova's continuous progress philosophy.

70% teachers feel that

...students need more time to reach an acceptable level of performance especially since the students of today are faced with entering ever increasing amounts of knowledge and concepts.¹⁹

Nelson County, Virginia

Project Opportunity was a summer program for the rural disadvantaged youth in Nelson County, Virginia. The aims of this program were to raise the level of student aspiration for higher education; to provide experiences that students would not normally encounter which would broaden their range of cultural interest and aid them in related academic achievements; and to provide experiences in fine arts for ninth graders, natural science for tenth graders, and critical thinking and independent study in the humanities for eleventh graders.

Through the information received from the members of the interdisciplinary team, participant observers, teachers and sixty student-interviews, it "...is obvious that a philosophy did prevail which succeeded in enlightening and broadening the students."²⁰ From the responses received, it appeared that the students did increase their concept of the world

outside their immediate environment, with many of them being helped in organizing their ideas about college and a possible career.

The greatest fluctuation occurred in college aspirations. All three groups of students demonstrated approximately a fifty percent attitudinal change towards college. One of the major occurrences of this program was the closeness which developed between student and teacher. This interaction led to a more relaxed and open approach to controversial ideas and students voiced the opinion that they were more willing to discuss these ideas under this informal situation. From the results of tests, there seemed to be a slight to moderate rise in vocational choice towards the professional level in all three groups. Another important aspect of Project Opportunity was that the program was at least tolerated, if not accepted, by the community. The parents were releasing some of their children from work on their farms, and, in general, were prepared to host the program.²¹

The overall conclusion as to the effectiveness of the 1967 summer program in Nelson County, Virginia, was one of positive approval. It was felt by the investigators that the administrative problems did not outweigh the inspired teaching, the active participation, and the involvement of the students in new experiences that they encountered. It must be pointed out, however, that perhaps the mere fact that this summer program was being evaluated had some effect on the program itself. One cannot discount the possibility

of the "Lawthorne Effect"--perhaps creating better teaching, better student responses, more adept administrative decisions, and more opportunities being presented to the students that particular summer. However, it was found by the investigators that the summer program in Nelson County, Virginia, did provide unique and special experiences that could expedite the intellectual, personal, and cultural growth of the involved students.

Pennsylvania

Two of the better known experiments involving extended school year plans were those in Ambridge and Aliquippa, Pennsylvania.

The four-quarter plan was adopted in Ambridge in 1930 to handle the large student enrollment while new schools were being constructed. According to the school superintendent in Ambridge, the program was extremely unpopular, as well as difficult to administer. The plan was discontinued (in 1934) as soon as additional schools were completed.

The four-quarter plan was adopted in Aliquippa in 1928 in order to avoid investment in additional school plants. At first the quarters were assigned arbitrarily, but requests for changes were considered. A new first-grade section was enrolled each quarter, and there were four promotion dates. More 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 students' 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.²³

Ohio State University

A course at Ohio State University which emphasizes intensive analysis and treatment of students' problems (Psychology of Effective Study and of Individual Adjustment) afforded an opportunity to obtain preliminary data as to the effect of year-round schooling on students. The students enrolling in this course tend to be the misfits of academic society--the students most apt to be bothered by the additional strain of continuous attendance. The students meet daily for eleven weeks in small laboratory sections. In addition to daily contact with the instructor, each student has frequent conferences with another counselor. The extensive diagnostic program and interviews provide an unusually thorough acquaintance with each student's problems, and the rapport developed leads to frank answers.

Of the sixty-four students studied, twenty-eight were in school the year round and thirty-six were absent during the summer session. The two groups were equal as to the

ratio of men to women and as to the percentage living at home while attending the University. This and other studies, however, indicate that those who chose voluntarily to attend the summer tend to be somewhat more intelligent than those who do not attend school during the summer.²⁴ Other evidence also indicated that such voluntary attenders tend to be more sensitive to seeking solutions to their problems. Interviews were obtained near the end of the fall quarter when it was felt that good rapport had been established, and when the students had had at least nine weeks of attendance during the fall quarter with which to compare their previous school experience. Each counselor was provided with an interview outline, but was urged to proceed in an informal manner in order to obtain the highest rapport. The students were asked the reason they attended or did not attend the University during the summer quarter and what specifically they had gained or lost. They were also asked to judge whether, knowing as much as they did at the time of the interview, they would attend the summer session if they could re-live the previous summer. As a means of judging the relative importance of acceleration as a source of difficulties, the counselors were asked to rank among twelve sources of problems the relative importance of year-round attendance as a cause of students' problems.

In general, the analysis indicated that year-round attendance was not a particularly important source of problems. First, the counselors gave year-round attendance a

median rating of ninth in importance as a source of problems among the twelve areas. Second, when the students were asked what they would do if they had the summer to re-live, more students favored attending than had actually done so the previous summer. Thus, forty-four percent had attended, but fifty-eight percent said that they wished they had. Among those who had not attended and who had not wished to were several who had used the summer to gain required experience for college work, or were out under doctor's orders.²⁵

As a conclusion to his article on the Ohio State University program, Mr. Robinson says that "If the school can provide a variety of work experiences in connection with its program and take care of certain students' financial problems, most of the difficulties arising from year-round attendance might well be overcome."²⁶

The Commack School District

The Commack School District in Long Island, New York, in August, 1967, instituted a Continuous Progress Extended School Year Program. The Commack Project was "...a deliberate attempt to show that a school district can save one year of schooling at the elementary school level through changing the nature of the children's educational time line."²⁷

After studying the Commack Project, these were some of the findings of the State Education Department of the State of New York:

1. Students can learn proportionately more in a lengthened school year than comparable students who have not

been in such a program. Students' attendance was slightly higher during the summer period than during the regular school year.

2. Reading Progress of Third Grade Students (November Metropolitan Reading Test). After 3.7 months of extra schooling, the third grade extended school year students showed a mean gain of 6.5 months in reading comprehension and a 2.7 months gain in reading word knowledge over comparable students designated as the control group. The third grade extended school year median in reading comprehension was 2 months higher than that of the control group and one year above the national norm. The median for word knowledge was six months above the control and nine months above the national norm.

3. Primary Grade Gain (May Metropolitan Achievement Test). The extended school year primary grade grouping attained higher achievement levels than the control group on all seven Metropolitan Achievement sub-tests. The mean gains ranged from 3.3 months in arithmetic problems to six months in reading and 9.8 months in spelling. These gains are considered particularly significant since a July computer analysis of ability factors indicated that the year-round school group had a slightly lower potential than the control group. This conclusion is partly supported by the fact that the control group seemed to progress faster from November to May than the experimental group.²⁸ In addition, slow learners made greater academic gains over the control group than average and high ability groups made in terms of

their controls.

Parents reportedly favored a 4-5 week vacation because children tend to get bored before the end of a lengthened 10-12 week summer vacation. Most parents enrolled their children in the extended school year program to provide them with a better education.²⁹

The School of Human Resources

Many rehabilitation professionals contend, that in general, physically handicapped persons must adhere to a less strenuous regimen of activities than nondisabled persons, and specifically that physically disabled students cannot "stand the pace."³⁰

The School of Human Resources in the State of New York runs a special extended school year program for physically handicapped children. The State Education Department of the State of New York, upon completing their investigation of this program, concluded the following:

1. The results of the year-round program at the Human Resources School indicates that one cannot validly generalize about an entire category of people and that at least in one instance, that of a summer program for disabled children, the contention that children cannot take it must be considered false.

2. Many teachers and parents have said that non-disabled children cannot take an extension of the school year. In view of the evidence that physically handicapped children can profit from involvement in an extension of the school year, one can conclude that all children, disadvantaged or

nor-disadvantaged, can benefit from their involvement in an extended school year program.

3. Physically handicapped children have no difficulty in learning during a summer extension of the regular school year. Rather, physically handicapped children will benefit academically from being involved in a well-structured program, especially where continuity of learning plus enrichment go hand-in-hand.³¹

The children in the summer program performed better in some physical fitness building activities than they did in others. While growth was not as great as it was for the academic program, the conclusion was made that "...involvement in an active summer school program is not detrimental to disabled students' physical fitness."³² The school physician's comment about this program is significant here:

The positive aspects of an extended school year program, from a physician's point of view, are so great that I do not hesitate recommending that this should be standard operating procedure for any school for children with physical handicaps.³³

Pre-tests and post-tests were given in all major subject areas. Statistical analysis showed positive gains were made in all subject fields. Elementary pupils showed a mean growth of 2.8 months on the Stanford Reading Test and a mean improvement of 3.25 months in Arithmetic. Junior high school students showed a mean increase of 10.3 months in Arithmetic on the Iowa Test of Basic Skills. This gain paralleled the mean gain of 8.0 months on the wide range achievement test in Arithmetic.³⁴

Green Chimneys School-Camp Program

This private school, without financial support from the State of New York, has completed an extended school year program involving a large number of emotionally disturbed and brain-damaged children. The pupils worked through a twelve-month program which combined a structured academic program with a camp experience in July and August. The program was initiated because it had been determined that, in the past, emotionally disturbed children would regress emotionally when they went home for the summer. The new program tended to be a settling one for these students. This was attributed to their need for a continuity of formal learning activities. The fact that academic pursuits were not interrupted made the adjustment to summer camp experiences less frustrating.³⁵

Newcomers who came to Green Chimneys for the first time in July were immediately phased into appropriate learning levels. They had no adjustment to make in September because they had engaged in programs of study quite unlike those encountered in traditional summer schools. Academically retarded children had an opportunity to make up for lost time.

The library was opened during the evening as well as during the day, enabling the students to use its resources intensively throughout the summer. Middle and upper grade students reported a feeling of accomplishment during a period when many of them would normally be wasting or marking time.

Teachers and school administrators reported a reduction in the social and behavior problems. There was a definite lack of emotional regression over the summer on the part of pupils who had not returned home. They attributed the ease of adjustment to the fall term to the extension of the previous school year.³⁶

At the time of the study done by the State Education Department, the Green Chimneys program had not been in operation long enough to provide much statistical data, however, the following points were made:

1. A statistical analysis of the achievement tests administered to control and experimental students showed a language growth on the part of the experimental group significant at the five percent level.

2. The experimental group showed gains were made which were higher than those made between pre-tests and post-tests by the control group on the Stanford Achievement sub-tests for paragraph meaning, arithmetic applications.³⁷

The educational implications of the Green Chimneys program are many. Academic teachers were able to build constructive learning activities around events and happenings in the summer which gave new meaning to the learning process. Academic learning and special interests were not interrupted. The extended school year program insured the continuation of guidance counseling, health, and nutrition activities. Teachers and specialists reported few discipline problems during the summer. This was attributed to the children's

understanding of the meaning of school with its established rules and routines.

Administrators and teachers at Green Chimneys, in speaking of their school-camp program, say: "The experience of the school year was not 'good' but EXCELLENT."³⁷

Florida State University Laboratory School

The Florida State University Laboratory School began trimester operation in the fall of 1964, thus providing an opportunity to study the effect of various lengths of school attendance on the achievement and mental health of young school children. Such a study was done by Ralph L. Winterspoon of the Florida State University College of Education.

Dr. Winterspoon investigated two null hypotheses:

1. There is no significant difference in achievement between comparable groups of K-3 children who attend school during the regular and the greatly extended school year of three trimesters.

2. There is no significant difference in adjustment status between comparable groups of K-3 children who attend school during the regular and the greatly extended school year of three trimesters.³⁹

Under this trimester plan, all children were required to attend two and one-half trimesters resulting in at least ten more school days each year than formerly, and an option was provided making possible an additional one-half trimester of thirty-five days. Approximately one-half of the students

enrolled elected this option during the first year of trimester operation.

Since the Florida State University Laboratory School did not provide admission priority to certain groups (such as faculty children) and also served county school children, it was assumed that the subjects for this study represented a cross section of the many small urban areas in the United States.⁴⁰

At the close of the study, thirty-eight children had attended school all three summers and thirty-eight had attended no summers. Forty-four had attended one summer and forty-three had attended two summers.

First, second, and third grade achievement was determined by use of the Metropolitan Achievement Test and the Developmental Reading Test. Adjustment was evaluated by use of the Faggerty-Clson-Wickman Behavior Rating Schedule and the California Test of Personality. All three tests were administered each October and May for a three-year period. Prior to the last two weeks in October of the first year, the Primary Mental Abilities test was administered to all subjects. This was done in order that the results of the study could be adjusted in terms of variation due to intelligence (covariance technique).⁴¹

Dr. Witherspoon found that length of school year does effect the adjustment and achievement of young children, kindergarten through third grade.

When intelligence is held constant children of these ages tend to achieve less well, and possess more adjustment problems as perceived by their teachers, when they attend an extended school year each year for three years than comparable children who attend only the regular school year during the same period of time.⁴²

Dr. Witherspoon further stated that ^{may}~~may~~ negative effects of the extended school year were found, indicating that there may be an optimum time period of instruction, beyond which undesirable effects result.⁴³

Chapter 4

FINDINGS AND CONCLUSIONS

In only one instance did this writer find evidence to suggest that extended school year programs are not advantageous to pupils. With the exception of the study done by Dr. Witherspoon, all research points to an overwhelming acceptance of extended school year programs.

It should not be surprising to anybody to find that pupils can learn more in twelve months than in ten. Ordinary judgement would enable one to foresee that extra schooling each year would result in more learning and consequently in more rapid grade progress, but nobody could foretell how much progress would result from the additional schooling.

Children can obtain more education in an extended school year program than they can in a regular school year. Studies have shown that boys and girls taking part in extended school year programs make greater academic gains than comparable peermates who remain at home, travel, go to camp, or spend their time at the lake or seashore.⁴⁴

The research clearly demonstrates that learning does not cease with the onset of the summer season. Comparative studies of student achievement have repeatedly shown that the

work done in the summer extensions of the school year is as good, if not better, than that which is done in the regular school year.⁴⁵

The year-round schools graduate a higher percentage of their students, they promote at a higher rate, they show a lower grade-age, they have less retardation, and they lose fewer students before graduation. All this appears to be accomplished "...not by advancing pupils to grades to which their ages do not entitle them, but by preventing pupils from falling so far behind the grades to which their ages do entitle them."⁴⁶

Year-round schooling increases the graduation output of a school each year by more than twenty percent, and these graduates are as well-equipped educationally as are the graduates of equivalent ten-month schools. The ten-month schools send into industry proportionately more pupils below eighth grade level. All in all, students leaving all-year schools either by graduation or because of the desire or necessity of going to work are superior educationally, though of about the same average chronological and mental age at the time of leaving.⁴⁷

nor is there any evidence of loss in mental health. At the end of the summer, after children have been in school for twelve months, there are no signs of brain fatigue; and achievement tests given at that time yield as high ratings as are obtained at any other time of the year. Also, it is a noteworthy fact that children return to school in September,

after a vacation of only two or three weeks, with as much zest for work, and with as keen interest, as if they had had a long summer vacation. In fact, teachers believe that summer study prevents interest from waning.⁴⁸

Teachers also declare that children who attend school during July and August return to school in September with behavior habits superior to those of the children who have been running the streets all summer. The influence of the teacher and of the school seems to be more wholesome than many of the influences met outside of school--as one naturally would expect.

That year-round education is somehow injurious to the physical and mental health of students is an argument of long standing. There is virtually no statistical evidence to support this claim and a good deal to counter it. Yet the nagging fear persists, that without the conventional summer reprieve from his books, the student will "...at worst burn out his brains or at least miss the bucolic joys of vacation revelries."⁴⁹

Extended school year programs have had a positive effect upon the social needs of boys and girls. Many students have maintained friendships or made new social contacts in the summer months. For many students the school is a socializing institution.

Emotionally disturbed children have found the continuity of educational experiences through a lengthened school year leads to fewer frustrations. They have to make fewer

adjustments in terms of peers, teachers, curriculum, and school routine.

Research clearly demonstrates that children's health is not impaired by involvement in extended school year programs. The recent studies support similar findings in the earlier studies in Newark and Nashville:

1. Physically handicapped children in one new program are reportedly in better health after taking part in a lengthened school year program than comparable peers who did not have this advantage.

2. Normal children had better attendance records in summer periods than they did in the regular school year.⁵⁰

When determining whether the extended school year plans impose too great a strain on students, the State Education Department of the State of New York came up with these findings:

1. Each year finds an increasingly large number of pupils going to summer school, but there are no reports that their extension of schooling has been detrimental to their physical and/or mental health.

2. The average length of the school year in fifty-one representative countries of the world is 210 days, but the students do not seem to be showing any evidence of strain.⁵¹

All children, especially the disadvantaged, will benefit through a narrowing of the memory loss associated with prolonged summer vacations. This could decrease the amount of time currently spent on repetitive and monotonous reteaching and review in the fall.

Educationally disadvantaged children are found in rural communities, small towns and cities, and on Indian reservations. The introduction of an elementary extended school year program in any such areas will show educational advantages outweigh immediate economy advantages. The extension of the school year can help stem summer regression, as well as enabling students to receive more education in their more formative years. In addition, the decrease in the length of summer vacations will help meet the basic needs of boys and girls who do not have an opportunity to engage in purposeful and enjoyable experiences between the end of one term and the start of another.

Fast learning students continue to grow academically under extended school year programs, but their gains in comparison to their controls is relatively small compared to the gains made by slow learning students working in an extended school year program. Slow learning pupils with the advantage of the extra time provided in extended school year programs made greater gains over their controls than fast and average learning students.

Since the slow learning students often show greater academic gains than average learners, consideration should be given to making such programs available to disadvantaged children. It will give them more education and will speed their progress through school. Since they have a deficiency in learning experiences when they enter kindergarten, they have more to learn in school than average children. They

also exhibit a slow rate of progress. Given the advantage of extra learning time annually and a well-structured program of education, it is possible to save one or more years of their educational life line.

One objection to the adoption of extended school year designs centers around the maturity issue. Many parents and teachers are afraid that boys and girls will be pushed through school so fast that they will be unable to cope with college life or the world of work. Studies show that the average kindergarten child will be five years and three months old when he starts school. Normally, he would take thirteen years to complete his schooling, therefore he would be eighteen years and three months old when he is ready for the world of work or college. Saving one year would make high school graduates seventeen years and three years on the average.

In 1964 a special study was made for the State Education Department of the State of New York by Nelson Associates to ascertain what would happen if applicants for college admission from extended school year programs were 17-3 chronologically instead of 18-3. The survey indicated that chronological age is not an obstacle to college admission if applicants meet normal college entrance standards. Ninety-nine percent of the responses indicated that seventeen year old boys will have equal or better chances of being accepted. Ninety-eight percent of the responses indicated that seventeen year old girls will have equal or better chances of being accepted.⁵²

Some opponents of a longer school year contend that children will be deprived of desirable camping experiences. At present, only five to seven percent of all children go to camp during the summer. The number could be multiplied many times over if extended school year programs incorporated school camping experiences based upon spring or fall or even year-round use of camps.⁵³

The Office of Economic Opportunity once expressed interest in sending disadvantaged children to summer camps. Since there is a limited number of available camps in July or August, this approach to the problem of the hot summer idleness had to be dropped. Public and private camping interests are willing to help provide camp facilities at other than the summer season. Therefore, it is possible to extend the school year by opening the schools in July or August with purposeful camp experiences provided in the spring or fall. Such programs can provide continuity of learning with a motivating force that is badly needed by disadvantaged and advantaged children alike.⁵⁴

Elementary and secondary school extended school year programs can help potential dropouts reach higher rungs on the educational ladder. This will be reflected in an increase in high school graduates and a reduction in the number of dropouts. All studies show that the nearer to graduation a pupil is when he may legally leave school, the less likely he is to do so.⁵⁵ The reduction of the overall school program from thirteen to twelve years means that pupils will be

one year nearer graduation when they reach the age of leaving. The likelihood of a pupil becoming a dropout is to that extent decreased.

Another point made by the New York State Education Department is that by extending the school year, "Extra instructional time can be provided to meet basic needs of every child, not just the gifted or 'academically retarded'."⁵⁶

It is the belief of some that the social advantages of the all-year school outweigh the educational, and that the chief merit of the extended school year lies in its success in providing continuously throughout the whole year "...worthwhile activity in an environment that is uplifting."⁵⁷

The citizen may feel that he has discharged his full duty by providing summer schools and playgrounds; but if children do not attend, the problem has not been met. A type of organization must be furnished that will attract all, or nearly all, the children.⁵⁸

FOOTNOTES

- ¹Ione I. Perry, Comp., Post-Conference Report: Extended School Year Conference (Tallahassee, Florida: Florida State University Department of Education, 1969) p.3.
- ²W. A. Roe, "All-year Schools--a Potential Progressive Educational Improvement," Educational Methods, 10 (October, 1930), 6.
- ³G. I. Brinkerhoff, "The Effects of All-year Schooling Upon Social Adjustment," Educational Methods, 10 (February, 1931), 291.
- ⁴George I. Thomas, Extended School Year Designs: An Introduction to Plans for Rescheduling the School Year (Albany: The University of the State of New York/The State Education Department, 1966), p. 3.
- ⁵The Rescheduled School Year (Washington: Research Division--National Education Association, 1968), p.33.
- ⁶Thomas, Extended School Year Designs, p. 3.
- ⁷W. W. Rich, "Present Status of the All-Year Secondary School," California Journal of Secondary Education, 31 (January, 1956), p.19.
- ⁸The Rescheduled School Year, p.33.
- ⁹The Rescheduled School Year, p.33.
- ¹⁰Thomas, Extended School Year Designs, p.111.
- ¹¹Thomas, Extended School Year Designs, p.113.
- ¹²Thomas, Extended School Year Designs, p.113.
- ¹³Thomas, Extended School Year Designs, p.112.
- ¹⁴Thomas, Extended School Year Designs, p.112.
- ¹⁵Clarence A. Schoenfeld and Neil Schmitz, Year-Round Education: Its Problems and Prospects from Kindergarten to College (Madison, Wisconsin: Dembar Educational Research Services, 1969), pp. 92-3.

- 16 Perry, p.22.
- 17 Perry, p.22.
- 18 Perry, p.63.
- 19 Perry, p.64.
- 20 Edward M. Hayes and Timothy H. Kerr, An Inter-Disciplinary Evaluation of a Summer Program for the Rural Disadvantaged Youth in Nelson County, Virginia. Final Report. (Washington: Office of Education, Bureau of Research, 1970), p. iv.
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- 23 The Rescheduled School Year, p.11.
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- 25 Robinson, 442.
- 26 Robinson, 443.
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- 28 Thomas, Setting the Stage, p.14.
- 29 Thomas, Setting the Stage, p.19.
- 30 Thomas, Setting the Stage, pp.42-3.
- 31 Thomas, Setting the Stage, pp.42-3.
- 32 Thomas, Setting the Stage, p.43.
- 33 Thomas, Setting the Stage, p.45.
- 34 Thomas, Setting the Stage, p.44.
- 35 Thomas, Setting the Stage, p.48.
- 36 Thomas, Setting the Stage, p.48.
- 37 Thomas, Setting the Stage, pp.49-50.

- 38 Thomas, Setting the Stage, p.49.
- 39 Ralph I. Witherspoon, Effect of Trimester School Operation on the Achievement and Adjustment of Kindergarten and First Through Third Grade Children (Washington: U.S. Department of Health, Education and Welfare, 1968), p.1.
- 40 Witherspoon, p.6.
- 41 Witherspoon, pp.1-2.
- 42 Witherspoon, p.2.
- 43 Witherspoon, p.23.
- 44 Thomas, Setting the Stage, p.89.
- 45 Thomas, Setting the Stage, p.89.
- 46 G. I. Brinkerhoff, "The Effects of All-year Schools Upon Pupil Advancement," Educational Methods, 10 (December, 1930), p.173.
- 47 Brinkerhoff, "Social Adjustment," p.290.
- 48 Brinkerhoff, "Social Adjustment," p.291.
- 49 Schoenfeld and Schmitz, p.92.
- 50 Thomas, Setting the Stage, p.90.
- 51 George I. Thomas, Economy and Increased Educational Opportunity Through Extended School Year Programs (Albany: The University of the State of New York/The State Education Department, 1965), p.15.
- 52 Thomas, Setting the Stage, p.97.
- 53 Thomas, Setting the Stage, p.107.
- 54 Thomas, Setting the Stage, p.107.
- 55 Thomas, Economy and Increased Educational Opportunity, p.5.
- 56 Thomas, Economy and Increased Educational Opportunity, p.16.
- 57 Brinkerhoff, "Social Adjustment," p.293.
- 58 Brinkerhoff, "Social Adjustment," p.294.

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