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ABSTRACT

This document contains statements by experts in the field of year-round schools and excerpts from publications dealing with various plans for year-round schools. The statements and publications discuss (1) the Valley View 45-15 continuous school year plan, (2) the Jefferson County, Kentucky, elective quarter plan, (3) various four quarter school plans, (4) the three plus system, (5) the Dade County Florida "quinmester" program, and (6) other extended school year programs. (JF)

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YEAR-ROUND SCHOOLS

ED 069043

HEARING
BEFORE THE
GENERAL SUBCOMMITTEE ON EDUCATION
OF THE
COMMITTEE ON EDUCATION AND LABOR
HOUSE OF REPRESENTATIVES
NINETY-SECOND CONGRESS
SECOND SESSION
ON
THE VALUE OF YEAR-ROUND SCHOOLS

HEARING HELD IN WASHINGTON, D.C.
APRIL 24, 1972

Printed for the use of the Committee on Education and Labor
CARL D. PERKINS, *Chairman*

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(1)

YEAR-ROUND SCHOOLS

MONDAY, APRIL 24, 1972

HOUSE OF REPRESENTATIVES,
GENERAL SUBCOMMITTEE ON EDUCATION
OF THE COMMITTEE ON EDUCATION AND LABOR,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2257, Rayburn House Office Building, Hon. Roman C. Pucinski (chairman of the subcommittee) presiding.

Present: Representatives Pucinski and Mazzoli.
Staff members present: John F. Jennings, counsel; Alexandra Kisla, clerk; and Cindy Banzer, minority legislation assistant.

Mr. PUCINSKI. The subcommittee will come to order. Perhaps our witnesses would like to take their seats at the witness table as a panel.

Today the General Subcommittee on Education is conducting a hearing on the "year-round school concept." The purpose of our hearing is to analyze the value of this idea from the experiences of the school districts which have sent witnesses to appear before us today.

The year-round concept has been advocated as one way to help avert the financial crisis which is developing in our elementary and secondary schools. We are here today, however, not only to analyze the fiscal implications of this idea, but also to examine the possibilities this idea affords us to rescue our schools from the rigidity of a 9-month, 5-day a week, 9 o'clock to 3 o'clock pattern.

Congressman John Erlenborn has been working diligently for some time now to have our subcommittee review the year-round concept. Congressman Erlenborn was to be our lead-off witness this morning but, unfortunately, he had to leave town unexpectedly on urgent business.

I would like, however, to insert at this point in the record the statement Mr. Erlenborn had prepared to deliver this morning.
(The statement referred to follows:)

PREFACE TO STATEMENT OF REPRESENTATIVE JOHN N. ERLENBORN

Mr. Chairman, I want to apologize for my absence from today's meeting. I am truly sorry that events have conspired to keep me away.

JOHN N. ERLENBORN,
M.C.

STATEMENT OF HON. JOHN N. ERLENBORN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Chairman, I want, first, to thank you for calling these hearings to hear testimony from school administrators who know from experience the good and the bad of year-round schools. I believe the Congress, other educators and all of the American people can learn much from them.

My attitude toward year-round schools is somewhat equivocal. I am sure of this much: That I am not *opposed* to keeping the schools open around the calendar. On the other hand, it seems likely that, in some communities, the people may prefer the two-semester term which has prevailed since the turn of the century.

I did not urge these hearings in order to put forward any pet theory of mine. Rather, I hope that people who have tried the various year-round plans will tell us what are the strengths and weaknesses of the plans they have tried, will estimate for us whether their plan could be strengthened with slight modifications, or, perhaps, will tell us why they think it best to return to the September-to-June arrangement.

I must confess that there are limits to my objectivity.

This is so because one of the witnesses today will be James Gove, Assistant Superintendent of the Valley View School District. This is in the 14th Congressional District, which I represent; and I have followed the progress of his 45-15 plan, which has been tested now for two years in Valley View. I believe the people of the district are, with very few exceptions, pleased.

I believe Mr. Gove is to be complimented for his ingenuity in finding an answer to the problem which has faced Valley View.

Valley View's problem has been money: The district has not had enough money or enough bonding power to build the number of class rooms necessary to accommodate a rising number of pupils. It seems to me appropriate that, at a time when many more districts are meeting citizen resistance to bonds for more construction, we hear from people who may have solutions or, more likely, partial solutions.

I hope the Education and Labor Committee will make these experiences available in report or committee print form, so that school boards in all parts of the United States will have available in one place a variety of facts and opinions about year-round schools.

Do parents like it? Or don't they? How about the pupils? How about the teachers? We assume there are savings in using school buildings throughout the year; but are there offsetting expenses? Or, alternatively, are there other savings which make the year-round programs even more attractive? These are the questions I hope will be addressed by our witnesses today.

I see no good purpose to be served by trying to find one formula to apply to all schools. If all schools want one system, fine. On the other hand, if a diversity suits the schools, that is well, also, and we should not quarrel with it.

I do not envision this hearing as leading to any legislation. I don't believe Congress ought to be in the business of telling a state educational system or a local school board how many days a year they should keep the school doors open.

These are decisions that must be made at the state and local levels. As far as I am concerned, our purpose is that of providing the facts and opinions on which they can debate.

Our witnesses today and others who will be sending statements to us can supply these facts and opinions; and again, Mr. Chairman, I thank you for your willingness to undertake this service.

Mr. PUCCINSKI. We have as our witnesses this morning administrators from four school districts which are in the process or are about to try new patterns of schooling.

Two of our witnesses will describe how their school systems have been operating with a year-round system for some time. One administrator will describe how his system is about to launch its effort with year-round schools this fall.

Our last witness will describe how his school district has cut down the school week from 5 to 4 days with the first day being entirely free for students and being available to teachers for inservice training.

The subcommittee has also sent letters to the 20 or so other school systems throughout the country which are experimenting or about to experiment with the year-round school concept. We have asked these school systems to submit papers to us describing their experiences. At this point in the record I will insert a copy of the letter which Congressman Erlenborn and I sent to the school superintendents.

SAMPLE COPY**APRIL 20, 1972.**

DEAR SIR: As the cost of educating our children continues to climb, school districts throughout the country are seeking ways to use their resources in a more efficient manner while providing the best possible education to their children. One of the more interesting ideas to receive attention recently is the year-round school concept.

On April 24th the General Subcommittee on Education, pursuant to our initiative, will hear testimony from administrators in four school districts which are in the process of implementing or which have already implemented year-round schools. Unfortunately time does not permit the Subcommittee to receive oral testimony from all of those who could make a contribution to our evaluation of this idea, but we would like to learn of your school district's experience with the year-round school concept.

Therefore, we would like to request that you submit to the Subcommittee a paper describing your experiences to date. In particular we would be interested in knowing the following: the reactions of parents when the change was announced; their reactions after the first year; whether the children adjusted readily to the change; whether the teachers were willing to accept the year-round schedule; cost benefits including any capital cost savings; any unanticipated problems; whether legislation was required to permit you to make the change; whether you tried a four-quarter system; whether the plan was compulsory, voluntary or a combination as regards your students and teachers; how long the plan was tried; and lastly, if it was abandoned, what might have made it succeed.

Since it is our intention to print the testimony presented to the Subcommittee on April 24th, together with any paper you may submit to us, as a committee document to be distributed to school administrators throughout the country for the purposes of stimulating discussion of the year-round concept, we would urge you to also include in your paper the advice you would offer to other school districts contemplating such an experiment. Naturally, our list of questions is not conclusive; and we would appreciate receiving any other information you may want to submit in your paper.

Your statement (of whatever length you determine to be necessary) should be submitted to the Subcommittee in Room B-345-C, Rayburn House Office Building by May 16th. If your statement is typed on two sides of one page we need two copies.

Thank you very much for your cooperation.
Sincerely,

JOHN N. ERLENBORN,
Member, Education and Labor Committee.
ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education.

It is our intention to publish today's hearing and the papers submitted to us by the 20 or so other school districts as a committee print for distribution throughout the country for the purpose of stimulating discussion on the year-round concept.

I am very pleased to welcome before the committee today Mr. James Gove, assistant superintendent of the Valley View School District No. 96 in Illinois and Mr. J. C. Cantrell, director, elective quarter plan, Jefferson County, Ky.

Also, I welcome Dr. E. Curtis Henson, assistant superintendent in Atlanta, Ga., and Mr. Albert Brewster, superintendent in Unity, Maine.

Before we proceed with the statements, gentlemen, I know our colleague, Mr. Mazzoli, would like to particularly introduce Mr. Cantrell. I yield to Mr. Mazzoli.

Mr. MAZZOLI. Thank you, Mr. Chairman. I would like to welcome all of the gentlemen to the panel but I have a special recognition for my colleague from Jefferson County, Mr. J. C. Cantrell.

Mr. Chairman. Mr. Cantrell, whom I have known for some years personally, was a principal of the largest county high school in our school system, Valley High School. Since then, he has taken over in 1970 the reins of the directorship of the elective quarter plan in our county.

I am very much pleased to have our good friend, Mr. Cantrell, here who is really not substituting but really standing in for Mr. Van Hoose, who is our superintendent.

Mr. Cantrell has more day-to-day background and knowledge about our plan than anyone in the county system. He is a man of great diplomacy with an educational background. I am sure the gentlemen of the panel would agree that you have to be a diplomat and have to have great tact and be quite skilled from the educational credential standpoint to make one of these things work.

I appreciated your yielding and would like to recognize all of the gentlemen before us this morning. I especially welcome Mr. Cantrell.

Mr. PETERSKI. Mr. Cantrell, we welcome you here. Gentlemen, all of your papers, of course, will be placed in the record in their entirety. Perhaps we can make great progress if we let you summarize your statements and then have questions with discussions on this whole new concept. Why don't we start with the assistant superintendent of Valley View School District No. 96.

**STATEMENT OF JAMES GOVE, ASSISTANT SUPERINTENDENT,
VALLEY VIEW SCHOOL DISTRICT NO. 96, ILL.**

Mr. GOVE. Thank you, Mr. Chairman. On behalf of the residents of Valley View District I appreciate the opportunity to appear here today to offer testimony in regard to a year-round school program that Mr. Robert Beckwith, chairman of the education department, the Illinois State Chamber of Commerce, has called a new chapter in the history of American education, The Valley View 45-15 plan.

I believe the written testimony I provided to the committee is pretty much self-explanatory, although I would like to add some additional remarks that time did not permit to be included in this testimony.

I do believe I should give some general background information in regard to our school district. It was formed in 1953 by consolidating four one-room country schools with a student enrollment of 89 pupils.

To date, we have an enrollment of 7,800 pupils in grades K-8, meaning kindergarten to eighth. We will be forming a unit school district on July 1, 1972.

We have in Illinois many dual districts, meaning elementary districts K-8; high school districts, 9-12; and will be forming a unit district next year at the same time starting the high school on the 45-15 program with an estimated enrollment in excess of 10,000 students.

Our district grew from an initial enrollment of 89 to the present 7,800. The voters of the district have been most supportive of education, a record that we are quite proud of.

Since 1953 the voters of Valley View have approved 21 different times, increasing their taxes for educational purposes. Such a support brought our district in 1966 to the limit of our bonding power, in Illinois, we had been only able to grow up to 5 percent of our assessed evaluation.

Knowing that in 1970 by State law we would have to start a kindergarten program and that our normal growth of 500 to 600 additional students a year would bring us to the point of needing two 30-room schools in 1970, where were we to get the money for school buildings?

We could not bond, we were not in a position at that time to borrow money from the Illinois School Building Commission, so we had three alternatives to look at: having 60 or 80 in a classroom, which is ridiculous; having half-day sessions, which the community let the Board of Education know in no uncertain terms they did not want their boys or girls to go to school half-days; and third, to take a look at better utilizing our taxpayer's investment in the way of buildings, materials, textbooks and other resources.

This meant year-round schools. In August, 1968, the Board of Education of our district directed the administration to come up with a year-round school calendar. Four weeks later the 45-15 plan was born.

I don't know how many of you are familiar with our program. You will find in your white packet a calendar. This calendar is rather self explanatory. The calendar works simply.

We divided the children into four groups—A, B, C, and D. We said all children from the same family would be in the same group unless the parents request otherwise. By the way, we had one mother with four children state she wanted her children split up into four groups.

Otherwise, the community went along with the same children from the same family in the same group. In addition, we said we would preserve the neighborhood concept.

We have groups A, B, C, and D. We started on June 30, 1970 by starting group A to school. Fifteen class days later group B started and 15 class days later group C started. Thus, we had 100 percent of our classrooms being utilized.

After group A finished their first 45 days of education they left for vacation and we brought group D into the empty classrooms.

The calendar you have in front of you is for the 1971-72 school year. You can see on July 6 that group A started a new year. On July 27 group B started a new year. The day before that group C finished their first year. Group C then started again on August 17.

At any one time we have a fourth of the children out of school. Children still attend school for 180 days in our district. Our need was a third more classrooms without laying the first brick. The plan gave us that.

In addition, our schools are closed a week at Christmas, a week at Easter, and a week and a half in the summer. We were concerned about two main factors in developing the calendar—mass versus distributive learning and family vacations.

In studying various types of year-round schools we could not see, in our sector of Illinois, having a fourth of our children off in the winter. Thus, we tried to develop a calendar, based on 45-day grading periods.

Forty-five days is a customary grading period for us. When a child finishes 45 days, they leave for a 15-day class vacation, four times over, giving still 180 days of education; the family receiving a vacation in each season of the year, summer, winter, spring, and fall; plus, a week at Christmas, at Easter, and a week and a half in the summer.

To date, the 45-15 plan has brought about a \$7.5 million tax avoidance. I refer to this as a tax avoidance and not a savings. It is not money that we had in our general education fund to begin with but it is money that is saved in the community which prevented us from going to the people to ask for a third more buildings.

The 45-15 plan has not solved all of our problems. It gave us the initial two 30-room schools but we still need school buildings. We anticipate that by 1980 we will have 32,000 students in our district.

We have two incorporated areas, Romeoville and Bolingbrook. Bolingbrook did not exist 7 years ago. It is located approximately 15 miles north of Joliet and 30 miles southwest of Chicago. This community is growing by leaps and bounds.

We are still at the maximum of our bonding power. In the future if we can build buildings, for each three buildings we build of equivalent size we gain a fourth.

I would like to emphasize that we entered the 45-15 plan out of necessity. We did not start 45-15 in order to save a lot of money or in order to improve education but because of building needs.

I would like to recommend for your consideration that publication OE-72-9, No. 27 in a series of P.R.E.P. reports be considered for inclusion as a part of this record. It is published by the U.S. Department of Education and a copy is also included in your white packet.

It goes into great detail in regard to the gearing up cost factors of our 45-15 plan in addition to a budget summary as far as projecting what 45-15 might cost. I would like to caution you, though, not to accept as gospel the cost projections due to the fact it was a projection report.

We have now operated almost 2 years. Our State Office of Education, Springfield, Ill., is presently conducting a comprehensive fiscal analysis of our first year of operation. I do not have at this time this data available to present to you.

O.S.P.I. did state, although, that their findings to date are running very close to what the P.R.E.P. document contains as far as per pupil expenditure before and after 45-15. Our evaluation, to date, we feel, has been very comprehensive.

Through the auspices of our regional Office of Education, region V in Chicago, they have been most supportive in giving us assistance in initially evaluating our 45-15 program in the way of a \$10,000 funding grant to conduct a feasibility study. Presently, they are funding another feasibility study for 45-15 at the secondary level.

I would hope, as a sidelight, more responsibility could be given to the regional U.S. office, due to the fact that we have found them to be most cooperative and most supportive at our local level. They are very close at hand to work with our various other educational matters.

Our community today is more supportive of 45-15 than we were at the time we started. Our staff is more supportive of 45-15 today than they were in the past. In regard to our students, those who did not like school before 45-15 do not like school today. Those who liked school before 45-15 like 45-15 today.

I must state that we had many assets going for us in regard to our district. We personally felt air conditioning would be a must. Today, we have all of the classrooms air conditioned.

On June 30, 1970, when we started year-round schools, all but 24 of the rooms were air conditioned. It is something our community has accepted all along in new construction. We included in new construction air conditioning from the start, not for 45-15 but for the days during the spring and also possibly the fall when the days became very hot.

Year-round school is something that brings a large impact on a community. When sputnik went off in 1956 or 1958, somewhere in there, we had the National Defense Education Act that brought about a lot of programs in the way of foreign language, math, science, and so forth. These educational changes we were able to hold to the confines of our ivory tower.

The Elementary and Secondary Education Act of 1965 brought about new programs at the Federal level, basically all of which we could contain within our ivory tower of learning.

Year-round school changes this pattern to the point that no longer can we hide a year-round school program within the confines of a school building. It affects every sector of the community.

You change vacation patterns for parents. You change the patterns of police surveillance in the community. No longer do you have 100 percent of the students and potential shoplifters out on the streets in the summer. You disperse them throughout the year.

You also affect recreation patterns. More important is the possibility in certain areas of our country that receive their primary resources from recreation—you must work very closely with these agencies. If you don't they will bring to your attention the fact they do exist.

We used to be only an educational institution. Now we recognize there is a library board and park district and a village government, and since we started 45-15 it has brought us more closely in working together.

In working out various problems what do you do about Bible School? Do you develop a 15-45 Bible School program that we have going in the district? Do you work with the recreation board to develop a 15-45 continuous recreation program and work with the police department in letting them know what group of students and what neighborhoods are out of school at certain times so they don't ask Johnny-on-the-street why he is not in school?

It does bring to a school system a large responsibility as far as assisting in coordinating various types of programs.

Valley View district has found itself, since we started the program, somewhat in the educational limelight.

We have had over 1,800 visitors come to our district to see year-round school in operation. It is interesting to note, that from April 1971 to March 1972, 178 visitors came from the State of Illinois, 326 from the Midwestern States, 36 from the Southern States, 37 from the Eastern States and 55 from the Western States. This is for approximately a 12-month period.

Education in general has many problems and we are surprised that these people come to Valley View for the answers. We are not in a position to give the answers.

We are in a position to present, as I am presenting here, a Valley View story. I do feel, though, when I get to my recommendations there is one recommendation I would like to include under "Recom-

mendations to the U.S. Office of Education" which I will spell out verbally.

To date, in Illinois year-round school is gaining much support. I feel very fortunate in the fact that our Illinois State General Assembly has included enabling legislation for year-round school programs to exist in the State of Illinois.

I personally am rather sorry that the State of New York has not seen fit to pass enabling legislation for various types of programs.

There have been policies adopted by the Illinois Agricultural Association in 1972 that under No. 6 they recommend that programs to assist and encourage local school districts to study possible use of a 12 month school year or for other ways to better utilize educational sources be investigated.

The U.S. Chamber of Commerce Educational Committee approved the following statement on February 5, 1971. The Education Committee in furtherance of policy recommends that businessmen and Chambers of Commerce work with the school boards and State educational agencies interested in developing plans for year-round schools in cooperation with representative citizen groups and that Chambers of Commerce and the business community lend influence and encouragement and support to such efforts to provide better educational opportunities for children and much needed economies in this time of grave financial crisis and further that the staff be directed to develop the materials for implementation of such a policy.

Insofar as the success of the Valley View 45-15 program is concerned, the credit must be given to the almost unanimous support the Valley View community has given to it.

Since we started 45-15 the voters, once again, have gone back to the polls and approved by a margin of 2 to 1 an \$8.2 million bond issue to build a new high school and remodel the old high school and a 53-cent educational tax rate increase for the education fund, which is, to our knowledge, the largest educational rate ever approved by the voters in the State of Illinois.

The success of our program must be shown or, I should say, the credit must be given, to the Valley View community. Although, when we were gearing up for year-round school, we had what I consider a phenomenal type of cooperative venture assisting us to be the success in our local district that we are today. A cooperative effort that possibly is unheard of in the 1970's.

These cooperative groups included the following. I must give credit to them. They are Will County Educational Service Region; State Office of Education; Office of the Governor; Illinois State Legislature; Illinois State Chamber of Commerce; the Department of Health, Education, and Welfare, Regional Office, Office No. 5 in Chicago, the Department of Health, Education and Welfare in Washington, D.C.; and the Office of Congressman John Erlenborn.

I would like to recommend for this committee as you consider legislation in the future, that the U.S. Office of Education encourage experimentation in year-round education, rigorously examine all year-round educational models which seem to be widely acceptable in terms of well-defined established criteria, to foster adoption of these plans or models which have demonstrated the value and acceptability so that nationwide patterns may emerge that are compatible with each other.

In addition, I would like to add that due to the fact that so many various districts in the country have come to Valley View to ask our help in implementing a year-round school program, which we are not geared to do, to include that; the U.S. Office of Education consider establishing year-round school training centers to assist districts in the United States wanting to implement a form of year-round school, to assist in the training for community relations activities and the scheduling of buses, teachers, students, and classrooms.

Valley View is pleased to present its story today but in no way do we profess to say that we have an answer for all the ills in education.

For the many districts who have come to us wanting to know if 45-15 will solve their problems I remind them of what Mark Twain once said: In order to get rid of submarines, boil the ocean, but how you boil the ocean is your problem. Thank you.

Mr. PUCINSKI. Thank you, very much, Mr. Gove.
(The statement referred to follows:)

STATEMENT OF JAMES R. GOVE, ASSISTANT SUPERINTENDENT, VALLEY VIEW PUBLIC SCHOOLS, ROMEOVILLE, ILL.

Mr. Chairman, members of the Education Committee assembled, the term "Year-Round School" has appeared in educational publications for the last 100 years. Just what exactly is "Year-Round School"? Before the turn of the century school systems in Chicago, New York, and other large metropolitan areas operated their schools in excess of 40 weeks a year. At the same time in the rural sectors of our country many one-room facilities were operating seven months a year. Somewhere along this time spectrum these two extremes merged to form what is more commonly called the traditional school year or the nine-month school term.

Various attempts were made during the 1930's to re-structure the school calendar. Today, school districts who operated on either a voluntary or on a compulsory year-round school program in the 30's are now operating a traditional nine month program with educational opportunities being afforded to students for summer enrichment or make-up work.

Research has led us to believe that the two main reasons why compulsory year-round school programs failed in the past were administrative inability to handle the complicated scheduling problems and public non-support for calendar revision.

Today, April 24, 1972, the computer age is here. The scheduling procedures which out of necessity were tried by hand in the 1930's have now been automated, and rapid accurate facts are readily available.

The taxpayers are crying for accountability in education. Along with this, they are also questioning what George Jensen, Chairman of the National School Calendar Study Committee refers to as "The Fantastic Coffee Break" or The Three-Month Summer Vacation. This does not mean to say that parents and other taxpayers are ready to endorse year-round school programs without being actively involved in the planning and development of such programs.

The success of the Valley View 45-15 Continuous School Year Plan must be credited to a harmony which existed during the developmental stages of the program. This harmony was the cooperation of various types of parent, business, and political groups working together to assist a school district that in 1953 sprung out of cornfields in the northern sector of Illinois. These groups are as follows:

Our Will County Educational Service Region Office; our State Office of Education; our Office of the Governor; our Illinois State Legislature; our Illinois State Chamber of Commerce; the Department of Health, Education, and Welfare, Regional Educational Office V, Chicago; the Department of Health, Education, and Welfare, Office of Education, Washington, D.C.; and the Office of Congressman John Erlenborn.

Today's on-going success of the Valley View 45-15 Continuous School Year Plan, though, must be credited to the acceptance that the Valley View Community has given to the program during the past twenty-two months of its operation.

But once again, what is a year-round school program? Is it a voluntary four-quarter plan that you will find in Atlanta, Georgia? Is it a voluntary-compulsory program that you will find in Hayward, California? Is it a voluntary summer school plus a mandatory nine-month program as you will find in New York City?

Or is it the compulsory Valley View 45-15 Plan that you will find in Romeoville and Bolingbrook, Illinois? The answer to these questions is "yes". These are all year-round school programs.

I would like to share with you now, approximately four years of experiences pertaining to the conception, the pre-natal care, and the birth and the rearing of what Mr. Robert Beckwith, Chairman of the Education Department of the Illinois State Chamber of Commerce has called "a new chapter in the history of American Education, the Valley View 45-15 Plan".

What are the reasons behind the hundreds of school districts currently studying, operating, or getting ready to implement a year-round school program in the United States?

There are various reasons. (1) To improve learning by distributing learning activities over a 12-month school period. (2) To utilize the district's more up-to-date facilities more days of the year and to close down up to one-third of their outdated facilities. (3) To bring about a more gradual and painless form of school integration. (4) To acquire the equivalent of up to one-third more educational facilities without laying the first brick.

VALLEY VIEW DISTRICT

Why did Valley View develop the 45-15 Plan? The taxpayers in our district had approved since 1963, twenty-one different educational issues for the increase of educational taxes. This demonstration of community support for public education resulted in the school district reaching the legal limit of its bonding power for school buildings in 1966.

It was almost inevitable that Valley View Schools of Will County, Illinois, would be the site of a major breakthrough in year-round education. In this semi-urban district are composed most of the problems that have beset soaring suburban districts since the end of World War II.

Valley View District lies on high, but gently rolling, rich farm land in the northwestern corner of Will County in Illinois. The forty square mile area of the district is bisected diagonally by Interstate Highway I-55, the main traffic artery between Chicago and St. Louis. Interstate 55 replaces the long crumbling U.S. 66, Santa Fe Trail made famous in John Steinbeck's *Grapes of Wrath*. Downtown Chicago lies thirty miles or 45 minutes to the northeast by I-55, known as Adlai Stevenson Expressway within the city.

The historic town of Joliet, named for Father Louis Joliet, the French Jesuit Explorer, lies ten miles to the south of the heart of the district. The district gets its name, Valley View, from the fact that it is located on high ground overlooking the Des Plaines River and the Chicago Sanitary and Ship Canal, main arteries in the Great Lakes to the Gulf Waterways, one of the world's busiest channels.

The Des Plaines River gives the Valley View District one of its few industries, the large limestone quarry of the General Dynamics Corporation, which furnished much of the crushed stone for the building of the Southwestern Railroad and for the highways of Illinois. The river also supplies Illinois soft coal and cooling water for the huge steam power generating plant of the Commonwealth Edison Company, which accounts for approximately 32% of the estimated assessed evaluation of the Valley View District. The district is laced with high tension lines carrying power to Chicago and northeastern Illinois.

Just outside of the district and contributing nothing to the building bond tax revenues are the large Argonne National Laboratories, operated by the University of Chicago for the U.S. Atomic Energy Commission; a large oil refinery, which receives its crude petroleum in barges along the Illinois-Mississippi Waterway; and the immense Stateville Penitentiary built as a model prison in the early 1920's to augment the famous Joliet Penitentiary.

Many of the present residents of the Valley View District work in these facilities lying outside of the district. Others work in large tractor and farm equipment plants in the southwestern suburbs of Chicago and in Joliet, which is also a center for producing steel and wire and fencing. About 10% of the workers living in the District are employed by the many interstate and regional trucking firms whose depots are located strategically south and west of the City of Chicago.

Until a year ago Valley View District contained no major shopping center. There were small neighborhood food marts in both Romeoville and Bolingbrook, the two incorporated communities within the district. Residents turned to Joliet

or to the Oak Brook Shopping Center approximately fifteen miles away for their principal shopping. Accordingly, there was almost no sales tax revenue to support municipal functions within the district.

Valley View School District was formed in the summer of 1953 by combining four one-room country schools into a single consolidated district. The total number of students registered in the first year was 89, which compares with more than 7,800 during this current school year. There were five teachers; two are still employed in the district. The 1971-72 Professional Staff of the district totals 288.

The agrarian school trustees who organized Valley View District gladly gave up their seats on the combined board to make possible the initiation of a general science program at the seventh and eighth grade level. They were concerned primarily with upgrading the educational offerings for the children—a concern that is still uppermost in the minds of the heterogeneous board.

Our district rested comfortably, insofar as expansion was concerned, until the fall of 1959. The official average daily attendance for the 1958-59 school year was 219. The district's assessed valuation had grown 55 million, thanks to the construction of Commonwealth Edison Power Plant, and there was a comfortable \$254,359.00 assessed property evaluation to support each student.

But, then came the avalanche. The elementary school population jumped 200% to 542 pupils as the first immigrants from Chicago began to fill up the Hampton Park Subdivision in Romeoville. This prefabricated housing project was developed by Alexander Construction Company, largest dealers for the nation's largest manufacturer of pre-assembled, panelized houses, National Homes Corporation of Lafayette, Indiana.

The Village of Romeoville, headquarters of our school district, had enjoyed a comfortable, rural population of 400 in the 1950 census. With the impact of Alexander's rows of pre-fabricated houses, the village was destined to go to 3,571 in the 1960 census; 6,358 in a special census taken in the mid-sixties; and to nearly 9,000 in the 1970 census.

Lagging only slightly behind was the new Village of Bolingbrook, at the intersection of I-55 with Illinois 53, which had jumped to a population of 5,357 in a special census in the mid-sixties and a population of nearly 8,000 in the 1970 census.

The financial plight of our district was compounded continually. Thanks to the arrival of the Commonwealth Edison Plant on the tax rolls, the assessed valuation per pupil had reached a peak of \$261,475.00 in 1957-58, the year before construction began to boom in the Village of Romeoville. By 1966-67 the assessed value per pupil had dropped to \$20,026.00 and by the fall of 1970 to \$17,553.00 per pupil, just one-fifteenth of the peak valuation in 1957-58.

Schools in Illinois are supported approximately two-thirds from taxes from real and personal property and one-third from state aid. The school population of our district is affected by another fact. Approximately two-thirds of the residents of the district are Roman Catholics—largely of Italian, Polish, and Irish descent—workers who have moved from their homes on the west, southwest, and south sides of Chicago when the Black population increased there. Only a fraction of the children from these families attend Catholic Parochial Schools—approximately 500.

Home building lagged during the two years preceding the 1970 school year in our district, due to the high cost of construction and the high interest rate. This had a temporary effect of sending the district approximately 10% fewer students than had been estimated in the school administration projections for the 1970-71 school year.

However, the end is nowhere near in sight. In the Village of Bolingbrook alone there are currently twenty-one various subdividerers constructing single family dwellings, quadro-plexes and various other types of condominiums ranging in price from \$10,000 to \$45,000. Conservative estimates given the district by the various subdividerers in Bolingbrook indicates that the total price of well over 3,200 new homes will be constructed during the calendar year of 1972. When the land the developers now own is fully developed, it is reasonable to expect that the Valley View School District will have to provide a kindergarten through twelfth grade education for approximately 32,000 children by the time the next decennial census (in 1980) comes around.

Although the majority of the voters and taxpayers in our district are blue collar workers (truckers and factory employees), they have historically supported the district to the greatest possible degree. They have voted continual

increases in the educational tax rate and in the bond issues for new schools. Since implementing the 45-15 Plan, the voters have continued their support for the schools at referendum time. On August 15, 1970, they approved a higher building fund rate and a 2.6 million dollar bond issue. The legal authority for bringing about this vote was due to the fact that the Valley View District qualified for an interest-free loan from the Illinois School Building Commission.

Once again on August 28, 1971 the voters returned to the polls to vote in (by a margin of two to one) the 8.2 million dollar bond referenda for a new high school and for the remodeling of an old high school and for an additional 53¢ educational tax rate. The positive passage of the 53¢ educational tax rate proved to be the largest increase voted on in the history of the State of Illinois. The passage of the August 1970 and August 1971 bond referenda was with the understanding that the additional facilities would operate under the Valley View 45-15 Continuous School Year Plan.

In 1966 Valley View knew that in 1970, it would be faced with implementing some different form of educational pattern for the children of the district. There were three choices that the Board of Education could consider. (1) Pack the classroom to overcapacity which would call for sixty to seventy students per teaching station; this was ridiculous. (2) The customary escape that the public gives to overcrowding situations when buildings cannot be obtained would be half-day sessions. The Board of Education did not wish to sacrifice the present quality of their on-going educational program by going on half-day sessions. (3) The third alternative was to develop a program that would better utilize the taxpayer investment in school buildings, materials, and capital outlay equipment for more days of the year.

Subsequently, in August of 1968, the Board of Education of the Valley View District directed the school administration to begin procedures on updating the school calendar. The Board directed that an educationally sound and fiscally sound program be developed for Valley View Schools and implemented no later than the 1970-71 school year.

The crisis the Valley View District was facing for 1970 included a phenomenal growth within the boundaries of the Valley View District and a requirement of state statutes that elementary districts or other districts that provides elementary educational services be required to also offer a kindergarten program.

Research findings indicated that commencing with the 1970-71 school year, the Valley View Schools would need the equivalent of two thirty-room buildings. The Board of Education charge to the district administration called for obtaining these two thirty-room buildings by up-dating the school calendar. The Valley View 45-15 Continuous School Year Calendar was developed. In order to completely understand how the 45-15 Plan works, we must take a moment to look at the school calendar itself.

THE 45-15 PLAN

The calendar, while looking confusing at first, is surprisingly simple. The figures "45-15" form the heart of the plan. Every one of our youngsters go to school for 45 class days and then has a 15 class day vacation all year long but in rotating shifts.

On June 30, 1970, our entire school district, composed of about 7,000 pupils in five elementary schools and one junior high school, was divided into four groups. Three groups were in class while the fourth group was on vacation. Thus, about 5,250 pupils attend school without overtaxing the facilities and 1,750 stay home.

As I mentioned before, Valley View started the program on June 30, 1970. We started by sending group A to class. Fifteen class days later, group B started. After another 15 days, group C began. When the next 15 class day period ended (August 31), group A pupils went on vacation, and group D pupils took their place. After another 15 class days group B went home, and group A pupils started up again. And so it has gone throughout the year and into the current 1971-72 year.

Weekends, holidays, and the traditional Christmas and Easter vacations are enjoyed by all students at the same time. In addition, all pupils receive approximately one and one-half weeks off during the latter part of June and the first part of July, so that maintenance work can be done on the school and buses.

All children from the same family stay in the same group. The Valley View Scheduling Pattern also calls for neighborhoods to be preserved. Parents receive a 15 class day vacation in each season of the year—summer, winter, spring and

fall—a week at Christmas, a week at Easter, and a week and one-half in the summer. Children still attend school for 180 days per school year.

Instantly, upon implementation of the 45-15 Program, Valley View District increased its building capacity by one-third. This was equal to adding two thirty-room schools at an estimated cost of six million dollars which also includes debt retirement. This was accomplished without laying the first brick.

LEGISLATION

At its conception, the Valley View 45-15 Continuous School Year Plan faced two major problems: (1) The scheduling calendar was illegal in the State of Illinois. (2) School systems in Illinois received state aid through an average daily attendance formula.

You can readily see that the 45-15 Plan required that one-fourth of the children be out of school year-round. It would not be possible for Valley View to operate its public school system with a reduction of a one-fourth in state aid. Consequently, two legislative bills were introduced into the 76th General Assembly. The first bill, House Bill 529 would provide that a school district could operate under a year-round school design if the board of education resolved that the district operate under such a program and that the State Superintendent of Public Instruction granted his approval. House Bill 529 was passed by the 76th General Assembly but later was vetoed by the Governor. The Governor's reasoning behind this veto was due to the fact that an entire school district would be required to operate a year-round school program, rather than being able to choose one, two, three, or more pilot schools within the confines of the district.

Consequently, an additional bill, Senate Bill 1438, was introduced into the adjourned session of the 76th General Assembly. This bill was very similar to House Bill 529 with the exception that a school district or attendance centers within a school district could operate under an approved year-round school program. On June 29, 1970 one day before Valley View was to commence its illegal program, Governor Richard B. Ogilvie, came to Valley View District to sign into law Senate Bill 1438.

To correct the state aid problem, House Bill 1525 was introduced into the 76th General Assembly and signed into law by Governor Ogilvie on August 18, 1969. This bill provided that if any school would operate on an approved year-round school program, it would receive its appropriate share of state aid as if it were operating under a traditional school year program. The decision-making power in providing the state aid financing for an approved year-round school program was left with the State Superintendent of Public Instruction.

I feel it is well to point out that in the State of Illinois, the General Assembly has taken appropriate action so that school districts can operate under their chosen type of year-round school program. That flexibility for instituting various types of programs is legal within the State of Illinois. No school district is required to operate under a year-round school program, but the decision-making power is initially vested with the local educational agencies.

Today, we find many school systems throughout the United States not as fortunate as those within the State of Illinois. As an example, in the State of Texas, a particular form of year-round school program is now required by state statute. This requirement is to take effect in the very near future. In the State of New York, permissive year-round school legislation has constantly been defeated in their General Assembly.

Many districts wish to study and to implement a year-round school program. Consequently in the current session of the General Assembly in the State of Illinois, year-round school legislation will be introduced to provide funds for the study of year-round school programs by individual school districts. I feel that it is wise that a limitation of funds has been included within this legislation.

PROFESSIONAL STAFF

The professional staff of the Valley View Schools was given an opportunity to select various types of contractual offerings under the 45-15 Plan. By state statute, no teacher can be required to teach more than 185 days within a school term. But teachers may be afforded an opportunity to work more than 185 days. In order to determine a salary schedule for the 45-15 Program, a traditional 1969-70 salary schedule was divided by 184 days to arrive at a per diem pay rate. At this point, negotiations were begun to establish what a per diem pay rate

would be for the 1970-71 school year, the first year of 45-15 operation. For the first year of operation 61.9% of the Valley View staff chose to work more than a traditional 184 days. (The maximum number of days would be 244 days.) On the second year of operation, the minimum teacher contracts would call for 180 days or the teachers could choose to work up to 240 days.

I feel that it must be pointed out at this time, that for a matter of years, taxpayers have been bemoaning the fact that teachers should receive a living wage for a twelve month period, but at the same time, teachers should be working a full year. On the other hand, teachers while trying to negotiate a living wage for a twelve-month period, have countered with the fact that there is usually no opportunity for work for an entire twelve-month period. Who has been locking the teachers out? Under a year-round school program, teachers now have an opportunity to work for a twelve-month period with approximately one month of vacation.

What does this do to a teacher's salary schedule? As an example: Our present salary schedule for the 1971-72 school year calls for a beginning teacher with a Bachelor's Degree starting at \$7,750 for 180 days work, or if he so chooses, \$10,334.40 for a full year's work, 240 days. At the top of our salary schedule it would call for 180 day salary of \$14,632 as compared with a full year salary for 240 days work of \$19,536. I now ask the question; are we competing with business and industry?

EVALUATION

The Valley View 45-15 Continuous School Year Plan has undergone constant evaluation through the assistance of the State Department of Education, State of Illinois, and the U.S. Office of Education, Washington, D.C.

Community

In April of 1971, based on a re-interview of 10% of the families in the district (originally interviewed just prior to the enrollment of their children), the following conclusions seemed warranted. (1) A small percentage of families who were originally the most negative towards the school system and the 45-15 Plan are still negative. (2) All other families remain as positive or are more positive towards the 45-15 Plan than a year ago. (3) Only one specific complaint was lodged by several parents that seemed directly tied to the 45-15 Plan. Some parents of small children said that the 15 day vacation that occurred during the coldest part of the winter required mothers to keep their children inside more with consequent irritation to mothers. (4) In contrast, several specific advantages were cited such as spreading the vacation period throughout the year, the opportunity of visiting parks and museums at less crowded times than is customary in the summer, time for winter sports, and elimination of long periods of student boredom and irresponsible vacation behavior. (5) Most families said they made no changes in budget for food, clothing, baby-sitting, and spending money. A few families said less spending was required. However, those that said that the costs were higher did not cite the actual expense but seemed to be using it as another means to express negative feelings about the plan or the school system. (6) Families sometimes reported that they personally knew of a family that had moved out of the district because of the 45-15 Plan.

Professional staff

In April of 1970, two months before Valley View District commenced the 45-15 Program, the professional staff was given a long questionnaire in which they could react to various features of the 45-15 Plan. Most of the teachers were mildly or strongly in support of the program. Many of the small number who were opposed also said that they would not be returning.

Their opinions on many specific outcomes of the Plan were varied and were often conflicting, thus, many teachers thought the cost per child would increase for administration, maintenance, and instructional materials. This is contrary both to the opinion of administrators and the preliminary cost analysis. However, most teachers thought children would learn as much or more under the 45-15 Plan.

The feature that the teachers overwhelmingly like was the selection of contracts of various lengths. Most of those who wanted to work "full time" were given such contracts.

Re-survey results to date indicate that the Valley View faculty are more positive after a year and one half experience than they were before starting the Plan. However, they are also more discriminating among their specific reactions.

An opinionnaire survey conducted among the primary staff in December of 1970 indicated that overwhelmingly the staff felt that very little re-teaching was required after a 15 class day vacation.

Students

Thus far students attitude has remained unchanged since the 45-15 Program was implemented. Students who liked school before the 45-15 Plan like school today. Those students who did not like school before the 45-15 Plan do not like school today.

Costs

A preliminary analysis showed that Valley View District initially would save at least 2% on total educational cost per child and eventually save 4%. A peculiarity of the financial problems of the district (assessed valuation has decreased from \$240,000 per child to less than \$20,000) is that little will be saved now on new construction because the district can not spend more money even if the taxpayers want too, as the legal limit had been reached for indebtedness. Instead, without the 45-15 Plan, the district would have been on double shifts twenty-two months ago. However, if the district is to remain on the 45-15 Program after construction needs are met, then the savings could increase to 4% or so.

Aside from reduced debt retirement, savings can be made in better use of equipment, reduced administrative costs, and extended use of instructional materials. In the short run, salary costs could go up, if most teachers chose to work under a 240 day contract and these teachers are more experienced and thereby higher on the salary schedule. In the long run, especially if more schools move towards year-round operation, then costs might go down because teacher groups might make less stringent salary demands with the higher income possible with twelve working month contract.

Student achievement

The first rigorous post-test achievement testing of pupils in Valley View District has been completed, but at the present time, no in-depth study has been conducted. The pre-test results showed that no significant difference among the four attendance groups but showed important differences between some schools at certain grade levels. These differences were largely accounted for by differences in ability tests results and achievement levels when moving into the district. Achievement level is significantly lower for those students whose families recently moved into our district. Preliminary findings lead us to believe that at this point in time, there has been no significant change in students' achievements operating under the 45-15 Plan.

Once again subjective reports by most teachers are that pupils are doing better school work with four short vacations rather than one long summer vacation.

SCHOOL COMMUNITY RELATIONS

The Valley View District launched a community and public information program before actual implementation of the 45-15 Program. The administrators of our district began talking to the public intensively in October, 1968. The first group of students was scheduled to enter the 45-15 Program on June 30, 1970. I wish to impress at this time that at least as much lead time as is necessary should be considered in order to work out the technicalities of scheduling, school census, air-conditioning, curriculum modifications, and teacher negotiations. It is recognized that the size of a school district wishing to implement a program would also dictate the amount of lead time that would be needed.

In Valley View's case the program was set up on an entire school district basis in Kindergarten through Grade 8. The problems mentioned above were in addition to passing, in two sessions of the legislature, needed changes in the Illinois School Code. It is now expected that other districts—certainly in Illinois—would not require that much time in the future if lessons from Valley View are heeded.

The public must be taken into the confidence of the Board of Education, because it is neither practical nor moral to carry out extensive plans behind doors. In Illinois the element of illegality of closed meetings comes under the Searlano "Open Meetings" Act. Information is bound to leak out, and then it will tend to be distorted and to be misunderstood. For Valley View it was just plain common sense to keep the community informed constantly and completely and to insure full coverage of every decision in newspaper reports of Board of Education meetings.

Essentially, the Valley View information campaign was similar in many respects to campaigns conducted by other school boards to "sell the public" on tax rate increases or authorization to issue bonds to finance school construction.

The Valley View campaign was "different" in two important essentials: (1) There was no formal or continuing "citizens" advisory committee. The district's Board of Education and administration believed then, and still believes, that the imposition of such an additional "super board" on top of a complex, major change in operations would merely complicate the job of maintaining community confidence. (2) Instead, reliance was placed mainly on person to person contact by a small team, composed of the Superintendent of Schools and one or more assistants and officials or members of the Board of Education.

This does not mean that our school missed any opportunity to present our 45-15 Story to any group, of any size, at any time. Our district is one of those fortunate school districts in which the community is interested and sends representatives to attend school board meetings regularly. At every meeting, the President makes a point of asking members of the audience to make suggestions or to arrange meetings with groups of any type or size.

Our neighborhood meetings were literally "coffee klatches". Parents wishing to host a meeting would call the District Office. A team of administrators and board members would call on the afternoon or morning "hostess" carrying with them an electric coffee maker, disposable cups, and a selection of doughnuts or sweetrolls all paid for by the school district. At these meetings the questions were informal. The discussions would range over every aspect of our school system and its operations and virtually every facet of education. Here the "gripes" and "worries" of individual parents over their children would come out in the open, giving the school administration a valuable opportunity to get constant "feedback" on the conduct of the schools.

This technique has been followed by the district and the Board of Education for years, and has been a major contributing factor to the success in securing public endorsement for the referendums since 1953. A big help in these meetings was the four color calendar that you have in front of you. This calendar though was enlarged to form a 34' long accordion display that was also used in presentation at large meetings. With this chart, every parent could tell at a glance on what days the schools were to be closed, and on what days each 45 class day learning session would begin and end.

Four color charts was only one of the many tools that were employed to present the 45-15 Program graphically to the community. There were also sets of overhead transparencies, which presented the financial and housing plight of the school district. There was also an audio visual presentation, consisting of a series of slides and a tape recorded narration. This slide-tape presentation was used especially for formal meetings, such as service clubs and PTA's. It has to date turned out to be extremely useful to the hundreds of school administrators, board members, and parents who have visited Valley View Schools since 45-15 began.

The local community newspapers in Roueoville, Bolingbrook, Joliet, Lockport, Naperville, and Chicago have been of extreme value in keeping the parents of our district informed as to the plan as it proceeded.

An interesting side light on the public relations program in our use of "Dial-Into-Education". Each week an up-to-date report about the happenings in the school system is recorded on a two minute tape. Parents are reminded constantly through the newspapers, flyers, and the school's lunch schedule to Dial-Into-Education, 838-0699, for information about their schools and about the 45-15 Plan. Other school systems have also impressed with this facet of communication that they also have taken the steps to include this type of dissemination activity in their own community.

Unit district

Effective July 1, 1971, a new high school district, Valley View High School District #211, was formed. Up until July 1, 1971, our Valley View Elementary District was one of many smaller districts which fed into Lockport Township High School District #205. The voters of Valley View felt that in order to upgrade the quality of education their children had been receiving in the years past, it would be necessary to split away from High School District #205 and form a new district.

One of the first decisions that the new Board of Education made was to call for Valley View High School District #211 to commence the 45-15 Program in the summer of 1972.

In addition, the Boards of Education of the elementary district and of the high school district voted to bring about the formation of a unit school district encompassing grades K-12. On May 20, 1972, the Unit District election will be held; pending the approval of this unit district a new unit district is to be formed July 1, 1972. At that time all children in grades K-12 will attend school under the Valley View 45-15 Continuous School Year Plan.

RECOMMENDATIONS

I would recommend that each state: (1) Take appropriate action to provide enabling legislation and/or policy permitting flexibility of programming so that various patterns of year-round education may be explored at the local level. (2) Take appropriate action to provide state school aid on a pro-rated basis for extended school programs. (3) Encourage operational experimental or exploratory programs for year-round education through financial incentive or grants.

I recommend that at the local level, local school systems: (1) Consider ways, including year-round education, in which the educational program can be improved in terms of (a) providing a quality education with equality in the educational opportunity, (b) adapting to the community and family living patterns and, (c) attaining optimum economic efficiency. (2) Conduct on-going public relations programs including information about how a year-round education program would affect teachers, parents, students, and other groups, and provide the public with adequate information about any proposed plan before it is adopted as a mandatory change. (3) Carefully assess the adequacy of the financial resources and current school facilities, including a careful analysis of comparative budgets, before adopting a new schedule. (4) Select and assign staff which will be both effective in terms of the school program and fair and equitable in terms of the demands placed on the staff. (5) Carefully develop budgets that will adequately provide for initiating and operating the proposed program and which will assess adequacies of school facilities before adopting a new schedule. This includes payment to teachers on a pro-rated base for additional time worked. (6) Provide, in the initial planning, for the institutionalization of the program if it meets expectations. (Do not accept state, federal, or other grant monies to initiate such a program unless the intent is to adopt it as a regular school schedule, if it proves successful and acceptable.)

I recommend that the U.S. Office of Education: (1) Encourage experimentation in year-round education. (2) Rigorously examine all year-round education models which seem to be widely acceptable in terms of well defined, established criteria. (3) Foster the adoption of these plans or models which have demonstrated the value and acceptability so that nation-wide patterns may emerge that are compatible with each other.

CONCLUSION

I feel that it is well to recognize that the standard 180 day school year as it now prevails in most schools is *not universally satisfactory*; nor has any operating program for year-round schools yet proved to be universally acceptable. I also feel that it should be recognized that a plan which may be appropriate in one community situation, may not be acceptable to another situation, and that the extended programs which seem to have been most acceptable are those which proved flexibility or optimal attendance. We must recognize that every individual is unique, and if each is to learn what he needs to know at his own best rate, a school curriculum must be individualized. I feel that time schedules of individuals and families are continuing to become more diverse and that a student's time in the school must be adaptable to this changing situation. I must point out emphatically, that financial resources of any community, all states and the nation are limited, and these financial resources must be allocated on a priority basis. Education programs, including the school calendar, must be designed to obtain optimum economic efficiency.

[Current Report ISCC]

THE CHALLENGE AT ROMEOVILLE

One of the most exciting changes to occur on the Illinois education scene in many years makes its debut at Valley View District 96, Romeoville, next June.

Using the basic concept of operating school facilities on a year-round basis, district 96 will commence a student scheduling plan that offers success where

previous plans—tried off-and-on across the nation since 1904—have failed or been abandoned.

Called the 45-15 plan, it proposes to break the long nine-month continuous school year into four 45-school-day learning sessions, each followed by a 15-school-day pupil vacation. This scheduling will thus allow more frequent intervals whereby the slow learner can advance more appropriately. Instead of three long summer months of vacation, the pupil will have a chance to relax and make a fresh start in school by enjoying a 15-day vacation each spring, summer, fall and winter. In addition, all presently established holidays will be observed. Under this arrangement, parents can plan vacations for Florida in the winter, Vermont at maple syrup time, camping in the north woods during summer or hiking up the Smoky Mountains in the fall.

Vacation opportunity and shortened—but more frequent—learning sessions were not the prime motivation for Valley View's 45-15 approach. The plan was born of the necessity to acquire more classroom space in an overcrowded district that had reached the limit of its bonding power for the construction of new schools. Under the plan, only three-fourths of the student body will be in school at any one time while the other one-fourth is on vacation. By staggering entrance dates for one-fourth of the students every 15 days, the first group to enter will complete its 45 days of learning and go on vacation the day the fourth group enrolls. Fifteen days later, when the first group returns, the second group commences its vacation and so on throughout the year.

Classroom space is automatically increased by 33 per cent without additional construction. Rather than closing down schools three months during the summer, the plan provides continuous operation, except for two weeks of complete closing for major renovation and to provide recycling adjustments of the 45-15 plan to fit the coming year's calendar.

Through the use of computers, Valley View has arranged for families to have all their children in the same cycle as well as all children from the same general neighborhood. This arrangement reduces by 25 per cent the geographical area covered by school buses.

Fewer desks, textbooks, library books, audio-visual items, etc. will need to be purchased to serve an increased number of students.

Unheard of two years ago, the 45-15 plan is rapidly gaining regional, state, and nationwide attention. Among the many flexible possibilities for improving the quality of education is the opportunity for professionally trained teachers to practice their profession for 11½ months a year and teach one-third more students without overcrowding classrooms.

The ultimate success of this plan is dependent upon total community support and understanding. This means parents, churches, service clubs, civic leaders and, most important—business and industry.

For years, the business community has decried the inefficient use of school plant. No business could continue in operation by shutting down three months a year. Valley View has taken a businesslike approach to resolving a classroom space problem. It has accepted the challenge of change.

It's also a challenge for those businesses whose employees have children in the district. With vacation opportunities opening up at times other than the traditional three months, many of these employees may wish to adjust their vacation scheduling. The cooperation of business to conveniently facilitate some equitable arrangement will significantly provide evidence and reassurance to the employee and Valley View District that the business world is willing to join as a partner in this new venture.

Lloyd A. Glessel, 1969 chairman of the Chamber's education committee and president of Burgess Cellulose Company, Freeport, summed it all up this way: "*Business' responsibility to assist in the improvement of education extends much further than being a good taxpayer. I urge all Illinois businessmen to extend their hand of cooperation to those school districts which have taken courageous steps to utilize facilities to their maximum.*

"If we expect the schools to change for the better both in the equality of the education program and the efficient expenditure of public funds, we must be ready to make, wherever practical, corresponding changes in our business operation. Over the long run these changes may well benefit industry by allowing a better distribution of production schedules, assignment of manpower, and use of plant facilities."

Recognizing that the complex task of providing an adequate education for today's youth calls for a greater utilization of educational facilities as a means of increasing educational opportunity, the State Chamber encourages education

programs which lead toward maximum use of all educational facilities where such will justify a more efficient use of public revenues.
Valley View 45-15 is such a program.

**A BOARD MEMBER LOOKS AT THE VALLEY VIEW 45-15 CONTINUOUS SCHOOL
YEAR PLAN**

(By James D. Bingle, President, Valley View Board of Education)

Less than two months after the implementation of the Valley View 45-15 Continuous School Year Plan on June 30, 1970, residents of the school district had an excellent opportunity to express their collective displeasure with the changed system if they so desired. On August 15, only 4 days after the third of the four tracks of students had interrupted their normal summer vacations to go back to school, Valley View District 96 went to the public with a 3-part building referendum. Although the referendum was only peripherally related to 45-15, unhappiness with the 45-15 Plan would certainly have been shown by a negative vote, since this is traditionally the way the public expresses its feeling on any issue.

While the very favorable outcome of the referendum (all 3 issues carried by substantial margins) cannot be said to be a particular endorsement of the Valley View 45-15 Plan, it does show that the community was not necessarily immediately alienated by the Plan, which, in reality, has brought far-reaching changes to everyone's way of life. The residents are apparently at least adopting a wait-and-see attitude as to the merits of year-round schools.

Although 45-15 was designed for just one particular school district, there is no doubt that it may have applicability for other districts as well. As a school board member, I would offer a few words of advice to those who would consider it elsewhere:

(1) Allow plenty of time. At least two years should be allowed from the first consideration of the plan until its implementation. There are *many* details, each of which *must* be resolved before that first day of school under the new system.

(2) Let the community think it is their idea. Go to the public with the alternatives, which are usually a) costly building programs, if you have the bonding power, b) double sessions, c) 50 or more children in a classroom, or d) some form of year-round schools. You will be surprised how rapidly the community will agree that year-round schools may be the best solution.

(3) Don't let your school administration scare you off. In our district, we are blessed with an administration that is not afraid of change, when change is necessary. But our research has shown that it is often school administrators that have in the past dragged their feet over school calendar reform.

(4) Involve your teachers. Year-round school will be a big change in their lives and yet it promises to be of great financial benefit to them. Let teachers participate in the planning and scheduling; in fact, insist on it.

(5) Keep the public informed. Once you decide to adopt a year-round school system, don't stop communicating. Let everyone know as each step down the road is taken towards that first day of school. It is of vital importance to retain the confidence of the public.

Certainly, the transition to year-round schools in District 96 was not perfect, and yet it was smoother than most of us thought possible. We feel that the transition was accomplished so satisfactorily because it was a team effort—Board, Administration, Teachers, and Public—all working together for the good of the children. That is the only way it can succeed.

**A SCHOOL BOARD PRESIDENT'S THOUGHTS ON THE VALLEY VIEW 45-15 CONTINUOUS
SCHOOL YEAR PLAN**

(By A. Vito Martinez, President, Valley View High School District No. 211)

In July of 1972 Romeoville High School will become one of the first high schools in the nation to go on a year round schedule using the Valley View 45-15 Continuous School Year Plan.

Also at that time Valley View Elementary School District #96 and Valley View High School District #211 will have combined to form a Unit School District. Formation of a Unit District will provide for curriculum continuity from grades K thru 12, a savings in taxpayer money, and the opportunity to better utilize other resources in the community.

The 45-15 Plan was conceived by the imaginative administration of Valley View Elementary School District #96 as a solution to increased enrollment and exhausted bonding power. The problem at the high school was increased enrollment plus *failure to pass referenda* that would have enabled it to use its bonding power. This problem was solved by dividing Lockport Township High School District #205. On July 1, 1971, Valley View High School District #211, which has boundaries 99% contiguous with Valley View Elementary School District #96, was officially created.

On August 28, 1971 the voters in Valley View High School District #211 passed BY A 2 TO 1 MARGIN the referenda necessary to air-condition and add space to Romeoville High School and also to build Bolingbrook High School. The entire building program will cost 8.2 million dollars. The voters also approved an increase of 53 cents in the Education Rate.

Implementation of the 45-15 Plan at Romeoville High School will help alleviate the overcrowded conditions until Bolingbrook High School is completed in 1973. Even with the completion of Bolingbrook High both schools will utilize the 45-15 Plan. Experiences on the elementary school level have proven beyond any doubt that it is just plain good sense to do so.

At the beginning the re-scheduled school year was viewed as primarily providing financial advantages; from experience the citizens have become aware of many favorable side effects.

- (a) 45-15 scheduling has stimulated student interest in school subjects.
- (b) New types of staff scheduling has inspired greater staff spirit and fostered innovations in teaching techniques.
- (c) The 45-15 Plan has enabled us to update and improve our curriculum.
- (d) Family vacation opportunities have been made more flexible. Every family has a vacation of 23-28 days in each season of the year.
- (e) Teachers and staff members can now work all year doing the thing they were trained to do.

When the idea of the 45-15 Plan was first presented to me, I must admit that I was very apprehensive of it. Because of my established ways it is easy for me to question and even to resist change. The questions and concerns I had were adequately answered; I decided to wait and see what impact this plan would have on my family.

I carefully observed my ten year old boy during his first 45 class day session. As expected, he didn't show any great love for school during the summer, but what surprised me was that he didn't resent it. As a sixth grader he was very enthusiastic about the fact that he had three teachers. To change teachers every 45 days was something he looked forward to. His good grades became better, and his enthusiasm for school after one year has improved 300%. In observing the attitudes of my boy and many of his friends, I soon became an advocate of the 45-15 Plan. Of course, other children may have the same teacher all year.

The other six members of the Valley View High School Board of Education and I campaigned for office with a firm commitment to the 45-15 Plan. Out of the fourteen candidates all seven of us were elected by a 3 to 1 majority. This showed that the Public (who knew exactly how the 45-15 Plan would affect them) had acquired a high degree of respect and appreciation for the Year Round Plan.

Implementing the 45-15 Plan into the high school system will present problems unique to a high school. Curriculum must get a fresh new look. Summer employment for high school students has always been an item of concern. We must work with employers who will employ four students from four different tracks for one job. This work arrangement holds great promise for a closer school-employer-community rapport.

The transition to year-round schooling in the high school will not be an easy task. The administration and faculty have thrown themselves behind the effort and have shown great enthusiasm for this fresh approach to education. John Q. Public has shown his support by supporting the referenda and the policies of the Board of Education. All are dedicated to the preparation of today's students to take their places in the AMERICA of tomorrow.

With all this going for us, success is but a matter of time.

THE VALLEY VIEW 45-15 CONTINUOUS SCHOOL YEAR PLAN

The Valley View 45-15 Continuous School Year Plan is a method of assigning pupils, buildings facilities, and staff members. By more efficient use of the physical

plant, by a more extensive use of the personnel, and by a more equal distribution of pupil class attendance throughout the year, the school district has realized a savings in building construction costs, a longer working year for some certified and non-certified employees (with corresponding increases in income), and quality education for the student body.

The Plan is educationally sound, financially desirable, and legally possible. This Plan was developed in the Valley View Public Schools and should not be confused with other scheduling systems.

(1) Saturdays and Sundays, all Illinois legal holidays, a Christmas vacation period, and Easter vacation period, and a short adjusting period around the Fourth of July are designated as school closing days. A five-year calendar has been prepared to insure that the pupil schedules are in logical segments. When classes are not in session, however, the buildings could be open for maintenance, athletic events, community activities and library service. All provisions of the Illinois "Monday Holiday Bill" are observed.

(2) All families have been placed in one of four groups (A, B, C, or D) according to the small neighborhood in which they live. Unless the parents request differently, all children in the same family are placed on the same attendance schedule, even though the children may be at different grade levels or at different buildings. The four groups always stay in the same order of rotation.

All children in grades K-8 have attended school according to the 45-15 scheduling pattern since the summer of 1970. All students in grades 9-12 will begin the 45-15 Plan in the summer of 1972.

(3) On June 24, 1970, the teachers and staff members for Group A began a four day Teacher Institute. On June 30, 1970, the pupils in Group A began classes. These pupils attended school for 45 class days then had a 15 class day vacation. Four cycles of attendance such as this gives the pupil 180 class days per school year and per calendar year.

(4) Group B staff members had a four day institute immediately prior to the beginning of classes for Group B. Group B pupils began classes on July 21, 1970, which was 15 class days after Group A began.

(5) Group C staff members had a four day institute after which Group C pupils began classes on August 12, 1970. At this time, three of the four groups of pupils were in school and one group was on vacation.

(6) After pupils in Group A finished 45 class days of schooling and began a 15 class day vacation, the pupils in Group D began classes utilizing the classrooms and (in some cases) the teachers that were used by the Group A pupils. Group A pupils returned to replace Group B pupils; Group B pupils replaced Group C pupils; Group C pupils replaced Group D pupils, etc.

(7) The families in the community were scheduled first. The teachers and classrooms were scheduled to match the pupils for grade level and department.

(8) Bus service, building administrators, library and resource center staff members, cafeteria workers, and custodial employees were scheduled as required.

Provision was made for special education pupils, pupils who transfer into the Valley View Public Schools, and pupils who may be retained or advanced. Kindergarten classes are provided on a partial day basis.

Provisions have been made for emergency school closing days and teacher institute days.

(9) This scheduling system was designed to provide Valley View pupils with quality education, full school days (except for kindergarten pupils), and 180 class days per year. The 45-15 schedule is not a device for increasing class days of instruction.

(10) So far the use of this plan has resulted in saving the construction costs of seventy six equipped classrooms. All new buildings and additions will also be scheduled under the 45-15 pattern.

STATEMENT OF J. C. CANTRELL, DIRECTOR, ELECTIVE QUARTER PLAN, JEFFERSON COUNTY PUBLIC SCHOOLS, LOUISVILLE, KY.

Mr. Cantrell, Mr. Chairman, Mr. Mazzoli, members of the General Subcommittee on Education, as Mr. Mazzoli stated I am J. C. Cantrell. I am director of the year-round school program—the elective quarter plan—Jefferson County, Ky.

I am substituting for the superintendent of Jefferson County Public Schools, Mr. Richard VanHoose, who was unable to accept the in-

vitation because of an important meeting of the Jefferson County Board of Education.

The Jefferson County School System feels honored to accept the invitation extended by Mr. Jennings and Chairman Pninski to appear before this committee.

I am going to depart just a little from the notes that I had prepared because, Mr. Chairman, with your permission, I have found if I use my notes for the many talks that I have made in the past year and a half that I talk approximately 45 or 50 minutes.

If you will excuse me, I am going to stick rather closely to my prepared notes so I can limit my time to approximately 10 or 15 minutes. I would like to give some additional background on the Jefferson County Public School System.

It serves the suburban area surrounding the city of Louisville. Pupil enrollment in our system has grown from 16,000 in 1950 to a present enrollment of 95,000. Next September our enrollment will reach 97,000. By 1973 or 1974 there is no doubt but that the enrollment will approach or exceed a figure of 100,000 pupils.

I need not dwell on the many problems encountered in housing the continuing waves of new faces each September. Yet, through all this Superintendent VanHoose has consistently kept his finger on the pulse of the community to determine the public's readiness to accept or not to accept the year-round school concept in some form. He became convinced in 1970 the time was at hand.

You are well aware that "free" public education has been haunted for a long time by the ghost of inadequate funding. Every professional educator is familiar with complaints that the school dollar ought to be spent more effectively.

Now that traditional sources of funds for schools are being challenged from New Jersey to California, it is more urgent than ever that school systems make wise use of their present resources.

Over the years in Jefferson County, Ky., we have asked ourselves what we could do to improve our program of education without making improvement totally dependent upon increased funding.

Each year for many years we have budgeted thousands of dollars for curriculum revision and new courses of study. Yet, over the years we have not been completely satisfied that the results justified our investment.

In order to improve curriculum at the high school level in particular and in response to repeated criticisms that school facilities were wasted 3 months each year, we made a thorough investigation of a restructured school calendar.

The waste of human resources during the summer months was of even greater concern than idle buildings, though an average enrollment increase of about 4,000 pupils each year for the past 20 years has demanded that we make the fullest possible use of our buildings.

In fact, over the years, double sessions somewhere in the system have almost been the rule rather than the exception. As Mr. Mazzoli pointed out, I left the principalship of a high school that was designed for 2,365 pupils.

We were on double sessions for 4 years in one stretch. During the peak enrollment of the 4 years we were housing 3,750 on double session

in that one building. In view of all this, an ad hoc citizens advisory committee on year-round school was appointed in 1968.

After serious study of a number of plans, the quarter plan was recommended by this committee as the most feasible approach. Our staff agreed that this type of reorganization was not only the most feasible but would provide the opportunity to write new courses and update others into 60-day units of instruction.

Curriculum revision on a large scale could make our courses, as the boys and girls have said, relevant, current, meaningful, and hopefully challenging. By unanimous vote in May of 1970, the Jefferson County Board of Education directed the staff to proceed with implementation of the elective quarter plan.

The following objectives were considered when this decision was made:

1. To offer greater educational opportunities for students and to reduce school failures through flexible scheduling, hopefully, and I have brought along a calendar that shows we have divided the year into four equal parts which means we will schedule and reschedule three to four times a year; curriculum improvement and enrichment; more comprehensive program of study, allowing more courses; freedom of course selection; and choice of vacation quarter;

2. To provide students with a better chance to stay on schedule if makeup work is needed;

3. To provide pupils a better opportunity to find a quarter's employment through selection of vacation quarter;

4. To open the door to year-round employment at least for some teachers;

5. To utilize present school facilities more fully; and

6. To reduce future building needs.

The elective quarter plan divides the conventional school year into three parts and adds a summer quarter. Each quarter contains 58, 59, or 60 days of instruction. A pupil who attends any three quarters fulfills the Kentucky requirement of a minimum of 175 days of instruction.

Most public school students now spent 12 years in school, a period of time equal to 24 quarters in grades 1 through 8 and then another 12 quarters in high school. Cost to the taxpayers, in our opinion, for a child's education is the same whether a student completes 36 quarters in 12 years or 11 years.

Under the elective quarter plan pupils will gain by having an updated curriculum with varied course offerings and a choice of vacation time. The taxpayer will gain because classroom space and seats will not be needed for those who vacation during one of the conventional quarters.

Students who accelerate will make space available earlier for others. These factors can reduce appreciably the need for classroom space. Students who vacation during a fall, winter or spring quarter will not have such stiff competition for employment if they wish to work for one quarter.

In order to get information, and I have it available, we polled our students on their choice of quarters for the school year beginning in September 1972. Over 88,000 or 99 percent responded to the questionnaire.

If you have been noticing figures, I said our enrollment at the present time is about 95,000. I am speaking here of 88,000 because it was unnecessary to survey our seniors.

Of the 88,000 2,198, or 2 percent, wish to attend class in the summer and vacation at some other time of year. When we added those who want to attend all four quarters, we came up with a figure of 6,167, or 7 percent, who want to attend the summer quarter of 1973.

This will reduce our classroom needs for the school year 1972-73 by about 25 rooms. We realize we cannot reduce our classroom needs by 25 immediately. This illustration is given only to let the public have some idea of the potential for savings in capital outlay.

Most pupils who complete 24 quarters will be ready to enter high school. Those retained will be entitled to additional quarters. In other words, we plan to keep an account of the quarters they attend and those people who are retained will be entitled to additional quarters just as they have always been, or until they are ready for the ninth grade.

Of course, the same will be applicable in the high school. We expect to reduce the number of pupils through the quarter plan who must repeat work. Very quickly, let me tell you how we award credit.

High school students will receive one point for each 60-day unit of work completed, earning three points in English, for example, for three quarters of work. Three points equal one Carnegie unit. High school course numbers and titles resemble college course designations, with 100 courses primarily for freshmen, 200 courses for sophomores, and so on.

Of course, boys and girls may cross number lines just as they do in college. Many courses are non-sequential, allowing for great flexibility in scheduling.

It is our conviction that the elective quarter plan will not cost any more in the long run, and that as the community takes full advantage of the opportunity for flexible vacation schedules we can realize considerable saving in construction costs.

The plan will require some initial outlay. We consider this an investment which will pay dividends many times over in future savings and in demonstrated advantages which other school systems can take advantage of if interested.

On the basis of current figures, the 4,000 students who want to attend a fourth quarter next year would cost the state about \$412,000. Cost to our board of education for these students would be about \$504,000.

The U.S. Office of Education has already manifested an interest in our project by way of granting us \$500,000 for curriculum revision over a 3-year period. We have not sought adjustments in Kentucky's minimum foundation law at this time but hope for experimental funding by the State that will not affect the allotment to other school districts.

If the elective quarter plan lives up to its promise, minimum foundation funds can be adjusted in 1974 to allow other State systems to adopt the schedule.

Without State aid for those attending the summer quarter of all four quarters a vital link in the elective quarter plan will be weakened.

Conventional summer school supported by tuition fees, our present approach to summer classes, will not serve the purpose.

We need a tuition-free summer quarter for students who vacation another quarter in the year, for those who need to make up work and for those who wish to accelerate.

The recent legislation in Kentucky authorizing experimental year-round education provides State aid for those who elect to attend the summer quarter and vacation during another but does not provide State aid for those pupils who elect to attend year-round.

In other words, the recent legislature in Kentucky was most gracious. It gave us almost the full loaf. It was highly cooperative, but it did not provide clear and distinct funding for those boys and girls who might wish to attend all four quarters.

I have a diagram that explains this in full. If the committee is interested, I will be glad to explain it. The success of our plan will reduce the number of students who now must repeat an entire year because of failure in one or more subjects.

In closing, may I say we realize free public education is indeed a costly business. Society's demands and expectations make it so. The elective quarter plan's potential justifies the comparatively small cost of initiating the program. We welcome the opportunity to share our findings with other school systems.

May I state that even though we are not on the plan at this time, we have had inquiries from 40 of the 50 States. We have had visitors from many States and we have even had inquiries from foreign countries.

I would say that if possible perhaps influence on State legislatures could be exerted to provide funds for those who wish to operate some type of a year-round program. Perhaps, if not at the State level, some national funding can be provided that would be of benefit to the large school systems.

I would like to throw this out in making my final plea for a year-round school program. I am sure we are all familiar with the quotation from Thoreau which states:

If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away.

I am hoping that somehow, somehow the Federal Government can be the drummer for year-round education and let each local school system beat the time that best meets its needs.

Thank you.

Mr. Mazzoli (presiding). Thank you, very much, Mr. Cantrell. You have some additional information you were referring to. Without objection the committee would like to make it a part of our record. If you give it to the reporter we will have it inserted with your statement.

(The information referred to follows:)

FALL QUARTER			WINTER QUARTER			SPRING QUARTER			SUMMER QUARTER		
PUPILS PRESENT - 59 Days			PUPILS PRESENT - 60 Days			PUPILS PRESENT - 58 Days			PUPILS PRESENT - 58 Days		
SEPTEMBER - 1972			DECEMBER - 1972			MARCH - 1973			JUNE - 1973		
M	Tu	W	Th	F		M	Tu	W	Th	F	
Sept.					November						
28*	29	30	31	1	28*	29	30	31	2*	3	4*
4*	5	6	7	8	4	5	6	7	8	9	10
11	12	13	14	15	11	12	13	14	15	16	17
18	19	20	21	22	18	19	20	21	22	23	24
25	26	27	28	29	25	26	27	28	29	30	31
OCTOBER - 1972					JANUARY - 1973						
M	Tu	W	Th	F	M	Tu	W	Th	F	M	Tu
1	2	3	4	5	1*	2	3	4	5	6	7
8	9	10	11	12	8	9	10	11	12	13	14
15	16	17	18	19	15	16	17	18	19	20	21
22	23	24	25	26	22	23	24	25	26	27	28
29	30	31			29	30	31				
NOVEMBER - 1972					FEBRUARY - 1973						
M	Tu	W	Th	F	M	Tu	W	Th	F	M	Tu
6	7	8	9	10	6	7	8	9	10	11	12
13	14	15	16	17	13	14	15	16	17	18	19
20	21	22	23	24	20	21	22	23	24	25	26
27					1* March	26	27	28	29	30	31

*Beginning of fall quarter
for 1973-'74 school year

- Days pupils will be in attendance
 Paid professional and In-service days or holidays

JEFFERSON COUNTY PUBLIC SCHOOLS
SUMMARY OF PUPIL SURVEY
FOR
FIRST YEAR OF EQP BEGINNING LATE AUGUST, 1972, ENDING LATE AUGUST, 1973

Total enrollment at time of survey - years 1-11	89,660	100%
Total number pupils returning usable computer cards	88,361	99% exact 98.6%

Electing SUMMER quarter, 1973		No. in SUMMER quarter attending ALL 4 QUARTERS		
6,167	7%	2,140	years 1-6	2+ 2
		1,829	years 7-12	2 1
		<u>3,969</u>		4 2

No. electing SUMMER quarter - will vacation another quarter			2,198
Vacation FALL quarter	546	.52	2,134 or 2%
Vacation WINTER quarter	1,245	1.02	64 **
Vacation SPRING quarter	343	.32	

** 64 pupils to be added to one of above 3 vacation periods.

Total attending conventional quarters, FALL, WINTER, SPRING	82,058	93%
Total attending any 3 quarters	84,192	95%

BREAKDOWN OF ABOVE BY ELEMENTARY AND HIGH SCHOOL TO SHOW SAVINGS IN CLASSROOMS

ELEMENTARY 1-6

1477 will attend summer quarter, vacation another quarter		
321 vacation fall	€ 30 per room	10 less rooms
916 vacation winter	€ 30 per room	30 less rooms
240 vacation spring	€ 30 per room	8 less rooms

1477

Average overall savings in rooms	16+
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HIGH SCHOOL 7-12

657 will attend summer quarter, vacation another quarter		
225 vacation fall	€ 25 per room	9 less rooms
329 vacation winter	€ 25 per room	13 less rooms
103 vacation spring	€ 25 per room	4 less rooms

657

Average overall savings in rooms	9+
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Average total savings, elementary and high school	25+
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JEFFERSON COUNTY PUBLIC SCHOOLS

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QUOTATIONS FROM ARTICLES ON YEAR-ROUND SCHOOLS

In the December, 1970 issue of *Compact Magazine*, Governor Harold LeVander of Minnesota, writing an editorial on the year-round school concept stated, "A recent Gallup Poll indicated that 42 percent of adults and 40 percent of students favored keeping the schools open year-round." He writes further on in the editorial, "...in most states the present state aid formula which reimburses districts only for 180 days of schooling, excluding the summer months, have severely limited real interest in the concept. If state funds were available for extended year programs, there is little doubt that the concept would receive greater attention."

Mr. Thomas F. Driscoll, Assistant Managing Editor, *Journal-Star*, Peoria, Illinois in a magazine article on Atlanta's Quarter Plan included the following quote by Curtis Hanson, Assistant Superintendent for Instruction in the Atlanta System. "The quarter system with its accompanying revised curriculum makes it possible to equalize the academic program of the school more nearly to the learning style of the pupil."

Earlier this year the Rochester, Pennsylvania School Board approved a request of the school administration to start procedures by which an optional 12 month school could be in operation by September, 1971.

The Christian Science Monitor on Thursday, August 19, 1971 reported at length on year-round schools. The article was entitled, "Variety, flexibility: the mark of year-round schools." The report had this to say of Jefferson County's plan, "...while in Kentucky it means four quarters of equal value with the student selecting any three of them for attendance."

The Second National Seminar on Year-Round Education, Harrisburg, Pennsylvania, made the following concluding statement:

It is recognized that the standard 180-day school year as it now prevails in most schools is not universally satisfactory; nor has any operating program for a year-round school yet proved to be universally acceptable.

It is recognized that a plan which may be appropriate in one community situation may not be acceptable in another situation, and that the extended programs which seem to have been most acceptable are those which provided flexibility or optional attendance.

It is recognized that every individual is unique and if each is to learn what he needs to know at his own best rate, the school curriculum must be individualized.

It is recognized that the time schedules of individuals and families are continuing to become more diverse and that a student's time in school must be adaptable to this changing situation.

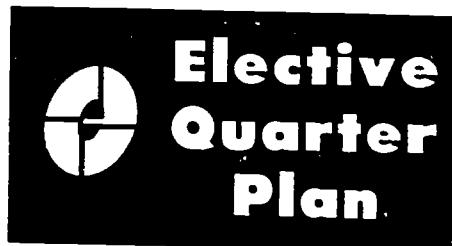
It is recognized that financial resources of any community, state and the nation are limited and must be allocated on a prior-calendar, and must be designed to obtain optimum efficiency. It is therefore recommended that each State:

1. Take appropriate action to provide enabling legislation and/or policy permitting flexibility of programming so that various patterns of year-round education may be explored at the local level.
2. Take appropriate action to provide state school aid on a prorated basis for extended school programs
3. Encourage experimental or exploratory programs for year-round education through financial incentive or grant.

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**JEFFERSON COUNTY
PUBLIC SCHOOLS**

Elective Quarter Plan



Introduction

Sometime during the calendar year of 1972 a new era in education will dawn for public school students of Jefferson County.

The Elective Quarter Plan will replace the traditional nine-month school structure. It will aid in the implementing of the Continuous Progress Program in the elementary school. In the secondary school the Elective Quarter Plan will replace the one-year one-unit rule, the concept of a totally sequential curriculum, and the practice of scheduling students into a master schedule with major schedule adjustments only once each school year.

This innovation will afford a flexibility within the curriculum allowing the school to develop a program to meet individual needs of students. Furthermore, students may choose from a much greater number of courses with little attention to sequence.

Background

HISTORY

The organization of the school term into quarters is not new. Since the mid 1800's, this has been tried by various large city school systems throughout the country. In rural areas length of the school year and corresponding length of vacation periods varied regionally in accordance with the dictates of an agrarian economy; children were needed seasonally for farm work. Gradually school terms were modified. In cities vacation periods were lengthened while rural areas extended the term until a balance of attendance days was achieved favoring, generally, a nine-month year as is the current mode.¹ Some 600 school systems have been or are currently experimenting with a year-round school in some form, but to our knowledge, none has tried or is presently operating within a four-quarter organizational pattern of grades one through twelve.

¹ National Education Association. *The Rescheduled School Year*. Washington, D. C.: The Association, 1968.

OVERVIEW

In the fall of 1968, Superintendent Richard VanHoose authorized Dr. J. O. Johnson, head of the Department of Research in Jefferson County, to direct a study to determine the feasibility of operating schools in Jefferson County year-round. From the outset the study was conceived to be a cooperative effort, involving school staff and citizens of the community. Toward that end three advisory committees were appointed. A 26-member citizens advisory committee was appointed to generate interest in and understanding of the year-round school concept in the community. This committee was made up of housewives, businessmen, clergymen, representatives of labor, and other community groups.

A brochure, "Signs of the Times," was distributed throughout the community. The brochure contained a questionnaire which offered anyone interested an opportunity to express his thinking regarding the year-round school idea.

Response from the questionnaires, favorable reports from the three committees, plus encouraging reports from the teaching staff and administrative staff prompted the superintendent to recommend the Elective Quarter Plan to the Jefferson County Board of Education in May, 1970. This plan was adopted unanimously.

Philosophy

The basic concept of the Elective Quarter Plan is not entirely new, nor especially complex. The main purpose of the plan is to improve educational opportunities while making the program more relevant to the needs of boys and girls. The program is not designed primarily to save space by scheduling students into a rigid master schedule which ignores individual needs of children, to avoid double sessions, or to hasten graduation day for a number of students, although any one or all of these could very well be eventual by-products of the Elective Quarter Plan. The main goal of this plan is to improve our educational program and to give freedom of choice in quarters of attendance and subjects elected.

One of the major challenges to the Elective Quarter Plan at present is attendance during the summer quarter. However, by offering a program during the summer commensurate with that of other quarters plus multiple and innovative courses, it is hoped that many pupils will decide to elect the summer quarter.

Structure

The school year will consist of four quarters, three of which will be of almost equal length. The summer quarter may be shorter in duration but equal in instructional time for any class. The fall quarter will begin in late August

or early September, the winter quarter immediately after the Thanksgiving Holidays, the spring quarter during the first week in March, and the summer quarter from the first week in June until the middle or last of August. All schools will be closed approximately two weeks or more during the latter part of August if the shortened summer quarter is permitted. Teachers will have two days to care for administrative records and details between each quarter and one holiday in each quarter.

The students will be expected to attend three of the four quarters to meet attendance requirements. However, students may elect to attend all four quarters. It is suggested that students who attend four or five quarters in succession should then vacation for a quarter or more.

In the secondary school it is recommended that students carry only four subjects during the summer quarter since class periods will be longer. However, with approval of the counselor and principal a student may carry five, or during the fall, winter or spring quarters carry six subjects. Despite the many options available to students, quality instruction and equal credit for courses will be given during each quarter.

Curriculum Reorganization

A monumental contribution to the educational program in Jefferson County derived from the implementation of the Elective Quarter Plan will be the new curriculum developed specifically for the program.

In the secondary school all subject areas will be reorganized into quarter courses independent of each other except where sequential courses are necessary. The number of courses required in each discipline will depend upon requirements of that discipline. Wherever possible, courses will be developed in such a way that sequential courses will be held to a minimum. It is hoped that 75 per cent or more of the total course offerings will be non-sequential.

The new course offerings will provide stimulation, relevance, and improved learning opportunities for all students. Courses will range from remedial to the very advanced. In the secondary school a student scheduled into an unsuitable program may be re-scheduled at the end of any quarter. In the elementary school a student may be rescheduled at the end of or at any time during the quarter. The viability of this program will allow scheduling tailored to the needs of individual students. Students with the aid of counselors can better evaluate their progress. The student will become more responsible because the plan will demand that he make wise course choices.

Method of Awarding Credit

Upon completion of any course at the end of any quarter, the student will be awarded one point. The only departure from this will be in physical education and health, which

can be adjusted by allowing 1.5 points for physical education and 1.5 points for health. At the end of any quarter the total points earned divided by 3 will equal the number of Carnegie Units earned. Likewise, the total number of points earned to date divided by 3 will equal the total number of Carnegie Units earned. Fifty-four points, if properly distributed in the various disciplines, will equal 18 units and entitle the student to graduate. Under this method of converting points to Carnegie Units, fractions will become involved only when the total number of points is not evenly divisible by 3. The progress of the student in the elementary school will be reported to parents each quarter through personal conferences, notes and report cards.

Identification of Courses

Curricula in all disciplines will be revised and developed into 58 or 60-day units in accordance with objectives of the Elective Quarter Plan. Courses will carry a number designation following the name of the discipline, plus a short title for the course. This method of numbering resembles that of college, which may be intriguing to students.

All courses on the ninth grade level will be numbered from 100 to 199, on the tenth grade level from 200 to 299, on the eleventh grade level from 300 to 399, and courses on the twelfth grade level from 400 to 499. The numbering system will be used mainly for purposes of course identification, and not to restrict course choices. In other words, seniors could take courses numbered below 400. Courses numbered between 500 and 600 will be on the college level. This will apply primarily to Advanced Placement courses. Advance Program courses can be identified by the number nine when it is used as the middle digit of a three digit number.

The curriculum in the elementary school will reflect the philosophy of our Continuous Progress Program.

Course Description

One Course Description Illustrated

MATHEMATICS 101 — Fundamental Mathematics

Prerequisite: None

This course includes study of the base ten numeration system; addition and subtraction of whole numbers; like fractions; decimals; denominate numbers; and simple multiplication and division of whole numbers and of proper fractions.

This course is designed for the student who has completed eighth grade mathematics but does not possess adequate understanding and skill to complete Mathematics 104 successfully.



The New Look

When the doors of the Jefferson County Public Schools swing wide in the summer or fall of 1972 a 'new look' will be very much in evidence. Choices or elections will be the name of the 'new look.' Pupils may elect for the first time to attend school or to vacation. The only requirement is that the pupil must attend three of the four quarters within each twelve-month period.

Read the following pages carefully. Many questions about the Elective Quarter Plan (EQP) are answered there. Share this information with friends and family.

Changes

Your school year will be divided into four quarters more or less equal in length.

The June, 1972 calendar to September, 1973 will be structured tentatively as follows:

Quarter	Begins	Ends
Summer	June 12, 1972	August 22, 1972
Fall	August 30, 1972	November 22, 1972
Winter	November 29, 1972	February 28, 1973
Spring	March 5, 1973	May 28, 1973
Summer	June 4, 1973	Aug. 9 or 21, 1973

You will be expected to attend three of the four quarters to make normal progress toward graduation. If you wish, you may attend all four quarters for either make-up or acceleration. Discuss this with your family.

If provisions are made by the 1972 Legislature to allow reimbursement to those school districts in Kentucky providing a quality educational program year-round or beyond the minimum requirement of 185 days, the summer quarter will be tuition free. However, pupils attending the tuition free summer quarter will be required to attend full time and carry a full load under present requirements.

Change Over

The change to the Elective Quarter Plan should be orderly. Registration procedures will change little unless it becomes necessary to adopt a policy similar to that used by colleges and universities requiring pupils to fit themselves into a pre-prepared master schedule. Registration will be held once or twice a year and students will register for two, three, or four quarters, depending on the frequency of regis-

tration. Perhaps the greatest noticeable change will be the large number of course offerings in some subject areas from which you may make your selections. No doubt, you will be surprised at the small number of courses which must be taken in a specified order.

What Courses

Will You Take?

Check again the points or Carnegie units required in each subject area for graduation. You will have great freedom of choice in selecting courses from each area to satisfy requirements. As in the past, your counselor, subject teachers, and homeroom teacher will help you in planning your program. Every level in the elementary school will be available each quarter.

For You

Plan your future. What do you want to do? What direction do you want to go with your high school studies? Do you plan to go to work when you finish high school or to attend college? Know what the colleges require for entrance, particularly the ones that interest you. Invite your parents to share in your planning. The increased scope of curriculum will allow you to explore subject areas not possible under the one year system.

Other areas not closely related to your academic work but relevant to your total school life should be given some attention. There are many extracurricular activities, so get involved. The Elective Quarter Plan will pose no problems for athletics; in fact, it will provide for an inter-scholastic athletic program during the summer quarter. No problems relating to eligibility are anticipated; however, athletes must be enrolled and attending school during the quarter a particular sport is being played. For example, a football player must attend the fall quarter, a basketball player the winter quarter, etc. A quarter of eligibility will not be charged against those participating in the summer athletic program unless open and flagrant abuse develops. The summer sports program will probably parallel the spring sports program.

Present K.H.S.A.A. rules provide for four years of eligibility in high school — the first four years. This means a player is entitled to four years or four seasons of football, basketball, or track, etc. The Elective Quarter Plan will not allow a player to juggle his quarters of attendance in such a way as to allow him five seasons of football, basketball, baseball, etc. while in high school.

There will be many activities in which you may participate during any quarter. Pick at least one. Remember, nothing can replace the opportunity you have while in high school for friendships, personal growth, and for doing something for your school.

An exciting new era is coming to the schools of Jefferson County. Make the most of your high school years of opportunity.

Answers

Eight high schools and twelve elementary schools in Jefferson County are air-conditioned. These buildings can easily care for 40 percent of our high school population and 15 per cent of our elementary school population during the summer quarter. If 25,000 to 30,000 students choose to attend the summer quarter, the Elective Quarter Plan will be off to a 'swinging' start.

Jefferson County will probably be the only school system in the state on the Elective Quarter Plan in 1972. This should have little if any effect on students transferring into or from Jefferson County Schools.

Once the Elective Quarter Plan is in full operation and attendance during all quarters is somewhat equal, then most courses will be offered every quarter. Of course, the total enrollment during any quarter and choices of pupils will determine courses offered.

The Elective Quarter Plan should not increase the number of textbooks required unless the pupil takes subjects in a greater number of areas than in the past. The EQP will not affect the present grading system.

Graduation requirements will not be altered except to make changes consistent with the new quarter plan. A committee has prepared a report on graduation under the EQP. This report will be reviewed and findings made available at an early date. Appropriate changes will be made as needs arise.

Requirements

For Grade Placement and Graduation

Grade Placement	Points	Carnegie Units
Sophomore	12	4
Junior	24	8
Senior	39	13

Graduation requirements: 54 points 18 Carnegie Units

	Points	Carnegie Units
(1) English	12	4
(2) Mathematics	6	2
(3) Science	6	2
(4) Social Studies	6	2
3 points or 1 unit of which shall be American History		
(5) Health 1.5	0.5	
Physical Education 1.5 3 0.5		1

PRESENT SCHOOL YEAR

SEPTEMBER TO EARLY IN JUNE - 9 $\frac{1}{2}$ MONTHS
9 $\frac{1}{2}$ MONTHS EQUIVALENT TO 3 QUARTERS

EOP SCHOOL YEAR

4 QTRS. - FALL - WINTER - SPRING - SUMMER
SEPTEMBER THRU AUGUST 4 QTRS.
JUNE THRU MAY 4 QTRS.

NEE)

YEAR	SUMMER	FALL	WINTER	SPRING	QUARTERS ATTENDED	ADDITIONAL FIN INCE
1		ATTEND	ATTEND	ATTEND	1,2,3	
2		ATTEND	ATTEND	ATTEND	4,5,6	
3		ATTEND	ATTEND	ATTEND	7,8,9	
4		ATTEND	ATTEND	ATTEND	10,11,12	
5	ATTEND	ATTEND	VAC.	ATTEND	13,14,15	
6	ATTEND	ATTEND	ATTEND	ATTEND	16,17,18,19	1 QTR. \$57.30
7	V.A.C.	VAC.	ATTEND	ATTEND	20,21	EVEN
8		ATTEND	ATTEND	ATTEND	22,23,24	
						<u>SECONDARY</u>
9		ATTEND	ATTEND	ATTEND	S01,S02,S03	
10	ATTEND	ATTEND	V.A.C.	ATTEND	S04,S05,S06	
11	ATTEND	ATTEND	ATTEND	ATTEND	S07,S08,S09,S10	1 QTR. \$57.30
12	W.C.	VAC.	ATTEND	ATTEND	S11,S12	EVEN
9	ATTEND	ATTEND	ATTEND	ATTEND	S01,S02,S03,S04	1 QTR. \$57.30
10	ATTEND	ATTEND	ATTEND	ATTEND	S05,S06,S07,S08	1 QTR. \$57.30
11	ATTEND	ATTEND	ATTEND	ATTEND	S09,S10,S11,S12	1 QTR. \$57.30
						NEEDED A YEAR EARLY (1 STUDENT) \$171.90

PRESENT SCHOOL YEAR - JUNIOR HIGH

GRADE 7	FAILED REPEAT	3 QTRS. 3 QTRS.	GRADE 7	FALL PASS	WINTER FAIL	SPRING PSS	SUMMER PSS
GRADE 7		6 QTRS.	VS				4 QTRS. - REDUCED COST BY 2 QTRS. (ON SCHEDULE)

GRADE	<u>HIGH SCHOOL</u>		<u>SPRING</u>	
	<u>FALL</u>	<u>WINTER</u>	<u>FALL</u>	<u>PASS</u>
9	PASS	PASS	FAIL	4 QTRS.
10	PASS	V.A.C.	PASS	3 QTRS.
11	V.A.C.	PASS	PASS	3 "
12	PASS	PASS	GRADUATED	<u>3</u> <u>13</u>

REFEATED ONE YEAR ON WHICH FEDERAL

CONCLUSION

1 STUDENT 4 YEARS \times 3 QUARTERS = 12 QUARTERS SAME COST

STATE MUST PROVIDE \$171.90 1 YEAR EARLIER - PROVIDES ADDITIONAL SPACE.

EQP CAN EASILY REDUCE NUMBER OF QUARTERS REQUIRED FOR THOSE FAILING - A SAVINGS TO THE TAXPAYER.

THOSE MAKING NORMAL PROGRESS WILL BE ENTITLED TO
EXTRA PAYMENT.

	6 YEARS	x 3 QTRS.	= 18 QTRS.
ELEMENTARY	2 "	x 3 "	= 6 "
JUNIOR HIGH	2 "	x 3 "	= 6 "
HIGH SCHOOL	4 "	x 3 "	= 12 "

$\frac{1}{12} \times 3 = \frac{3}{12}$ TOTAL

RETAINEES WILL BE ENTITLED TO ATTEND UNTIL 54 POINTS OR 18 CARNEGIE UNITS HAVE BEEN EARNED - NO CHANGE FROM PRESENT POLICY.

Mr. Mazzoli. The next panelist is Dr. E. Curtis Henson. You may proceed, Doctor.

**STATEMENT OF DR. E. CURTIS HENSON, ASSISTANT
SUPERINTENDENT, ATLANTA, GA.**

Mr. HENSON. Thank you, very much, Mr. Mazzoli and members of the panel. It is indeed a pleasure to be here today to represent the Atlanta school system and the Metropolitan Atlanta area.

I think many of the comments and reasons for going into a year-round school program have already been stated; therefore, I will make this as precise as I can.

Year-round education is not a new concept. It has been implemented in many and various locations in the United States since the mid 1800's. In Atlanta's search for a more effective and efficient educational program, the year-round school program was explored.

In December 1965, the eight school systems in Metropolitan Atlanta representing some 300,000 pupils began a rather intensive effort to develop a more dynamic and meaningful curriculum and organizational structure for the high schools in that area.

We felt that the schools needed to be more compatible with and responsive to society, the students and the world of knowledge. We were very concerned about the fact that 40 percent of our graduating seniors went on to college but 60 percent did not.

Of the 40 percent who started to college, only about 20 percent finished. However, our curriculum design was such as to train all people as though they were going to go to college and were going to complete it.

We were also following pretty much of the traditional pattern for college preparation. Employers were concerned about the prospective employees not being able to fulfill the needs of their respective institutions.

We were very much concerned about trying to develop a course of study which would meet the varying needs of all youngsters within our school districts.

The Atlanta school system spent more than 2 years in planning, studying and developing the program which was begun in all 26 high schools in September 1968.

Today, we are halfway in the 15th consecutive quarter of operation. During that time, the school system alone has supported the costs of the fourth quarter. The state has given support to the first three quarters, but ad valorem tax locally levied has to support the fourth quarter.

Structurally, the four quarter plan is a division of the school year into four parts of approximately equal length rather than two semesters and a summer session. We thought for this to be meaningful a conscientious effort must be made to provide a complete program during each quarter and to require only minimum prerequisites in our sequential offerings so that the pupil may choose to work or go on vacation at a time other than during the summer without undue penalty.

Merely to divide the textbook or the formal course offerings into quarter blocks instead of semester blocks would not make an adequate year-round program. Without extensive revision of the educational goals and an intensive analysis of the curriculum, four quarters of school will be no more of an exciting prospect than three quarters or two semesters.

Factors other than time, number of pupils and amount of days must be weighed. Each quarter course must be complete and autonomous. This meant that we had to revise the entire high school curriculum completely so that there was no particular course named or required for all students but that any student might be able to attain his own level of development in a given subject area.

The number of possible courses within a given discipline must be large enough, therefore, to assure each student ease in scheduling while assuring continuous growth opportunities for the pupil.

Only occasionally under such a plan would a pupil be required to pass a specific course since there are others which deal with similar concepts of equal quality which would serve as well. With a four-quarter plan, a system can offer greater flexibility both in scheduling and in curriculum offerings.

The possibilities appear unlimited and the benefits to pupils great. If a pupil chooses, he may take a greater number of courses in a 12-month period. Such a choice permits him these options: He may graduate at an earlier date or he may enrich his plan of studies; he may take remedial work if required or he may take an alternate course if he is unsuccessful in one; he may work in November on a job that he possibly could not have gotten the previous June; he may even work parttime and attend school part-time year-round.

Parenthetically, we have more than 6,000 youths who chose this option. They attend year-round with a reduced course load while working part-time. Originally, we had thought that a job would be divided among four youths, one staying out of school for a full quarter and then rotating. This has not been our experience.

They seem to get a job for one-half day and keep it for an entire year or longer and another youth taking it the other half-day. By taking four courses a day or a quarter, and going year-round, a pupil can complete his high school requirements with his peers, plus having had 3 or 4 years of work experience.

We think this is equally as important to many students as some of the academic subjects. To a greater extent the pupil may vary studies according to his interests and convenience as course offerings become less sequential in some subject areas. Having to enroll in courses in sequence is a myth which has been exploded.

The sequential offering of courses really has very little foundation because no one knows why pupils consistently have been required to take European history before American history, or having to complete English literature before being permitted to take American literature.

There is no reason for it other than tradition, that we have been able to find. Recognizing there might be some savings or delayed taxation when school buildings are needed and bonding capacities are reached, the Atlanta school system did not go into the year-round school program for the purpose of trying to save money.

The advantages sought from a 4-quarter plan were to provide wider options and educational opportunities for the youth involved. The idea that we can predetermine what a pupil needs to know before he is born seems to have long since ceased to have any validity, if it ever did.

Benefits to the students, then, should be the prime reason for converting to a quarter plan or a year-round education.

Thank you very much. I will be happy to try to answer any questions you may have.

Mr. PUCINSKI (presiding). Thank you, Dr. Henson.
(The prepared statement follows:)

ATLANTA PUBLIC SCHOOLS, ATLANTA, GEORGIA
THE FOUR QUARTER SCHOOL YEAR

(Prepared by E. Curtis Henson, Assistant Superintendent for Instruction)

**WIDENING CURRICULUM OPTIONS
 THROUGH A FOUR-QUARTER SCHOOL YEAR**

Year-round education is not a new concept. It has been implemented in various locations in the United States since the mid 1800's. In Atlanta's search for a more effective and efficient educational program, the year-round school program was explored.

In December of 1965, an intensive effort was started to develop a more dynamic and meaningful curriculum and organizational structure for the high schools in the Atlanta School System. We felt that the schools needed to be more compatible with and responsive to society, the students, and the world of knowledge. Two years were devoted to studying, planning, and developing the program before it was begun in all 26 high schools in September of 1968. Today, it is in its fifteenth consecutive quarter of operation, and during this time the fourth quarter has been funded almost entirely from local ad-valorem taxes.

The following description of Atlanta's program is usually accompanied by a slide presentation and attempts to tell (a) why Atlanta developed and implemented the year-round educational program, (b) how the program was developed, and (c) how well it has worked.

Atlanta is a vast, complex, changing city, and the changes of recent years have been dramatic. No longer is life dominated by an agrarian society. Animal power has been replaced by machinery and modern technology demands skills unheard of in previous years. People are more mobile; new and different jobs are being developed daily.

The challenge of education has always been to provide programs which meet the needs of the time. However, the changes in education have not always kept pace with the changes in society as a whole. Too often educational changes have occurred as a reaction to the times rather than a response. Therefore, the major question faced by the Atlanta Public Schools in this period of complex and constant change is

What type of educational programs should be provided?

In response to this question, we found we had to ask ourselves two other pertinent questions:

...What are Atlanta's needs?

...What is a possible and positive approach to meeting these needs?

WHAT ARE ATLANTA'S NEEDS?

There is no simple answer to this question, for Atlanta is far from a simple city. It is a big, bustling, growing city: it is 27th in population in the United States, 3rd in air travel, 9th in residential buildings, and 3rd in non farm employment.

The homes for its residents range from modern high rise apartments to old frame structures, from decaying parts of the inner city to townhouses, from low socio economic areas to large estates, from slums to subdivisions.

What are Atlanta's needs? How do the people who live in these various kinds of housing earn a living in 1972? They are dental technicians, lawyers, construction workers, service station operators, airline reservation clerks, architects, executives, clerks, judges, secretaries, inmates, and welfare recipients.

What are Atlanta's needs? Educational programs which will equip the young people of today to live in this complex, changing city. Educational programs which will provide for individual needs and individual aspirations.

Traditionally, the school program was pretty much of single design similar to a funnel. Regardless of the size, shape, desires, aptitudes, and goals of the pupils, courses were presented and required in sequential order—pupils passed or repeated before moving on. Pupils were grouped rigidly and scheduled by grades regardless of their learning abilities and potentials. This constraint did not seem appropriate; neither did it seem to be educationally meaningful.

HOW WAS THE PROBLEM APPROACHED?

We were faced with finding a pattern of organizational structure which would carry a flexible, changing curriculum and would allow for individual goals of pupils. We had tried the semester system. We also tried the "souped up" semester system. We examined the trimester. However, we were searching for an organizational structure which would permit more flexibility and individualization of instruction; one which would allow pupils to take one course, or two courses, or a combination of courses and activities; one which would permit a wider selection of options; and one which would expand the school year and permit the interchange of its various parts. Therefore, representatives from the eight school systems in the metropolitan Atlanta area, in conjunction with the State Department of Education, worked cooperatively to develop such a plan. We actually went into this program on a cooperative basis because of the size. These eight school systems enroll more than one-third the students in Georgia. Cooperation gave us psychological security and mutual support.

Area superintendents, state department representatives, department chairmen, and other key instructional leaders were added to the planning group. The decision was reached that the vehicle needed to carry the curriculum should have four interchangeable parts. The structure took shape; the four-quarter plan was the structure we would use as a vehicle for our new curriculum and program. Merely to "chop" the traditional courses into quarter blocks would not give the flexibility desired. So, each of the eight school systems, in varying degrees, independently and cooperatively organized and worked to develop an appropriate curriculum.

Atlanta's staff composed of teachers, coordinators, subject area department heads, librarians, consultants, administrators, and, on occasion, students examined the curriculum by

subject areas. Each subject area committee exchanged ideas with similar committees in the other metropolitan school systems, and interdisciplinary groups worked together. Administrative committees were also at work. Collectively, we produced a non-sequential, non-graded individualized program. In order to accomplish this goal, the entire high school curriculum was rewritten by identifying feasible concepts in each discipline, grouping those which seemed to hang together, and arranging them in courses. When possible, the courses were developed according to behavioral objectives, student characteristics, and administrative requirements as we perceived them at that time.

In order to give some uniformity in course development, this guide was devised and used by each subject area committee.

**RECOMMENDED QUARTER COURSE
SUBJECT AREA OF _____**

Name of Course and Description	Student Characteristics	Behavioral Objectives	Administrative Requirements
(Catalogue title and a one or two sentence description)	(Who will take the course? Age, achievement level, prerequisite courses, vocational goals, academic goals, others)	(What the pupils are expected to accomplish in this course)	(Double periods, time of day, size of class, physical facility required, etc.)

You will note we were concerned about behavioral objectives. These were the days when behavioral objectives were just beginning to become popular, and perhaps we did not reach our desired goals in every case. However, for the first time, on a comprehensive basis, we were concerned about what it was that students were to learn, to learn to do, to develop their attitudes, or specifically what we were trying to accomplish. This behavioral approach is quite different from saying that the purpose of this course is to prepare people to live successfully in American democracy--whatever that means. We were much more specific. Furthermore, we turned our attention to the more individual characteristics of students:

- ...learning styles
- ...goals
- ...ambitions.

We were concerned about developing courses which would make possible the reaching of behavioral objectives by students of many and varied individual characteristics.

We were also concerned about administrative regulations. We had previously had the experience of developing courses only to have them rebuilt because of inadequate space or restraining needs such as a wall removed. Therefore, we wanted to know before we began our

new course building what kinds of administrative requirements would be necessary to implement a particular course. The constant and meaningful involvement of administrators made this goal possible.

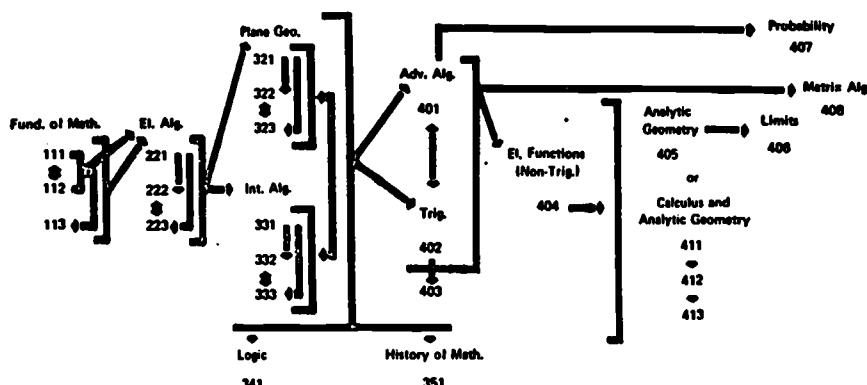
For each course, we developed a teacher's guide—a mass undertaking. During one summer alone—the first summer we really got underway—we used more than eighteen tons of paper cut in 8½ x 11 size for printing the guides. When we tallied the number of courses we found that we had developed over 850, a number which has now grown to 870. Each course was listed and described in a catalogue which was distributed to each high school. Obviously, no one school could offer all of these courses during any one quarter, nor would some of the courses necessarily ever be offered in some schools. The selection of courses for any one school is determined by the composition of the student body.

WHAT IS THE NEW CURRICULUM LIKE?

It is non-sequential, non-graded, individualized.

The majority of the courses are non-sequential. This is a problem that we had to solve early in the planning. We found, to the dismay of some and to the satisfaction of others, that courses did not necessarily have to be provided in sequential order.

FLOW CHART OF THE ACADEMIC PROGRAM IN MATHEMATICS



NOTE: A pupil may move from the Academic Program to the Basic Program at any quarter.

Math 111 and 112 can be taken in any order as long as the context is reasonably mastered in both before 113. As long as the content in these three courses is mastered, a pupil might branch off in any direction, in any math courses offered in the school system. His own desires and his goals will dictate into which course he goes and in which order he chooses his path.

It provides for flexible scheduling.

Another important feature is flexible scheduling. The new curriculum provides for the different levels and abilities of the students through more flexible scheduling.

PUPIL'S SCHEOULE - COLLEGE PREPARATORY			
Fall - 1968	Winter - 1968	Spring - 1969	Summer - 1969
Nature of Civilization (S.S.)	Dev. of Nation State (S.S.)	Political Behavior (S.S.)	Typing
Inter. French A	Inter. French B	Inter. French C	Theater (Eng.)
P. E.: Tennis	P. E.: Soccer	P. E.: Track and Field	Short Story
BSCS Biology	BSCS Biology	BSCS Biology	Dev. of U.S. Democracy
Adventuring in Lit. I	Composition (Eng.)	Adventuring in Lit. II	
Plane Geometry	Plane Geometry	Plane Geometry	

This is a schedule for a pupil who wishes to go to college. Although it is entitled college preparatory, we have no such program designated, but from the 870 courses and proper professional assistance from counselors, teachers, and parents, we can assist the pupil in selecting the kind of courses he will need to enter practically any university anywhere. This particular student wanted to go to college - is now in college and is doing quite well. A careful examination of the courses selected will reveal the fact that this is a traditional college prep type program.

Another program for a student who needed two quarter courses in English and in social studies to complete requirements for graduation wished also to take choir or music and to be of assistance around the school, thus completing one-half day.

ACTUAL SENIOR STUDENT SCHEDULE	
1st Quarter	2nd Quarter
1. Composition (Eng.)	1. Composition (Eng.)
2. Choir	2. Honor Choir
3. Aide (Principal)	3. Aide (Assistant Principal)
4. Comparative Cultures (S.S.)	4. International Relations (S.S.)
Early dismissal —at work by 1:00 P. M.	Early dismissal —at work by 1:00 P. M.

At noon the student was dismissed and worked as a mail clerk in a nearby establishment. This young man is also in college and is doing quite well, illustrating again the fact that a student who wishes or needs to work would not be prevented from going to college.

Other types of flexibility in terms of students with different abilities and having different needs was also considered important. English is probably an example that illustrates as well as any the wide range of abilities of students in a common core type subject. In Atlanta we have high school students who are reading below the fourth grade level, between fourth and sixth, and above the sixth grade level. Some appropriate courses for each one of them are listed next, including courses for those who are just beginning to read and are improving below the fourth grade level. Would it be better for a non-reader, 16-years old, to learn to read than it would be for him to flunk Shakespeare again? We decided in favor of teaching students things that were meaningful to them regardless of whether it was on the first grade, twelfth grade, or college level.

A. READING LEVEL BELOW 4.0	
LOWER DIVISION:	UPPER DIVISION:
Reading Improvement I, II	Expository Composition
Communication Skills Lab. I, II	Readings for Modern Man
Literary Modes	Adventuring through Literature I
Language Skills	Drama for Modern Man
Mass Media	Theatre and Stagecraft
	Short Story

B. READING LEVEL FROM 4.0 - 5.9	
LOWER DIVISION:	UPPER DIVISION:
CSL I, II, III	Expository Composition
Literary Modes	Adventuring through Literature II
Language Skills	Oral Language
Mass Media	Poetry
	American Literature I
	Communication: The Paragraph
POSSIBLE SUMMER QUARTER ELECTIVES:	
Theatre and Stagecraft	

C. READING LEVEL 6.0 OR ABOVE	
LOWER DIVISION:	UPPER DIVISION:
Literary Themes	Adventuring through Literature II
Communication: Sentence Patterns	Composition
Myths and Legends	American Literature I
Mass Media	Language Development
Communication: The Paragraph	American Literature II
Literary Types	Drama
POSSIBLE SUMMER QUARTER ELECTIVES:	
Creative Writing Shakespeare The Novel	

It requires more counseling with students.

To have this much flexibility is one thing, but to be able to counsel with students in the way the flexibility demands is very important. The classroom teacher's role in counseling has been greatly enhanced because she works closer with the pupils and, above all others, is better able to suggest appropriate courses to take next in any given subject area. Hopefully, through this process, each pupil will be scheduled so that he will be challenged enough to maintain interest but not enough to find course work too demanding and thus lose interest. Through this total counseling and selection process, courses are selected for each pupil for each quarter. Each pupil examines his program of studies, and the courses selected for the quarter are noted. During the quarter, the pupil's records are reviewed, and with further counseling—with a guidance counselor if the case warrants it—a second quarter's program of studies is identified and added. As was illustrated previously, work may be scheduled for one-half day, during the morning or afternoon or it could come at some other time. The whole idea is that there is a flexibility or a possibility of flexibility depending upon the pupil's respective needs and his own direction.

To facilitate scheduling, we do use the computer. There is some question about whether it is mandatory or not in order to have a successful program, and there is still some real question about whether we can schedule faster or more effectively manually. The question of rapidly retrievable forms of data is clearly answered by the computer assisting us in that particular area. Following the same counseling procedure, the third quarter's program of studies is identified, as is the fourth quarter, and any subsequent quarters of work that the pupil may wish to take.

This whole process of scheduling re-emphasizes the fact that Atlanta's pupils come in different sizes and shapes and that the old uniform curriculum design does not fit the majority of our pupils. The four-quarter plan provides wider options and, with proper counseling, better suits our pupils.

It credits students for work completed in a different fashion.

After several months of debate, we decided that if the courses were properly selected in terms of the activity that the student would need next in order to continue his normal growth pattern and if he were pursuing these reasonably well and making progress, every course would have exactly the same amount of credit. That is, if he attends class one hour a day, five days a week for a quarter and passes, he would earn five quarter hours regardless of

the name of the course. Although we do not record Carnegie units or keep up with them in any way, the rule of fifteen quarter hours equals one Carnegie unit is used for handling transfer students.

WHAT HAS REALLY HAPPENED TO THE ATLANTA PUBLIC SCHOOLS AS A RESULT OF THIS EFFORT TO WIDEN CURRICULUM OPTIONS?

Many questions have been answered and many others identified.

After more than two years of preparation, the four-quarter plan began in September of 1968, and is now in its fifteenth quarter of operation. During this period of time, we have answered many questions, but we have, in the process, probably identified more questions than we have answered. One of the more commonly asked questions, particularly in the earlier years, was—does it save money? The answer for Atlanta's program is simply no. It was not designed as a money saving approach; it was designed as a vehicle for curriculum revision—a method for providing more relevant courses and more meaningful experiences for the youth enrolled in the school system. Since all youth have an opportunity to come either three or four quarters if they wish, the cost of operating the additional quarter is over and above what it would cost if we stopped at the end of the third quarter.

How did you get people involved?

We worked at public involvement some two or more years prior to implementing the program, and we developed publications which we distributed widely to PTA's, news media, television programs, radio, school bulletins. We appeared before all kinds of groups to talk. We encouraged pupils to discuss their specific courses of study with their parents. Parents were invited to talk with teachers if they had any questions about what might happen. Faculty meetings were devoted to developing better understanding among staff members. Through this all, we found out that the public generally was much more in favor of moving into this type of program than some of us who call ourselves professional educators.

What major differences have been experienced since going into the year-round program?

One of the differences is that we have all of our high schools open all year long, full-day, tuition-free. Formerly, in the summer, we had only a select number of schools open in various locations. The enrollment has changed considerably, too. Prior to going on the year-round program, we had approximately 25% of the high school student body enrolled in one or more courses during the summer for which they paid tuition. In 1969, the first full summer of

operation on the year-round program, we had some 39% of the students to enroll with an average enrollment of 2.6 classes. The next summer, we dropped to 35%, but the number of classes increased to 3.6 on an average per student. In 1971, the enrollment percentage was 36; the course enrollment was 3.7, approaching the average load of 4.

What about eligibility for athletics?

Are you permitting your students to stay out the quarter they participate thus in essence becoming a pro? No. We appeared before the Association that sets the regulations, and it was ruled that a student would earn eligibility the quarter prior to this participation in a competitive sport, i.e., he would either earn his eligibility in the spring or the summer quarter prior to participating in the fall depending on his enrollment time. He must pass fifteen quarter hours during the quarter he earns eligibility and must be enrolled during the quarter he participates. The Atlanta School System has increased the requirement from fifteen to twenty quarter hours.

Have more special programs been added?

In addition to the regular full program, we have been able to maintain special activities and to increase the offerings of special activities because of our flexibility. One such program is called Upstream—the Atlanta School System's version of the internationally known program Outward Bound. For this program, youngsters enroll for 21 consecutive days in the North Georgia mountains. Fifteen quarter hours of credit—five hours in sociology, five hours in environmental biology, and five hours in physical education—are allowed for the experience. Qualified, certified teachers stay right with the students at all times. Other such special courses or programs include environmental biology, oceanography, automobile mechanics . . . Not only do these special programs enrich the curriculum offerings, but also some courses such as the automobile mechanics succeed in destroying many of the myths about those who work with their hands having less intellect.

HAS THE PROGRAM WORKED?

The curriculum has changed. It is more up-to-date, relevant, and flexible. The student and parent response has been positive. Perhaps some illustrative student comments will give an idea of the reception:

...Going to school all four quarters, I don't get behind and yet I can hold down a part-time job.

...By taking three or four courses a quarter, I don't feel pushed. We schedule what we feel I can handle without my getting upset and nervous.

...One quarter, I took three social science courses—not to get rid of the hard work but to concentrate in one field.

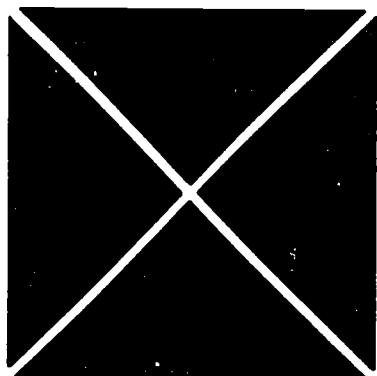
...just go whenever my mom makes me.

...Even physical education is different? we went to the public swimming pool three times a week for lessons.

...I'm on the annual staff so I went the fourth quarter to lighten my load all year and give me more time for the yearbook.

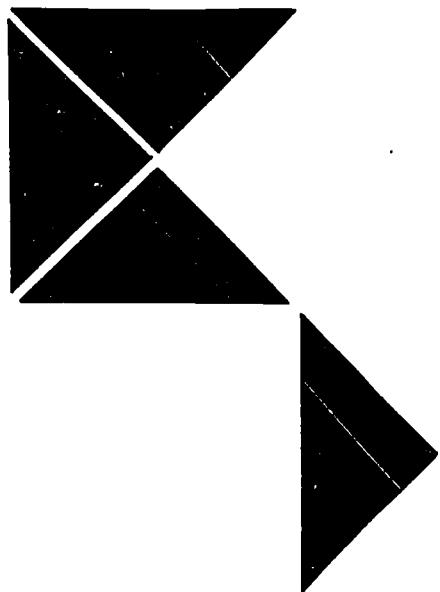
Few students, less than 100, take vacation quarters other than summer. Few choose to graduate early. Close to 6,000 will work—either as a part of a school program or on their own—part-time.

Does the new approach help? We think so. We know it widens the opportunities; we work constantly toward keeping it relevant and flexible.



**THE
FOUR
QUARTER
SCHOOL
PROGRAM**

**ATLANTA PUBLIC SCHOOLS
ATLANTA, GEORGIA**



***A Report
on the
Fourth
Quarter***

SEPTEMBER, 1971

What is the four-quarter school program?

Structurally, the four-quarter program is a division of the school year into four periods of approximately equal length rather than into two semesters and a summer session. To be meaningful, a conscientious effort must be made to provide a complete program during each quarter and to require only minimum prerequisites and/or sequential offerings so that a pupil may choose to work or go on vacation at a time other than during the summer without undue penalty.

To divide the textbook or course into four quarters instead of two semesters does not produce an adequate four-quarter program. Without extensive revision of educational goals and an intensive analysis of the curriculum, four quarters of school will be no more of an exciting prospect than three

quarters or two semesters. Factors other than time, number, and amount of days must be weighed. Each quarter course must be a complete and autonomous unit. The number of possible courses within a given discipline must be large enough to assure ease in scheduling while assuring continuous growth opportunities for the pupil. Only occasionally would a pupil be required to pass a specific course since there are others which deal with similar concepts of equal quality which would serve as well.

With the four-quarter plan, a system can offer greater flexibility both in scheduling and in curriculum offerings. The possibilities appear unlimited and the benefits to pupils great. If a pupil chooses, he may take a greater number of courses in a twelve-month period. Such a choice permits him these options: He may graduate at an earlier date, enrich his plan of studies, take remedial work if required, or take an alternate course if he is unsuccessful in one. He may work in November on a job he possibly could not have gotten the previous June. He may even work part-time and attend school part-time year-round. To a great extent, he may vary his studies according to interest and convenience as course offerings become less sequential in some subject areas.

For the school system, advantages sought from a four-quarter plan are not financial. Initially, such an operation is more expensive to implement and maintain than the traditional two-semester plus a tuition-supported summer school. Benefits to pupils should be the prime reason for converting to a four-quarter school program.

FOURTH QUARTER DATA***Enrollment by Subject Areas***

<u>Enrollment By Subject Areas</u>	<u>1 9 6 9</u>	<u>1 9 7 0</u>	<u>1 9 7 1</u>
<u>Art</u>	<u>1163</u>	<u>1002</u>	<u>1683</u>
<u>Business Education</u>	<u>2429</u>	<u>2574</u>	<u>2345</u>
<u>Driver Education</u>	<u>357</u>	<u>155</u>	<u>523</u>
<u>English</u>	<u>6982</u>	<u>6835</u>	<u>6799</u>
<u>Foreign Language</u>	<u>425</u>	<u>444</u>	<u>77</u>
<u>Health</u>	<u>130</u>	<u>(combined with P.E.)</u>	<u>497</u>
<u>Home Economics</u>	<u>1125</u>	<u>1767</u>	<u>2009</u>
<u>Industrial Arts</u>	<u>1232</u>	<u>1300</u>	<u>3963</u>
<u>Mathematics</u>	<u>5335</u>	<u>5545</u>	<u>5248</u>
<u>Music</u>	<u>1365</u>	<u>1607</u>	<u>2275</u>
<u>Physical Education</u>	<u>3754</u>	<u>5115</u>	<u>6095</u>
<u>Science</u>	<u>2987</u>	<u>4017</u>	<u>3880</u>
<u>Social Studies</u>	<u>6319</u>	<u>7092</u>	<u>7488</u>
<u>Others</u>	<u>191</u>	<u>390</u>	<u>614</u>
<u>TOTALS</u>	<u>33,794</u>	<u>37,843</u>	<u>43,466</u>
<u>Average Number Subjects Per Pupil</u>			
	<u>2.645</u>	<u>3.609</u>	<u>3.725</u>
<u>Total Enrollment</u>	<u>12,770</u>	<u>10,484</u>	<u>11,666</u>
<u>Percent Attending</u>	<u>37%</u>	<u>30.77%</u>	<u>35.5%</u>

Fourth Quarter Pupil Enrollment

High School	1 9 6 9			1 9 7 0			1 9 7 1		
	Remedial	Advanced	Total	Remedial	Advanced	Total	Remedial	Advanced	Total
<u>Archer</u>	72	353	425	279	279	559	37	529	565
<u>Bass</u>	60	150	210	245	100	345	151	150	301
<u>Brown</u>	149	113	262	115	225	278	376	407	783
<u>Carver</u>	120	370	490	120	306	426	135	321	456
<u>Douglas</u>	257	755	1012	255	697	952	175	1126	1301
<u>Dykes</u>	110	175	285	78	175	235	70	174	249
<u>East Atlanta</u>	19	179	192	17	221	239	-	249	249
<u>Fulton</u>	25	88	113	23	192	207	104	153	257
<u>George</u>	85	170	202	123	227	254	116	150	265
<u>Grady</u>	155	420	575	164	452	616	100	329	428
<u>Harper</u>	100	1726	1826	50	620	640	60	600	660
<u>Howard</u>	180	544	724	276	300	493	139	370	508
<u>Kennedy</u>	-	-	-	-	-	-	-	84	94
<u>Murphy</u>	273	635	635	193	569	569	234	523	570
<u>North Fulton</u>	275	231	319	115	163	278	29	260	289
<u>Northside</u>	196	174	370	93	244	327	20	304	324

<u>High School</u>	<u>Remedial</u>	<u>Advanced</u>	<u>Total</u>	<u>1969</u>	<u>1970</u>	<u>Remedial</u>	<u>Advanced</u>	<u>Total</u>	<u>1969</u>	<u>1970</u>	<u>Remedial</u>	<u>Advanced</u>	<u>Total</u>					
O'Keefe	32	310	342	79	192	260	79	195	274	28	153	181	4	101	103	21	111	132
Parks Junior																		
Price	136	542	679	113	233	346	107	195	302									
Roosevelt	84	175	206	75	193	268	25	319	344									
Smith	121	221	342	123	320	372	74	285	359									
Southwest	54	338	392	110	365	475	41	479	520									
Sylvan Hills	56	87	143	237	469	285	37	201	238									
Therrell	164	191	355	127	200	327	25	260	298									
Turner	-	575	575	15	464	464	68	452	488									
Washington	375	839	1214	307	696	993	416	447	863									
West Fulton	109	537	646	153	448	601	88	492	570									
TOTALS	* 3235	* 9995	12,770	* 3358	* 9125	10,42	* 2731	* 9182	11,666									

* Some pupils enrolled in both remedial and advanced courses.

Enrollment by Courses - Fourth Quarter, 1969

		Art	Business Ed.	Driver Ed.	English	Foreign Lang.	Health	Ind. Arts	Home Econ.	Math	Musical	Social Studies	Science	Phys. Ed.	All Others
Archer	73	167	-	346	-	12	-	-	263	43	139	171	193	-	-
Bass	-	38	-	318	-	-	-	40	155	-	15	90	160	-	-
Brown	-	150	-	139	-	-	-	-	200	-	173	70	225	-	-
Carver	46	94	-	277	-	-	-	-	-	249	21	171	164	213	-
Douglas	125	-	-	634	247	-	-	581	697	300	-	-	-	248	-
Dykes	-	-	65	72	-	-	-	-	-	26	-	65	52	88	-
East Atlanta	-	-	-	176	-	60	-	-	-	55	-	141	69	169	-
Fulton	-	25	25	49	-	-	7	-	17	-	-	20	7	68	-
George	-	11	8	125	-	-	5	29	94	-	54	143	201	-	-
Grady	40	72	98	261	-	-	-	-	122	87	56	43	275	-	-
Harper	84	155	-	325	-	51	-	-	189	160	269	161	429	106	-
Howard	91	281	-	421	-	-	112	62	331	-	155	143	405	-	-
Murphy	60	112	-	391	49	-	63	36	279	96	168	339	314	-	-

	Art	Business Ed.	Driver Ed.	English	Foreign Lang.	Health	Home Econ.	Ind. Arts	Math	Music	Phys. Ed.	Science	Social Studies	All Others
North Fulton	49	15	26	224	-	-	-	-	136	-	-	22	13	418
Northside	20	81	100	58	-	-	-	-	-	74	-	81	30	171
O'Keefe	93	60	-	253	-	-	85	56	54	84	331	69	155	65
Parks Junior	-	36	-	155	-	-	45	6	80	37	120	30	48	-
Price	-	269	-	413	-	-	174	76	477	40	116	200	465	-
Roosevelt	-	14	25	89	-	7	-	5	38	-	116	44	175	-
Smith	42	61	-	182	-	-	114	33	186	99	369	-	109	-
Southwest	58	120	-	257	-	-	102	81	75	-	259	103	475	-
Sylvan Hills	-	32	10	139	-	-	6	-	59	-	6	19	10	6
Terrell	47	64	-	254	-	-	-	-	48	108	35	55	82	198
Turner	97	138	-	295	67	-	85	-	240	146	305	178	226	-
Washington	141	313	-	646	62	-	214	81	643	112	274	376	472	14
West Fulton	97	121	-	483	-	-	106	98	498	105	274	392	389	-
TOTALS	1163	2429	357	6982	425	130	1125	1232	5335	1365	3754	2987	6319	191

Enrollment by Courses - Fourth Quarter, 1970

	Arts	Business Ed.	Foreign Lang.	Home Economics	Industrial Arts	Mathematics	Music	Physical Ed.	Science	Social Studies	All others
<u>Archer</u>	97	110	-	433	-	97	-	496	86	308	354
<u>Bass</u>	77	-	-	336	-	-	79	149	-	133	155
<u>Brown</u>	50	136	-	640	45	-	96	329	-	251	194
<u>Carver</u>	-	95	-	236	-	71	-	185	36	238	143
<u>Douglas</u>	121	377	-	726	63	305	432	826	423	546	466
<u>Dukes</u>	-	-	60	112	-	-	-	34	-	-	37
<u>East Atlanta</u>	-	-	-	92	-	-	-	57	-	27	101
<u>Fulton</u>	-	120	19	156	-	-	-	139	-	142	101
<u>George</u>	32	25	-	223	-	-	21	121	45	26	100
<u>Grady</u>	-	75	10	260	-	-	-	156	97	103	93
<u>Harper</u>	-	150	-	344	-	205	50	421	151	259	212
<u>Howard</u>	-	154	-	271	96	114	92	213	56	236	156
<u>Murphy</u>	69	60	-	364	-	102	14	462	127	527	274

	Art	Business Ed.	Driver Ed.	English	Home Economics	Industrial Arts	Mathematics	Music	Physical Ed.	Science	Social Studies	All Others
North Fulton	20	18	-	105	-	-	75	-	-	29	172	17
Northside	27	51	-	133	-	-	70	-	91	46	145	-
O'Keefe	26	79	-	205	-	60	15	61	25	237	61	106
Parks Junior	-	22	-	54	-	23	-	-	121	69	-	-
Price	-	171	-	243	-	106	53	326	32	167	106	169
Roosevelt	40	69	-	150	13	24	15	59	37	136	125	169
Smith	35	81	-	110	59	-	39	139	65	165	41	154
Southwest	54	153	-	196	-	120	105	101	-	309	342	465
Sylvan Hills	21	17	27	105	-	32	37	60	14	31	47	320
Therell	49	49	-	364	-	-	60	75	-	77	-	205
Turner	79	92	-	164	-	116	-	246	56	275	136	194
Washington	97	260	39	433	146	205	26	434	136	301	30+	450
West Fulton	105	210	-	333	-	165	136	263	69	247	410	310
TOTALS	1002	2574	155	635	444	1767	1300	554	1607	5115	4017	7092
												390

Enrollment by Courses - Fourth Quarter, 1971

	Art	Business Ed.	Driver Ed.	English	Foreign Lang.	Health	Home Econ.	Ind. Arts	Math	Music	Phys. Ed.	Social Studies	Science	All Others
<u>Archer</u>	-	151	-	361	-	24	-	-	374	276	440	73	352	124
<u>Bass</u>	33	-	4	47	-	-	-	50	34	-	42	32	48	11
<u>Brown</u>	236	283	-	827	-	-	212	207	177	130	710	212	452	-
<u>Carver</u>	16	49	-	305	-	34	27	62	208	-	241	200	233	-
<u>Douglas</u>	150	205	44	951	-	80	304	401	861	485	729	557	993	-
<u>Dykes</u>	-	-	16	113	-	-	-	-	65	-	-	43	162	-
<u>East Atlanta</u>	-	20	2	189	-	77	-	-	105	97	167	137	519	-
<u>Fulton</u>	-	72	26	215	-	41	-	155	179	-	151	149	307	-
<u>George</u>	32	96	48	211	-	11	20	5	62	68	46	104	279	73
<u>Grady</u>	12	24	36	103	-	-	28	13	86	61	55	40	169	15
<u>Harmer</u>	53	215	-	454	-	113	337	118	450	207	226	250	306	-
<u>Holard</u>	39	72	-	151	23	5	52	31	171	111	255	94	217	55
<u>Kennedy</u>	30	31	-	23	-	-	24	36	38	22	31	10	9	-
<u>Murphy</u>	102	-	5	340	-	-	102	78	472	29	236	242	359	-

	Att.	Business Ed.	Driver Ed.	English	Foreign Lang.	Health	Ind. Arts	Math	Music	Phys. Ed.	Social Studies	All others
<u>North Fulton</u>	35	14	41	44	-	-	-	121	-	-	52	394
<u>Northside</u>	36	32	92	140	-	-	-	41	14	153	27	183
<u>O'Keefe</u>	100	62	7	156	-	-	44	67	87	-	259	87
<u>Parks Junior</u>	-	33	-	53	-	-	53	45	32	65	165	49
<u>Price</u>	114	119	5	99	-	-	64	66	114	95	206	46
<u>Roosevelt</u>	48	107	28	230	-	-	20	-	21	115	52	259
<u>Smith</u>	27	81	9	191	29	-	57	58	136	113	178	109
<u>Southwest</u>	113	135	35	360	-	53	128	165	215	-	299	172
<u>Sylvan Hills</u>	26	41	36	115	-	-	32	34	102	57	85	38
<u>Therrell</u>	90	83	22	230	-	26	-	44	96	-	76	88
<u>Turner</u>	107	129	-	219	-	-	104	-	254	81	284	130
<u>Washington</u>	183	204	47	457	17	-	189	74	378	156	473	334
<u>West Fulton</u>	101	87	16	205	-	-	212	224	255	136	289	447
TOTALS	1683	2345	523	6789	77	487	2009	3963	5246	2275	6085	3880
												614

Mr. PUCINSKI. Mr. Brewster, we are particularly interested in hearing your 4-day-a-week plan for students. I am anxious to hear it. Your entire statement will go in the record at this point, and you can summarize it in any way you wish.

(The prepared statement follows:)

LESS SCHOOL—BETTER LEARNING: THE 4-DAY SCHOOL WEEK

(By Albert J. Brewster, Jr., superintendent of schools, Maine School Administrative District No. 3, Unity, Maine)

Maine School Administrative District Number Three began a trial four-day student school week in September of 1971 as a solution to two specific problems: financial need, and a need for in-service training time for teachers.

In early spring of 1971, word was received that District Three had been awarded an E.S.E.A. Title III grant for its project entitled "Individualized Learning and Responsibility Development." A project geared to changing teaching techniques and materials, it featured an extensive training program for teachers. The time for such training was the most serious consideration of the project.

The long established practice of holding teacher training sessions after school or in the evening, in this writer's experience, had never really proved to be very productive. After all, a teacher can hardly be expected to report to a central location after a full day of teaching and be in any state of mind to assimilate new ideas.

In the midst of the teacher-training dilemma, a new crisis struck—a 10% budget cut. These two problems, then, created a situation to which a four-day student week appeared to be a tenable solution—an opportunity to provide a substantial block of training time for teachers while in the same instance reducing certain operating costs namely in the areas of maintenance, food service, and transportation.

Any reduction in the number of days in the student school week implied, of course, a reduction of instructional time. To minimize such a reduction, it was proposed that the length of each of the four remaining school days be increased by thirty-five minutes. Thus, the actual reduction of instructional time would be only two hours and twenty-five minutes per week instead of the usual full day of five hours and five minutes.

After careful consideration, the State School Board authorized the implementation of the proposed four-day week every week from September to Christmas recess, 1971, once every other week from January 3 until March 1, 1972, and once every fourth week from March 1 until June 1, 1972.

It was not without some trepidation that District Three embarked upon the four-day week project. Perhaps the greatest initial concern was the possibility of a fatigue problem for elementary school youngsters, and careful observation by all staff was maintained from the first. The final conclusion in December of 1971, based upon teacher observations and parental reports, was that there was no appreciable increase in fatigue of youngsters as a result of a thirty-five-minute-longer school day.

Another major concern was, of course, the reduction of instructional time. Here it was felt that the increase in learning efficiency as a result of the use of new methods and materials in the teaching/learning operation would more than offset the weekly 2 hour and 25 minute reduction in instructional time. A comparison of standardized test data is now in progress.

While initially there was a small but vocal group opposed to the four-day school week project, the great majority of the residents of the district adopted a "wait and see" attitude.

On a purely subjective basis this writer feels that the goal of the Title III project have been much further advanced than they would have been without the fifth day of teacher training activities. Acceptance of the four-day school week has been very good. Students, naturally, are almost unanimous in their approval. Many parents are enthusiastic about the individualized instruction effected by the program.

At this point, while the final, comprehensive evaluation is being completed, all aspects appear to be positive, and there is reason for confidence that a more extensive continuation of the four-day school week project will be sought for the

coming school year. If the budget authorization vote is any indication of approval of the educational program by the electorate, it must be pointed out that after two successive years of significant budget cuts (5% in 1970-71 and 10% in 1971-72) the budget this year was approved intact by a vote of almost three to one. After almost 7 months of the 4-day weeks project.

In order to make effective changes in the educational process, adequate time must be allowed for inservice training of teachers—time which is not in addition to a full, vigorous workweek. What has long been established in the industrial realm must be established in the educational realm—effective, productive change can best be effected by providing for inservice training on "company time."

A critical point, germane to the four-day school week, is that no matter how carefully simulated or cleverly contrived, formal educational experiences can only be a genuine experience in formal education. In other words, the humanizing aspect of real life experiences can only be realized through real life experiences for which adequate time must be provided. The school-free day, be it Friday or any other school day, can provide the time for real life experiences—time for experiences in community activities such as those sponsored by service organizations, churches, youth groups, and so forth.

Though the quantity (time) of the treatment (education) must necessarily be reduced in a four-day week program, the efficacy (quality) of the treatment may be increased, by means of the teacher training program, to such an extent that the overall result (learning) is superior: less school—better learning.

Mr. PUCINSKI. I might point out that Congressman Hathaway had hoped to be here to introduce you personally. He is on another committee. He asked me to extend to you his welcome before the committee.

**STATEMENT OF ALBERT J. BREWSTER, JR., SUPERINTENDENT
OF SCHOOLS, MAINE SCHOOL ADMINISTRATIVE DISTRICT NO. 3,
UNITY, MAINE**

Mr. BREWSTER. Thank you, Mr. Pucinski and ladies and gentlemen. Greetings from the great State of Maine and the good people of Waldo County.

I would like to give you a few bits of information about district 3. We consist of 11 towns and one plantation, which is unorganized territory. The area is approximately 396 square miles. Our buses run about 1,650 miles a day, which is about the distance from Portland to Atlanta.

We have 1,670 youngsters, 5,200 in population in the entire 11 towns and plantation. We have seven elementary schools, a centralized high school, grades 9-12, and centralized junior high grades 7 and 8.

Approximately a year ago, we became interested in upgrading our curriculum to try to keep pace with the times and in tune with the latest techniques and new materials. We applied for and were successful in receiving a title 3 ESEA grant for our project entitled "Individualized Learning and Responsibility Development" wherein we hoped to get our school district moving toward an individualized program, and by means of this approach, through the education of youngsters, develop in them a greater sense of responsibility.

We felt a sense of urgency here in that the 18-year-old vote has become a reality in the State of Maine. In June of this year, youngsters will have full adult rights and privileges at the age of 18.

In order to implement our title 3 program, which was very heavily inservice training oriented for teachers, we came up against a very difficult task of trying to find time for this training.

Having such a large area, and teachers having to travel considerable distances to a central point, we thought that perhaps some part of the school day might very well be the best way to handle at least the initial inservice training.

In the meantime, March of last year at our annual budget meeting, we turned out to be one of the unfortunate school districts that suffered a 10-percent budget cut. Coming on a rather stark budget proposal to begin with, in desperation and in an attempt to reduce operating costs, the thought occurred to us that perhaps we could combine the inservice training time and also effect some operational savings by reducing the school week for youngsters, from 5 to 4 days.

The plan was drawn up and presented to the State Department of Education. After a considerable amount of discussion and testimony, at a second meeting a compromise proposal was accepted. It called for a 4-day week beginning September 1971, and every week through or to the Christmas recess in December, and then once every other week through March from the first of this year, and from March to June once every 4 weeks.

What we have done on this day is to have teachers gather at the central area, the central high school, from 8 o'clock in the morning until noon for a 4-hour intensive training period.

We were able, under the provisions of the title 3 project, to fund this program. I must say that such a program does require earmarked funds. We were able to bring in experts from the various schools and colleges, consultants and so forth to assist us in getting started on an individualized learning program.

We, at this time, feel that the program was very successful. We were able to get teachers into a complete total immersion situation as far as training is concerned. Needless to say, youngsters unanimously endorsed the 4-day school week.

Parents were largely "let's wait and see," although we were quite surprised after the result of a survey to find that less than 10 percent found this change in the week schedule inconvenient and under 5 percent indicated they had to lose work because of it.

I should add at this point that we did provide for additional instructional time in the 4-day week. We did not just drop a day out.

Actually, we increased the schoolday by 35 minutes, shortened the recess period by 5 minutes, and were able to confine the actual loss of instructional time in a 4-day week to 2 hours and some 40-odd minutes.

I think at this point, following up at the end of a very distinguished panel, I can probably distinguish my remarks further by being as brief as possible and end my remarks with my thanks for the opportunity to be here to be heard.

Mr. PICINSKI. Thank you, very much. Mr. Brewster.

Obviously you all had a considerable degree of success in your programs that you have brought before the committee. I believe it is wise for the committee, in looking to this new educational phenomena, at least reasonably new, to seek out whether or not we cannot find some answers.

I was wondering, Mr. Brewster, with the additional time that teachers now have for inservice training and other work, what has been the effect of their professional achievement within the framework?

Mr. BREWSTER. We have not any objective evaluations at this point. I have to be very subjective. I would say that I feel, personally and my administrators do, too, that our project is perhaps as much as three times further advanced than it would be on a once-a-week after school or evening type of program. This total emerging factor, we feel, was very successful.

We intended initially to have 21 so-called pilot teachers totally dedicated to the process of this learning. As a result of the inservice the number increased to over 30. During the fall the interest of teachers was just overwhelming.

Mr. PCCINSKI. So, your 4-day week with 1 day for training comes close to the proposal I made time and time again for the 3 and 2 days when I urged we spend 3 days a week on basic education and 2 days a week on career education.

My emphasis on career education is to allow teachers to go through an inservice program and various other things, but we would keep the youngster at school for the 5 days as against the 4 days you do.

Mr. MAZZOLI. Thank you, Mr. Chairman. I would like to ask Mr. Brewster one question. On page 3 of your statement you state, "At this point, while the final, comprehensive evaluation is being completed, all aspects appear to be positive, and there is reason for confidence that a more extensive continuation of the 4-day school week project will be sought for the coming school year. If the budget authorization vote is any indication of approval of the educational program by the electorate, it must be pointed out that after 2 successive years of significant budget cuts (5 percent in 1970-71 and 10 percent in 1971-72) the budget this year was approved intact by a vote of almost 3 to 1."

Is that a vote by your electorate of 3 to 1?

Mr. BREWSTER. Yes.

Mr. MAZZOLI. How does it work?

Mr. BREWSTER. Our district is a school administrative district, and is a quasi-municipal operation in many ways. The school district does levy taxes on the inhabitants of the towns of the district, approximately 50 some odd percent of the operating revenue comes from the State under a general subsidy plan. The rest of it is levies through local assessments on a formula.

We hold a budget meeting annually, and all of the registered voters in the 11 towns in the district come to the meeting for explanation of the budget, and vote by ballot to approve or not approve.

Mr. MAZZOLI. So the 10 percent vote was also voted by the electorate?

Mr. BREWSTER. Yes.

Mr. MAZZOLI. This maybe is a direct response to their dissatisfaction with progress in education or what do you attribute the dramatic turnabout to?

Mr. BREWSTER. I think general satisfaction with the program we developed this year.

Mr. MAZZOLI. Four-day week?

Mr. BREWSTER. That is part of it. Probably more importantly the fact that individualized instruction to the extent we have implemented it now is proving very popular with youngsters and parents are very much impressed. The youngsters seem to like the process.

Mr. MAZZOLI. In any program you adopt in your district you have to be very careful with public approval of it or acceptance of it or

knowledge of it, because they then have really the pursestrings insofar as the 50 percent generated from local sources?

Mr. BREWSTER. Right.

Mr. MAZZOLI. As a school administrator, do you find that it is better to be more or less under the gun? Does that help you to perform your job better?

Mr. BREWSTER. Well, it has been bad for us in some ways. It does keep us very responsive, I must say. But, in some areas, for instance, textbooks and supplies, we, of necessity, because of budget cuts and because of a necessity to present nothing but a bare-boned budget, we had to cut the accounts, pare them back so that perhaps for the past 5 year's expenditures in textbooks would be the same.

We know of inflationary increases in textbooks alone going up 80 percent, so, we are suffering in that respect.

Mr. MAZZOLI. So, possibly by keeping out front, as they say, with respect to the voters, it may keep you more sensitive of what they think of the need or what they feel is the need, and probably more apt to inform them or keep them periodically apprised of what is happening since you have to go to their need.

Mr. BREWSTER. Sensitive to the point of paranoia, I might say.

Mr. MAZZOLI. Well said. Mr. Henson, I wondered, in your statement, and I believe the gentleman, Mr. Gove, too, mentioned that apparently you had no trouble with your State with respect to getting it to fund those programs which involve this additional quarter, is that generally correct?

Mr. HENSON. The State has not assisted at all.

Mr. PUCINSKI. Well, didn't we in Illinois in this legislative session give you what you needed for your particular planning?

Mr. GOVE. Yes. Keep in mind, we are still educating children at Valley View for still 180 days, not more days like Curt does. But, we are on an average daily attendance in the State of Illinois with 45-15, having also a fourth of the children not in attendance.

So, House bill 1525 was introduced in the 76th general assembly to give the State superintendent discriminatory powers in giving a new State aid formula so districts wouldn't be penalized, but they wouldn't receive more than their fair share.

Mr. MAZZOLI. You are accounting for the 15 days when the quarter student body is gone, they are counted in for the full-time attendance?

Mr. HENSON. For 180, but not beyond that.

Mr. MAZZOLI. Not beyond that. Now, the ad valorem tax in Atlanta, is it specifically levied for the summer quarter or what?

Mr. HENSON. It is part of the general operating budget. Approximately 60 or 65 percent of the total operating costs of the city school system comes from ad valorem taxes.

Mr. MAZZOLI. Some part of it is handled by your staff and devoted to costs of summer school programs?

Mr. HENSON. Right.

Mr. MAZZOLI. So you don't get State aid for that?

Mr. HENSON. Not for the fourth quarter.

Mr. MAZZOLI. As I remember your statement, Mr. Cantrell, you mentioned that the assembly this year in the just concluded session passed a law which permitted you to take a summer course, or those who elected to take a summer quarter or who were on vacation for some

quarter during the year, they get paid for those on the foundation, but you can't for those children who go the four quarters, is that correct?

Mr. CANTRELL. Mr. Mazzoli, I did not take time during the testimony to explain it. I would like to briefly explain it.

Mr. MAZZOLI. I would like to find out if, for instance, an adequate law was proposed to the assembly at the time? Maybe I can start at this point. Was a law proposed or legislation proposed to cure the problem?

Mr. CANTRELL. No, sir: we did not propose legislation that would permit a student to attend all four quarters, and Jefferson County would draw ADA for this reason, that the State department of education felt it would be unadvisable because if such a law were passed, they seemed to feel that many systems in the State that do not necessarily need a year-round school program, would suddenly start summer school and let the boys and girls go year-round when they did not need it.

I am speaking of the rural areas in a very small system. What they did is give us everything they could short of saying that if a child goes four quarters, we will not finance the fourth quarter, but they did this. They made a formula whereby we received money under ADA so liberally that even if we should permit at our expense boys and girls to go all four, we would be picking up a little money.

In other words, we would not be the sole individual to bear that cost.

Mr. MAZZOLI. You are not going to solely sponsor that?

Mr. CANTRELL. No, sir.

Mr. MAZZOLI. You will get assistance from the State?

Mr. CANTRELL. It would be very little really, depending upon the increase in the fall.

Mr. MAZZOLI. So that the assembly did not refuse to pass legislation which was before them?

Mr. CANTRELL. No, sir.

Mr. MAZZOLI. But did pass what was submitted to them?

Mr. CANTRELL. They did. I brought it and I am sure you have seen it, the Senate bill.

Mr. MAZZOLI. I guess that is the same with Mr. Gove's experience?

Mr. CANTRELL. Yes.

Mr. MAZZOLI. They made that arrangement so you are not solely sponsoring the students for that summer period, those who elect to take their third quarter, I guess you would say in the summer period?

Mr. GOVE. Our plan, they have no say. It is compulsory, when you go and when you are out.

Mr. MAZZOLI. I was wondering, Mr. Cantrell, a percentage of return, something like 2,100 of the students, are going to take the elective, no, I think it was 2,100 would go in the summer quarter, and 4,000 students would attend four quarters.

Mr. CANTRELL. Yes.

Mr. MAZZOLI. Was that the percentage you anticipated?

Mr. CANTRELL. We anticipated 8 percent in the summer. We did not anticipate what they would be year round or what. We missed it by 1 percent.

Mr. MAZZOLI. Seven percent?

Mr. CANTRELL. Yes, sir; instead of 8. What concerned us was the fact we had quite a few elementary children elected to attend year round. When I say that, I am talking about the first year, first graders.

We can hardly say why many of those would want to attend year round. Now, I am sure that in the long run, it will help us, but we do not wish to accelerate to the point of permitting boys and girls to finish schools at age 14 or 13. So we may be forced to put in a rule that says they cannot attend over four, five, or six quarters in summer session without a vacation or they can only attend one summer out of every three or four.

Mr. Mazzoli. Did you find out the background, maybe it was you, you noted at the time Mr. Cantrell talked, and what would be the reason for apparent accelerating in earlier schools?

Mr. HENSOX. Our elementary youngsters are permitted to come 6 weeks in summer session for enrichment on a tuition-free basis. We have approximately 20,000 elementary pupils in enrichment programs; and over 12,000 high school students attending the fourth quarter.

People like to learn when it is presented in a way meaningful to them. Also, school for most youngsters is the friendliest place they know. So, a couple of weeks is about all they can entertain themselves, and that is about all the parents want them to stay at home, too.

So, the school is a desirable place to be, and when learning is going on, they want to come.

Mr. Mazzoli. So, it is a social center in addition to being, I guess, an educational system?

Mr. HENSOX. I think it is about the only thing they know. Pupils usually gravitate to the place where they are accepted and where they feel friendly and comfortable.

Mr. Mazzoli. Mr. Cantrell, would you tell the committee whether or not the parents were specifically polled at all during the procedures leading up to the decision to go on with the elective quarter this coming fall?

Mr. CANTRELL. All parents were not polled. However, we had many committees. We had, as I mentioned, the Citizens Advisory Committee. We had reactions from the PTA's, from civic clubs, from many, many groups. We prepared a little booklet that should have gone home to every family.

The response from that little questionnaire indicated more of, well, a greater need for more information. But we were not making any progress at all with our meetings, and with our plans until we pointed up that it was purely voluntary. From there on, we seemed to get public sentiment behind us, and really, as I say in my talks, if you do not feel the concept is worth it, forget it, and go from September to June. Consequently, we cannot hurt anyone, but we are hoping by these elections, that they will see we are giving the same quality program in the summer, not necessarily the same quantity, because we will not have nearly as many boys and girls attending, but the same teachers and subjects and so on, so really, we base the whole thing on options, on the voluntary programs. Hopefully, we would do two things. No. 1, improve curriculums, and if you do that, you improve your program of education. No. 2, open the door to get a greater use of our buildings

because we cannot build rapidly enough to keep ahead of our growing school population.

Mr. MAZZOLI. Is that the way you sold your program, on that basis?

Mr. CANTRELL. Yes. No. 1 was an improved educational program and No. 2 to save schoolbuilding construction. As the one survey pointed out, just on the basis of the first survey, we will have somewhere throughout the county, 25 empty classrooms during this coming school year.

So, if the public will begin to see, and, rather I can't see why, in an area such as we have, a suburban area, why somebody should be deprived of going to summer school at public expense; and it will not cost more in the long run, so let him take his options and let the pupil's vacation fall in the winter, fall, or spring, and work, and then we get greater use of buildings.

Mr. MAZZOLI. One final question before I yield to the chairman because I think he has a question. Would you envision the use of this fourth quarter or going to summer schools to complete the third quarter would be a commonplace thing? Is this your hope or expectation?

Mr. CANTRELL. Well, I think Mr. Mazzoli, really you asked a two-pronged question, and may I try to separate it?

Mr. MAZZOLI. Please do.

Mr. CANTRELL. If someone wants to attend the fourth quarter for makeup work, let's say he has failed the third quarter, then actually his fourth quarter would be substituted for his third.

Mr. MAZZOLI. Right.

Mr. CANTRELL. Then, the program does provide for enrichment. I believe that is the other part of your question. For example, we are going on the point system. A pupil will need 54 points to graduate. If he goes to high school for 12 quarters and take five subjects, he will have 60 points. So he really has six courses there for out and out enrichment.

Now, many of them, if they wish to get out into the world of work, then they can take their diploma at the end of 11 quarters, and the public has been saved this one quarter.

One more thing here, we, in order to make our public agree that we are not going to make education cost anymore, we agree to keep check of the quarters. For example, everyone will be assigned a quarter. If you are a ninth grader, it will be quarter 25, or we may start with quarter one. Then, how you take your 12 quarters does not really matter.

That is the place that we need some money in advance or some seed money to get the program started. For example, I am entitled to four quarters or three quarters in a year. If I attend my three quarters, there is no problem of financing, but if I go the summer quarter, there is a problem; so, somebody has to put money in the till for my fourth quarter.

Then, if I take a vacation in the subsequent fall, winter, or spring, everyone is back even. So, I think that we almost approach that point with the legislature, but not quite.

Mr. MAZZOLI. Thank you very much.

Mr. PUCINSKI. Thank you. I am very pleased to announce we have here the eighth grade class from the Peterson School in Chicago. Mr.

Sorenson is in charge of the group. I might tell you young people that we are having testimony today on a subject that may or may not be close to your heart, a year-round school term with 45 days of school and 15 days of all-year-round.

Let me ask you gentlemen one question, all of you? Is there any role you see at this point in the Federal Government, that it can play in helping develop this concept? Mr. Henson?

Mr. HENSON. Yes, sir. I think there is a need for some overall planning opportunities, communication, publication, things of this type, which the Office of Education might provide. The Office of Education might also provide consultative services and leadership, both at the local and State level, and information might be provided to local groups, governmental bodies, and to State legislative bodies.

Mr. PUCINSKI. Mr. Cantrell.

Mr. CANTRELL. I would underscore what the gentleman has just said, except I do feel that there are cases, perhaps, where local school systems are in need of money to start a program and, hopefully, maybe the State would pick it up after they see how it works, and it will provide or do the things that the originators of that program say it will do. And, then, hopefully, the local or rather the States will pick up the costs from there on.

Mr. PUCINSKI. In other words, you would have the Federal Government perhaps paying for the summer quarter for instance, which, for the amount, our assembly is not providing for in Illinois, with the idea it will show its benefits and advantages, and then at some point, phase in the State support of that?

Mr. CANTRELL. Yes. I pointed out actually what it would cost in our State. We can't help but feel over a period of 2 or 3 years the money would be left someplace unless you had a large increase in enrollment.

Mr. BREWSTER. I want to say in addition to larger levels of Federal funding, categorical planning funds are essential, and places like my own district three were very much restricted in any type of planning or innovative work because of lack of funds.

I would like to get in a plug here for some of the categorical programs we have now. ESEA has been a blessing in providing us with funds for training, for materials, and I think, perhaps, if some categorical funds such as that were established for innovative school years, it would be very helpful in moving things along.

Mr. GOVE. I would have to state my previous recommendations still hold true. I would have to agree with my colleague to the right if additional days of education are afforded to children in a district, the State should provide the funding for these additional days of schooling.

Of course, in Illinois, we don't have a problem along those lines. In regard to direct Federal funding to assist various areas, I would hope that along with this it would carry a provision of in-kind costs, additional costs, to be picked up either at the State or local levels.

I feel that ESEA programs are very worthwhile. I feel NDEA, particularly NDEA title 3 that calls for matching funds at the local level, provides a better use of these funds at the local level, when the local taxpayers and Boards of Education have to include some of their own operating money in these programs.

Mr. PUCINSKI. Gentlemen, I thank you very much for starting off the hearings on the year-round school concept. I think we are off to a good start. You have given us a great deal of information that we are going to now be able to build on, and when we are through with this dialog, as I said earlier, we intend to put in kind of a committee report, and circulate it around the country and provide a dialog in this whole field.

Mr. MAZZOLI. I hate to interrupt, but I am very curious, almost mystified by what Dr. Henson is talking about, some 12,000 in high schools and about 30,000 in grade schools, is that correct?

Mr. HENSON. Some 20,000 elementary pupils in summer enrichment.

Mr. MAZZOLI. There are 20,000 who attend in Richmond in the summertime?

Mr. HENSON. Elementary children do, but high school might attend for advancement or what have you, but most of them go year round.

Mr. PUCINSKI. It is amazing, but in Chicago, out of 405,000 students in the public school system, some 260,000 voluntarily attend summer schools.

Mr. MAZZOLI. It seems in contrast to what I knew about the young people in my day. As I recall many years ago, I probably did not volunteer to go, and do you think there is some societal change or some difference that causes the young people to elect to go? Do you think it is a parental decision?

Mr. HENSON. I think there are a number of reasons.

Mr. PUCINSKI. They get credits?

Mr. HENSON. The high school students do, but elementary do not. It is not popular to express a desire to attend school, but in reality, I think most pupils like it.

If I might make another comment, I think there is a great deal of difference in year-round schooling and year-round education.

Mr. MAZZOLI. The distinction being the summertime, the elective enrichment can be fun and really enjoyable, as well as going through a routine.

Mr. HENSON. One is pretty much an organized system that deals with incarceration time and check off how many days the pupil attends. Education year round is designing something that is meaningful to individuals, whether it be advanced Latin, an independent study, joint enrollment, or work experience, all kinds of things that would help the pupil grow into a more mature individual.

Mr. CANTRELL. May I add one thought. I believe Dr. Henson pointed out if they attended in the summer, it is free. I think you are aware in Kentucky, if you attend summer school, you pay tuition. Across the river in New Albany, they have 2,800 in high schools, grades 7 to 12, and the high school principal says 1,100 to 1,200 attend every summer. I said, "Why?" and he said, "Two reasons. Number one, it is free."

I think the Federal Government should certainly give consideration to that when we start thinking in terms of year-round education, not necessary year-round schooling.

Mr. MAZZOLI. One more followup question on that, and I don't want to prolong it, but it is interesting to me. That is, if we were to make a summer program free, and therefore assuming that there would be a pretty large increase in the attendance for enrichment program, not

to make it a pure enrichment, are we then using schools to do something that a society or township or community is not otherwise doing?

Or, do you think this is really going to help the students themselves? This is a direct promotive help to their education?

Mr. HENSON. I think it is both. May I give you a couple of illustrations?

Mr. MAZZOLA. Yes. It is interesting to me.

Mr. HENSON. Where does a youngster learn anything about the world of work or discipline of work? It is certainly not in urban centers, because there are not any. Now, if the school does not assume part of this role the child will never have the opportunity.

I think work experience is not only just for remuneration but provides psychological reward of being counted on as a productive member of society, of being prompt, of having someone look to you for service and not with the feeling that you are in the way. This has great educational value.

On the other side, education does not take place only within a school building. In some of the individual studies, exploration quarters, and related experiences, we found that many youngsters explore subjects in great depth, beyond anything that we could offer at school.

For example, the other day we had a youth symphony conducted by Robert Shaw, and some of the members playing in that orchestra were our high school students who had been permitted, on their own, to work with him.

We think that equals any music program that our high schools might be able to provide for them.

Mr. MAZZOLA. Thank you very much.

Mr. PUCCINSKI. Mr. Gove, you have a very able assistant over there, and I wanted to ask you if you wanted to introduce her?

Mr. GOVE. For the record, this is my daughter, Jane, who is escorting me here today.

Mr. PUCCINSKI. She is not under a 15-day break?

Mr. GOVE. No.

Mr. PUCCINSKI. Miss Banzer, do you have a question?

Miss BANZER. Mr. Cantrell, you mentioned the Carnegie unit. You mentioned the possibility of completing high school in 3 years as opposed to a 4-year program. It seems most schools require an amount of Carnegie units which would be possible to complete in 3 years. This shorter program would cut costs down considerably. Does your program evolve around something like that?

You mentioned that this could occur through your school system, but that right now very few people have taken this option. Is that because of the tradition of going to high school for 4 years?

Mr. CANTRELL. They could, but most of them, under the present system, take five subjects a year and three times five is 15, so they are short three, and since they must come back for the three, they stay for the whole year and get five and graduate with 20. Have I missed the point?

Miss BANZER. No. Mr. Gove, you mentioned that with the 45-15 plan, you would have a \$7.5 million tax avoidance for capital outlay of education, however, capital outlay is a very small percentage of the cost. Now, knowing that salaries for teachers are about 80 percent of the cost of education and noting that 62 percent of your teachers

elected to work more than the traditional 184 days, it would seem to follow that your school expenditures would be greatly increased.

Mr. GOVE. No, ma'm. As an example, everytime we grow 30 students, we have to hire one teacher, and, as an example, rather than hire this one teacher, we afford an opportunity to three of the present teachers who are working 180 days, to work a third longer, or 240 days, taking the salary which we would have had to pay that fourth teacher because of our growth. We pay it to our present teacher's who took the extra days of work.

Consequently, for the first year, 61.9 percent, to date 67 percent are working more days, but we are having to hire fewer teachers because of our growth. But then, more of our teachers are working longer. Do you follow me?

Miss BANZER. Yes.

Mr. PUCINSKI. Thank you very much, gentlemen. We are most grateful for your contribution here today.

The hearing session is closed.

(Whereupon, the hearing was adjourned at 11:55 a.m.)

APPENDIX

BOARD OF EDUCATION,
CITY OF CHICAGO,
Chicago, Ill., May 9, 1972.

Hon. ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education, House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN PUCINSKI: At your request the attached statement has been prepared in behalf of the Chicago public school system relative to the year-round concept and describing our experiences to date. The statement includes the following sections:

Background Information.

Distinctive Features of the 45-15 Plan.

Educational Advantages and Opportunities.

Specific Statements Requested. (April 17, 1972 letter from the Honorable Roman C. Pucinski, Chairman of the General Subcommittee on Education, and the Honorable John N. Erlenborn, member of the Education and Labor Committee).

The Libby Elementary School "School for All Seasons" Communication.

The Lowell School 45-15 Program Communication.

The Raster School "Crest" Newspaper.

Again we thank you for inviting this contribution to the hearing of the General Subcommittee on Education.

Sincerely,

JAMES F. REDMOND,
General Superintendent of Schools.

BACKGROUND INFORMATION

In 1967 the Board of Education of the City of Chicago requested that a study be made of year-round school programs.

Following an intensive study of year-round school programs across the country and a survey of the field, a report was submitted to the Board in 1968, with programs presented in detail.

No recommendation was made in 1968; a cost analysis was requested by the Board of Education.

In February 1970 an updated report was prepared.

The Board requested a pilot project and program recommendation(s), following state legislation effective July 1970 making a pilot year-round program economically feasible.

A report including possible sites for pilot projects, four plans, and costs was presented in 1971. Included as major considerations were plans which could help meet: severe reading needs, integration needs, bilingual needs, multi-ethnic needs, needs due to severe overcrowding, and the needs of children in schools with rapidly increasing enrollments.

The Board of Education gave all schools in the city the option of deciding:

Not to participate in any year-round plan at that time

To participate in one of the plans suggested, or

To participate in a modification of a plan within the constraints imposed by State School Code, Board of Education policy, negotiated agreements with bargaining employee groups, and available financial resources.

A process was developed for introducing the four plans and others to all communities for consideration. Plans were reviewed by the faculties, local school councils, and parents of high school and elementary school children. The decision

as to whether or not a school would participate and the determination of the plan to be used was made on the basis of a majority vote of the parents.

Requests were then submitted to the Board of Education. Three schools asked to participate. All wanted the 45-15 plan.

The Board of Education approved the requests.

A Board of Education resolution and descriptions of the proposed pilot projects were submitted to the State Superintendent of Instruction for approval.

Approval by the State Superintendent of Public Instruction was received.

Budget provisions were made for starting program implementation on July 1, 1971.

The plan became operational July 1, 1971 in the three elementary schools: Libby, Lowell, Raster.

Other schools continued to engage in studies of the various plans.

In November 1971 Dyett Middle School voted to participate in a 45-15 plan, effective at Dyett on July 1, 1972.

The options offered by the Board of Education in the spring of 1971 continued to be available to communities for study. Representatives from other Chicago schools visit the three schools in operation and continue to study plans in relation to their needs. In October of each year, in time to include necessary provisions in the succeeding year's budget, parents in each school district may vote to join the schools in the year-round program.

Recently parents and teachers of children enrolled in the three schools operating on the 45-15 plan had an opportunity to vote to continue or to discontinue the program at the end of their first year on the program. In all three instances the vote has been to continue the program. Although the decision rests with the parents, teachers also have had an opportunity to indicate their desires. In 1971, before the start of the program, the teachers voted 6 to 1 in favor of the program. This year, after working in the program, teachers at two of the schools voted 100% in favor of the program; at the third school the ratio was 7 to 1.

The 45-15 plan is being considered for a new high school which is in the planning stage.

DISTINCTIVE FEATURES OF THE 45-15 PLAN

This plan is presently in operation in three Chicago elementary schools (KG-8) :

Lowell—3220 W. Hirsch Street

Raster—6936 S. Hermilage Avenue

Libby—5300 S. Loomis Street

This plan is approved for operation in a fourth school beginning July 1972.

The present 1971-1972 calendar is divided as follows:

Group	45-day periods begin	Interim (vacation) periods begin
A.....	July 1, Oct. 27, Jan. 3, Mar. 29	Sept. 3, Dec. 3, Mar. 8, June 9.
B.....	July 23, Oct. 19, Jan. 24, Apr. 20	Sept. 27, Jan. 3, Mar. 29, June 30.
C.....	Aug. 13, Nov. 10, Feb. 15, May 18	Oct. 19, Jan. 24, Apr. 20, July 24.
D.....	Sept. 3, Dec. 3, Mar. 8, June 9	Nov. 10, Feb. 15, May 18, Aug. 14.

Children attend school for a 45-day period and then have a 15-day interim (or vacation) period before starting another 45-day school session. Teachers are assigned to a group of children and follow the same schedule as the group.

One of the four interim (vacation) periods occurs annually during each of the four seasons of the year.

For a listing of the advantages of the program, see Educational Advantages and Opportunities.

EDUCATIONAL ADVANTAGES AND OPPORTUNITIES

Individualization of instruction, particularly in the basic skills, is more possible.

The periods between student required attendance days can be used extensively for providing such learning opportunities as the following:

intensive assistance in reading,

tutorial or small group instruction.

programs for non-English speaking children.

programs to help children to achieve at their expectancy level.

provisions for children who need a little longer time to study to keep pace with others of their age.

courses which use the city or local community as the basic source of information.

mini-exchange or "Wingspread"-type programs for appreciation of multi-racial, multi-ethnic, and multi-cultural values.

outdoor education programs, including conservation and pollution studies.

guided independent studies.

Students may return to school during their interim periods to participate in such activities as band, chorus, and athletic programs.

Mini-courses and quarter courses have been and others are being developed: curriculum restructuring to meet local needs results.

Such mini- and quarter courses permit more flexible scheduling, which can provide more adequately for individual differences.

Mini-courses permit children more subject options and provide more adequately for individual differences.

Mini-courses provide more frequent evaluation and are expected to improve student motivation to learn.

A reduction in loss of learning which typically has occurred because of a long summer vacation, according to research findings, should be reduced or eliminated.

Greater utilization of and more satisfaction from recreational and cultural facilities is possible because of the reduction in numbers of students using them simultaneously.

According to experts in the field, vandalism and juvenile delinquency will be reduced.

Textbooks, other instructional materials, and equipment can be evaluated by teachers during their "vacation" periods.

Teachers have opportunities to try out new or changed modes of teaching new curriculum materials and to modify curriculum to meet the specific needs of the children in their own classes conducive to creativity.

Ten days a year are available to be utilized within the interim periods for staff development, tutorials and small group work with children, and the types of work already listed.

SPECIFIC INFORMATION REQUESTED

Reaction of parents when the plan was announced.—The parents themselves voted to participate in an extended school year plan and selected the 45-15 plan from an option of three plans. The vote was by a formal balloting procedure after a study of materials provided by the Chicago Board of Education for discussion and after shared information sessions at the community level. The option to participate in the pilot extended school year program and a choice of plans were open to all public schools in the city. The reaction of parents of children transferring from another Chicago school has also been favorable. The reaction of parents whose children are transferring from another system usually changes from one of inquiry or lack of understanding to one of acceptance or enthusiasm when the advantages and educational opportunities are pointed out and a calendar is provided.

Their reactions after the first year.—In March 1971 the parents voted at each of the three schools on whether to continue or discontinue the plan. At each of the three schools the majority of the parents voted to continue the plan. The feeling has changed from "Let's see if it will work" to "It works; it's better."

Whether the children adjusted readily to the change.—The children adjusted very readily, despite the fact that summer vacation for children in other schools was in progress as the program started on July 1, 1971.

Whether teachers were willing to accept the year-round schedule.—Although the decision as to whether a school would ask for approval as a pilot extended school year school was determined by parental vote, the teachers at all three schools indicated that they favored the program by formal vote. Teachers were given the option of transferring to a school on the regular 10-month session. Only four teachers asked to transfer to other schools.

Cost benefits, including any capital cost savings.—Since the Chicago Extended School Year plan is still in its first year, actual operating expenditures have not yet been determined. The mobile units or the school additions that would

have been necessary to relieve overcrowding have not been required. The mini-vacation schools are reimbursable on the same basis as summer schools. Capital savings which could be possible are estimated at about 25% of the cost of planned needs.

Unanticipated problems.—Because of preprogram answers found to staff and parent questions that searched out the *how to* queries, there have been no unanticipated problems. Because of limited time between the parents' vote and the beginning of the operation of the plan, scheduling was an anticipated problem, with its special considerations of neighborhood block scheduling, integration needs, friendships within a block, and prior vacation plans of parents and teachers. This was time consuming but was accomplished. Other anticipated problems which needed and were given special attention were storage of teacher materials during minisessions since a group returns to a different room; payroll procedures, including dates and payment for holidays; graduation dates; on-going procedures for reminding the children in each group when to return to school; inter-agency cooperative planning for the interim periods.

Whether legislation was required to permit the change.—The legislation was needed but it had been passed by the State of Illinois legislature during the previous year.

Whether a four-quarter system was tried.—No.

Whether the plan was compulsory, voluntary or a combination.—A school participates on a voluntary basis, that is, on the basis of the vote of the parents of the children enrolled. When the decision is made to participate, the program is mandatory for all children and teachers. There is one exception: when a school is embarking on the plan for its first year, a teacher may request and receive a transfer to a 10-month school.

How long the plan has been tried.—The plan became operation in three schools on July 1, 1971; on the basis of the parent vote the plan will be continued at the three schools during the next school year; a new middle school will operate under the plan beginning July 1972.

SCHOOL FOR ALL SEASONS

(By Arthur A. Libby)

Once upon a time, there stood a school building in Chicago by the name of Arthur A. Libby.

If a building can have a heart because of all the people, both children and grownups, who worked, learned and played in it, who were very human and had hearts, Libby had a heart made of all those human beings who lived in it. But in June of every year, the people, small and big, were told to leave and stay away for two long months. The doors were locked and the rooms and playyards were empty until after Labor Day in September. The building waited, staring, bewildered, with vacant, windowed eyes, for the warmth of the presence of its family to come home.

A few other schools, away from Chicago, began to ask why the children couldn't go away for shorter times throughout the year and keep their buildings open during the whole calendar year. They tried the idea and it worked well.

Our Board of Education offered to allow the parents of children in Chicago to try the "School For All Seasons" for one year by a family vote. Many parents were fearful of change, many saw no reason for rescheduling their summer vacation plans after all the years on the same calendar. But the wise parents of the Libby children looked ahead to an improved and enriched education for their young ones and voted "Yes" when the time came.

Now, for almost a year, our parents have seen the good things evolve and found the personal inconvenience a very small factor compared to the many benefits that have been reaped. The building has a happy face because of the children who give it life every day of the year, coming and going, working and playing, using their "other home" to prepare themselves to be mature adults equipped to take an active and productive role in our society.

THE GOOD THINGS NOW AT LIBBY

- Children from the same family and neighborhoods share the same schedule of attendance.

Only three-fourths of the students are in attendance at any one time, resulting in reduced class size with a climate in classes more favorable to learning. Shorter vacation time leads to less likelihood of study habits breaking, therefore, less review time is needed.

Supportive staff added because of Teachers' Union agreement.

Two para-professional staff members to give tutoring help to (a) pupils with Spanish as a first language, (b) pupils with learning disabilities.

"Mini-vacations" offer individual tutoring in reading, math and library study (remedial assistance, challenging the talented.)

Dressmaking and arts and crafts classes.

Bus trips to other cultural and educational agencies in Chicago.

Neighborhood Youth Corps employment at Libby.

Parent interviews.

In-service days for teachers to visit other schools to observe new techniques and innovations.

Resource teachers to help implement use of materials for programs of learning.
Gym teacher for Primary grades.

Librarian for Primary grades.

Two upper grade E.M.H. teachers.

Freed assistant principal.

Stabilization of staff—(teachers may tutor or substitute while "out" on 15 days interim period).

Reduction of pupil absenteeism (because of shorter time spans, pupils are less bored; more individualized instruction.)

Teachers believe that the children get a better education in the program at Libby now and that textbooks, manipulative and audio-visual materials are better utilized. Most teachers find that they are creative and try different techniques, sharing ideas with one another. The in-service days are profitably used.

The pupil with learning problems and those transferring from a ten-month school program need not be held back but can be temporarily shifted to another cycle. The traditional failure may be a thing of the past. A pupil with a problem may be given an opportunity to be shifted to another Track, where his problems in a different setting may be solved.

Many other benefits could be detailed but boring in length. The free buses for the regular classes, the Friday afternoon sports events in the boy's playground during the months when we can be outdoors, the picnics in Sherman Park are but a few of the new delights we are relishing. Above all, the children who are now happy to come to school are the best evidence that our parents knew what they were doing when they said, "Yes. We Want it!"

In a few weeks time, the Libby fathers and mothers will again be asked to come to school to cast a family vote to retain the plan. They will be notified as to the dates. For a school week that will include two evenings, the building will be open for balloting.

We consider the importance of the education of the Libby children to be the overriding factor at stake. Are the children worth it? The only answer is "Yes".

CHICAGO PUBLIC SCHOOLS, LOWELL SCHOOL 45/15 PROGRAM

FACT SHEET—ADVANTAGES OF 45/15 PROGRAM

1. Smaller class size

- a. Educational environment changed.
- b. More individualized instruction.
- c. Students receive more attention.
- d. Classes dropped from maximum of 45 to 34 or 31.

2. Vacation school

- a. Over 1000 students have attended one or more sessions for additional work.
- b. Students function in groups of 10 to 15 allowing for greater individualization.
- c. Extra help or enrichment is offered three times during the school year.

3. Special programs were added

- a. Three TESL positions (Teaching English as a Second Language). This enables us to assist all our bi-lingual students.

b. Resident Special Assistance Team. This team offers added help to over 150 students per week.

4. Optional teacher time

- a. Greater opportunity for teacher planning and professional growth.
- b. More teacher time for small group tutoring.
- c. More time to investigate new methods, programs and materials.

5. Student opportunities

- a. N.Y.C. positions, 12.
- b. F.T.A., Volunteers—Opportunity for those who wish to volunteer some of their vacation time to assist other students.

6. Additional student benefits

- a. Students more relaxed and refreshed due to four mini-vacations—one in each session.
- b. Better retention over the three week vacation period.
- c. Improved interest and attitude toward school.
- d. Improved student attendance.
- e. Marked improvement of student behavior patterns.
- f. Increased playground and lunchroom space because only three-fourths of the students are present at any time.

[The Crest, January, 1972]

THINK RASTER . . . COLOR US VIP

THE PROS AND CONS OF THE 45-15 PLAN

Children in all grades were given a chance to voice their opinions on the 45-15 Plan. Over half the Raster School was in favor of the plan. Many liked it because of the three week period of time used for leisure activities. Others like the plan for the enjoyment of summer school which includes a field trip at the end of the three weeks that the children especially enjoy. Some children mentioned that they were in favor of the plan because they felt they were learning more with less children in a classroom as a result of the plan.

The other fraction of the school not in favor of the 45-15 Plan had their reasons too. Many children said they didn't like it because they have to attend school in the summer. Others said they didn't especially like it because it is too confusing to them. Families were affected in a few cases where this plan prevented them from spending the entire summer at a lake or farm.

The children who have voiced their opinions on the 45-15 Plan have helped through their community to bring to light some of the problems connected with the plan. Although all the problems can't be solved to satisfy everyone, it is felt that the 45-15 is a success at Raster.

CINDY BRANN, 478-8.

THE 45-15 MINI VACATION PLAN

The 45-15 Mini Vacation Plan at Raster is a keen idea. During the three week vacation, the children on vacation can come back to school for different subjects. The subjects are arithmetic, reading, music and art.

On my last vacation, I went to school. At the Mini Vacation school I took all the subjects. The subjects that were the most fun were music and art. In music we learned new songs. In art I made a fish and an octopus out of yarn. Mini Vacation Plan is fun. Miss Frey and Mr. Kaduchak made the Mini Vacation most interesting and highly beneficial.

PATRICIA RAPPETT 206-6.

TELLING IT LIKE IT IS

I am proud to go to Raster. Raster is a small school with a big population. It has a fine gym. The gym is the home of the Raster Rebels and Rebelettes. Both teams have won many trophies displayed prominently outside the office. Our library is one of the finest and contains both educational and recreational materials. We have big classrooms but small desks. The teachers are nice and the principal and assistant principal are great.

JAMES TIERNEY, 156-6.

P.T.A.

The P.T.A. Board would like to thank everyone, parents and faculty, for the cooperation you have shown. Your attendance at the meetings shows you are interested in what is going on at Raster. And, as you all know, quite a few changes have been made. But, all in all, everyone seems to have adjusted very well.

We imagine there have been times when Mr. Gornick and the school's faculty must have wished for the good old days when things seemed less hectic. We are fortunate to have a wonderful faculty who works with the P.T.A. for the welfare of our children and community. The children did a great job of adjusting to and favor, for the most part, the 45-15 Plan.

I would like to wish each and every one of you a Happy New Year!

Mrs. R. VALDEZ, President P.T.A.

Never has there been a more dedicated group of ladies than that of our P.T.A. "Ask and you shall receive" should be their motto, for whenever our school had a need, it was met by our P.T.A. In the past few years we have received such items as television sets, special reading equipment, and new curtains throughout the building. These are only some of the material things given by the P.T.A.

To count the many hours of their time given to Raster would be impossible, for they are always there when needed, and they are needed often. Our P.T.A. is a very important part of our school, and to them we are very grateful.

JANET WENSEL, 207-7.

OUR PRINCIPAL'S MESSAGE

To the Parents, Teachers and Students of Raster:

Change is all about us—look around—a new room, a new teacher, new friends and for many, even a new school. Have you looked at any old pictures of yourself lately? If you have, you will probably say "How I have changed!"

The biggest change for all of us at Raster this year is the "45-15 Plan". This plan is a new idea and a new approach to scheduling your education . . . Many parents have expressed strong feelings for and against this new concept. Remember, however, differences of opinion and a respect for these differences is the foundation of this country, a right that most of us take for granted.

We cannot predict what the future holds for the 45-15 Plan; but, as President Kennedy once said, "There is no sense in trying to do anything unless you give it your maximum effort. You may not succeed, but at least the effort, dedication, and interest should be there."

I want to take this opportunity to thank everyone: the entire staff, the P.T.A., our community members, our parents and, especially, you, the students of Raster for a maximum effort in the 45-15 Plan. Its future rests in your hands.

Change made it also necessary to say goodbye to a friend, Mrs. Mary Mahoney. Her work was marked by unselfish giving of her total energies, an untiring effort that has sustained our school for many years. We will do our best to uphold the high standards she helped establish at the school. Mrs. Mahoney, your school and students will long remember your support, your example, and your industry.

Sincerely,

RICHARD S. GORNICK.

EDITORIAL

With the 45-15 school year half over it seems that the majority of the students at Raster have found it to be an interesting experience. It's great to look forward to the three-week vacations every nine weeks and I think we should be honored to be one of the first schools to experiment on a brand new concept in education.

This year has also brought another new practice to our school which was more than happily accepted by all. That, of course, was the adoption of the new dress code. With the recent cold weather it seems especially practical that the girls are allowed to wear slacks. However, we should all remember to respect ourselves and be neat and orderly at all times so that we will be deserving of this new privilege.

TAMMY LUTZ, 478-8.

45-15

As far as I'm concerned, the 45-15 Plan is a big success here at Raster. The 9 weeks on and 3 weeks off are just fabulous. It makes the school year seem to

fly by a lot faster, and it breaks the monotony. Neither school nor vacation gets tiring.

I have found this plan very good except for a few bugs. For instance, split classrooms. It is harder to do work when you are trying to think and the class is discussing something. The upper grades do not change classes for different subjects like they use to do.

The Mini-Vacation School activities are diversified and depend on which group you are in. Group C wasn't too good at all the first time; but, Group A's second vacation program is really terrific. All together, it isn't really a bad plan.

DAN FIELDS, 378-8.

45-15 PLAN

I think the 45-15 is a bad plan. The reason I think this is because the 45-15 was originated so classes could be smaller, enabling the teachers to give more individual attention to the children. I think that this year I didn't learn any more than usual. The plan was also used because they think that we forget what we learn over our summer vacation. Maybe, sometimes we did—but, there are always reviews in the books. I dislike the plan very much.

NANCY JOHNSON, 178-8.

45-15

We are the first of 45-15. It's not as bad as it might seem. How great it would be—man alive! If only it were 15-45.

THE CHILDREN OF CODE, 245.

THE EXTENDED SCHOOL YEAR

At first I thought that I wouldn't like it; but, now after I have had my first 15 day vacation period I find that it is great.

I can't wait for my next 15 day vacation period so I can play hockey. We get the whole month of December off, so I am going to spend it playing ice hockey.

PAUL TAPIA, 156-6.

(Sorry about that, Paul. You should have been in the "B" Group.)

THE 45-15 PLAN

The 45-15 Plan is good, and I really think they should continue on this plan next year. For if they don't, I shall fear our school would have overpopulation. Now consider this situation; children here, children there, children everywhere. But, if we continue this year-round plan, we'll never have to worry again.

KAREN CONTINO, 204-6.

A IS FOR ANXIOUS . . .

Anxiety for our new program to benefit each child; but we're agile so we'll make it.

B IS FOR BUGS . . .

Doesn't every new program have a few in it? But, we are busy working them out.

C IS FOR CRAMPED . . .

Which we are—for space! But we'll make the 45-15 Plan successful with our ceaseless cooperation.

It's A Big Challenge, but we are. . . Anxious to Better our Children.

ANONYMOUS.

THE 3 REASONS WHY I DON'T LIKE THE 45-15 PLAN

I don't like the 45-15 Plan one bit. First of all I'd rather be off in the summer with most of my friends in the Catholic schools. Who wants to go to school when it is hot? It's too hard to work when it's hot.

Secondly, when we are off in the winter and fall, there is nothing to do, no place to go and all I do is sit around and watch TV. At least when I'm in school I always have something to do.

Thirdly, I feel that I haven't learned as much as I would if I went straight through for the ten months. All of my friends in the other schools are ahead of

me in their subjects. I feel like a real dummy. If you ask me, the 45-15 Plan; to a degree, is failing its purpose.

CHRISTINE MOUSTIS 306-6.

WELCOME TO RASTER

Here at Raster, we have many new teachers. When asked to interview one, I choose Miss Toolis. I had attended her music class and she seemed so nice. I thought this would be a wonderful opportunity to talk to her about her background. As all of you probably know, Miss Toolis has taught at Raster since September. Before coming to Raster, she was a substitute teacher at Fulton teaching History and English. In previous years, she attended Chicago State College. When asked, "Would you like to stay here or go on to teaching somewhere else?" Her reply was, "I'd like to stay here because it's close to my home and I like the people."

I think Miss Toolis has done a beautiful job for her first year teaching music. Thank you Miss Toolis!

TAMMY LUTZ, 478-8.

ECOLOGY

Ecology! What is Ecology? The natural environment which surrounds us—the trees, animals, wild life, and greenery which so abundantly plays a part in our everyday life. Soon there may be a terrific change so unimaginable to our most creative or wildest dreams. Soon because of man's carelessness, our world will be polluted with the decay of our natural surroundings.

I leave you with one point in mind, preserve for the future what is yours today.

TONY GRECO, 208-8.

FUTURE YEARS

I plan to continue my education because it is essential to my future profession which will be that of a veterinarian.

I enjoy working with animals very much. I think even now I am capable of handling animals in a way that a trustworthy veterinarian would; but, I suppose the main reason is my goal in life to help others even if they are only animals.

ROSEANN FICULAK, 208-8.
MECHANIC

I would like to be a mechanic because I know a lot about engines and working parts. I have taken apart and put together lots of engines. I hope that when I am older I may get a job as a mechanic and one that pays good wages. This is a job I would like. College isn't for everyone as I have already found my interest.

MIKE SCHMIEGEL, 208-8.

MY FUTURE PLANS
FUTURE PLANS

After graduating from high school I plan to go to college and study to become a teacher. I would like to teach the primary grades. I choose to become a teacher because I feel that I can help the younger children to learn. A good education is important in getting a job. I would be very proud to think that maybe someday I could guide a young child in getting a career he or she is interested in.

KAREN McDONALD, 208-8.

When I grow up, I plan on being a teacher. The reason for this is because I would like to teach the children things they do not already know. Another reason for my interest in teaching is because all of the teachers I have had taught me well and have encouraged me to be a teacher.

CHERYL THOMAS, 208-8.

SUMMER SCHOOL PROGRAM

The summer school program is lots of fun,
Even the work is easy to get done.
Arts and crafts are really nice,
The home made glue smells like a dish of rice.
The kids are nice and they don't fight,
I think this plan is really right.
I like the things we do here,
I hope they have the same plan next year.

DEAN ZOWASKI, CODE 150, GRADE 5.

MINI-VACATION PROGRAM

The Mini-Vacation Program here at Raster is functioning quite well and is growing in popularity. There are subjects such as readings, math, music, and art for children who are in need of additional instruction to keep up with their class. Besides being a time for studying, there is time for recreation. At the end of each group's three week term, they go on field trips. Group C even participated in a poster contest sponsored by the Chicago Savings and Loan. Quite a few children at Raster received recognition for their work on the posters dealing with the theme of "Inflation".

The following is a presentation of opinions by some of the teachers in the program:

Mrs. Weston.—The program gives the children a chance to catch up in their work, or get a better understanding of the fundamentals.

Mrs. Molis.—I feel that the Mini-Program is effective in tutoring the less able children, increases the math and reading skills of the average students, and offers an accelerated program for the advanced child.

Miss Frey.—It would be an excellent program if we had more classroom space.

Mr. Morrison.—He thought it was a good opportunity for the children to enjoy things not usually presented in regular school.

Miss Biros.—I enjoyed it very much.

Miss Conlin.—There was a certain kind of friendly atmosphere that made it very enjoyable.

Miss Hardy.—The one thing she did not like was the moving from one place to another.

Miss Sima.—It was quite an experience. (We wonder how she meant that?)

Miss Toolis.—There were too many children and not enough teachers. (The D Group has the largest number of pupils).

TONY GRECO, 208-8.

CHAMPLAIN VALLEY UNION HIGH SCHOOL,
Hinesburg, Vt., May 3, 1972.

ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education, John N. Erlenborn, Member, Education and Labor Committee, Congress of the U.S. House of Representatives, Washington, D.C.

DEAR SIRS: An increasing number of school districts across the nation are facing crises in providing adequate housing for their students. Whether because of having reached the limit of bonding ability, as in the Valley View school district, or because of voter reluctance to provide additional construction funds, or because construction would not give relief soon enough—whatever the reason, it is clear that there is growing interest in year-round schools, and in "45-15" in particular.

It should be made clear that 45-15 is not an educational solution, per se. It is primarily an organizational scheduling device designed to increase school plant capacity. It does not guarantee, or necessarily require, innovative program developments.

That 45-15 may not be an educational solution is its major drawback. For unless the school is large enough, or unless the curricular program and instructional abilities of the staff are suited to a great extent to individualized learning, then 45-15 may not be possible without reducing curriculum opportunities for students. This problem is probably more critical at the high school level, which, generally, has not moved toward individualized and other relevant programs at the same pace as the primary and intermediate levels.

Another drawback of 45-15 lies in its potential for continuing the inflexibility of school calendars for the sake of achieving maximum economies and the most efficient utilization of buildings. While these are certainly essential considerations, it is also very important to realize that the 45-15 concept provides the opportunity to open up the calendar and the school to make learning programs and experiences available at the times preferred by students and their families. In fact, if the student attending a year-round school is enrolled in a program including continuous progress, independent study, and similar individualized courses, he and his family can tell the school which 175 days they prefer he come to school. But as it has been implemented in most districts, 45-15 is as rigid and mandatory as any traditional calendar.

Flexibility in curricula and calendar options becomes extremely desirable as it serves to strengthen program offerings and to capitalize on the capabilities of a good faculty and resourceful community. Indeed, in our community excellent program and maximum flexibility for the individual were the essential expectations. That economy and space saving resulted too was simply frosting on the cake.

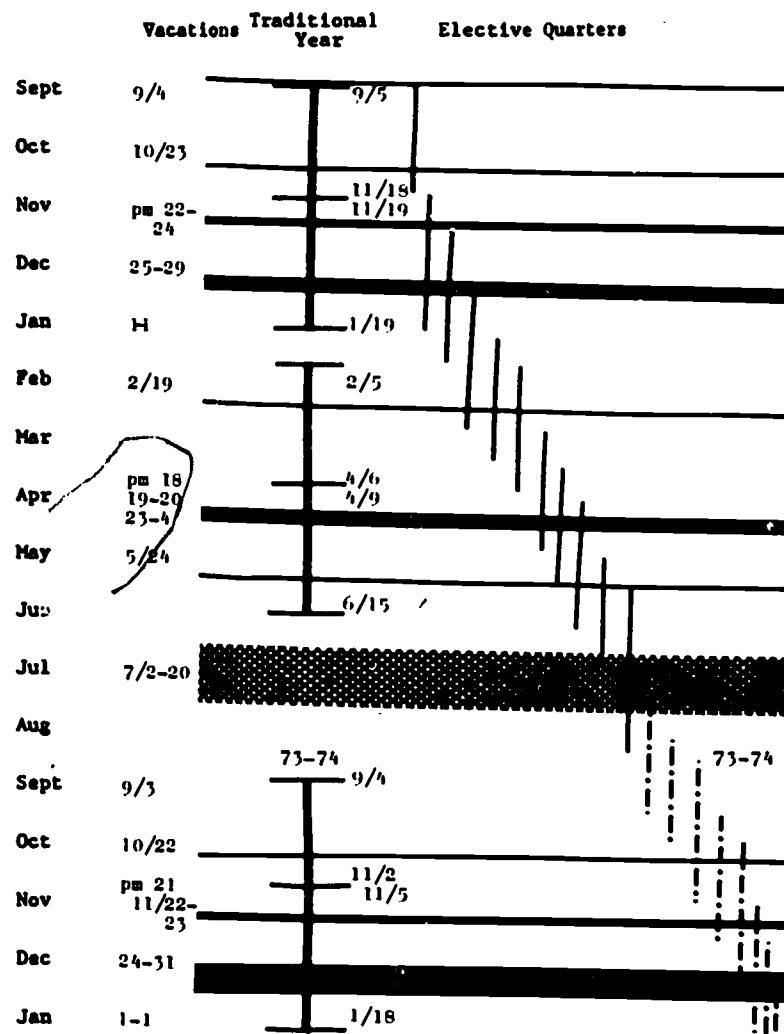
Our community would not accept 45-15 because of its rigid and mandatory nature. Our response has been a "multiple access curriculum and calendar" consisting of 16 nine-week quarters. It is similar to 45-15 in that each quarter is staggered to begin at about three-week intervals. A major difference is that students may elect to attend any four or five of the 16 quarters. Independent study and out-of-school programs may occur within or between any quarters. We know that we will achieve the maximum possible space saving (as is possible under the mandated 45-15) only by chance, yet we will achieve close enough to this point to suit our particular purposes. Our main purpose is to offer a calendar which serves primarily as a vehicle for the curricula program; therefore, our adoption of the Multiple Access Curriculum and Calendar.

The "multiple access curriculum and calendar" is first and foremost an educational plan. The term "multiple access" simply means that learning programs and experiences are available to students at several or more times during the school year. The ultimate goal is "open access", so that the student will have complete ability to select his starting times and dates of attendance.

The multiple access calendar does not abolish the traditional school year for those who like that calendar best, but does provide the flexibility for students and their families to elect other school attendance (and vacation) times. (See next page for copy of the 1972-73 calendar for C.V.U. For the first year of implementation, in order to effect a gradual phase-in of the year-round program, we have modified the calendar to offer eleven rather than sixteen 9-week quarters.)

Because the curricula program is the essential element of our year-round school program, it may be useful to provide a brief description of those aspects of the program which make our flexibility possible.

72-73 Calendar



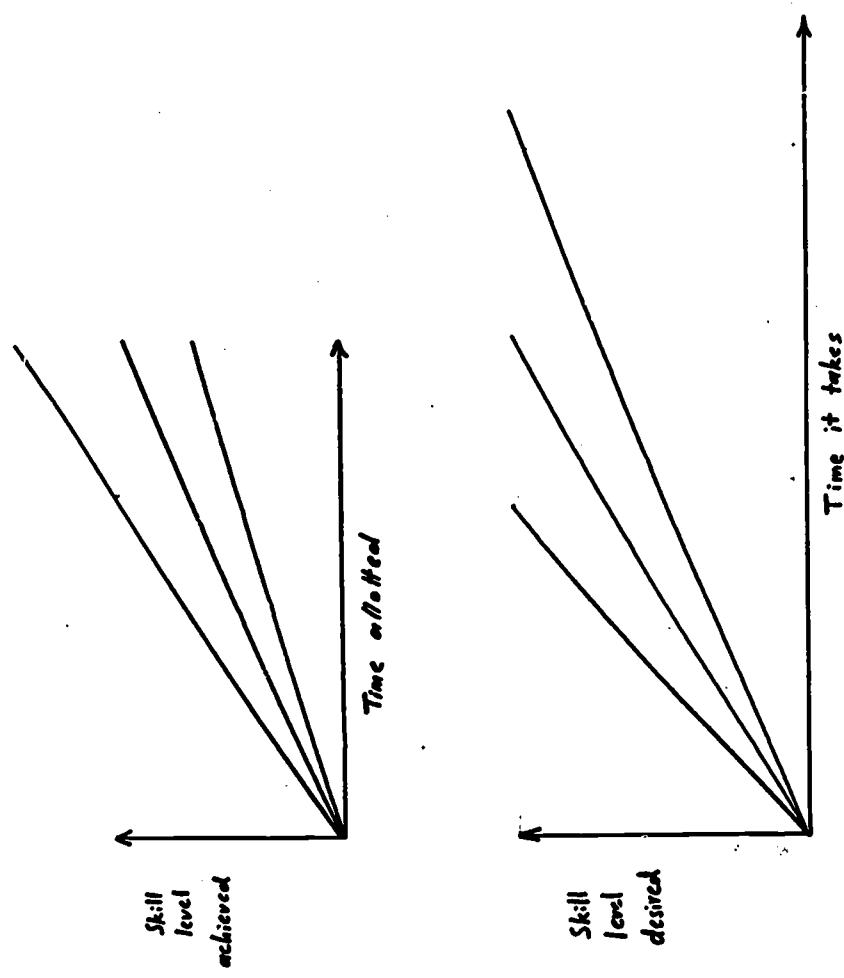
Courses of varying lengths. In the past, there were usually only year-long courses offered - English 9, for example. All 9th grade students elected "English 9." Students with different academic abilities were sorted into separate classes. The content for each lower ability level was "watered down" just a little more than the last. Most classes, if not all, were based on the college-preparatory curriculum. In year-long courses, such as English 9, one teacher taught the class for the whole year. This implied that the teacher was highly proficient in all of the areas studied: literature, composition, reading skills, speech, etc. More often than not, the teacher's background and interests were in one or two of these areas only.

When courses of varying lengths - whether 3, 6, 9, or 18 weeks - are offered in place of year-long courses, teachers can be used more effectively - and to their greater satisfaction - by concentrating the teachers' instruction in the areas of their greatest interest and competence. The same benefits can be enjoyed by students whose interests likewise are varied. (See the attached course offerings book.) Courses of varying lengths do not increase the costs of instruction. They require the same number of class sections and teachers as year-long courses, but no more.

Continuous progress courses. There is another very important reason for offering courses of varying lengths. This is that courses should - and now can be - designed with specific behavioral objectives in mind. That is to say, we have done away with the Carnegie Unit - courses can now be based on what it is we want the student to learn, achieve, and/or experience, not simply on the arbitrary amount of time available. For different students, this may be a matter of weeks, months, or years depending on the student. The diagrams (on the next page) illustrate the two concepts we are dealing with. The upper diagram shows a course in which time is the constant for all students. American History, for example, is usually a one-year course in high school. With a bright class, you move quickly and accomplish more either in terms of material covered or enrichment experiences. With a slower group, you move more slowly and accomplish less. The lower diagram shows a course in which skill level desired is the constant for all students. If you forgot for a moment that U.S. History is a year-long course, and thought instead of what it was you wanted the student to accomplish through a study of American History, wouldn't you have to arrive at some different and varying time patterns? The lower diagram is the continuous progress course concept. This is an individual or group situation in which the student progresses through the course at his own pace. Periodic hurdles are set up which the student must overcome before progressing to the next phase or unit. Periodic is used to denote learning phases or units, not time intervals. A minimum achievement level is established for each hurdle, usually at about the 80-90% level. The course has no length - the student completes the course when all the hurdles have been overcome, when all the course objectives have been achieved.

The teacher's role is critical and vital! The teacher is available to the student as needed by the student. The teacher's role also involves prodding, if the student isn't moving as quickly or achieving as well as expected; braking, if the student seems to need to go slower; anticipating potential difficulties for each student; and the like.

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There are ordinarily no teacher-to-the-whole-classroom presentations. Because of its individual nature, a student can begin the course at any time during the year; by the same token, absence for sickness or a vacation is no problem since the student will miss no class presentations - when he returns he simply does the necessary review, depending on the length of his absence, and picks up where he stopped working before the absence.

Open laboratories. Group presentations are useful in many classroom situations, but when better learning is possible by creating individual learning situations, then such should be employed. One instance is the open laboratory concept in science. Rather than a class, by-the-numbers, approach to science experiments by students, we let students schedule themselves for laboratory experiences. Some students will finish more quickly than others; some, in order to learn better, will repeat experiments. Absent students aren't deprived of that particular experience. In terms of facilities utilization, science labs are available all day for laboratory experiences - science classes can meet in regular classrooms for the most part - and fewer science laboratory facilities are needed.

Independent Study. This concept provides opportunities for students to meet course objectives in different ways as well as to create unique courses or special curriculums for particular individuals. This is often done for students confined to bed during a lengthy illness. Another instance may be a novel substituted for another novel being studied by a literature class. The substitution may occur because of the student's or his family's objections to the novel being studied by the class. Or the substitution may occur because the student is already very familiar with the novel. Or it may occur because the student wants, but cannot be scheduled for, a particular course. Or because the student's background, experience, previous study, or special abilities suggest a better learning experience if a part of - or the whole course - is accomplished independent of a class situation. Independent study is often an individual situation, but can be a group situation too. Independent study programs, as well as others, operate best as student-faculty contracts in which the student contracts with the teacher/advisor to accomplish the stated objectives. Explicitly stated should be the logical consequences of matters such as the student's learning, or lack of learning, and effort, or lack of effort.

ISDA - Individual Student-Directed Activities - ISDA is that aspect of the school program which has given students the responsibility to decide for themselves what they will do during "not-in-class" time. ISDA offers opportunities to use unscheduled time in a variety of ways and under limited supervision:

- ...take a break
- ...become involved in work-experience programs
- ...attend films and lectures
- ...audit classes
- ...consult with guidance counselors
- ...toss a football around on one of the fields

- ...work on independent research
- ...elect a DUO project
- ...study in small groups
- ...just sit around and chat
- ...help others by offering to tutor
- ...assist in Head Start or help out in the elementary schools
- ...go to one of the department resource centers
- ...work in the art room, shops, science labs, and music rooms - you don't have to be in a course to use the facilities
- ...eat breakfast and lunch
- ...have conferences with teachers
- ...join one of the service organizations
- ...work out in the gym
- ...enjoy the out-of-doors, except by classroom areas
- ...participate in mini-courses and club activities

With the exception of freshmen, who are initially assigned to study areas, and students who are found to be unable to handle the responsibility, the entire student body is involved in the ISDA program. The program provides the student with the opportunity to experience the considerable freedom that he has after high school graduation but at a time when the home and school can still exert considerable influence in its use. We would rather have the initial failures and crises occur now, rather than in college or on the job - we would rather have them occur now when the results will be less disastrous and the problems more easily remedied. Both the personal and school problems of students are much more noticeable in a program such as ISDA - but this also gives us the opportunity to be more aware of the problems and to work more closely with the students and family in solving them.

SOPE- Student-Organized Project in Education. During the 1969-70 school year, the regular curricular program was completely set aside for a week and was replaced by a curriculum of more than 200 courses, both in and out of school, which was planned, determined, and implemented by the students. One of the main purposes was to provide an opportunity for students to learn about matters not included in our regular course offerings. Our faculty was involved in many courses, but numerous community resource persons became faculty members too. In one of the informational bulletins sent to community residents, the students stated, "SOPE is a unique experience that considers learning to be a 24-hour process and makes the entire community the school." SOPE was not intended to be an isolated week in the school year, but is evolving into a program of continuing year-round learning opportunities in which alternative offerings and situations play a major role.

DUO is one of the permanent, on-going programs in which students have the opportunity to learn by utilizing the many and varied resources in the community. They may perform a service at the same time they learn new skills or share their talents and the learning they have acquired in school. They may teach in an elementary school, work in a social service agency such as the hospital, or they may learn a craft or a trade by apprenticing to a business or to a master craftsman. DUO projects are designed by the individual student to meet his special needs and interests,

and, with the guidance of his parents and teachers and the resources provided by the school, the student may elect and schedule a full-time DUO program for a period of three, six, nine, or eighteen weeks, or he may elect a "partial" DUO program which allows him to plan a project in the morning or afternoon or on one day a week only. The school will help the student select an experience in conjunction with his regular in-school program, and with the cooperation of the Guidance Department in the planning of his total program, the student may have a meaningful "personal" as well as "learning" experience. Academic credit may be granted, the number of credits being determined by the nature of the project, by the period of time devoted by the student to the program, as well as through evaluations of the project made by the student, the sponsoring agency, and by the DUO Coordinating Committee. The student plans his program and submits his application to a student-faculty committee. The application must be approved by his parents, teachers, the DUO agency in which the student will work, and by the school (see page 22 of curriculum booklet for listing of suggested DUO programs).

Differentiated staffing is a fancy term which means we try to use all members of our staff in the most effective ways possible: department chairmen; teachers, certified, subject area; instructional aides; technicians; clerical aides; supervisory aides; and community resource persons. The concept is also economically sound. Our concept may be somewhat different than general use of the term. We use professional faculty, for example, only for the professional functions for which they were employed. The primary functions are directing and supervising students' learning, providing and improving present instructional programs, and developing curriculum. We are concerned with "professional load", not "teaching load." Less-skilled and lower-salaried personnel are employed for those functions which they can perform as well as, and often better than, professional teachers. Among the numerous examples of these functions are filing of student papers, typing tests, running off ditto masters, correcting True-False and multiple choice tests, supervising corridors and cafeterias, and the like. Instructional and technical aides, often working directly with students, supervise open laboratories, media and department resource centers, and the like. An important aspect of differentiated staffing is salaries. Included in the negotiations agreement is this statement: It is the joint goal of the Board, Administration and Professional Staff to change the present method of compensating the professional staff from the traditional salary schedule to a method which will provide compensation on the basis of professional effectiveness.

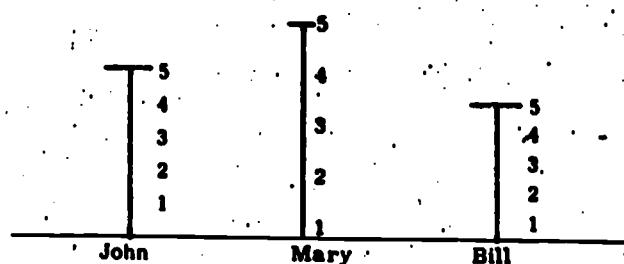
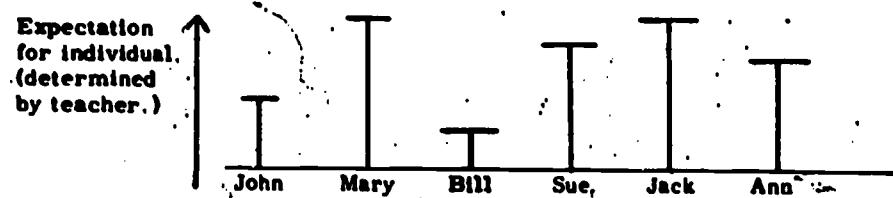
Alternative Staffing. First, let me clarify the term "alternative" - it is not an attempt to replace teachers. Rather, in much the same way that our DUO program might be called "alternative education", we are working to add to and enhance learning opportunities for students. As in the case of differentiated staffing, which is an elementary form of alternative staffing, we are seeking to redefine the role of the teacher. But even more than that, we are looking to utilize all resources in different and expanded roles. If the professional staff member is in fact a "director of learning experiences", in contrast to the "stand-

up-in-front, chalk-and-talk" teacher, then his traditional roles must be remodeled. Additional, probably non-professional, "teachers" will be utilized to help provide richer, more meaningful learning experiences. Often, this means new environments too, and ultimately, new definitions of such terms as course, program, school, the "system", and the like. Most teachers are not prepared, philosophically or experientially, for assuming such new roles. We are now involved in an Alternative Staffing project. We hope to be able to establish and demonstrate some additional viable models of alternative staffing which operate within the school umbrella.

Reporting student progress. Report cards are issued at the end of each quarter. (In addition, at any time during a course, interim reports are made.) Our philosophy encompasses two goals: 1) to establish individual goals for each student in each course within the framework of the general course objectives; and 2) to provide an accurate reporting of the student's skill achievement. If we expect that a student working at his full potential will achieve at a level different than others, our expectations for a class might look like the top diagram on the next page. These expectations may be defined as skills to be learned, the level of skill to be achieved, information retained, concepts understood, values learned, and the like. The expectations for a specific student are based on past performance, standardized testing results, other pertinent data, and professional judgment. In the case of continuous progress courses, in which the skills to be learned, for example, are the same for all students, the expectations may be in terms of time needed. The extent to which a student lives up to the expectations for him is reflected in the "effort-ability index", a scale ranging from 1 (lowest) to 5 (highest). This is illustrated in the lower diagram. Whatever the reporting system, how can the grade be made to tell just what the student has learned? A, B, or C does not really say much about

...the number of words per minute that a student can type
 ...whether a student studying French is equally proficient in conversation and reading
 ...which of the Social Studies course objectives are being met, and how well
 ...etc., etc.

Where we need to give a better indication of actual achievement, we provide additional information. In the case of typing, for example (see actual report card on page 11), we report on such matters as Typing Techniques, Work Habits, Speed, Accuracy, Following Directions, Proofreading, Erasing, Completion of Assignments, and Types of Problems Completed This Quarter. We feel such a report provides more and better information than the traditional grade to the student, his parents, and prospective employers or colleges. (See other examples on pages 12-17.) Our philosophy of grading does not lend itself either to "Honor Roll" or computation of "Rank in Class." In practice, this has presented no problems for the school or been a handicap to our students. Indeed, we received the following letter from the Admissions office of an out-of-state, nationally recognized institution:



REPORT OF PROGRESS IN TYPING I

Typing I is designed to provide each student with a basic vocational skill. It is a prerequisite for **Typing II, Secretarial Procedures, and Clerical Office Procedures.**

During the first several weeks of the course, emphasis is on the development of proper keyboard control and techniques, proper stroking, knowledge of the operative parts of the typewriter, and good work habits. As early in the course as possible each student commences work on assignment sheets which he completes at his own rate. As the year progresses, the student will apply his typing skill to a variety of problems such as proper placement of material, letter styles, envelopes, carbon copies, tabulation problems, manuscripts, and simple business forms.

Throughout the course, considerable time is spent on various types of drills designed to improve the student's basic typing skill in terms of both speed and accuracy. Related knowledges and skills to be developed during the course include recognition and skillful correction of errors, correct word division, proper punctuation and capitalization, careful planning and organization of work, and the ability to complete an assigned task within a reasonable period of time.

Typing Techniques _____ Following Directions _____
 Work Attitudes and Habits _____ Proofreading _____
 Speed (straight copy) _____ Erasing _____
 Accuracy _____ Completing Assignments _____

(Excellent, Good, Average, Poor, Failing)

Types of Problems Completed This Quarter _____

Student Name _____	Parent conference requested	YES	NO			
Class _____ Homeroom _____	Effort ability index	1	2	3	4	5
Subject/level _____	(Minimum - 1	Maximum - 5)				
Teacher _____	Final Grade _____					
Class absences this report period _____	Unit of credit earned _____					

English Department
Achievement Report

Objectives of Developmental Reading 1971-72

Dear Parent:

This course is totally individual in nature. The student and I set goals which need to be worked on and he spends his class time accomplishing these. Much stress is put on individual initiative and a business like approach to the work.

The / before the objective indicates this one as needing improvement when the student entered this course.

The * after the objective indicates the student accomplished the goal.

Those objectives with no / or * are ones this student is not involved with.

By the end of one semester the student should be able to:

- _____ demonstrate substantial increase in level of reading comprehension.
- _____ have an extended general reading vocabulary taken from his readings.
- _____ demonstrate by quantities and qualities of material read, an awakening recognition of the role of reading in his career, and an interest in reading itself.
- _____ vary his reading speed to the difficulty of material read and the purpose for reading it.
- _____ increase his reading speed about 100%.
- _____ study and work efficiently and effectively for each content subject and task.

Student Name _____	Parent conference requested: YES NO
Class _____ Homeroom _____	Effort ability index 1 2 3 4 5 (Minimum - 1 Maximum - 5)
Subject/level _____	Final grade at end of course _____
Teacher _____	Unit of credit earned _____
Class absences this report period _____	

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English Department
Achievement Report

Dear Parent:

Course Description:

Writing Workshop offers the student the opportunity to sharpen his writing skills by writing about experiences and events which arise from his own thoughts and activities.

GOALS:

_____ has completed _____ writing assignments.

The student demonstrates the ability to:

1. focus on a specific idea, feeling, or event which he wants to express in writing. _____
2. organize his material logically. _____
3. use concrete details to make his writing clear. _____
4. write in different ways in order to be understood by different readers. _____
5. recognize the strengths and weaknesses of his writing. _____
6. improve his papers by rewriting. _____

Student Name _____	Parent conference requested YES NO	
Class _____	Homeroom _____	Effort ability index 1 2 3 4 5 (Minimum - 1 Maximum - 5)
Subject/level _____	Final grade at end of course _____	
Teacher _____	Unit of credit earned _____	
Class absences this report period _____		

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**DRIVER EDUCATION
ACHIEVEMENT REPORT**

Dear Parent:

The goals of Driver Education are:

1. To develop a knowledge of the laws and rules of the road through classroom work.
2. To develop good driving attitudes.
3. To develop acceptable driving skills.

During the semester progress towards these goals has been:

Poor	Below Average	Average	Good	Excellent
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Weaknesses have been discovered in the following checked areas:

<input type="checkbox"/> Attitude	<input type="checkbox"/> Interstate Driving
<input type="checkbox"/> Steering control	<input type="checkbox"/> City driving
<input type="checkbox"/> Speed control	<input type="checkbox"/> Adverse condition driving
<input type="checkbox"/> Hill starts	<input type="checkbox"/> Parking
<input type="checkbox"/> Turns	<input type="checkbox"/> Anticipation of hazards
<input type="checkbox"/> Backing	<input type="checkbox"/> Reaction to conditions
<input type="checkbox"/> Classroom work	

Comments:

Hours of additional driving practice at home are recommended before attempting to get a license.

Student Name _____	Parent conference requested YES NO	
Class _____	Home room _____	Effort ability index 1 2 3 4 5 (Minimum - 1 Maximum - 5)
Subject/level _____	Teacher _____	Final grade at end of course _____
Class absences this report period _____	Unit of credit earned _____	

REPORT OF PROGRESS IN BUSINESS MATH

Business Math is designed to help the student develop his computational skills and his ability to apply this skill to practical personal, consumer, and business situations.

Specific objectives of this course include:

1. A thorough review (and remedial work when necessary) of arithmetic fundamentals--addition, subtraction, multiplication, division, per cents, decimals, and fractions.
2. Development of increased speed and accuracy in working with these fundamentals.
3. Providing related knowledges involving practical applications of fundamentals.
4. Development of the ability to interpret and solve practical problems logically.
5. Emphasis of the value of arithmetic competency as an indispensable tool in the student's future.
6. Emphasis on neatness and legibility.

Topics covered during the year include: a thorough review of arithmetic fundamentals; application of the fundamentals to areas such as income, property and sales taxes; discounts; paychecks; interest; checking accounts; notes; credit buying; and personal records. Students will also complete at least one comprehensive practice set. Each student will progress through the course at his own rate.

Work Habits _____ Ability to Read and Interpret Problems _____

Attitude _____ Computational Skills: _____

Completion of Assignments _____ Speed _____ Accuracy _____

(Excellent, Good, Average, Poor, Failing)

Topics Covered This Quarter _____

Student Name _____	Parent conference requested	YES	NO
Class _____	Homeroom _____	Effort ability index	1 2 3 4 5
Subject/level _____		(Minimum - 1	Maximum - 5)
Teacher _____		Final Grade _____	
Class absences this report period _____		Unit of credit earned _____	

SOCIAL STUDIES - U.S. HISTORY
Specific Objectives to Achieve Goals

The extent to which the student:

	Exceptional	Satisfactory	Needs Improvement	Poor	Failure
...when given hypotheses about economic development and evidence in historical essays, is able to state generalizations about economic development in terms of natural, capital, and human resources.					
...when given data in statistical tables and charts is able to read and interpret that data.					
...knows that a combination of natural, human and capital resources promoted American economic development.					
...knows that industrial growth changed the patterns of life and work for many Americans.					
...knows the extent and importance of American industrial growth between the end of the Civil War and 1929.					
...knows some of the problems in association with the settlement of the western frontier.					
...knows the significance of railroad growth in the U.S. as a factor in settlement and business and government regulation.					
...is able to associate the interrelationships of the development of industry and government involvement in many spheres of American economic life.					
...takes an active and positive part in class activities, follows directions and works productively as an individual and in small groups.					
...shows an open mind in class discussions and reaches conclusions about issues after investigation and debate.					
...demonstrates an understanding of the basic classroom procedures and values of: punctuality, class attendance, and completion of homework including missed work.					

SOCIAL STUDIES - U.S. HISTORY
Specific Objectives to Achieve Goals

		Needs Improvement	Poor	Satisfactory	Exceptional
	SOCIAL STUDIES - U.S. HISTORY Specific Objectives to Achieve Goals				
The extent to which the student					
...knows that many current reform movements have historical roots.					
...knows that reform movements appear when a significant number of people become distressed with some aspect of society.					
...knows that a reform movement, as opposed to revolution, is a non-violent mode of change which relies on persuasion, assembly, speech, pressure-group activities, and sometimes civil disobedience to gain its goals.					
...knows the customs and laws of war which were established at the Hague and Geneva conventions.					
...knows that our nation established and tried to maintain a position of non-entangling alliances in our early history.					
...demonstrates awareness of current events in U.S. history.					
...participates in class activities.					
...is able to work effectively with a small group of students in researching and presenting to the class their findings concerning a reform movement in U.S. history.					
...is able to apply the principles of Nuremberg (crimes against: peace, conspiracy, humanity, and the laws of war) to other situations.					
...is able to weigh the evidence of the defense in the Nuremberg trials and decide which arguments were most persuasive and which were least persuasive.					
...is able to support his values regarding current reform movements with evidence and reasoning.					

"Just a short note to commend you and your associates for the kind of job you are doing relative to providing college admissions offices with very informative and, more important, very human application folders. After reviewing _____'s folder I felt as if I knew something about him as a person. The teacher comment sheets coupled with the very thoughtful recommendations are great. Keep up the good work. You are doing your students a great service.

P.S. _____ has been accepted and will hear from us shortly."

Many in our community comment that our curricular offerings booklet (enclosed) seems more like a university catalog. Some wonder if the school, in its pursuit of "relevance", has eliminated much of what was considered "basic learning." Such comments emphasize the need for understanding the shifting priorities in education and the changes in our responsibilities and functions. For example, the classics of literature which for years were the standards of Language Arts instruction have not diminished in value. Yet the knowledge explosion which is upon us, which now doubles the amount of useful knowledge within a decade, has required a broader scope of offerings and a shifting of priorities so that all periods of literature receive somewhat equal emphasis, including the contemporary.

Other changes have occurred. The increased availability, scope, and influence of such media as film and television have also caused a shifting of priorities so that all media (including literature) receive the emphasis necessary to give our students the ability to appreciate, understand, and react intelligently to them. Very often in the past, too, the school tended to promote the segregation of students with different social and educational abilities and aspirations - not intentionally, but by the nature of the course offerings. Because the school's goals include preparation for involved citizenship, it seems very desirable to minimize such differences and to encourage students to communicate well and effectively with others of different abilities and aspirations.

The curricular program places great emphasis on both academic and non-academic challenges but on an individual rather than on a mass basis. This is the major difference between present and past practice. There are more than enough students at all levels of ability to sustain the competitive spirit within classrooms. If anything has changed, it is that the opportunities to compete have been increased. Also, that the opportunities to "know thyself" have been increased. Where a course is offered for students of a particular range of abilities, the course is planned for those students. The course is not just a milder dose of the high academic program.

The Champlain Valley Union High School is a regional school which serves the suburban-rural communities of Charlotte, Hinesburg, St. George, Shelburne, and Williston. They are located just south and east of Burlington, Vermont's largest city. Two of the towns border on Lake Champlain. The area covered by the high

school district is about 126 square miles. The high school district has its own Board of School Directors and is an autonomous agency with respect to the five town districts, each of which has its own Board of School Directors. Four of the towns operate K- or 1-6 systems. C.V.U., with a building capacity of 750 students, opened in the fall of 1964 with an enrollment of about 460 in grades 9-12. Eight years later we anticipate about 1,000 students, well over double the original enrollment.

The growth rate of the school district in 1962-63 indicated capacity enrollment in 1972. Because of expanded and new industries in the area, however, the capacity figure was exceeded during the 1967-68 school year. A 3-million dollar bond issue for the high school was twice defeated in the spring of 1968. (This may have been due in part to major elementary building programs in all of the district communities. Many also considered the proposed addition to have numerous extravagances and frills.) Four temporary classrooms were added in 1969 and again in 1970 pending a solution of the space problem.

The Board's Ad Hoc Committee, charged with finding a solution to the school's space problem, "discovered" 45-15 in the literature in June or early July 1970. 45-15 was studied by the Committee because it seemed to meet the several criteria set by the Committee as necessary for any adequate long-range solution to the school's problem. It became apparent to the Committee that this particular calendar concept was not simply a space-savings device but also offered extensive possibilities and opportunities for program development. In August of 1970 a consultant was brought to C.V.U. to meet with the Committee, the Department Chairmen, and the Board of School Directors. We sensed significant differences in philosophy and operation between the several districts already in operation on the elementary level and our own, but felt that the concept of 45-15, as we would hope to implement it, was sound and, indeed, quite desirable. It was in this context that the Ad Hoc Committee reported to the Board in early September and requested the Board's permission to further study implementation of 45-15 at C.V.U. as a possible solution to our particular problem. The Board granted the Committee's request and allocated funds to enable the Committee to do this. At the same time, the Board asked that the Committee work to provide the community with information concerning the 45-15 concept and charged the administration to work toward developing the necessary skills, administrative and teaching, so that we would have a clear indication as to our ability to actually implement 45-15 before a Board decision on the matter. The Ad Hoc Committee was instructed to report back to the Board at its second meeting in November with a final recommendation regarding 45-15.

Today, through the benefit of hindsight, we can much better appreciate the mammoth undertaking we had set for ourselves. There was no doubt in our minds that we possessed the ability to effectively implement the 45-15 program; time and an extremely competent faculty have shown this to be true. What proved extremely difficult, however, was to convincingly explain to the public a concept, the details of which were still being worked out by the administration and faculty. In one instance, school bus transportation, we revised our initial plans for implementation midway through the series of community presentations because we had developed a

CALENDAR POSSIBILITIES
 (Specific examples on following page)

House A	House B	House C	House D	Other
AAAA	ADCD	BBAA	BDCD	CBAA
AAAB	ADDC	BBBB	BDDC	CBAB
AAAC	ADDD	BBCB	BDDD	CBCB
AAAD		BBBD		CBAC
AABA		BBAB		CBAD
AABB		BBAA		CBBA
AACB		BBCA		CBBB
AACC		BBCC		CBBC
AAAC		BBDC		CBBD
AAAD		BBBB		CBCC
ABAA		BAAB		CBCD
ABAB		BAIA		CBDC
ABAC		BAIC		CBDD
ABAD		BAID		CCBA
ABBA		BAAB		CCBB
ABBB		BAAA		CCBC
ABBC		BAAC		CCBD
ABBD		BAAD		CCCB
ABCB		BACA		CCCC
ABCC		BACC		CCCD
ABCD		BACD		CCDC
ABDC		BADC		CCDD
ABDD		BADD		CDAB
ACBA		BCAA		CDAC
ACBB		BCAB		CDAD
ACBC		BCAC		CDAC
ACBD		BCAD		CDAD
ACCB		BCCA		
ACCC		BCCC		
ACCD		BCCB		
ACDC		BCDC		
ACDD		BCDD		
ADCB		BDCA		
ADCC		BDCC		

better, more flexible, as well as more economical, solution. As similar situations occurred in curricular and instructional areas, it perhaps caused an unsettling effect - possibly a credibility gap - within the community.

A mistake, probably, in looking back on the situation, was our insistence that the 45-15 calendar was simply a revision in calendar. The problem we experienced in this matter was one of interpretation and, likely, poor communication on our part. The point we were trying to make was that merely implementing a 45-15 calendar accomplished nothing in terms of program or curriculum. It was only with the adoption of a 45-15 calendar AND the implementation of a highly desirable program, taking advantage of all the new opportunities now available, that the 45-15 concept was truly an extremely desirable solution to our particular problem.

As the November deadline drew near, the Ad Hoc Committee met with the school administration and with the department chairmen to obtain their reactions to the 45-15 calendar and program, with particular emphasis on the school's ability to achieve instruction with at least the present level of quality, and hopefully at higher level. With only one exception, all of the administrators and department chairmen were in agreement that 45-15 was not only possible, but desirable, from both a calendar and instructional point of view. The Committee also attempted to make an assessment of the reaction of the community to the proposal regarding 45-15. It seemed clear that most Board members were under the impression that community reaction was favorable to the proposal. This was a result of their conversations in the community, the reactions they received at the public meetings they attended, and the like. The Committee tried to assess the response of the community in terms of a prepaid postcard which had been included in the pamphlet mailed out to the entire community earlier in the fall (enclosed). At the time of its assessment, about 100 returns had been received (about 5,500 registered voters), the majority of which were favorable to the proposal of 45-15. However, as the date for the Board meeting drew near, there was some indication of unhappiness and concern regarding the 45-15 proposal. This was brought to the forefront at a public meeting prior to the Board's regular meeting, and at the Board meeting itself, when, in a split vote, the Board adopted the 45-15 calendar.

At this point the Board of School Directors - anxious to encourage greater community expression - decided to hold a non-binding (by law) referendum on the 45-15 calendar. The Board indicated prior to the referendum that it would not feel bound by the results unless 51% or more of the electorate voted. (See enclosed mailing to the community concerning the referendum.) As it happened, fewer than one-third voted, and of those, about three of every five persons voted against 45-15. The Board, feeling that only a small minority of the community was opposed to 45-15, approved the 45-15 calendar at its next meeting. It was this decision that provided the basis for the controversy which enveloped the school district for the remainder of the year. It was basically not a controversy over the merits of 45-15 (though it often took this form) but rather a determined opposition to the Board's action in the face of a negative vote, no matter how small.

The controversy itself is now history. Persons of different educational persuasions, including many who favored 45-15, banded together to protest the manner in which the calendar decision was made. A number of faculty members joined in this movement. Community meetings and newsletters, a number of petitions to the Board, letters to the Editor, and very well-attended and lively Board meetings characterized the spring of 1971.

Adding fuel to the controversy was the faculty situation. Public support for the program and public confirmation of our ability to implement a flexible 45-15 program were withheld by the majority of the school faculty because of concern over natural vs. forced attrition of staff, whether or not additional working days were to be paid on a per-diem basis, and the like. It is only fair to state that some faculty members also had genuine concern as to whether educational benefits would derive from implementation of the calendar. The final straw was probably the matter of teacher contracts vs. letters of intent. The state's Attorney General had ruled that Boards could not issue contracts until after the Annual Meeting of the school district - in our case, in May. The Board had pledged itself to natural attrition of faculty and issued letters of intent to the faculty, but with the growing controversy in the community the teachers feared that significant cuts would be made in the school budget at the Annual Meeting and that the Board would then have no choice but to eliminate positions. This was the final emotional issue of the controversy and effectively dealt the death blow to implementation of 45-15 for the 1971-72 school year. The final decision was made by the Board in May 1971 when it became apparent that the community would approve only a token budget (\$208,000 vs. \$1,588,000) if the decision to implement 45-15 was not rescinded.

Following the reorganization meeting of the Board in July - the Board now increased from eight to twelve members as the result of one petition and community vote - the opportunity was provided for members of the community to participate with the school board members, administrators, faculty, and students in discussions of the problems facing C.V.U.

Beginning in late July, innumerable hours of effort were devoted to the school for a period of several months by the many persons serving on the numerous committees and sub-committees. During the spring, many of us were either receiving or hurling abuse and yet there were clear signs of a common spirit from the beginning. It appeared that the crisis we experienced had been the prelude to achieving the community utilization and support for the high school that had been sought for so long. It was obvious that everyone serving on the committees, virtually without exception, was proud of the school and very jealous to safeguard its program and to further its potential.

The result of these community committees was a very excellent and extensive report to the Board. The following is a condensation of the goals for the school recommended by the committees:

- 1) Restructuring the curriculum, placing increasing responsibility on the learner and utilizing the community as a laboratory for learning.

2) Expanding the core facility, C.V.U., to facilitate contemporary learning needs.

3) Promoting options which have objectives. Some examples would be:

- a. 3-year graduation
- b. DUO
- c. Independent Study
- d. Year-round operation
- e. Alternative staffing or free school within the system
- f. Differential staffing insuring maximum teacher talent
- g. Individualized instruction

4) Provide a quality education for each student which would assure him of the following:

- an understanding of himself and his relation to society as a human being
- an understanding of all peoples of the earth, their cultures, ethnic background, social structure
- a mastery of the basic skills in use of words and numbers
- a positive attitude toward learning
- development of responsible citizenship
- the ability to maintain physical and emotional health
- the encouragement to be creative and inventive; we must stop rewarding the analytical mind alone
- the ability to create social and physical environments capable of sustaining and promoting productive human life
- the understanding and appreciation of human achievement in the natural sciences, social sciences, humanities and arts
- the preparation for a world of rapid change and unforeseeable demands

Certain themes, ideas, and proposals were evident and recurring in the reports of the community committees and in the recommendations of the faculty, students, and administration:

- 1) Need for options in programs, time schedule, teacher contracts, and calendar.
- 2) Need for flexibility in providing these options.
- 3) Need to provide adequate core facilities in Learning Resources, Industrial Arts, Physical Education, Student Commons, and other areas.
- 4) The student and his needs must be the first consideration in any recommendation to be acted on.
- 5) Further development of present program goals is desirable and encouraged.
- 6) The traditional school year must be included in the provisions offered for options and flexibility.
- 7) Need for better community understanding of school program, curriculum, instructional methods, and operation. ("Community" includes students.)
- 8) Need to continue and expand active involvement of all segments of community in the affairs of the school district.

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As a result of the administration meeting with these several groups, recommendations for the 1972-73 school year calendar (together with others for program, facilities, etc.) were presented to the Board of School Directors at its meeting on November 23, 1971:

- 1) The requirement that each student be involved in "directed learning experiences" for 175 days in each academic year, as at present.
- 2) The traditional school year be a basic part of the school calendar and an option to all students desiring that calendar.
- 3) The school operate on a year-round basis beginning in July 1972, with the following stipulations:
 - a. the basic structure of nine-week quarters, as at present, be maintained for the time being.
 - b. a structure of staggered quarters, providing the desired flexibility for DUO, acceleration, other program options, and times of attendance, be offered as options to students desiring such flexibility in calendar.
 - c. the arrangement of staggered quarters be offered as shown on the following page.
 - d. the options for quarter selections number just over one hundred and twenty, including options for acceleration. Among the calendar options are:
 - ...Qs (Quarters) 3, 6, 10, 13 - Traditional school year
 - ...Qs 1, 4, 7, 10, 13 - Accelerated school year
 - ...Qs 4, 7, 10, 13 - Shortened school year
 - ...Qs 2, 5, 10, 13 - One example of options possible
 - ...etc.

(Note: Considerable attention must be given to the accurate and understandable explanation of the calendar options to students, their families, and the general public.)

(Note: 233 days comprise the fiscal year 1972-73; 232 days for fiscal year 1973-74; 231 days for 1974-75; 234 days for 1975-76; 232 days for 1976-77.)

- 4) The basic contract for faculty be for 185 days, with addenda issued on an individual basis for additional and fewer days work, with the following stipulations:
 - a. Salaries be paid on a per diem basis.
 - b. The final decision on teacher contract options be based on student enrollment, student program and course requests, and student calendar options elected.

July 24-28 (1972) —

July 31-Aug 4

Aug 7-11

Aug 14-18

Aug 21-25

Aug 28-Sept 1

Sept 4-8

Sept 11-15

Sept 18-22

Sept 25-29

Oct 2-6

Oct 9-13

Oct 16-20

Oct 23-27

Oct 30-Nov 3

Nov 6-10

Nov 13-17

Nov 20-24

Nov 27-Dec 1

Dec 4-8

Dec 11-15

Dec 18-22

Dec 25-29

Jan 1-5 (1973)

Jan 8-12

Jan 15-19

Jan 22-26

Jan 29-Feb 2

Feb 5-9

Feb 12-16

Feb 19-23

Feb 26-Mar 2

Mar 5-9

Mar 12-16

Mar 19-23

Mar 26-30

Apr 2-6

Apr 9-13

Apr 16-20

Apr 23-27

Apr 30-May 4

May 7-11

May 14-18

May 21-25

May 28-Jun 1

Jun 4-8

Jun 11-15

Jun 18-22

Jun 25-29

July 2-6, 9-13, 16-20

July 23-27

July 30-Aug 3

Aug 6-10

Aug 13-17

Aug 20-24

Aug 27-31

1

2

3

4

5

8

7

9

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11

12

13

14

15

16

1972-73 School Year - Proposed

Blocked quarters (#3, 6, 10, 15) represent the traditional school year calendar.

Other quarters are optional and available for selection by students.

Normally, four quarters (not overlapping) will be selected for one academic year.

DUO programs may occur during or between quarters.

Only the Christmas-New Year and July vacation periods are shown here. Additional shorter holiday and vacation periods occur throughout the year.

These recommendations were accepted and approved by the Board. At its next meeting on December 8, 1971, the administration offered a further recommendation to eliminate five of the sixteen quarters in the 1972-73 school year calendar. (See next page for modified calendar.) This modification was recommended as best serving "the interests of the students and school district for the coming year because:
a) it will be a more acceptable introduction to the continuous school year for the community; b) it will make cost forecasts easier to predict and more accurate; c) it eliminates the need for teachers to elect contract options for this coming summer; d) it provides for a phasing into multiple quarters which will be advantageous during our first continuous school year operation."

The Board approved the modified calendar as recommended. To date, we have received many requests for further explanation of the calendar and program, but no adverse comments such as characterized the 1970-71 school year. The Annual Meeting of the high school district was not well-attended and the budget and other items were approved within an hour.

Many of the cost benefits are already being achieved because of programs such as differentiated staffing, which utilizes staff more effectively and at lower total cost without compromising instructional quality or limiting students' access to teachers.

Other cost benefits will accrue as we enter into year-round school operation. Among these are a greatly reduced need for facilities expansion and a reduction in costs for per unit expenditures (employee insurance programs and other benefits, busses, equipment such as projectors, science labs, and the like). Additional information concerning budget comparisons is contained in the November 25, 1971, mailing to the community (enclosed).

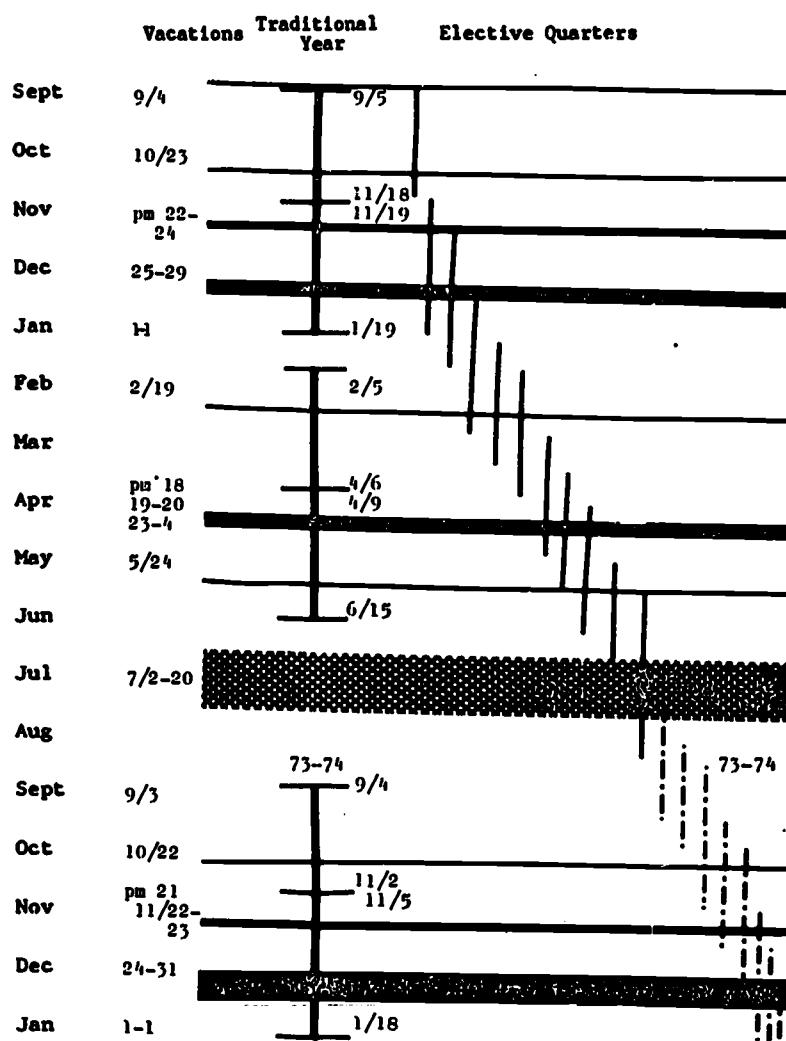
A summary to this report can only serve to emphasize our reasons for adopting a year-round school program. The report of the community committees speaks to this point:

"How we educate our young people is of profound importance for they are caught in a social revolution and we desperately need their help if we are to re-invent the social order without risking self-destruction. So, our schools must respond by inventing and providing programs which will expand human potential and lead to productive adult lives without relying completely on one isolated physical plant or structure to do it all."

And again:

"We must strive to keep this school and individual working together. The

72-73 Calendar



student as an individual is the life and energy and curiosity and potential who seeks support and guidance in the process of learning. Our teaching, then, should be directed toward helping the individual understand himself as a human being. We should teach a student how to teach himself for knowing how to learn is one of the few durable skills we need. This school should foster the growth of individuality in the student giving him strength to lead an independent life in an increasingly complex world. We must give each student positive ways to combine his own special talents with the needs of the times. We must enable students to invent their own institutions to pursue their work because those we have to offer are, in part, out of date.

Our school and the world we are making could be considered joint partners in a combined effort to give an individual direction and provide him with whatever skills or knowledge will be helpful in his making wise choices and the equipment to pursue them. "

The "multiple access curriculum and calendar" offers a calendar which includes the "traditional school year" for those who prefer those times of attendance. It also offers fantastic new opportunities for those students and families who prefer other times.

From a curriculum viewpoint, we have realized better program development and implementation of existing offerings. As we view the future, we sense that we will continue to realize these benefits as we take advantage of the many new opportunities made possible by the calendar.

We have the sober warning that the future is not fixed. Man is not being guided inevitably to a desirable future. Together with the home and other institutions we must provide the knowledge (old and new), attitudes, and skills which our children will need to survive, to live fully as human beings, and to cope wisely with the personal and social choices they must face.

And we, the schools, must find better ways to provide these - better ways for students to learn and absorb them. Our multiple access curriculum and calendar is not a panacea. But it is, we believe, a significant and major step in the right direction.

We have come a long distance in the past several years. We have explored widely, studied in depth, and developed in detail. We have learned a great deal about ourselves and others. C.V.U.'s involvement with change in general and 45-15 in particular is described from a layman's point of view in a paper presented early last fall by the chairman of the Board of School Directors, Mr. Richard J. Young. It is attached to this report to provide you with additional insight into our experience.

Respectfully submitted,


Johannes I. Olsen, Principal

A NEW VIEW OF THE USE OF OUR SCHOOLS

A NEW LOOK AT OUR SCHOOL YEAR

45-15

Remember that:

CVU was built in 1963-64 to hold 750 by about 1972. CVU now has over 950 students.

Within a few years, CVU will have more than twice the number it was built to hold...1600.

CVU has an excellent educational program that must be maintained and constantly improved.

In order to make room for our expanding student body we have

Put up temporary units
Cut out all study halls to make classrooms

Run off-schedule busses so students with free modules arrive late and/or leave early

Extended the school day
Cut out physical education for juniors...next year we will cut it out for both juniors and seniors
Gone to modular scheduling
Made better use of large group/small group instruction.

Some of these changes are good... where they affect program, they are not good!

THEY HAVE ALL REACHED A SATURATION POINT.

Building costs rise each year. It is real efficiency to use an expensive building like CVU all year 'round.

45-15 plus a bond issue could give us walls for 1200, room for 1600.

WHAT IS 45-15?

45-15 is one concept of the continuous school year.

The continuous school year is full use made of the whole calendar year for educational purposes...the school in use year 'round.

School is in session during all months of the year, but individual students spend only the traditional 175-185 days actually in school. No traditional vacation time is lost.

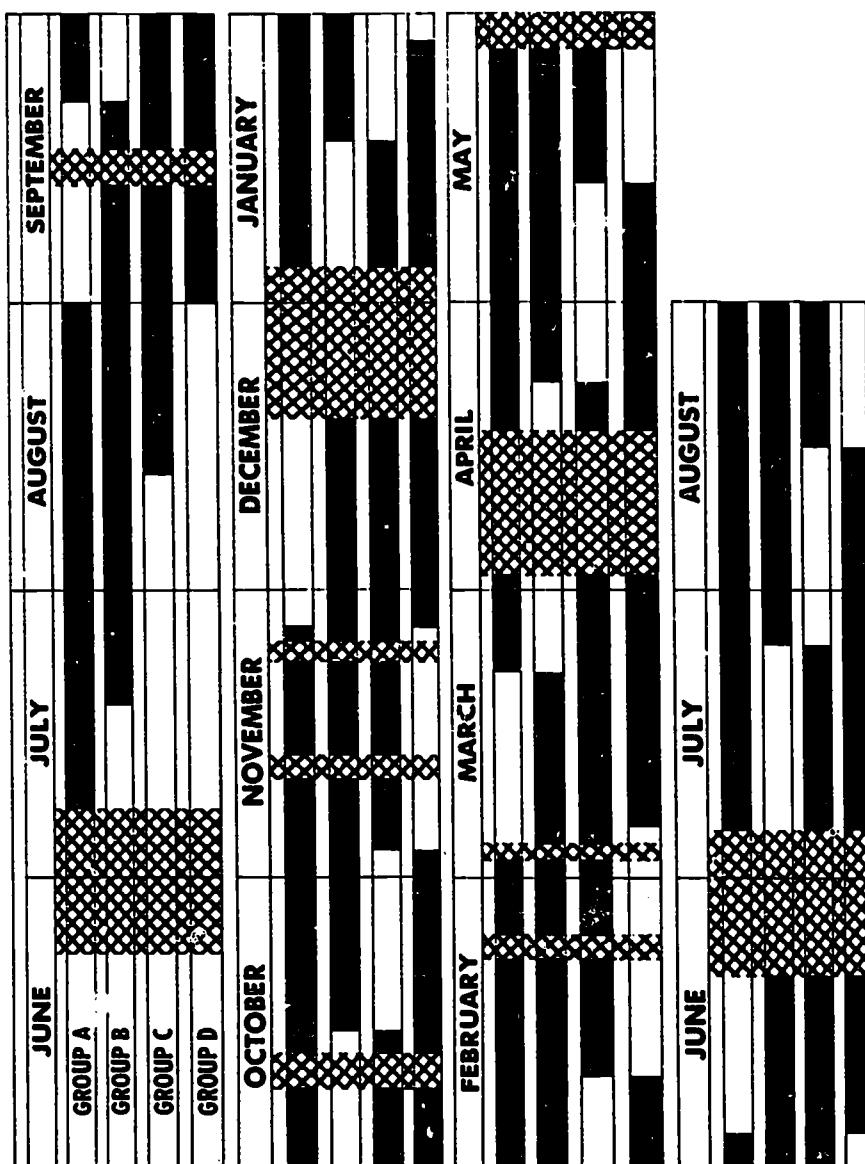
Careful staggering of student and faculty schedules make it possible to educate more students in less space because all of the students on a school roster are not in the school at one time.

There are other continuous school year plans being used in communities throughout the country.

45-15 matches our traditional marking period pattern of a grade given at the end of nine weeks.

HOW DOES 45-15 WORK?

If you will turn the page to the chart, we'll take a look at how the system works.



KEY:

The black tracks running across the page represent groups in session. The white tracks represent group vacation times. The cross-hatched sections represent time when the school is closed (weekends, legal holidays, etc.)

All students are divided into four groups - A, B, C, & D. All students in the same family are on the same schedule (in the same group) unless parents request otherwise.

Each group attends school for 45 class days (nine calendar weeks) and then has a 15 class day (three calendar weeks) vacation. The attendance schedules for the four groups are spaced 15 class days apart so that only three of the four groups are in school at the same time.

Four 45 class day sessions per calendar year equals 180 class days per year which is our present number of class days.

All legal holidays will be closing days. All pupils are out of school at the same time for a Christmas vacation, a spring vacation and a two-week break in the summer.

All families have a three-week vacation in each of the four seasons of the year. Just as the starting time for the nine-week school session is staggered by group at three-week intervals, so are vacation times staggered.

WHAT WILL 45-15 DO FOR CVU, ITS STUDENTS
AND THE COMMUNITY?

45-15 will...

Immediately remove one quarter of the students from the school around the year.

When the addition is planned and built at CVU, it can be done for 1200, but still serve 1600.

Give flexibility never before possible for student progress and times of attendance where individual circumstances dictate.

Make course choices occur more often.

Make use of more "good weather" months to broaden the whole educational experience... field trips, outdoor learning experiences.

Give the "lost" student a better opportunity...a student in difficulties with a subject can begin again in a following group...the student who has been ill can join in again in a following group.

Make use of our natural facilities for waterfront programs...a plus for safety as well as athletics.

Open up possibilities for 'round the year job training for many students.

Expand "good weather" athletics-- baseball, track, tennis.

Make opportunities for students to work in seasonal jobs never before open to them at times when there will not be a flood of college students and teachers also looking for work...motel openings and closings, apple picking, ski trail work, ski instruction, yard maintenance, department store sales, golf course maintenance, and more.

BUT WHY 45-15?

45-15 plus an addition bringing the building up to 1200 capacity is the most positive solution to the problem in a District that covers 125 square miles.

CVU is now over 200 above the number it was originally built to hold. The CVU Board of Directors has investigated in depth other ways to make room for the current student body and plan for the 1600 which will be in our school within five to six years:

The Board has sought to provide space, maintain and even improve on the quality of education our students receive and yet not make extraordinary demands on the taxpayer's dollar. 45-15 plus building for 450 MORE students does all this. Other plans do not...

Plans like:

Split, staggered and double sessions require
A rise in faculty costs
Transportation costs rising 80-100%
in our District
A negative impact on extra-curricular activities

Lengthening the school calendar requires
School days added - vacation days
taken away
Three-year time lag before space
is realized
Straight increase in operating costs
Construction required anyway
Every student must graduate in
three years

**Building a second high school elsewhere in
the District would require**

Duplication of building
Transportation increase
Splitting of District
Large staff increase

More temporary classrooms would require
Limitation of kinds of classes
Spending money for a structural
life of 5-10 years
Additional money spent on per-
manent plumbing and heat

BUT WHAT ABOUT OPERATING COSTS WITH 45-15?

Individual faculty salaries will go up because teachers will work longer. This will be offset by the need for fewer teachers.

The cost of transportation will not rise, except as it would normally when our busses will be servicing an expanding student population. Fewer busses will run for longer periods with 45-15.

The custodial work load and costs will equalize because these jobs will be spread throughout the year as in other public institutions that serve the public around the year.

WHAT EFFECT WILL 45-15 HAVE ON THE FAMILY?

Because all students in one family will be scheduled together, the average family will have the opportunity to plan a three-week vacation during all four seasons of the year if they choose.

Working mothers...and non-working mothers...will have a pool of teen-aged helpers from which to draw 'round the year if they wish.

Where individual family circumstances dictate, there is built-in flexibility for a student's times of attendance and educational progress never before possible.

WHAT EFFECT WILL 45-15 HAVE ON EXTRA-CURRICULAR ACTIVITIES?

No effect at all, really. Activity busses will still run as they do now.

Students in a three-week vacation period during an athletic season can elect to return for practice just as they do now at the end of summer vacation, during Christmas vacation and spring vacation.

In fact, 45-15 can bring an enrichment of extra-curricular programs not possible under the traditional calendar.

YOUR Champlain Valley Union High School
Board of Directors is interested in YOUR
questions about 45-15.

The Board is interested in your reac-
tions to 45-15.

Please take a moment to tear out the
attached sheet, fill it in and mail it back
to them.

CORNWALL-LEBANON SCHOOL DISTRICT,
Lebanon, Pa., April 24, 1972.

Re: Information on year round schools.
Mr. ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education.
Mr. JOHN N. ERLENBORN,
Member, Education and Labor Committee.

GENTLEMEN: The Cornwall-Lebanon School District operated an "extended school term" for six weeks during the summers of 1967-68-69 under a Title III ESEA grant of approximately \$30,000 per summer.

Reaction of Parents: Excellent.
Reaction of Teachers: Excellent.
Cost Benefits: No savings; since the grant concerned a supplemental education project of innovative courses providing for enrichment and creativity.
Legislation: No changes needed to operate.
Plan: Volunteer students—registrations were heavy, requiring selection of enrollees.

The plan, so well received by students, teachers and community offers excellent possibilities for a twelve-month program if it were enlarged. Our students were limited to Grade 4 through Grade 12 registrations. The majority enrolled were Grade 4 to Grade 9. Senior high school students preferred summer employment opportunities.

A descriptive account of the project is enclosed.
Respectfully,

E. F. STOUT, Superintendent.

Enclosures (3).

NEWS LETTER—JULY-AUGUST 1967

LEBANON COUNTY SUMMER SCHOOL PROJECT, JOHN G. HEAGY, DIRECTOR

SUMMER LEARNING

In many communities across our country, public education ends when schools are dismissed for summer vacations. In Pennsylvania more than two million children are released to communities each summer at the close of school.

In recent years summer schools have become a feature of numerous forward-moving school districts. Fifty years ago the nine-month school term made sense since many families lived on farms and the children spent much time in farm related activities. Today, the picture is a different one, the majority of our homes are now suburban and the long-established custom of closing down well-equipped multi-million dollar school buildings during these vacation months can be a rather questionable use of public funds.

The twelve-month school has been tried in certain areas with limited success. One plan calls for the school terms to be divided into four periods with children attending three of the quarters. This arrangement places many family activities and related programs at a disadvantage. When brother and sister in the same family are required to attend different sessions at different times because of attendance periods at different schools troubles are apt to develop between the school and home.

Therefore, the Cornwall-Lebanon Schools, along with the city of Lebanon, have developed a summer session of six weeks—offering courses to those students who need to "make up" work or wish to improve their grades as well as for students who desire to earn extra credit.

This program is offered without tuition charge to residents of these two districts since the school authorities are subsidizing the costs of this program. Secondary school students from all other county schools have been enrolled at a tuition charge of \$35.00. Transportation is provided by the Cornwall-Lebanon District and the Lebanon School District for resident students of these two districts. Ten school buses are used for this service, covering the main highways on a "limited" schedule of routes bringing in students for program which operates from 8 A.M. to 12 Noon. Seven of these buses are operated by the Cornwall-Lebanon School District and travel a total of 370 miles each school day.

Arrangements have been made between the Cornwall-Lebanon School District and Lebanon School District to share the expenses of operation of the program on a pro-rated student basis. The Cedar Crest school with its "all-weather" facilities

is ideally suited to summer session operation; the student body will affirm this to any inquirer.

This program planned for six weeks of operation is entitled the *Basic Summer School* and has been in session since June 19 with a total of 389 students enrolled under the direction of the following instructors: Mr. Albert Askins, Shorthand; Mr. Richard Braungard, German I; Mr. Hubert Conner, English VIII; Mrs. Patricia Edris, Algebra I; Mr. Dwight Fiske, American History; Mr. Ernest Firestone, Geometry; Mr. Charles Gerberich, General Mathematics; Mr. Robert Gilbert, Algebra I; Mr. Ray Heberling, Biology; Mr. Walter Houser, Algebra I; Mr. Thomas Israel, English VII; Mrs. Carol Keim, English IX; Mr. Abram Leaman, Chemistry; Mr. Harold Lineuweaver, Physics; Mr. William Longenecker, Algebra I; Mrs. Ruth Maud, Algebra II; Mr. Foster Schooley, Typing; Mr. William Slike, Spanish I; Mr. Richard Smith, Biology; Mr. Edwin Zarek, English X, XI, XII.

The Cornwall-Lebanon School District is also operating a Basic Reading-Mathematics program for students of grades 4-5-6. These classes are held in the Cornwall Building. Sixty-six students are being instructed by Mrs. Dixie Confer, Mrs. Janet Snyder and Mr. Larry Wood.

Federal funds under Title I of the Elementary and Secondary Education Act are being used by the Cornwall-Lebanon School District in the operation of a special diagnostic and corrective reading program. Under the supervision of Mrs. Karen Light, Cornwall-Lebanon School District reading specialist, eighty-four students are receiving special instruction twice a week for two-hour class periods. Extensive use is made of the "Travel Lab" motor van. Miss Beatrice Reed of the Cornwall Elementary faculty is assisting in this work.

It is of interest to note that two other county school districts are also operating special elementary summer reading programs. The city of Lebanon has enrolled 351 students with a staff of 18 instructors. These students are divided into two groups with each group receiving two hours of instruction each day. The Palmyra Area schools have enrolled 70 students with a professional staff of 8 persons. These pupils are attending schools in their home district.

INNOVATIVE SUMMER SCHOOL PROJECT, CORNWALL-LEBANON SCHOOL DISTRICT

The Cornwall-Lebanon School District was one of three schools in Pennsylvania named last spring to receive a Title III Federal grant. Our program is an "Innovative" summer school for selected students of sound scholastic ability participating in an enrichment summer school involving work and skills that are not usually developed during the regular school term.

These courses challenge both students and teachers for no textbooks are involved, creativity and original expression being the essence of the program. Sixteen teachers and 320 students are now at work for six weeks in these classes which have been underway in Cedar Crest High School since June 19. The following outline indicates the scope of the program: Mr. George Lazorjack, Basic Astronomy—25; Mrs. Ann Passenger, Basic Astronomy—22; Mr. Albert Rossi, Exploratory Mathematics—16; Mr. David Shenk, Conversational Spanish—18; Mr. David Kruger, Conversational German—18; Mrs. Frances Weitz, Conversational French—14; Mr. Robert Maurer, Creative Writing and Public Speaking—23; Mrs. Esther Papson, Creative Dramatics—19; Mrs. Phyllis Yaklich, Creative Drama (Senior High School)—27; Mrs. Ferne Eberly, Creative Art—19; Mr. John Embrich, Practical Arts—19; Mr. Luke Scipioni, Conservation of Natural Resources—21; Mr. Robert Minnich, Source Studies in American History—23; Mr. Joseph Heiser, Source Studies in American History—13; Mr. Anthony Orsini, Source Studies in American History—17; Mr. Amos Long, Source Studies in American History—13.

Field trips have been an integral part of several areas of the Innovative program. The Source Studies in American History classes have visited various areas in Lebanon County such as the Charcoal Furnace, The Old Tunnel and Bindnagle's Church and other historical areas in the Lebanon Valley. The Conservation of Natural Resources class has been to the Filtering plant of the City of Lebanon and the fish hatchery at Limestone Springs. The Art class has sketched the Charcoal Furnace and plans to visit several art museums.

The offerings in this Innovative program have been so attractive that approximately 250 student registrations had to be turned away since the funds provided

for only the number of classes listed above. The following is a brief description of the objectives of each of the course offerings:

1. Conservation of Natural Resources

To make children aware of the need for intelligent planning of the use of natural open space, tillable land, mineral resources. To reach these objectives, opportunities will be provided for nature study, importance of land use, and reclamation of minerals and land and water.

2. Source Studies in American History

To familiarize children with the rich historical background of the immediate area through a program of excursions and field trips.

3. Basic Astronomy

To provide opportunities for children to study the earth and space science and explore the problems which man is facing in the explorations of the solar system. The planetarium will be used for much of this instruction as well as telescopes, spectroscope, charts.

4. Practical Arts

To provide opportunities for children of elementary school age to learn the proper use of basic hand tools, materials and safety practices. To instruct children in the various and appropriate instructional building materials from the standpoint of practicability and use.

5. Exploratory Mathematics

To provide opportunities for exploration with mathematical processes beyond the present course of study. To provide opportunities for children to explore mathematical relationships through the use of cuisenaire rods, measuring apparatus, geometric solids.

6. Conversational Foreign Language

Instruction in the spoken and the cultural aspects of the language.

7. Creative Dancing and Dramatics

To provide leadership and opportunity for free expression in dance and rhythmic activities. To provide opportunity for self-expression through dramatics, public speaking.

8. Creative Verbal and Written Expression

To fulfill the need of training our future citizens in the area of verbal and written expression. This we feel should be done at an earlier age than is now possible.

9. Creative Drama

To incorporate Art Department in Programs, providing for self-expression in public speaking, writing, art, etc.

10. Creative Art

To develop an appreciation of art through field trips to art museums, and outstanding architecture.

To serve all the needs of the student body the professional teaching staff is augmented by the addition of one full-time and one part-time librarian, a guidance counselor and a nurse. It is interesting to note that 414 books and other educational media were circulated from the Cedar Crest library during the first two weeks of school. The nurse has had to take care of the normal number of headaches, minor cuts and bruises. Mr. Logan, our guidance counselor, has conferred with a number of the students; in addition he has developed an evaluation report for the student body and has been responsible for the audio-visual program. The latter portion of this work involves a "first" in this area. The Millersville Regional Instructional Materials Center has set up a complete film library in the Cedar Crest Building. From this source films, filmstrips, etc. are distributed to the various summer school classes. This program will be evaluated by the Millersville R.I.M.C. in an attempt to improve their services during the regular school year.

Faculty and administrative members meet regularly in all these programs to evaluate, plan and meet the changing needs of students. No textbooks are used

Since creativity and exploratory programs are essence of the innovative sessions.

The staff is tremendously pleased with the interest and participation of the students; the public has been invited to visit classes at anytime and observe the work being accomplished.

The American Association of School Administrators has said: "The summer remedial, enrichment, vocational and recreational program answers a great many needs—it provides for many enrichment activities which cannot reasonably be included in the regular school session. Additional costs involved can be justified in the form of greater educational opportunity for all concerned."

TABLE OF STUDENT DISTRIBUTION

School district	Basic program		Innovative program	
	Public school	Parochial schools	Public school	Parochial schools
Annville-Cleona.....	30	4	.....	2
Cornwall-Lebanon.....	129	6	155	35
Eastern Lebanon County.....	7	.....	11	1
Lebanon City.....	157	35	31	42
Northern Lebanon.....	1	.....	19	1
Palmyra.....	13	.....	.....	.....
Others.....	7	.....	.....	.....

SUMMER RECREATIONAL PROGRAM—JUNE REPORT, FLOYD E. BECKER, DIRECTOR

The new summer recreation program of the Cornwall-Lebanon School District opened during the month of June with many activities planned toward unity of programs. Seven hundred and forty-one children between the ages of 6-16 were registered on the playgrounds of the district. The playground registration was as follows: Ebenezer 70, Pleasant Hill 85, Mt. Gretna 103, Avon 119, Cornwall 156, and Iona 208.

The playgrounds, hours in session, their special activities for June and their play leaders are:

Ebenezer.—Miss Pamela Forry, Thomas Quinn

Monday through Friday: 1-4:30 P.M.—6-8 P.M.

Swimming at Cedar Crest: Thursday morning; alternate Friday afternoon
Special Activities: Hat parade, pet show, peanut scramble, candy scramble, checker tournament, ping pong tournament, and marshmallow roast.

Pleasant Hill.—Miss Judith Uhler, George Carmickle

Monday through Friday: 9:15-11:30 A.M.—1-4 P.M.—6-8 P.M.

Swimming at Cedar Crest: Monday afternoon; alternate Wednesday afternoon

Special Activities: Watermelon contest, bike rodeo, Mt. Gretna hike, candy scramble, chess tournament, and checker tournament.

Mt. Gretna.—Miss Paula Miller, Michael Stoudt

Monday through Friday: 9-11:30 A.M.—Wednesday, 1-4 P.M.—6-8:15 P.M.

Swimming at Cedar Crest: Friday morning; alternate Wednesday afternoon
Special Activities: Ping pong tournament, softball games, checker tournament, hobo parade, umbrella parade, and candy scramble.

Avon.—Miss Kay Dostich, Gerald Ebersole

Monday through Friday: 9:15-11:30 A.M.—1-4 P.M.—6-8 P.M., Wednesday excepted

Swimming at Cedar Crest: Tuesday morning; alternate Thursday afternoon
Special Activities: Hat parade, scavenger hunt, "S'more" feast, toy parade, ping pong tournament, and movies.

Cornwall.—Miss Judith Mullen, Joseph Sakalosky

Monday through Friday: 1-4 P.M.—6-9 P.M., Friday excepted

Swimming at Cedar Crest: Wednesday morning, alternate Friday afternoon
Special Activities: Shuffle board tournament, cookie walk, drawing contest, pet parade, bean throwing contest, and lollipop scramble.

Iona.—Miss Iannicelli, James Dostich.

Monday through Friday: 9:15-11:30 A.M.—1-4 P.M.—6-8 P.M.

Swimming at Cedar Crest: Monday morning; alternate Thursday afternoon
Special Activities: Ping pong tournament, checker tournament, boys intra-mural softball league, candy scramble, hat parade, and wheel parade.

Arts and Crafts instruction has been provided by Miss Peggy Weaver, the Arts and Crafts Coordinator of the Summer Recreational Program. The schedule for this instruction is:

Mt. Gretna, Thursday morning. Avon, Tuesday afternoon. Iona, Monday afternoon. Cornwall, Thursday afternoon. Ebenezer, Wednesday afternoon, Friday evening. Pleasant Hill, Friday afternoon.

The report of the swimming program under Miss Sharon Royer and Mark Francis shows four hundred and fifty-six children are enrolled in the recreational swim program and two hundred thirty-one children are enrolled in the instructional swimming program. In the adult swim program eighty-two are registered with attendance ranging from two to twenty-four adults each session. These sessions are held every Tuesday and Thursday evening from 7-9 P.M.

The schedule for the Summer Music Program is as follows:

Cedar Crest, James Garret, instructor.

Monday, 9-12 A.M. lessons; 7-9 P.M. Summer Band Rehearsals.

Tuesday, 8-9:30 A.M. Theory and Composition, 9:30-12 lessons.

Wednesday, 8-10 A.M. Dance Band or Stage Band, 10-12 lessons.

Thursday, 8-9:30 A.M. Theory and Composition, 9:30-12 lessons.

Friday, 8-10 A.M. Choir or Vocal Ensemble.

Iona, Peter Boyer, instructor, Monday through Friday 8-12 A.M. lessons. Cornwall, Donald Witter, instructor, Monday and Tuesday 8:15 A.M.-12:30 P.M. lessons.

Donaghmore, Donald Witter, instructor, Wednesday and Thursday 8:15 A.M.-12:30 P.M. lessons.

NEWS LETTER—JULY-AUGUST 1968

LEBANON COUNTY SUMMER SCHOOL PROGRAM, SECOND ANNUAL SESSION.
WILLIAM R. LOGAN, DIRECTOR

THE EXTENDED SCHOOL YEAR

The nine-month school year was established when America was largely an agricultural society and youngsters were needed at home during the planting and harvesting seasons. For some time now many people have been questioning the need or advisability of limiting the school year to nine months.

Numerous communities are presently operating summer or extended sessions during traditional vacation months thus finding ways of putting to educational use the millions of dollars worth of public school buildings normally idle in the summer.

Our Cedar Crest building, with its "all-weather climate control", has been serving as a fine resource for the second year of the Lebanon County Summer School being operated jointly by Lebanon City Schools and the Cornwall-Lebanon School District.

The high enrollment, the excellent attendance and the many favorable comments received on the 1967 program are again being duplicated this summer; the two district operated summer sessions offer six weeks of work to those students who (1) desire to "make-up" credit, (2) wish to improve their marks, (3) plan to earn extra credits and (4) enroll for enrichment in courses not normally offered during the winter session.

The program is offered without tuition charge to student residents of Lebanon and the Cornwall-Lebanon areas since the school authorities feel the values received warrant subsidizing the costs of the program. Secondary students from all other county schools have been enrolled in the Basic Courses at a tuition charge of \$35.00. Transportation is provided by the Cornwall-Lebanon and Lebanon City Schools for resident students. Ten school buses are used for these services operating a "labeled" route schedule over the main highways transporting students to the 8 A.M.-12 noon sessions.

Financial arrangements between the two districts provide for sharing expenses on a pro-rated student basis. Comments from parents on the operation are always welcome and public evaluation can be helpful in assessing and improving the program.

An interesting feature of the sessions is that in two years they have become one of the largest in eastern Pennsylvania in numbers enrolled; both of the sponsoring school systems are operating elementary classes in reading and mathematics to children who wish to receive additional instruction. Federal funds are

being used by both districts for this purpose as well as for the innovative or enrichment program open to all county children.

The "Travel Lab" motor van of the Cornwall-Lebanon schools is being used extensively for diagnostic and remedial work by Mrs. Karen Light, Cornwall-Lebanon's reading specialist. Other schools in the county are also offering elementary summer classes in their own buildings.

BASIC SECONDARY PROGRAM

Four hundred fifty-seven students are presently attending sixteen courses on a secondary level which are similar to those offered during the regular school term. A staff of twenty-three teachers has been employed to instruct these classes with an average teaching load of approximately twenty students. Over half of the summer school students are enrolled in the eleven mathematics classes. Typing and Shorthand run second with a total enrollment of over eighty students. These commercial subjects are the only classes to meet for two hours allowing some students to take both courses. All other classes are in session four hours per day and meet the state requirements for the granting of a full credit toward graduation.

All Basic Secondary courses meet in the Cedar Crest School building with the exception of one biology class of Lebanon City students conducted in Lebanon Senior High School. The following instructors make up the secondary staff:

Mr. Bruce Althouse, Algebra I	Mr. William Longenecker, Algebra I
Mr. Richard Braungard, German I & II	Mr. James Magazino, General Mathematics
Mr. Dwight Fuke, American History	Mr. Robert Maurer, English 11-12
Mr. Ernest Firestone, Geometry	Mrs. Beatrice Sautley, Typing I & Shorthand
Mr. Anthony Fritz, Algebra II	Mr. Forster Schooley, Typing I
Mrs. Elizabeth Hahn, Latin I	Mr. Albert Sineavage, World Cultures
Mr. Raymond Heberlig, Biology	Mr. William Sliko, Spanish I
Mr. Abram Lehman, General Mathematics	Mr. Richard Smith, Biology
Mrs. Sandra LeGay, General Mathematics	Mrs. Phyllis Yaklich, English 9-10
Mr. Alvin Light, Geometry	Mr. Edwin Zarek, English 7-8
Mr. C. L. Light, Algebra I	Mr. Richard Zerbe, Algebra II
Miss Linda Light, Algebra I	

BASIC ELEMENTARY PROGRAM

In addition to the secondary courses at the high school, nine classes in reading and mathematics are being offered on an elementary level in the middle school at Cornwall. Students in this program were recommended for this special instruction by their regular school teachers. Eighty students are participating in six first, second, and third grade classes in reading which meet for two hours. The fourth thru sixth grade classes, enrolling sixty pupils, meet in a full four hour session involving remedial help in both reading and mathematics. All reading classes are making use of the "controlled reader" and tachistoscope materials. The following instructors make up the Basic Elementary Staff: Miss Beatrice Reed, Mrs. Gail McFadden, Mrs. Kay Kreider, Mr. Larry Wood, Mrs. Janet Snyder, Mr. Thomas Quinn, and Mrs. Karen Light, Reading Specialist.

Lebanon City Schools offers a parallel elementary developmental and corrective reading program for city school students. This federally funded TITLE I program offers special reading help to five hundred students thru a staff of twenty-three instructors.

BASIC MUSIC PROGRAM

The group and individual music instruction, formerly operated under the playground and recreation department, has now been included as part of our regular summer school program. Approximately one hundred thirty students attend classes conducted by Mr. Donald Witter at the Cornwall Building, Mr. Peter Boyer at the South Lebanon Building and Mr. Robert Rhine at Cedar Crest. Mr. Rhine will be joining the teaching staff of the high school as band director in the fall.

INNOVATIVE SUMMER SCHOOL PROJECT

Operating concurrently with the Basic Program is the Federal Grant TITLE III Project. Now in its second year, this program provides some marked contracts

to what is typically thought of as summer school. Two hundred ninety elementary and secondary pupils are involved in ten classes designed to allow for creative and original experiences in courses not offered during the regular school term. Traditional teaching methods have been put aside, in this project, in favor of innovative instructional methods.

Over forty educational field trips, several evening sky and star observation sessions, guest lecturers from our community, and the use of video-taped class room presentations are but a few of the unique features employed in the innovative classes.

The largest single enrollment in the innovative program is in Source Studies in American History with over sixty, fourth through seventh grades participating. Fifty-four students are enrolled in Basic Astronomy and fifty in three Conversational Foreign Language classes.

Increased student interest this summer necessitated the addition of a second section of Practical Arts. Thirty-eight fourth, fifth and sixth grade girls and boys are designing and producing projects in wood, plastics, and metal.

One new addition to the innovative project are the two Experimental Kindergarten Enrichment classes. Thirty boys and girls who had attended kindergarten during the past year were recommended for additional help by their teachers. The experience gained in the summer school should better prepare these young people to enter first grade in the fall. Two regular teachers, two teachers' aides, and two student aides provide a type of individualized instruction not available during the regular school year. A number of the successful activities of the nationally known "Headstart" programs are being followed. Miss Elizabeth Wagner and Mrs. Dixie Confer are serving as teachers of these classes.

Every effort is made to provide enriched experiences for these students through daily "story telling" sessions, field trips, and appropriate reading materials.

Miss Donna Boltz serves both the kindergarten and elementary classes in the Cornwall Building as a librarian. The following instructors make up the innovative staff:

COURSE TITLE AND STAFF

Basic Astronomy (Gr. 4-8), Mr. George Lazorjack and Mr. Kenneth Zimmerman.

Conservation of Natural Resources (Gr. 4-8), Mr. Luke Scipioni.

Conversational French (Gr. 6-8), Mrs. Galen Hansen.

Conversational German (Gr. 6-8), Miss Ingrid Koenig.

Conversational Spanish (Gr. 6-8), Mr. David Shenk.

Creative Art and Music (Gr. 6-12), Mrs. Ferne Eberly and Mr. James Garrett.

Exploratory Mathematics (Gr. 4-6), Mr. Albert Rossi.

Practical Arts (Gr. 4-6), Mr. Ronald Royer and Mr. William Wunder.

Source Studies in American History, Mr. Joseph Heiser, Mr. Antos Long, Mr. Robert Minileb and Mr. Anthony Orsini.

For the first time this year two consultants have been added to the summer school staff. Mr. James Garrett has acted consultant to the Creative Art and Music program. Mr. Eugene McCleary has served in the program as a specialist in the use of the video-tape recorder. This involved the taping of various basic and innovative classes for demonstration purposes. A full-time school nurse has been on hand in the Cedar Crest building to take care of normal day-to-day aches and pains. Mr. Charles Zimmerman has been working as guidance counselor and audio-visual aids director for the program. The Millersville Regional Instructional Materials Center has again cooperated with us in setting up a library of 16mm films, filmstrips, and tapes in the Cedar Crest building from which distribution has been made to the various buildings involved in the program. Mrs. Harriet Doll, the summer school librarian for the Cedar Crest building, has reported a total of 791 books circulated from the library during the first three weeks of summer school.

SUMMER RECREATIONAL PROGRAM

The summer recreation program of the Cornwall-Lebanon School District was initiated on June 10 with the opening of the eight playgrounds in the district. This year two new playgrounds, Hebron and South Hills, were added. Nine hundred and eighty-three children between the ages of 6-16 were registered on the playgrounds of the district. The playground registration was as follows: Avon 142, Cornwall 135, Ebenezer 119, Hebron 69, Iona 186, Mt. Gretna 110, Pleasant Hill 82, and South Hills 140. The registration totals show an increase of 243 children over last year's registration for the month of June.

The playgrounds, play leaders, hours in session, and special activities for June are:

Avon.—Miss Gayle Shank, Terry Light

Monday through Friday—9:15-11:30 A.M.—1:00-4:00 P.M.—6:00-8:00 P.M.
—Wednesday excepted

Swimming at Cedar Crest—Tuesday morning

Special Activities—Wheels Parade, Scavenger Hunt, Ping Pong Tournament, and Relay Races

Cornwall.—Miss Linda Southall, James Lester

Monday through Friday—1:00-4:00 P.M.—6:00-9:00 P.M.—Friday excepted
Swimming at Cedar Crest—Wednesday morning

Special Activities—Shoe Parade, Cookie Walk, Bubble Gum Contest, Ping Pong Tournament, Story telling and Shuffleboard Tournament

Ebenezer.—Miss Pamela Forry, David Stewart

Monday through Friday—1:00-4:00 P.M.—6:00-9:00 P.M.

Swimming at Cedar Crest—Thursday morning

Special Activities—Bean Bag Contest, Marshmallow Roast, Dress-up Parade, Candy Scramble, Movies, Freckles Contest, Checker Tournament, Shuffleboard Tournament, and Peanut Scramble

Hebron.—Miss Judy Mellinger

Monday through Friday—9:30-11:15 A.M.—1:00-4:00 P.M.—6:00-8:00 P.M.—Tuesday and Friday excepted

Swimming at Cedar Crest—Tuesday afternoon

Special Activities—Ping Pong Tournament, Coloring Contest, Newspaper Contest, Hat Parade, and Pet Parade

Iona.—Miss Kathy Iannicelli, William Dissinger

Monday through Friday—9:15-11:30 A.M.—1:00-4:00 P.M.—6:00-8:00 P.M.

Swimming at Cedar Crest—Monday morning

Special Activities—Ping Pong Tournament, Shuffleboard Tournament, Hat Parade, and Candy Scramble

Mt. Gretna.—Miss Paula Miller, Gregory Gettle

Monday through Friday—9:00-11:30 A.M. (Tuesday only 1:00-4:00 P.M.)—6:00-8:15 P.M.

Swimming at Cedar Crest—Friday afternoon

Special Activities—Checker Tournament, Candy Scramble, Shoe Parade, Turtle Derby, Penny Scramble, and Movies

Pleasant Hill.—Miss Judy Ulmer, David Weutling

Monday through Friday—9:15-11:30 A.M.—1:00-4:00 P.M.—6:00-8:00 P.M.

Swimming at Cedar Crest—Monday afternoon

Special Activities—Pet Parade, Frisbee Contest, Relay Games, Candy Scramble, Newspaper dress-up Parade, and Movies

South Hills.—Miss Kathy Dorkes, James Dostie

Monday through Friday—9:15-11:30 A.M.—1:00-4:00 P.M.—6:00-8:00 P.M.

Swimming at Cedar Crest—Friday morning

Special Activities—Scavenger Hunt, Hat Parade, Checker Tournament, and Stuffed Animal Parade

Arts and Crafts instruction as provided by Miss Grace Gingrich, the Arts and Crafts Coordinator of the Summer Recreational Program. The schedule for instruction in these areas is:

Avon—Thursday afternoon

Iona—Tuesday morning

Cornwall—Monday afternoon

Mt. Gretna—Wednesday morning

Ebenezer—Tuesday evening, Friday afternoon

Pleasant Hill—Thursday morning

Hebron—Wednesday afternoon

South Hills—Tuesday afternoon

CEDAR CREST HIGH SCHOOL SWIM PROGRAM

The report of the swimming program under the direction of Miss Sharon Royer and George Carmickle shows six hundred eighty-four children are enrolled in the recreational swim program and three hundred and twenty-five children are enrolled in the instructional swim program. Any child, age eight through sixteen, who cannot swim the length of the pool in reasonably good form and who cannot tread water is considered a non-swimmer by the pool staff. Miss Royer instructs these non-swimmers at the beginning of each swim session.

In the family swim program, the enrollment has increased over last year from eighty-two adults to two hundred four adults. Over four hundred children are

registered in this program. This program will continue every Tuesday and Thursday evenings, 7:00-9:00 until August 16. It will be discontinued until September 5 when it will again be offered every Tuesday and Thursday evening to the families of our district. In this program the children are admitted without charge, when accompanied by a parent. The adult fee is fifty cents a session.

DISTRICT RECREATION BOARD

A Recreation Board with the municipalities of Cornwall Borough, North Cornwall Township, Mt. Gretna Borough, North Lebanon Township and South Lebanon Township being represented, along with representatives of the Cornwall-Lebanon School Board, has been created. This board entered into a one-year agreement effective June 18, 1968. The purpose of this board is to initiate and develop recreational programs for the Cornwall-Lebanon School District on a year-round basis providing for the needs of the community as its growth takes place.

This type of organization, working through the years ahead, can accomplish effective relationships between the school district and local municipality officials. Our district has much to gain by the merging of mutual efforts planned with future growth and development in mind.

Highways are being improved, schools are being built, new homes and commercial establishments are appearing—all these require community planning. Recreation programs can be an important contributing force to better neighborhoods, better citizenship and a better life in our community and it is hoped that parents in our playground neighborhoods give assistance to local associations in the work of the playground program.

First day of school for students: Wednesday, September 4, 1968.

NEWS LETTER—JULY-AUGUST 1969

LEBANON COUNTY SUMMER SCHOOL PROGRAM, THIRD ANNUAL SESSION, GEORGE T. RITTER, DIRECTOR

EXTENDING EDUCATION INTO SUMMERTIME

One of the changes in education in recent years has been the increasing number of summer school sessions operated by public schools across the country. Many districts have adopted such programs in response to request for additional time for education and in reply to the desires for an extended school year. Likewise the summer schools are an answer to the growing concern of the public for putting into use the heavy investment in school facilities by conducting summer school sessions.

The Cornwall-Lebanon Schools and the Lebanon Schools jointly have been conducting a six-week summer school program now in its third year of operation; the Cedar Crest High School Building with its "all-weather climate control" has been an ideal facility for the operation of the program. If sessions in 1970 are continued by the school districts, the new senior high school in Lebanon could very likely be the center of operations.

The high enrollment, the excellent attendance and the many favorable comments received on the 1968 program are again being evidenced this summer; the two district operated summer sessions offer six weeks of work to those students who (1) desire to "make-up" credit, (2) wish to improve their marks, (3) plan to earn extra credits and (4) enroll for enrichment in courses not normally offered during the winter session.

The program is offered without tuition charge to student residents of Lebanon and the Cornwall-Lebanon areas since the school authorities feel the values received warrant subsidizing the costs of the program. Secondary students from all other county schools have been enrolled in the Basic Courses at a tuition charge of \$35.00. Transportation is provided by the Cornwall-Lebanon and Lebanon City Schools for resident students. Ten school buses are used for these services operating a "limited" route schedule over the main highways transporting students to the 8 A.M.-12 noon sessions. Financial arrangements between the two districts provide for sharing expenses on a prorated student basis.

An interesting feature of the sessions is that in three years they have, with more than a 1100 students, become one of the largest in eastern Pennsylvania in numbers enrolled; both of the sponsoring school systems are operating elemen-

tary classes in reading and mathematics to children who wish to receive additional instruction. Federal funds are being used by both districts for this purpose as well as for the innovative or enrichment program open to all county children.

BASIC PROGRAM

Three hundred thirty-five students are now enrolled in the basic courses being conducted at Cedar Crest. All classes are in session four hours daily except in the business education curriculum where typing and shorthand are offered in two hour class sessions each. The primary grade program in reading is also scheduled in two hour periods. A full unit of credit is given for the successful completion of a four hour course and the work is applied to graduation requirements.

The 1969 year has a student teacher program in operation that is cooperatively conducted by Lebanon Valley College. Dr. Cloyd Ebersole of the college staff, serves as coordinator of the work of the six student teachers who have been assigned to participate in the summer school classes.

The list of teachers of the Basic School faculty are:

<i>Teacher and Subject</i>	<i>Teacher and Subject</i>
Mr. Boyer, CLSD, English 7-8	Mr. Light, CLSD, Algebra I
Mr. Maurer, CLSD, English 9-10	Mr. Zearfoss, Lebanon, Algebra I
Mrs. Yaklich, CLSD, English 11-12	Mr. Heierlig, Lebanon, Biology
Mr. Shiner, CLSD, General Math. 8	Mr. Leaman, CLSD, Chemistry
Mr. Edris, York Co., Gen. Math. I & II Sr. High	Mr. Schooley, Lebanon, Typing & Shorthand
Mr. Firestone, CLSD, Geometry	Mr. Snider, Lebanon, Typing I
Mr. Stone, Lebanon, Algebra II	Mr. Fiske, Lebanon, American History
Mr. Fritz, Lebanon, Algebra II	Mr. Sineavage, Lebanon, World Culture
Mr. Food, Lebanon, Algebra I	

BASIC ELEMENTARY PROGRAM

Seven classes in reading and mathematics are being conducted in the Cornwall Building for 165 student residents of the Cornwall-Lebanon School District. The pupils are recommended by the teachers for this special instruction; emphasis is given to intensive activities dealing with the improvement of reading and mathematical skills. Eighty-one students of the first three grades meet for two hours in reading classes; 84 pupils of the fourth, fifth and sixth grades meet in a full four hour session of reading and mathematics. Mrs. Karen Light, Reading Specialist, provides intensive aid in reading through the use of the Cornwall-Lebanon School District Reading "Travel Lab" and its modern equipment and reading materials.

The following instructors are on the Cornwall-Lebanon School District Elementary staff: Miss Beatrice Reed, Mrs. Kay Kreider, Miss Catherine Schworer, Mrs. Gail McFadden, Mrs. Janet Snyder, Mr. Larry Wood, Mr. Thomas Quinn.

MUSIC PROGRAM

Music instruction has also been provided for many years by the district schools; instrumental lessons are given by Mr. Rhine at Cedar Crest for 30 students, as well as the band rehearsals scheduled in August; Mr. Donald Witter instructs 48 pupils of the Cornwall, Quentia and Donagbmore areas; Mr. Peter Boyer teaches 38 students of the South Lebanon region and Miss Georgine Radosinovich instructs 20 district pupils on string instruments; ensemble work is also scheduled. These instructors are serving on a part time basis.

LEBANON CITY ELEMENTARY PROJECT

The city schools offer an elementary reading program involving Title I Federal funds for 483 children; 22 teachers are employed for this program devoted to improving the reading and study habits of this selected group of children.

A Spanish-English instructional program using a bi-lingual approach is being given to 42 Puerto Rican children, a teacher and a teacher aide are serving this group.

INNOVATIVE SUMMER SCHOOL PROJECT

Operating concurrently with the Basic Program is the Federal Grant Title III Project. Now in its third and final year of the grant, this program provides some

marked contrasts to what is typically thought of as summer school. Two hundred ninety elementary and secondary pupils are involved in nine classes designed to allow for creative and original experiences in courses not offered during the regular school term. Traditional teaching methods have been put aside, in this project, in favor of innovative instructional methods.

Over forty educational field trips, several evening sky and star observation sessions, guest lecturers from our community, and the use of video-taped classroom presentations are but a few of the unique features employed in the innovative classes.

The largest enrollment in the innovative program is in Souree Studies in American History, with over sixty fourth through seventh grades participating. Sixty-one students are enrolled in Basic Astronomy and forty in three Conversational Foreign Language classes.

Increased student interest this summer necessitated the addition of a second section of Practical Arts. Thirty-one, fourth, fifth and sixth grade girls and boys are designing and producing projects in wood, plastics, and metal.

Added to the innovative project for the second year, are the two Experimental Kindergarten Enrichment classes. Twenty-eight boys and girls who had attended kindergarten during the past year were recommended for additional help by their teachers. The experience gained in the summer school should better prepare these young people to enter first grade in the fall. Two regular teachers, two teachers' aides, and six student aides provide a type of individualized instruction not available during the regular school year. A number of the successful activities of the nationally known "Hendstart" programs are being followed. Mrs. Janice Schereh and Mrs. Dixie Confer are serving as teachers of these classes. Student volunteers serving without pay as aides are: Greta Smith, Susan Siegel, Libby Hess, Janice Moore, Susan Patches, and Glenda Hostetter.

Every effort is made to provide enriched experiences for these students through daily "story telling" sessions, field trips, and appropriate reading materials.

Mrs. Donna Sherk serves both the kindergarten and elementary classes in the Cornwall Building as a librarian. The following instructors form the innovative staff:

Teacher and Subject:

Mr. Rossi, CLSD, Exploratory Mathematics
 Mr. Minnieh, CLSD, Souree St. in American Hist.
 Mr. Orsini, CLSD, Souree St. in American Hist.
 Mr. Long, Annville-Cleona, Souree St. in American Hist.
 Mr. Scipioni, CLSD, Conservation Natl. Resources
 Mr. Lazorjneak, CLSD, Astronomy-Planetarium St.
 Mr. Danner, Lebanon, Astronomy-Planetarium St.
 Mr. Zimmerman, CLSD, Astronomy-Planetarium St.
 Mr. Garrett, CLSD, Creative Art and Music
 Mrs. Eberly, CLSD, Creative Art and Music

Teacher and Subject:

Mr. Sanger, Annville-Cleona, Conversational German
 Mr. Slike, Eliz., Conversational Spanish
 Mrs. Pertusio, Palmyra, Conversational French
 Mr. Royer, Palmyra, Practical Arts
 Mr. Krumrine, Northern Leb., Practical Arts
 Mrs. Doll, CLSD, Librarian
 Mr. Fields, CLSD, Guidance & Visual Aids
 Mrs. Gress, CLSD, Nurse
 Miss Bomberger, CLSD, Nurse
 Mrs. Confer, CLSD, Kludergarten Enrichment
 Mrs. Schereh, CLSD, Kindergarten Enrichment

A full-time school nurse has been on hand in the Cedar Crest building to take care of normal day-to-day aches and pains. Mr. Henry Fields has been working as guidance counselor and audio-visual aids director for the program. The Millersville Regional Instructional Materials Center has again cooperated with us in setting up a library of 16 mm films, filmstrips, and tapes in the Cedar Crest building from which distribution has been made to the various buildings involved in the program. Mrs. Harriet Doll, the summer school librarian for the Cedar Crest building, has reported a total of 791 books circulated from the library during the first three weeks of summer school. Use of video taping is also provided to affect instructional improvement and a modern copying machine has been made available for summer school use.

SPECIAL COUNTY PROJECT

The Office of the County Superintendent of Schools is introducing a new class in each of the county districts for handicapped children of pre-kindergarten age. This project is financed through federal funds. Approximately 15 children of the Cornwall-Lebanon School District will be taught in the Cornwall Building for six weeks beginning July 7.

Miss Linda Southall is the instructor; teacher aides will be employed and transportation provided for the children. Emphasis will be placed on newer methods dealing with young children that seem to have significant promise for their education.

SUMMARY OF STUDENT DISTRIBUTION

District	Basic		Innovative		Total
	Public school	Parochial school	Public school	Parochial school	
Anville-Cleona.....	30	0	8	4	42
Cornwall-Lebanon ¹	303	15	136	31	485
Eastern Lebanon.....	19	0	5	2	26
Lebanon City ¹	94	16	61	53	224
Northern Lebanon.....	9	0	5	0	14
Palmyra.....	8	0	0	0	8
Others.....	6	0	0	0	6
Total.....					805

¹ Music classes of the Cornwall-Lebanon Schools enroll an additional 135 students for part time instrumental summer instruction.

¹ Lebanon City enrolls an additional 482 elementary children in the Title I Language Arts summer instruction.

The payment of a Federal Grant for the 1969 summer closes out the \$86,000 appropriation received by the Cornwall-Lebanon School District over the past three years. The terms of the original grant indicated that such funds were provided to supplement educational programs over a three year period to encourage communities to continue similar projects after the funding period had lapsed.

The decision now rests with the local district and the people as to the extent financial support is desirable and practical in continuing certain innovative or enrichment classes in the summer time. Such finances must come from local support and decisions as to inclusion in the 1970-71 school budget for 1970 summer operation must be made during the early months of next year. It is our hope, too, that the basic summer program can also be continued as part of a community plan to serve the needs of students and to secure an investment return on our school buildings during the summer time. Comment on this subject from parents and citizens to school officials will be welcome and the public is invited to visit the classes at any time during the sessions.

Open House will be conducted by the Innovative Classes on Wednesday, July 30, during the hours of 7 to 9 P.M. Parents and friends are cordially invited.

SUMMER RECREATION PROGRAM, FLOYD E. BECKER, DIRECTOR

The summer recreation program of the Cornwall-Lebanon School District began on June 16 with the registration of children between the ages of 6-16. Registration lists for the eight playgrounds are: Avon 140, Ebenezer 147, Hebron 91, Ionia 218, Mt. Gretna 125, Pleasant Hill 108, and South Hills 125. Total registration is 1004 children; an increase of 111 children over the June 1968 list.

The playgrounds, play leaders, hours in session, and special activities for June have been:

Avon.—Miss Beverly Bomberger, Terry Light. Monday through Friday: 9:15-11:30 A.M.; 1-4 P.M.; 6-8 P.M.; Closed Wednesday evening; swimming at Cedar Crest, Tuesday morning.

Cornwall.—Miss Judy Mullen, Warren Grubb. Monday through Friday: 1-4 P.M.; 6-9 P.M.; Closed Friday evening; swimming at Cedar Crest, Wednesday morning.

Ebenezer.—Miss Judy Mellinger, David Stewart. Monday through Friday: 1-4 P.M.; 6-9 P.M.; Swimming at Cedar Crest, Thursday morning.

Hebron.—Miss Anita Rank. Monday through Friday: 9:30-11:15 A.M.; 1-4 P.M.; 6-8 P.M.; closed Tuesday and Friday evenings; swimming at Cedar Crest, Tuesday afternoon.

Iona.—Mrs. Kathy Andrews, William Dissinger. Monday through Friday: 9:15-11:30 A.M.; 1-4 P.M.; 6-8 P.M.; swimming at Cedar Crest, Monday morning. *Mt. Gretna*.—Mrs. Paula Miller, Gregory Gettle. Monday through Friday: 9-11:30 A.M.-4 P.M.; Tuesday: 6-8:15 P.M.; swimming at Cedar Crest, Friday afternoon.

Pleasant Hill.—Miss Linda Melly, James Dostich. Monday through Friday: 9:15-11:30 A.M.; 1-4 P.M.; 6-8 P.M.; swimming at Cedar Crest Monday afternoon.

South Hills.—Miss Kathy Darkes, George Carmickle. Monday through Friday: 9:15-11:30 A.M.; 1-4 P.M.; 6-8 P.M.; swimming at Cedar Crest, Friday morning.

Special Activities at the various playgrounds include various dress-up parades, table tennis tournaments, shuffleboard contests, checkers, relay races, folk dancing and craft activities.

Arts and crafts instruction, under the direction of Mrs. Pamela Wentling, the Arts and Crafts Coordinator of the Summer Recreational Program is given by the following schedule: Avon—Monday morning; Cornwall—Monday afternoon; Ebenezer—Tuesday evening, Friday afternoon; Hebron—Friday morning; Iona—Thursday afternoon; Mt. Gretna—Wednesday morning; Pleasant Hill—Thursday morning; South Hills—Tuesday afternoon.

RECREATION BOARD

The Recreation Board meets regularly to coordinate the operation of the summer recreation program. The municipalities of Cornwall Borough, North Cornwall Township, North Lebanon Township, South Lebanon Township, and the Mt. Gretna Cluntauqua Auxiliary have contributed \$1000 to the operational costs for each playground in their local community. West Cornwall, not having a local playground, has contributed \$250 to the operation of the summer playground program.

SUMMER SWIM PROGRAM

The June report of the swimming under the direction of Miss Lee Probasco and William Miller, shows the following registration: Avon 60, Cornwall 75, Ebenezer 50, Hebron 54, Iona 64, Mt. Gretna 30, Pleasant Hill 43, South Hills 54, total registrations 430.

The program provides (1) knowledge and skills which will enable children to take care of themselves in the water; (2) instruction in accuracy, coordination, speed, and expenditure of energy; and (3) enjoyment of recreational aquatic activity, students have been placed in Beginner, Intermediate Swimmer, Swimmer, or Advanced Swimmer courses.

The resident family swim programs from 7 P.M. to 9 P.M. on Tuesdays and Thursdays, children are admitted without charge, when accompanied by a parent. The adult fee is fifty cents a session.

Through the efforts of the South Lebanon Township Supervisors, lavatories and a pavilion have been added to the South Hills playground.

The North Lebanon PTA has provided bus transportation every Wednesday afternoon to and from the Ebenezer playground for the children of the township.

The Hebron Playground Association is adding a basketball court to their playground.

The basketball court at Cornwall has been recently resurfaced and repair work completed on the backboards, this work was financed by the school district.

The annual "Play Day" for the combined playgrounds is scheduled for the Cedar Crest Campus on Wednesday, July 23, 1:00-8:00 P.M. Parents and friends are invited.

DADE COUNTY PUBLIC Schools,
Miami, Fla., May 9, 1972.

HON. ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education,
House of Representatives, Washington, D.C.

DEAR MR. PUCINSKI: As per the request in your correspondence of April 14, I have forwarded to you under separate cover, a statement which includes the rationale, operating procedures and direction of the Dade County Public School Quintimester Extended School Year Program.

The statement explaining the quintimester program was developed in light of the needs and specific areas of concern in the Dade County Public School sys-

tem, and it is not meant to suggest that the design is appropriate for all school districts. The total issue of extended school year programming is an extremely complex one and requires a unique design for each community and school district planning to implement this type of program.

I hope that you find this statement of some value and if I can provide any additional information, please do not hesitate to contact me.

Sincerely,

MARTIN RUBINSTEIN,
Project Manager, Quinmester Program.

Enclosure.

THE QUINMESTER EXTENDED SCHOOL YEAR PROGRAM

(By Martin Rubinstein)

On August 14, 1969, the Dade County School Board authorized the Division of Instruction to conduct a plant utilization study. The study was to have as its purpose the exploration and recommendation to alternate plant utilization plans for the most efficient use of Dade County School facilities so as to reduce the need for capital expenditure during the next five (5) years. The recommendations which were to evolve from the study were expected to maintain the present level of instruction and where feasible, provide an opportunity for the improvement of the educational program while still effecting plant economies.

Two plant utilization strategies became apparent as the study progressed. They are: (1) the extended school day; (2) the extended school year.

The extension of the school day (Ten Hour Day) has the potential of becoming operational in a short period of time since no major curriculum revision or restructuring is required, and it does not significantly increase school operating costs. The Ten Hour Day extended day plan increases the capacity of a school facility by approximately seventy-five percent by dividing the school's enrollment into two equal groups and dividing the day into two equal sessions. Each student is assigned five subjects but may elect to extend his regular five-hour day and take an additional subject. In the 1970-71 school year twenty-three Dade County secondary schools adopted the Ten Hour Day plant utilization plan.

The extension of the school year was considered to be a far more complex strategy to implement and the long term plant utilization benefits cannot be accurately projected. The plant utilization study reviewed seven extended school year plans, all of which were considered as being impractical for implementation in Dade County. The experiences of other school systems would indicate that the following criteria need to be considered prior to the development of an extended school year program for the Dade County Public Schools:

1. The extended school year design that produces the greatest plant utilization benefit requires the greatest adjustment in living patterns and such designs have proved least acceptable to communities at large.

2. Extended school year designs that mandate specific vacation periods to pupils are not as acceptable to communities as are those extended school year programs that are voluntary in nature.

3. Extended school year designs that demand a radical departure from existing school calendars are not accepted by communities as are those extended school year plans that require only slight calendar changes.

4. The extended school year plan that increases the students' options of course selection, attendance sessions and vacation options are more acceptable to students and patrons than those plans which maintain present restrictions in the areas of curriculum, attendance and vacation periods.

5. Extended school year plans that do not provide a common vacation period for all pupils and staff members are resisted by the community more than those that provide a period in which all the schools are closed and a common vacation period is available to students and staff.

On the basis of the above criteria, the quinmester plan was developed by the Division of Instruction and recommended to the Dade County School Board for piloting in selected secondary schools.

The Quinmester Extended School Year design was developed around a calendar that divides the school year into five 45-day or 9-week sessions (See Chart I). Pupils in schools operating with the quinmester organization must attend four

(4) quinquesters in the five (5) quinquester school year. The student has the option of attending all five (5) quinquesters and accelerating his graduation from high school or electing a vacation quinquester other than the traditional summer vacation period (See Chart II). Each fifth quinquester attended by the pupil could possibly accelerate his graduation from high school forty-five days, although the fifth quinquester may be used by pupils for enrichment and remedial experiences and not result in an accelerated graduation.

This extended school year organization does not radically affect the present operational calendar of the Dade County Schools, and provides the community with the option of an extended school year program while maintaining the present calendar structure for those people in the community who prefer the traditional 180-day school year. The quinquester program is designed to be different from the present summer programming in that the summer quinquester will be an extension of the four other terms of the school year and is not considered as primarily a vehicle for remediation or enrichment. Although these types of programs are available in quinquester schools, the Quinquester Extended School Year Plan makes available regular school programming throughout the calendar year with the exception of a two to three week summer vacation period. The above average student could accelerate under this plan while other pupils could more easily repeat grade failed. (Gifted and motivated pupils could complete 6 years of secondary schooling in 5 years by attending four summer quinquesters between grades seven and eleven, while less gifted pupils who did full grades could get their elementary and secondary school education in the present normal twelve year period.) The voluntary features of this plan permits those who wish to attend a full year to do so, and those who strongly object to being in school for an elongated period attend only the regular 180 day school program.

Quinquester Pilot School Involvement

During 1970-71, seven secondary schools were identified as quinquester pilot schools. They were Miami Springs Senior High School, Miami Beach Senior High School, North Miami Beach Senior High School, Nautilus Junior High School, Henry H. Filer Junior High School, Hialeah Junior High School and Palmetto Junior High School.

All but two of the pilot schools (North Miami Beach Senior High School and Miami Beach Senior High School) achieved a quinquester program starting in June, 1971. The other two pilot schools started their first quinquester in September, 1971.

During the 1970-71 school year, the pilot schools were involved in a comprehensive study of the administrative and curriculum implications of the quinquester program, through representation on all the subject area advisory committees and the administrative review and steering committee.

The individual pilot schools in addition to writing curriculum support material for the quinquester program, conducted a community information dissemination campaign designed to acquaint the community with the Quinquester Extended School Year Program.

Plant Utilization Implications of the Quinquester Extended School Year Program

The quinquester plan theoretically has the potential to increase the capacity of school plants by twenty-five percent. A school having a capacity of 2,000 pupils could conceivably enroll 2,500, and due to the staggered attendance periods have but 2,000 pupils in attendance during any given quinquester (see Chart II). Increased plant capacity could be achieved also through an acceleration procedure developed under this plan. The fact that the fifth quinquester coincides closely with the Dade County Base Plan for summer school operation is likely to make attendance in summer school for acceleration purposes more appealing. To achieve the maximum benefit from this plan relative to plant utilization four-fifths of the total secondary school population would need to be in attendance each quinquester (see Chart II).

This maximum benefit indicated above could be achieved only by mandating pupil attendance and vacation periods. The Quinquester Extended School Year design, as presently being planned in the Dade County Public Schools does not anticipate this mandatory procedure.

The prevailing patterns of family and community living and working, although presently undergoing change, militate against the acceptance of any extended school year design by the community that assigns pupils to specific attendance sessions for plant utilization purposes. It is anticipated that as community mores

and habits change, the number of families that elect to vacation in a period other than the summer will increase and more students will attend the fifth quinmester program that affords them the same academic opportunities that are available in the regular school year program.

Attendance statistics from the 1970 six-week summer session indicated that thirty-four percent of the potential secondary school population attended an academic summer school for credit. These attendance figures provided some data for a projection of what summer quinmester attendance might become after several years of operation.

It is not projected that attendance at a summer quinmester will always be reflected in an accelerated graduation for students; however, it can be generally assumed that in most cases each summer quinmester attended by a pupil will result in the saving of twenty-five percent of a pupil station.

The attendance of 3,384 pupils in the quinmester programs during the summer of 1971, provided a savings of 846 student stations computed at .25 pupil stations per students in attendance. The economic benefits derived from savings in operating costs per pupil between ten-month operation and fifth quinmester operation is shown in Chart III. The degree to which pupils avail themselves of the acceleration factor in the quinmester plan and the degree to which pupils voluntarily elect a vacation period other than the traditional summer months, will in effect, represent the sum total of the plant utilization benefits available from the quinmester plan.

The present pupil capacity deficit in the Dade County Public Schools makes it unfeasible to consider the Quinmester Extended School Year Program as a replacement for the ten-hour day plant utilization plan. The seventy-five percent pupil capacity increase available with the ten-hour day plant utilization plan, could not possibly be matched by the voluntary Quinmester Extended School Year Program and schools can be expected to operate both plans simultaneously.

Community Involvement: Implications for the Quinmester Program

A public information campaign was conducted by the five pilot schools with the patrons of the school community and interested civic, social and religious organizations. The new curriculum, the possibility of mid-year vacation periods and the possible reduction in the school system's capital outlay requirements were the main areas of interest at quinmester informational meetings. Numerous groups within the community and the school system were contacted by the staff of the Division of Instruction relative to the Quinmester Extended School Year. These groups included school P.T.A., League of Women Voters, university groups, curriculum councils, district principals' groups, professional organizations and individual school facilities.

Twenty thousand copies of a brochure entitled "Quinmester Program Progress Report," were distributed to all School Board employees as well as interested community groups and educational agencies. A telecast was broadcast over Channel 2 during a teacher work day. The telecast included a panel of teachers assigned to several of the quinmester pilot schools who answered questions concerning the quinmester plan that were solicited from the county at large.

Numerous references and informational items concerning the quinmester program have been published in *Checkpoint* which is a publication of the Dade County Public Schools' Office of Public Information, and the school newspapers of the pilot schools. Several of the pilot schools have developed and distributed brochures to their patrons and pupils.

The Greater Miami Coalition has coordinated a committee to assist the Dade County Public Schools in the dissemination of information about the quinmester program to the community. The committee convened for five meetings to study the quinmester program in depth. On April 8, 1971, the committee voted to recommend to the Greater Miami Coalition Board of Directors, that the implementation of the quinmester program in the Dade County Public Schools be fully supported by the Coalition and the procedures be established to publicize the quinmester program to the community at large.

It is planned to continue the public information program with additional telecasts and progress reports published at regular intervals throughout the school year. The public information and involvement campaign requires a continued emphasis since historically, extended school year programs have met with considerable public opposition due to a lack of cooperative planning between school personnel and the general community.

Fiscal Implications of the Quinmester Extended School Year Program

In the 1970-71 school year the Dade County quinmester developmental effort was funded with \$490,000 budget—\$240,000 of which provided by the State Department of Education through a legislative grant and \$250,000 of which was provided by the Dade County School Board.

The 1970 summer quinmester program at three pilot schools was funded by the allocation of State Special Teacher Service Units. It is anticipated that a similar funding procedure will be used for the 1971 summer program at the five quinmester pilot schools.

Three separate funding requests were submitted to the State Department of Education during the 1970-71 school year:

1. A request to the State Department of Education for an extension of Minimum Foundation Program funding beyond the 180 day school year to support the nine-week quinmester pilot program at five (5) Dade County quinmester pilot schools during the summer of 1971.

2. A request to the State Department of Education for the allocation of \$240,000 to be used for the continuing development of the quinmester program during the 1971-72 school year.

3. A request for an operational assistance grant of \$382,025 for the operation of five (5) quinmester pilot schools during the summer of 1971.

The status of these three requests could not be determined fully until the 1971 legislative session was completed. The request for the \$240,000 developmental grant was included in the governor's budget while the \$382,025 operational assistance grant was deleted from the governor's budget.

The implementation of an extended school year program can be approximated generally to increase the operating costs of the school system in direct proportion to the increase in the employment period of instructional personnel. The projected increase in the operational costs of the Dade County Public Schools operating under the quinmester design is not expected to increase by twenty-five percent irrespective of the fact that the instructional period is being extended by twenty-five percent. This is due to the present Dade County employment policies which provide for the employment of senior high school principals, central office and district personnel and various support personnel for a twelve-month period. The projected increase in the operating costs of quinmester schools for the fifth quinmester can be considered to be nineteen percent or approximately \$108.00 per pupil (see Chart III).

Present State Statutes permit the attendance of pupils in an extended school year program to be added to the attendance totals of the regular 10-month program. This procedure would provide the Dade County Public Schools with approximately \$2.20 for each day a pupil is in attendance in a quinmester program. This fiscal support for the fifth quinmester program at the five pilot schools would permit a reduction in the local funding required for the operation of the summer quinmester program. The \$2.20 per pupil was made available for use by the Dade County Public Schools during the 1971-72 school year and is not limited to a salary expenditure.

To be eligible for this funding the Dade County Public Schools are expected to operate during the summer, a program that is equal in academic value and intensity to the program that is operational during the regular 180 day school year.

The full-cost benefits available by the implementation of the quinmester program cannot be determined fully at this time. The increased budgeting allocations required for operational costs need to be equated with the fiscal benefits that will be accrued by the school capacity increases gained as a result of rotating vacations and student acceleration. The educational concomitant of the improved curriculum and the projected decrease in the number of dropouts and failures also represent direct cost benefits which must be weighed against the increase in operating costs.

The schools that are starting their involvement in the quinmester program during the 1972 summer session are expected to continue the program through the 1972-73 school year and in the years ahead. The participation of these additional schools in the quinmester program is not expected to increase the operating budget of the school system, since a school functioning with four quinmesters during the regular 180 day program is not allocated any additional staff beyond the normal regular school year allocation.

It is on this basis that secondary schools have been encouraged to implement the quinmester curriculum and administrative organization during the 180 day program.

The adoption of the quinmester program by all of the secondary schools in Dade County will not necessitate the operation of all the schools during the summer (5th) quinmester. It is planned that each summer a sufficient number of quinmester schools will operate to accommodate between twenty percent and thirty percent of the total 180 day program secondary population. These summer centers would be rotated so as to provide a summer quinmester center to different communities in each district on a rotating basis making maximum use of the available air conditioned school facilities.

As additional interest in the summer quinmester increases additional centers can be offered. This strategy will maintain a favorable balance between local expenditure for summer programming and the funds received from the state under the Minimum Foundation Program.

The majority of the new quinmester schools have participated in an intensive staff development program centered around the quinmester plan prior to their final commitment to the program. The staff development activities of the newly designated quinmester schools have included the following:

1. Visitation by staff members to the seven operating quinmester pilot schools;
2. Participation of the administrative staff in pilot school principal's meetings;
3. Participation of selected staff members in a quinmester workshop conducted by the Henry H. Filer Junior High School staff on November 29, 1971;
4. A review of the quinmester curriculum by the faculty and staff;
5. Participation in a meeting with staff members of the Division of Instruction to select an appropriate curriculum unique to the needs of the individual school from the Catalog of Authorized Instructional Courses for the Quinmester Program;
6. Attended a conference on the implementation of the quinmester program with parents, students and community groups.

It is expected that the staff development program operating in quinmester schools will be an ongoing process, and that as the program continues, schools will develop the administrative techniques and additional curriculum support material that can be made available to other schools considering the adoption of the quinmester plan.

Several schools have indicated an interest in adopting quinmester curriculum and organization starting with the 1972-73 school year. This will simplify the articulation process for those students who will be attending quinmester centers during the summer session, with the school program in their assigned schools for the 1972-73 school year. An intensive educational guidance and articulation program will be implemented prior to the summer session by all secondary schools to assure that each student attending a quinmester center will be able to enroll in classes that are needed for his individual program and that are compatible with the organization and program of his assigned school.

Curriculum Implications of the Quinmester Extended School Year Program

The strategy of the Quinmester Extended School Year Program provides significant implications for curriculum improvement. The revisions necessary to implement this program of instruction enhances the opportunities for the Dade County Public Schools to further stimulate each student attending school through a study plan unique to his level of interests, capabilities and needs.

A program of nine-week, non-graded, non-sequential courses of instruction has been developed in each subject area of the curriculum. There is a broad range of courses, from the remedial to the highly sophisticated, making possible the development of a pupil program unique to each individual student. This type of curriculum structure provides each student with the opportunity to individualize his program by selecting from a large number of quinmester courses for learning experiences which will be of greatest interest and meaning to him while complying with the standards established by the state accreditation program and the Dade County School Board.

The Division of Instruction provided leadership and support to approximately 1,100 Dade County educators representing all work levels who developed the quinmester curriculum structure. Subject area advisory committees were established to develop course titles and descriptions for each course of instruction to be developed within the discipline and to recommend guidelines for the imple-

mentation of the proposed curriculum structure to the staff of the Division of Instruction. Subject area consultants and teachers on special assignment conferred on the interdisciplinary aspect of many of the courses to make feasible a student taking a course in one subject area and being granted credit in another subject area when there was an interrelationship of concepts.

The titles and descriptions of 1,300 quinmester course offerings have been comprehensively reviewed by the Division of Instruction staff and, with the approval of the Administrative Cabinet and the Dade County School Board, represents the authorized courses of study for the Dade County Public Schools.

Each school participating in the pilot quinmester program has been asked to identify the courses of instruction which are appropriate for the pupil population served by the school. It is intended that as the program is further implemented, each school will select those courses from the master catalog of authorized courses which best suit its student needs, therefore, offering a catalog of courses unique to its own school population. It is not expected that every school offer every course. This type of structure provides for the great variety of school populations as well as the great variety that exists within each school population.

At this phase of quinmester curriculum development it is anticipated that approximately 960 courses of instruction are available to the quinmester pilot schools at the start of the 1972 summer (fifth) quinmester. Individual teachers and teams of teachers have been preparing the courses in each subject area according to priorities established by the schools. It is projected that by the summer of 1973 all courses listed in the master catalog will be available to any school within the Dade County Public School system interested in the implementation of the quinmester curriculum.

Since curriculum development is a continuing process, the teachers in the fields and the professionals who will be working with the program in their class situations, will play a great part in the continuous reviewing, evaluating and rewriting of the courses of instruction. Channels of communication are open between the subject area consultants and the classroom teachers and administrative personnel for the constant revision and updating such a program demands.

Evaluation of the Quinmester Extended School Year Program

An evaluation of the quinmester program was conducted by the Department of Program Evaluation of the Division of Instruction.

This evaluation considered the broad aspects of the quinmester program as a concept and the specific outcomes at five schools operating during the summer of 1971 under the quinmester plan. The results of the evaluation were generally favorable. The results were based on information obtained from parents, students, teachers, principals, institutions of higher learning and the business community.

Attendance.—The 1971 summer quinmester demonstrated that pupils can be voluntarily recruited for a full academic program during the summer. The rate of daily attendance was about nine percent below the regular school year. Principals reported the dropout rate to be less than five percent.

Academic achievement.—Although achievement testing was limited to reading and mathematics in one school, the results were highly favorable, with students gaining six-tenths of a year in mathematics and one and one-tenth years in reading during the summer quinmester.

General reactions.—The reactions of principals and students who participated in the summer quin were favorable or neutral by a large margin. A majority of students, parents and teachers willing to express an opinion favored the quinmester over the conventional school, although many felt that they needed more information in order to decide which they preferred.

Businesses and industries were almost unanimously in favor of or neutral toward the quinmester program. The quinmester plan, which spreads school operations more evenly across the year, seems to fit in better with business operations in general.

Scheduling.—The quinmester program offers the student a great deal of flexibility in scheduling courses. Conversely, the program creates special demands upon scheduling. Additional administrative work is required to insure the smooth operation of the scheduling process.

Curriculum.—Among students, teachers and principals, the strongest point of the quinmester program was curriculum revision. Reactions of all of these groups were highly favorable to the rearrangement of the curriculum into rela-

tively self-contained nine-week periods. In the 1971 summer quin, students, parents and teachers all favored the greater choice of courses, the addition of new courses (e.g., ecology), the student's ability to continue or change courses after nine weeks, and the availability of the complete school program in the summer. Quin principals, however, felt that a student who attended four consecutive quinesters should be allowed to attend a summer quinmester to take just one remedial course. Potentially, that option is open for all five quins.

Staffing.—Since the entire curriculum is available in the summer quin, the need for specialized teachers for the summer quin is greater than for summer school under the conventional plan. This may create some staffing problems until the summer quin becomes regularly established and teacher vacations can be planned in relation to it. Generally, teachers favored the summer quinmester program in relation to their professional activities, with only three to eight percent feeling that the summer quin would be a disadvantage to teachers with respect to year-round employment, opportunities for further education, ability to hold student interest because of the more relevant curriculum, ability to hold student interest because of shorter course length, better use of teacher preparation and the possibility of a smaller number of students in school at one time.

Vacations.—Extensive samplings of the business community indicated that the quinmester program presents a favorable solution to many of the problems that businesses usually have with the scheduling of employee vacations. Businesses and industries were favorable or neutral toward evenly spaced school vacations by a very large majority, the exceptions being those businesses that regularly close down operations in the summer for vacations or have seasonal peaks during the winter. The latter businesses employ about eleven percent of all employees represented by the sample.

Approximately one-third of the sample of students, parents and teachers felt that a summer vacation was necessary, although about two-thirds preferred that time period. The survey did not take into account, however, the fact that a two-week vacation period exists during the summer even with the operation of the quinmester program. A study of the second choices of vacation periods indicates that, discounting the preference for summer, vacations could be spread fairly evenly across the year, although the January-March period showed some weakness in terms of preference.

Student employment prior to graduation.—More jobs are available to students during the year than during the summer vacation period. With the spreading out of the availability of students, the competition for jobs should be lessened through a closer matching of supply with demand. The majority of students are employed by supermarkets, department stores, and public utility companies as clerks, cashiers, bag boys, stock boys and telephone operators. Most students are hired by large businesses rather than small businesses.

Early graduation.—Early graduation was a surprisingly strong factor in support of the quinmester program. Early graduation would allow the potential drop-out to complete his studies earlier, thus moving him into the job market at a speed more in agreement with his desires. It would also offer opportunity for the student who is going to college to complete his work earlier, thus lengthening his productive professional life by a year. There are also obvious administrative and economic advantages to the school system.

The initial survey indicated that one-third of all students would expect to attend all five quinesters. This attitude was supported by parents. Most of the quin principals felt that the decision to accelerate graduation should not be left entirely to the student, but should depend upon proper counseling and the involvement of parent, teacher and principal.

Employment after graduation.—About one-third of the sample of large businesses indicated that it considered applicants for employment at age sixteen. Employment of sixteen-year olds was under the same terms and conditions as the employment of older applicants. Allowing for legal restrictions, a much greater number of the companies indicated that they would consider the younger applicants. (Seven of forty-three of the large businesses would not consider sixteen- and seventeen-year olds under any circumstances.)

Early graduation and admission to college.—In forty of forty-four schools for which data were available, age was not a consideration for admission. Maturity, however, was a criterion for admission in some cases. On the whole, the responses indicated that sixteen-year olds should have no difficulty in obtaining admission to college given a reasonable amount of maturity and a satisfactory academic background.

Quimester graduations five times per year.—Practically all businesses felt that the staggered graduation sequence would facilitate or have no effect on hiring, since their need for employees was not tied to a particular time of the year. Only one of 41 large businesses and two of 336 small businesses felt that multiple graduation would impede the hiring process.

Entry into colleges and universities has traditionally been tied to June graduation. The quim most out of phase with existing college entrance practices is the quimester ending January 20, where the student must wait four or more months to enter twenty-six of the forty-four schools in the sample. Under the regular program, however, it is not unusual for the student to wait from June until September to enter college following graduation from high school. The school which serves the largest number of Dade County students (currently 24,416) has indicated that it will be glad to work with the Dade County Public Schools in order to effect a smooth entrance into college following quimester graduations.

In summary, the initial evaluation of the quimester program is favorable. By all measures, it has the potential for making a substantial contribution to quality education through a more rational utilization of school resources. Although extensive education of parents and students concerning the advantages of year-round school may be necessary to insure full attendance at summer quims, the potential for success exists within the data that have been presented to this date. Problems of scheduling students in a more flexible manner must be solved, but the technology is available and the advantages are obvious. The initial success of the summer quim indicates that satisfactory planning has occurred to this point and that expansion of the program should be considered.

Administrative Implications of the Quimester Extended School Year Program

The changes in administrative procedures and practices need to be comprehensively reviewed as a school system changes from a regular ten-month, 180-day program to a quimester extended school year program. The plant utilization and curriculum benefits that are concomitant to the quimester design can only be realized as the program becomes administratively feasible and manageable.

In an effort to focus in on the administrator's concern relative to the quimester program, the Division of Instruction organized a countywide Administrative Review and Steering Committee. Composed of representative personnel from the county office, district offices and schools, this committee was organized to study the administrative implications of the quimester program.

In order to better study the varied countywide and school administrative problems and to identify necessary tasks to be completed, the countywide committee organized itself into smaller ad hoc groups and adopted the following guidelines for intensive study:

1. That the committees address themselves solely to the concerns unique to the quimester program unless there were distinct areas of commonality found in the studies that would have significance for all schools in Dade County.
2. That since the program was in pilot status, county policy revisions be kept at a minimum unless a change in the present procedure was essential to the implementation of the pilot program.

COUNTY CONCERNs

1. Calendar

The quimester calendar follows the regular county calendar closely observing the same holidays and vacation periods as the regular calendar and providing a 180 day instructional period for all students. The most notable change is the placing of teacher planning days, when students are not in school, at the end of the nine-week session. Many other schools in the county other than pilot schools are presently on a nine-week reporting period and could avail themselves of the benefits of the quimester calendar.

2. Personnel

In its present stage of implementation, the quimester program requires no changes in the personnel policies and procedures that are presently operational. The following personnel procedures were studied in depth by the Administrative Review and Steering Committee: school staffing, assignments, staff utilization, recruitment, salary schedules, retirement, pension plans, sick leave procedures, sabbatical leaves. It was generally concluded that the present design of the Quimester Extended School Year Plan could readily function within the framework of existing Dade County personnel policies and procedures.

3. Support Services

No changes are necessary at this time in the areas of transportation and food services. When the quinmester program becomes fully implemented added transportation costs will accrue because of the extended period of service. School cafeterias will operate as they do during the regular 180 day school year. Custodians are on a twelve-month employment basis and will now have the option of taking vacation time throughout the year.

Routine maintenance will pose no greater problem in schools than it does at the present time. Major maintenance projects can be scheduled during vacation periods.

4. Accreditation

Requests for accreditation waivers for quinmester pilot schools have been made and granted by the State Department of Education. The accreditation waivers granted were:

9.823 (2)(a) — *Course or Subjects Required.*—A waiver is requested of this standard specifically in the requirement that 90 hours of physical education in grades seven and eight to be distributed over the entire school year. It is feasible that a pupil attending a quinmester school be involved in a physical education class for two quinmesters which would total ninety hours of instruction. This waiver, if granted, would permit a pupil to enroll in physical education classes beyond the ninety-hour requirement or other elective programs offered in the school program. This request does not alter the ninety-hour requirement, but does compact it into two quinmesters, or ninety days, rather than the entire school year. A waiver of this standard is required for certain ten-hour day schools.

9.952 (2) — *Summer Programs Credit Limit.*—This waiver is requested to permit pupils attending quinmester schools to earn more than one (1) credit during a nine-week summer session.

9.952 (2) — *Three Year Requirement for Graduation.*—A waiver of this standard permits students to graduate in less than three years, grades 10-12, if they have fulfilled all other requirements for graduation.

SCHOOL CONCERNS

1. Scheduling

The Quinmester Extended School Year Program by its design requires that a school develop a master schedule each nine weeks, as opposed to developing a school schedule once during the year as is the practice in the present 180 day school program. The development of a master schedule each nine weeks would provide a maximum of flexibility to pupil programming and make available alternatives in course selections that would enhance considerably the individualization of instruction.

Due to lack of time, training and assistance available to school personnel regarding the scheduling process, it is impractical at this time to consider scheduling a school five times per year.

Alternatives to scheduling a school each quinmester have been proposed which tend to balance the degree of flexibility of student selections with the administrative burden of scheduling the school. They include:

(a) Scheduling two or more quinmesters at the same time. This approach would be similar to the procedure of linking two semester courses together (Psychology-Sociology) presently being used by some schools. This procedure would require a definite subject commitment by students beyond one quinmester.

(b) Scheduling on a college-type arrangement in which the school administration creates a year's schedule of classes (five quinmesters) in advance and students section themselves into the schedule each quinmester based on the students' desires and the subjects available in the quinmester schedule.

(c) A combination of procedures using components of the two alternatives previously described.

2. Student Records

The area of student records and accounting requires a significant amount of study for the implementation of the quinmester program.

Student attendance records need to be redesigned to be compatible with the 45-day quinmesters. This becomes increasingly significant with students opting out quinmesters which heretofore had been considered a portion of the regular 180 day school year.

The recording of the courses students take, their grades, and the completion of graduation requirements will necessitate a new procedure for educational planning and record keeping. The Central Data Processing Department is presently investigating a computer input-output system to facilitate the recording of student grades five times a year.

The investigation of areas of administrative needs must be considered an ongoing activity. The experiences of the pilot schools during the 1971-72 school year will assist in the identification of the administrative areas that require additional study. Many of the administrative concerns of the pilot schools are being studied by the faculties and administrative staffs of the individual schools. Periodic meetings of the pilot school principals have served as a clearinghouse for newly developed procedures and school policies that are required for quinmester implementation.

APPENDIX

CHART I.—QUINMESTER VACATION ROTATION

	1st quinmester	2d quinmester	3d quinmester	4th quinmester	5th quinmester
Group A.....	Vacation.....	School.....	School.....	School.....	School.....
Group B.....	School.....	Vacation.....	do.....	do.....	00.
Group C.....	do.....	School.....	Vacation.....	do.....	00.
Group D.....	do.....	do.....	School.....	Vacation.....	00.
Group E.....	do.....	do.....	do.....	School.....	Vacation.

CHART II.—QUINMESTER SCHOOL YEAR PLANT CAPACITY BENEFITS ACHIEVED BY THE MANDATING OF ATTENDANCE SESSIONS

	Quinmester extended school year 225 days				5th-traditional summer school 30 days or 15 days	
	180 day school year					
	1st—45 days	2d—45 days	3d—45 days	4th—45 days		
Theoretical registration.....	2,500	2,500	2,500	2,500	2,500	
Student capacity.....	2,000	2,000	2,000	2,000	2,000	
Student membership.....	2,000	2,000	2,000	2,000	2,000	
Student vacationing.....	500	500	500	500	500	

Note: Total number of students enrolled for 180 days—2,500; total number of students in attendance each quinmester—2,000; total number of pupils vacationing each quinmester—500; total number of days school is in operation—225.

CHART III.—A COMPARISON OF THE PER-PUPIL OPERATING COST OF THE 10-MONTH REGULAR PROGRAM AND THE 5TH QUINMESTER IN 5 PILOT SCHOOLS

Pilot schools	1970-71 operating budget	Member-ship, October 1970	Regular school year operating costs per pupil	Projected operating costs, 5th quinmester	Projected enrollment, 5th quinmester	Projected pupil operating costs, 5th quinmester	Percentage increase in per-pupil operating costs in pilot schools operating 5th quinmester
Miami Springs senior.....	\$1,802,028	3,354	\$561	\$121,068	1,140	\$106.20	+18.9
Nautilus Junior.....	792,950	1,434	553	53,865	488	110.38	+19.9
Henry Filer Junior.....	1,039,683	2,049	507	74,128	697	106.35	+20.9
Hialeah Junior.....	940,855	1,462	644	53,865	497	108.38	+16.8
Palmetto Junior.....	995,420	1,632	602	62,586	562	111.36	+18.5
Total.....	5,570,971	9,951		320,625	3,384		

NOTES

- Average per-pupil operating costs in pilot schools for 180-day program, \$560.
- Average per-pupil operating costs in pilot school for 5th quinmester, \$108.53.
- The operating costs of the 5th quinmester (summer) is approximately 19 percent of the 10-month cost per pupil. This means that the present cost per pupil for a school to operate a 12-month quinmester program would be 119 percent of the present operating cost per pupil.

CHART IV

A COMPARISON OF THE STARTING AND ENDING DATES OF DADE COUNTY
QUARTERS AND THE QUARTERS AND SEMESTERS OF SELECTED
INSTITUTIONS OF HIGHER LEARNING

	Dade Public School's Quin- mester Calendar	Miami- Dade Jr. College	Berry College	University of Miami	University of Florida	Florida Atlantic University
Sept. 1						
Sept. 15						
Sept. 30	QUINMESTER 1					
Oct. 15		Fall Quaror				
Oct. 31			Fall Semestor			
Nov. 13						
Nov. 30						
Dec. 15	QUINMESTER 2					
Dec. 31						
Jan. 15						
Jan. 31						
Feb. 15	QUINMESTER 3	Winter Quaror				
Feb. 28			Winter Somestor			
Mar. 15						
Mar. 31						
Apr. 15	QUINMESTER 4					
Apr. 30						
May 15						
May 31						
June 15		Spring Session				
June 30	QUINMESTER 5					
July 15			Summer Session			
July 31						
Aug. 15						
Aug. 31						

FULTON COUNTY BOARD OF EDUCATION,
Atlanta, Ga., May 17, 1972.

Hon. ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education

Hon. JOHN N. ERLENBORN,
Member, Education and Labor Committee, Washington, D.C.

DEAR CONGRESSMAN PUCINSKI AND CONGRESSMAN ERLENBORN: I appreciate your recent letter and the interest expressed in it in the four term school plan.

May I apologize for a slight delay in reply. But perhaps the information I am sending may be of some help to you.

May I reply, to the degree possible, rather categorically to your questions:

1. The reaction of parents to the four term school plan was most favorable and is most favorable.
2. The attitude of the students involved is also most favorable.

3. The attitude of the teachers is again most favorable. It should be understood, however, that in our plan teachers are not compelled to work in the fourth term. It is entirely optional with teachers as well as with students.

4. The matter of cost benefits is a rather academic question with us at this point because the State has not financed the operation of the fourth term. Students attending the fourth term must pay tuition to attend. When the State finances the fourth term, as we confidently believe it will, the tuition charges will be waived. It is obvious that at this point any definitive statement in terms of capital cost savings would not be meaningful in view of the lack of State finance.

We have realized a substantial savings in the reduction of failures at the high school level due to the complete reconstruction of the high school curriculum. In this regard, please see my reference in the copy of the talk I am sending.

5. We do not have any unanticipated problems. This fact is due to our spending from two to three years of intensive study in the complete reconstruction of the school curriculum. Some might regard as a problem the fact that more of our students are being graduated a quarter or two quarters earlier under this plan than they were before it was adopted. Personally I do not regard this as a problem but as an advantage.

6. Legislation would be required to finance the fourth term.

7. Our plan is not compulsory either in terms of students being required to go for four full terms or for teachers to teach four full terms. At this point I do not foresee that we will ever make it compulsory. With State financing, I am sure we will have at least twenty per cent of our student body enrolled in the fourth term on a voluntary basis. If we can achieve our objective on a voluntary basis there is no reason to make the plan compulsory.

8. Our plan has been in operation for four years. It has not been abandoned during this period and we do not intend to abandon it. As a matter of fact, I suspect our community wants us to go faster with it than we are really willing to go.

9. In terms of counsel we would offer school districts contemplating such an experiment the strong advice that they take at least two years of study in restructuring the high school program to a quarter system. We would advise the involvement of all staff personnel in this study. We would advise careful and consistent orientation of the community to the plan.

10. May I emphasize that our plan is at the moment a high school plan only. I think you should know that this plan is in operation in eight systems in the metropolitan area of Atlanta and that the secondary students involved aggregate between one-third and one-fourth of all secondary school students in the State of Georgia.

I am taking the liberty of sending you a couple of copies of a little talk I have made on our plan in a number of places in the country. I am also sending you two copies of a brochure describing our plan.

We realize that this is not the only feasible four term school plan and that other types of plans may work in other communities. It is nevertheless my professional judgment that some kind of a four term school plan is now a fact of educational life and that school systems should be moving toward the type of plan their clientele may desire.

I thank you for your interest and assure you we will be glad to furnish any other information you may wish.

Sincerely yours,

Douglas G. MACRAE,
Deputy Superintendent.

Enclosures.

FOUR TERM SECONDARY SCHOOL PLAN, FULTON COUNTY SCHOOLS, ATLANTA, GA.

A. RATIONALE AND PURPOSE

From the very beginning the main thrust of this program has been toward a more qualitative education, especially for those students who attend what used to be called "summer school". Several years ago we were arrested by the realization that one-fourth of our high school population was voluntarily attending summer school and paying tuition for it.

Unfortunately, we were not offering work in the summer that was equivalent either quantitatively or qualitatively with that offered during the other portions of the school year.

It was reasonable, therefore, to conclude that these students attending during the summer deserved a quality of work fully comparable to that offered at other times. It is interesting to note that seventy per cent of the work taken by these students was "new work"—work they had never had before. The image of summer school has changed from a period in which flunk-outs make up failures to a period in which students for the most part are taking advanced work. All the more reason, therefore, for qualitative program for such students. They deserve it.

Again, the main purpose we have in this program is one of qualitative education—our purpose has not been basically to save money, to graduate students earlier on to use buildings over an entire year. These, in our view, are ancillary outcomes but do not represent the basic thrust.

N. PLANNING OF PROGRAM

We caution that this is not a program to enter overnight. It takes time and the effort of many people to develop a program with any chance whatever of success. We spent at least three years in the planning of this program.

C. COOPERATING SCHOOL SYSTEMS

Eight school systems in Metropolitan Atlanta were involved in the planning of the program and six or seven of the eight are currently implementing it.

It is well to note that in these eight systems in the Metropolitan Atlanta area there is between one-fourth and one-third of the entire secondary school population of the State of Georgia.

D. STRUCTURE OF CALENDAR

In simple terms it is the calendar of colleges and universities that are on the quarter system. We have discarded the two eighteen-week semester year plus an abbreviated summer session of eight weeks to a four term year of twelve weeks for each of the first three terms and ten weeks for the fourth term. Each of the subjects in the fourth term, however, has the same integrity of time as the same subject offered in one of the first three terms. We accomplished this by running the subject class periods for the fourth term ten minutes longer than the periods for the other terms.

The reason we make a difference between the fourth and the other terms in this respect is in order to maintain the integrity of our holiday structure—Christmas, Thanksgiving, Easter, etc.

E. CREDIT PER SUBJECT

We have abolished the Carnegie Unit System of one unit per thirty-six weeks of work. Faced with the decision of what credit to give for a twelve-week term, we decided rather than to go to a fractional value like one-third unit per subject it would be better to go to a quarter or credit hour system. We, therefore, give five credit hours per subject per term. We give five credit hours for each subject taken, including those at the eighth grade, and require a total of 375 credit hours for graduation. This is the equivalent of twenty-five units including the eighth grade inasmuch as fifteen credit hours represent the value of one "old" Carnegie Unit.

F. REORGANIZATION OF SECONDARY CURRICULUM

Here is the heart and core of our plan. The entire secondary school curriculum has been reorganized and restructuring in order to provide flexibility both for the student's program and for the school schedule, and also to eliminate the rigid lockstep of required sequence in the taking of courses.

For some time we had suspected that much of the ironclad sequence in the taking of secondary course work could be abolished but we were astonished as well as highly gratified after a three year study that 70% of high school subject area work could be so reorganized that courses need not be sequential.

There are some exceptions, of course, such as beginning French and elementary Algebra. But all English is non-sequential, all Social Science, all Home Economics, practically all Health and Physical Education, Business Education, Industrial Arts, about one-half the Science courses, and many of the Math courses above the very beginning level.

For example, in 9th grade English, instead of offering English 201 the first 18 weeks and 202 the second 18 weeks, with English 201 an absolute prerequisite for 202 we now have three 12 week courses—English 201, English 202, 203 with no required sequence whatever. This obviously provided greater flexibility for the student in arranging his program and flexibility also for the schedule maker. In fact, all three of the courses may be offered simultaneously in a given term.

As it is in English so it is in seventy per cent of all subject areas.

Another result of the reconstruction of the high school curriculum is the ability through twelve week, relatively short courses, to provide a greater number and variety of courses, with opportunity for depth treatment in each, and also provide for the differing needs, capacities and interests of the student.

In English, for example, from grades 8 to 12 we have about 40 courses available, varying from English Lab courses for very slow learners to a course in Greek and Elizabethan Tragedy. In Social Science we have more than 40 courses available, varying from Anthropology at 8th grade level to advanced Political Theory at 12th grade level.

And all this structure and variety is projected against the fourth term background as well as that in the first, second and third terms.

G. PROBLEMS IN PROGRAM

1. The main problem is that the program, while State endorsed, has not yet been State financed. The State Superintendent of Schools has placed \$4,000,000.00 in the State budget which will be presented to the incoming legislature. This amount should finance the program for the systems interested in it.

2. A corollary of this problem is that students have to pay tuition to attend the fourth or summer term. Our charges are \$20.00 for the first subject and \$18.00 for each succeeding subject. A full load of work would, therefore, cost \$92.00—a deterrent to many students.

3. It is not possible without State finance to pay teachers their full scale pay for the ten weeks.

4. Without State finance fourth term operations must be confined only to those centers with an enrollment sufficient to schedule a comprehensive program of work.

5. Without State finance it is not possible to attract a sufficient number of students to take a full program of work for the four term operation to achieve its full potential. One of the elements of this potential is for the student to be able, if he wishes, to substitute the fourth term for any one of the other three terms. Obviously, before a school district can permit a student to miss the first, second or third term, anticipating the substitution of the fourth term for it, the district must be certain it will have available in the fourth term what the student missed in the term he was out of school.

H. ADVANTAGES OF PROGRAM

1. Each subject in the fourth term has the same integrity of quality that such subject has in any one of the other three terms.

2. Students, by attending all four terms may be graduated earlier, or may get a much broader, deeper secondary school preparation. Indeed, many of our students take work in the fourth term which they do not have time to get during the first three terms.

3. Subject matter is capsule into more compact and viable elements in twelve week periods than it can be in eighteen or thirty-six week periods.

4. The variety and flexibility of in depth, concentrated courses, to which reference has already been made. The departure from conventionally required sequence in courses. Each course stands on its own and is evaluated in its own right.

5. The provision for moving a student at an earlier time (twelve weeks) out of a course in which he is not proving successful.

6. A reduction in the percentage of failures. In the Fulton County System the percentage of failures in the first year of the program dropped by about forty per cent. In terms of budget dollars, this fact alone saved the school district over \$400,000.00.

7. One of the greatest advantages we are just now on the point of realizing—the provision that a student may attend any three of the four terms, and be out

of school any one of the four terms he wishes. Business and industry are very much interested in this development. So is the Atlanta Chamber of Commerce.

I. SUMMARY

We are committed to this program and convinced it is workable. Some of its potential cannot be immediately realized, but two years' experience with it documents our belief that it is in the best interest of student, school and community in making available a secondary school program of quality the year round and at any time in the year.

FULTON COUNTY SCHOOLS FOUR QUARTER PLAN

**FULTON COUNTY BOARD OF EDUCATION
786 CLEVELAND AVENUE, SOUTHWEST
ATLANTA, GEORGIA 30315**

**Paul D. West, Superintendent
Douglas G. MacRae, Deputy Superintendent**

Overview

When schools opened for the 1968-69 term in Fulton County, a new era in public education became a reality. Students entered the secondary school program in September with educational opportunities never before possible.

The Fulton County four-quarter plan has replaced the traditional nine-month school structure; the Carnegie unit credit; the concept of a totally sequential curriculum; and the concept of scheduling students into a master schedule only one time each year.

A flexibility has been built into this new curriculum that not only allows the school to develop a program to meet the needs of the student, but also allows the student to participate in the selection of courses and the scheduling of himself into class.

Philosophy and Rationale

The basic concept is simple. The purpose of the four quarter plan is to improve the EDUCATIONAL opportunity of our boys and girls. It is NOT a program to save money, to use the school plants on a year-round basis, to schedule children into a space-saving master schedule to relieve an over-crowded condition, or to accelerate students through high school to an early graduation. However, these could be "by-products" of the four quarter school, and this program obviously could make provisions for some of these in the long run. To reiterate, the only purpose of this program is to improve the education of our children.

One of the major reasons for the four quarter plan is the need for a quality program during the summer months. With this in mind, a program has been designed that will meet the standards of the total school program without regard to the quarter in which they are selected.

Structure of the New School Year

The school year will consist of four quarters with approximately the same amount of time in each quarter. The first quarter will begin in September and the fourth quarter will end in August. This will allow for a few days between each quarter, and for the usual holidays.

The student will be required to go to school three of the four quarters each year. At the present time, the student is required to attend the first three quarters of each year with the fourth quarter the option. However, when the program is fully implemented, the student may exercise an attendance option. He may elect to attend all four quarters or he may elect any three of the four quarters. That is, he may exercise his attendance option to stay out of school any one of the four quarters. Any combination of three quarters in a given year will meet the attendance requirements.

Because of four equal quarters, the attendance option is possible with quality instruction in each quarter and equal credit given, regardless of the quarter in which the course is taken.

Carnegie Unit Abandoned

One of the major reasons the high school curriculum has been so inflexible is because it has been shackled by the Carnegie unit credit—one Carnegie unit for one year's work. In this four quarter school plan, the Carnegie unit has been abandoned in favor of a more flexible credit hour system. Each quarter course satisfactorily completed will net the student five (5) credit hours. The maximum student load is six full course elements per quarters; i.e. the student meets the class five days per week. Therefore, the maximum credits earned in a given quarter will be thirty (30) credit hours. One can immediately see the flexibility made possible by this change in credit policy.

Subject Reorganization

One of the most significant contributions the program will make to education will be the new curriculum developed specifically for it. This in itself will be an innovation unparalleled in the nation.

All subject areas have been reorganized into quarter courses independent of each other. The number of courses required in each discipline will depend upon the needs of that discipline. Wherever possible these courses have been developed so that the rigid sequence of taking courses would

no longer be necessary. About 70% of the courses have been developed so that they are independent and may be taken without regard to sequence.

The new course structure provides stimulation and learning opportunities for all students. There is a range of courses from the remedial to the very sophisticated. Furthermore, if a student is misplaced he may be rescheduled at the end of any quarter. In fact this structure will allow the school to tailor-make a schedule to meet the needs of the individual student. This gives the student and his counselor an opportunity to evaluate the student's progress and guide him in a more successful direction.

EXPLANATION OF NUMBERING SYSTEM

The numbering system for the new Course Guide is a three (3) digit number. The numbers have the following meanings:

The first digit on the left is the level—100 level, 200 level, 300 level, etc.

First (1st) digit of "9" always indicates independent study

The middle digit is the most significant. If the middle digit is "0," this means a regular course with no special characteristics for both boys and girls.

Middle digit "1" = boys only

"2" = girls only

"3" = remedial courses

"4" = advanced placement

"5" = low group

"6" = high group

"7" = BLANK — NOT USED

"8" = business education

"9" = FLES (Foreign Language in Elementary School)

Third (3rd) digit indicates sections of course.

Requirements for Admission to Homeroom:

9th Grade—45 hours passed including 15 hours of English.

10th Grade—105 hours passed including 30 hours in English plus all required 8th grade subjects.

11th Grade—195 hours passed including 45 hours in English.

12th Grade—285 hours passed including 60 hours in English.

No more than 30 hours may be earned in Library Education.

ACADEMIC COURSE

375 Hours Are Required for Graduation

English: 75 hours

Social Studies: 60 hours

Math: 60 hours

Language—Science: 30 hours in a Language and 30 hours in Science or 60 hours in Science. 15 hours in Biology is required of all. 30 hours or 60 hours of Science must be above 100 level.

Family Development: 5 hours—from 301, 401, 501 at 10th, 11th or 12th grade level.

Physical Education: 60 hours—required of all students unless excused by doctor.

Electives: 55 hours

TOTAL 375 hours

The normal load is 25 hours each quarter consisting of four academic subjects and Physical Education. A student may elect Music, Art, Typing, Library Education, Woodshop, Drafting, Home Economics or Journalism. Any student with a high "B" average may take 25 hours of academic subjects and 5 hours of Physical Education.

Math Requirements:

Algebra—200, 201, 202

Geometry—300, 301, 302

Algebra—300, 301, 302

Social Studies Requirements:

8th Grade: Sociology—100 or 130
 Georgia History—100 or 130
 Anthropology—100 or 130

9th & 10th Grades: Geography—200
 History—200
 Political Science—200
 Economics—200

11th Grade: U. S. History 304, 305, 306
 Plus 10 hours of additional electives.
 100 series: non-sequential
 200 series: non-sequential—two of 200 series prerequisite to 300 series.

Science Requirements:

Science 100 (Pre-Chemistry & Pre-Physics) prerequisite to either Chemistry or Physics. This course plus 10 hours of Chemistry or Physics constitutes the Chemistry or Physics requirement.
 To elect Chemistry, a student must have completed 15 hours of Algebra.

To elect Physics, a student must have completed 15 hours of Algebra and 15 hours of Geometry. It is also recommended that Algebra 300, 301, 302 be completed or taken concurrently.

To elect Human Physiology, a student must have a "B" average in Science or recommendation of Biology teacher.

English Requirements:

10 hours of American Literature. American Literature 300 plus 5 hours—required of all students.
 10 hours of English Literature. English Literature 400 plus 5 hours—required of all students.

BUSINESS EDUCATION COURSE**375 Hours Are Required for Graduation**

English:	75 hours—12th Grade Bus. English 604, 605, 606 if offered
Social Studies:	60 hours
Math:	30 hours
Science:	30 hours—15 hours must be Biology
Physical Education:	60 hours—required of all students unless excused by doctor.
Family Development:	5 hours—from 301, 401, 501 at 10th, 11th or 12th grade level.
General Business:	10 hours
Typing	20 hours

Special Business Education Sequence:	60 hours in one of the following areas: Stenography, Management, Clerical
Electives:	25 hours
TOTAL	375 hours

The normal load is 25 hours each quarter consisting of four academic subjects and Physical Education. A student may elect Music, Art, Typing, Library Education, Woodshop, Drafting, Home Economics, or Journalism. Any student with a high "B" average may take 25 hours of academic subjects and 5 hours of Physical Education. Students who are on the honor roll the previous year are urged to take 25 hours of academic subjects and 5 hours of Physical Education.

Math Requirements:

30 hours required from the following:
 8th & 9th: 101, 102, 103 or 131, 132, 133 or

104, 105, 106 or 134, 135, 136 or
 Bus. Arith. 305, 306, 307 or 30 hours from Algebra/Geometry series.

NOTE: 15 hours of Bus. Arith. or 15 hours of Algebra required.

Social Studies Requirements:

8th Grade: Sociology—100 or 130
 Georgia History—100 or 130
 Anthropology—100 or 130

9th & 10th Grades: Geography—200
 History—200
 Political Science—200
 Economics—200

11th Grade: U. S. History 304, 305, 306
 Plus 10 hours of additional electives.

100 series: non-sequential

200 series: non-sequential—two of 200 series prerequisite to 300 series.

Science Requirements:

Science 400 (Pre-Chemistry & Pre-Physics) prerequisite to either Chemistry or Physics. This course plus 10 hours of Chemistry or Physics constitutes the Chemistry or Physics requirement.

To elect Chemistry, a student must have completed 15 hours of Algebra.

To elect Physics, a student must have completed 15 hours of Algebra and 15 hours of Geometry. It is also recommended that Algebra 300, 301, 302 be completed or taken concurrently.

To elect Human Physiology, a student must have a "B" average in Science or recommendation of Biology teacher.

15 hours of General Science 101, 102 & 103 and 15 hours of Biology will meet the requirements for graduation but not college entrance requirements.

English Requirements:

10 hours of American Literature. American Literature 300 plus 5 hours—required of all students.

10 hours of English Literature. English Literature 400 plus 5 hours—required of all students.

CLERICAL PRACTICE	MANAGEMENT	STENOGRAPHY
Required:	Required:	Required:
Cler. Pr. 180	Cler. Pr. 180	Cler. Pr. 180
Cler. Pr. 181	Cler. Pr. 182	Cler. Pr. 181
Cler. Pr. 182	Cler. Pr. 508	Cler. Pr. 182
Cler. Pr. 184 or	Management 380	One course from:
Cler. Pr. 385	Management 381	Steno. 286, 480, 186
Cler. Pr. 587	Management 382	One course from:
Cler. Pr. 508	Management 385 or 501	Steno. 287, 481, or
Management 501 or 502	5 Courses from:	Cler. Pr. 401, 402, 403
2 Courses from:	Management 405, 406, 407, 484, 485,	One course from:
Cler. Pr. 281 282, 283, 284	486, 487, 501, 502, 504, 506, 507, 589, 602, 603	Steno. 482, 387, 584 or 388
Steno. 186, 387 584, 388		3 Courses from:
3 Courses from:		Steno. 388, 483, 581, 582, 583, 584, 585, 681, 682, 683
Management 406, 407, 408, 504, 506, 507, 601, 602, 603		3 Courses from:
Cler. Pr. 589		Cler. Pr. 184 Management 380, 385, 405, 406, 407, 408, 501, 503, 504, 506, 507, 601, 602, 603 Steno. 589

GENERAL COURSE**375 Hours Are Required for Graduation**

English:	75 Hours
Social Studies:	60 hours
Math:	30 hours
Science:	30 hours—15 hours must be Biology
Home Economics:	15 hours (Girls)
Family Development:	5 hours—from 301, 401, 501 at 10th, 11th, 12th grade level.
Physical Education:	60 hours—required of all students unless excused by doctor.
Electives:	100 hours for girls 115 hours for boys

TOTAL	375
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The normal load is 25 hours each quarter consisting of four academic subjects and Physical Education. A student may elect Music, Art, Typing, Library Education, Woodshop, Drafting, Home Economics, or Journalism. Any student with a high "B" average may take 25 hours of academic subjects and 5 hours of Physical Education. Students who are on the honor roll the previous year are urged to take 25 hours of academic subjects and 5 hours of Physical Education.

Math Requirements:

30 hours required from the following:
 8th & 9th: 101, 102, 103, or 131, 132, 133 or
 104, 105, 106, or 134, 135, 136 or
 Bus. Arith: 305, 306, 307, or 30 hours from Algebra/Geometry series.

Social Studies Requirements:

8th Grade: Sociology—100 or 130
 Georgia History—100 or 130
 Anthropology—100 or 130
 9th & 10th Grades: Geography—200
 History—200
 Political Science—200
 Economics—200

11th Grade: U. S. History 304, 305, 306
 Plus 10 hours of additional electives.
 100 series: non-sequential
 200 series: non-sequential—two of 200 series prerequisites to 300 series.

Science Requirements:

Science 400 (Pre-Chemistry & Pre-Physics) prerequisite to either Chemistry or Physics. This course plus 10 hours of Chemistry or Physics constitutes the Chemistry or Physics requirement.

To elect Chemistry, a student must have completed 15 hours of Algebra.

To elect Physics, a student must have completed 15 hours of Algebra and 15 hours of Geometry. It is also recommended that Algebra 300, 301, 302 be completed or taken concurrently.

To elect Human Physiology, a student must have a "B" average in Science or recommendation of Biology teacher.

15 hours of General Science 101, 102 & 103 and 15 hours of Biology will meet the requirements for graduation but not college entrance requirements.

English Requirements:

10 hours of American Literature. American Literature 300 plus 5 hours—required of all students.
 10 hours of English Literature. English Literature 400 plus 5 hours—required of all students.

ART EDUCATION

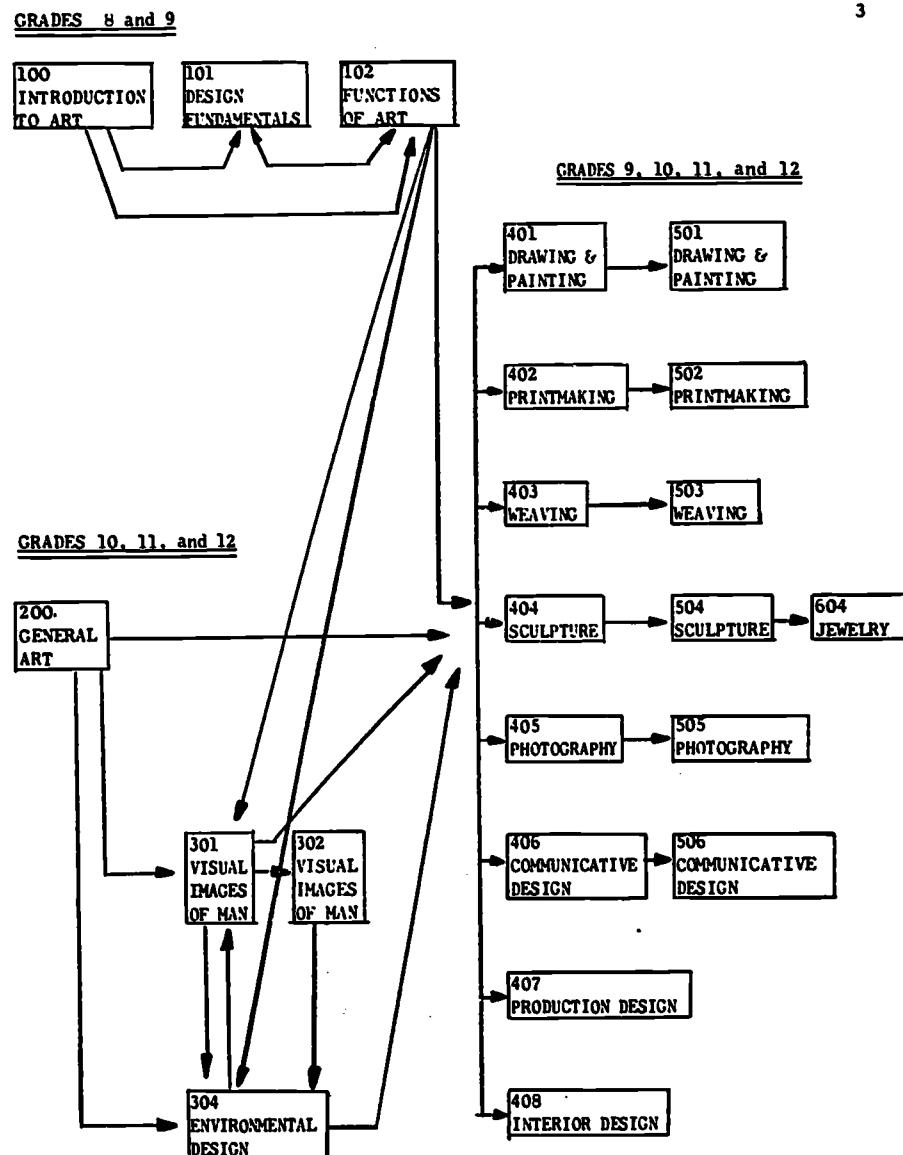
Through group participation, study, and research on the part of many art teachers, the art department chairmen, and the art staff at the system level, this Framework of Art Education for the secondary schools of Fulton County has emerged.

This Framework should serve as a reference in helping to stimulate all art teachers to evaluate and to improve and expand their present art programs in relation to their own situations. At no time is it expected that all twenty-two courses described in this framework be taught simultaneously in one school. It will be the responsibility of each school (the administrator and the art teacher) to determine which of these courses are most pertinent to the needs of students and can be most effectively offered.

In order to allow for the individual differences of students, the strengths of individual teachers, and the needs of students in any particular locale, each art teacher, in following the Framework in Art Education, should always consider the needs, interests, and abilities of students at different levels of growth.

RECOMMENDATIONS: ART EDUCATION

1. All art courses will be elective. Care should be taken in scheduling to give each student opportunity to elect.
2. All art courses should carry same unit credit as any other area course offering.
3. Art teachers should work closely with the scheduling committee at the local school level in art for each quarter.
4. More advanced or complex courses in particular areas should be included in the schedule of offerings as the need arises (such as (01 Painting and Drawing for students who desire and need more experience in this area after completing 500 level).
5. Class sizes for all laboratory courses in art should be limited to 25 or less.



ART EDUCATION

INTRODUCTION TO ART 100 (8th and 9th grades)

Introduction to Visual Art is a basic, exploratory course designed to provide experiences which will develop a heightened awareness of the senses . . . sight, sound, touch, motion. These experiences will offer opportunities for students to solve problems in working with a variety of materials and processes which will stimulate imagination, inventiveness, and discovery. No Prerequisite.

DESIGN FUNDAMENTALS 101 (8th and 9th grades)

A course designed to offer opportunities for the related use of the basic elements of design . . . line, color, texture, light, motion, in working with a variety of materials such as: paint, ink, plaster, clay, wood, wire, metal, and "found materials." The materials, tools, and processes should be compatible with the individual stages of growth and development of students.

Prerequisite—Art 100

THE FUNCTIONS OF VISUAL ART 102 (8th and 9th grades)

A laboratory course designed to help students develop understandings about the functions of art as they relate to the individual, the environment, and past and present cultures.

Prerequisite—Art 100

GENERAL ART 200 (10th, 11th, and 12th grades)

A survey-laboratory course designed to offer students their first experience in art. The course emphasizes: 1) the nature of art, 2) the language of art, 3) the materials and tools of art and 4) the functions of art found in the natural environment.

No prerequisite

VISUAL IMAGES OF MAN 301 (10th, 11th, and 12th grades)

A study of man and his condition, past and present, as seen through significant works of visual art. Investigations will deal primarily with concepts reflecting ideas, ideals, and attitudes transcending time and culture barriers. These courses will include the examination of a limited number of concepts, but a broad range of works of art. Emphasis will include: A. The universality of these concepts, B. the varied interpretations of these concepts in relation to the time and locale in which the works of Art were produced, and C. the aesthetic qualities that evoke human responses and set significant visual images apart from the ordinary.

Prerequisite—Art 200 or (Art 100, 101, and 102)

VISUAL IMAGES OF MAN 302 (10th, 11th, and 12th grades)

A continuation of Visual Images of Man 301.

Prerequisite—Art 301

ENVIRONMENTAL DESIGN 304 (10th, 11th, and 12th grades)

A course planned to provide opportunities for students to critically examine the existing surroundings with concerns for aesthetic and functional aspects of design in space. Students will become involved in research related to architecture, urban and suburban design, landscape design, and outdoor advertising.

Prerequisite—Art 200 or (Art 100, 101, and 102)

DRAWING AND PAINTING 401 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students opportunities to explore a variety of techniques and a wide range of media and with emphasis on drawing. Two dimensional interpretations of both two and three dimensional forms will be emphasized through concentration on: 1) line (characteristics and quality), 2) selection of tools and media to reflect desired characteristics and qualities, 3) value relationships, 4) spatial relationships, 5) volume, and 6) texture.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

PRINTMAKING 402 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to provide experiences in a variety of techniques of the basic processes of printmaking, achieving design quality through the simplification of forms. These processes will include the development of techniques through the use of the following materials: paper plate, torn card, linoleum, and wood. These processes will include relief, resist, coordinated stencil, monoprint, and intaglio.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

WEAVING 403 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to include an investigation of the techniques, knowledges, construction, and creative use of a variety of simple looms and materials for the production of utilitarian and aesthetic woven objects.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

SCULPTURE 404 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students opportunities for experimentation in three dimensional design. Choices will be made from a variety of materials such as paper, plaster, wood, clay, and wire, with which to construct, carve, or fuse forms in space. Emphasis will be given to developing a working acquaintance with the tools and materials of sculpture and with the uses and relationships of design elements in three dimensional form in space. Natural and man-made forms of significance will be studied in correlation with laboratory work.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

PHOTOGRAPHY 405 (10th, 11th, and 12th grades)

A laboratory course designed to offer experiences in the study of design through an exploration of the visual environment. Composition will be emphasized through particular attention to relationships of the elements of design: line, shape, texture, and value. Principles of photography will be introduced through the use of student built cameras, light-sensitive paper, and darkroom for developing the paper negatives by contact printing.

Prerequisite—6 art courses and permission of Art teacher.

COMMUNICATIVE DESIGN 406 (9th, 10th, 11th, and 12th grades)

A laboratory course planned to provide opportunities for students to become actively involved in lettering, poster design, and display. Emphasis will be placed on the manipulation of color, line, texture, form, and space in the composition of layout design for school and community use. Limited reproduction techniques and processes will be employed in the execution of poster design and display. Historical developments in communication symbols and media and their relation to new developments in communications will be investigated.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

PRODUCTION DESIGN 407 (10th, 11th, and 12th grades)

A course planned to include the study of the history of stage design, costume design, the techniques of lighting, and set construction. Students will plan, design, and construct sets, design costumes, explore makeup techniques, and experiment with lighting. Students will work directly with the art teacher in cooperation with the drama teacher and students in the drama classes toward the execution of stage production.

Prerequisite—(Art 100, 101, and 102) or Art 200 and recommendation of Art teacher.

INTERIOR DESIGN 408 (9th, 10th, 11th, and 12th grades)

A laboratory course planned to help students understand the uses of art in the home environment. Creating interiors, which will be functional, aesthetically pleasing, and related to the needs and interests of people will be of primary concern.

Prerequisites—(Art 100, 101, and 102) or 200 and recommendation of Art teacher.

DRAWING AND PAINTING 501 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students opportunities to explore a variety of techniques and a wide range of media with emphasis on painting. Two dimensional interpretations of both two and three dimensional forms will be emphasized through concentration on: 1) color, 2) color relationships, 3) characteristics and qualities of various painting media and 4) reproductions of paintings of art masterworks, including works of recognized contemporary artists.

Prerequisite—400 course in the same area and Art teacher recommendation.

PRINTMAKING 502 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to include "carry-over" techniques from basic printmaking and an introduction to the more complex techniques of woodcut and intaglio. Students will become involved in the following methods of silk screen printing: stencil, tusche, and film.

Prerequisite—400 course in the same area and Art teacher recommendation.

WEAVING 503 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to present a survey of weaving, and to offer opportunities in the use of a variety of more complex weaving processes and materials.

Prerequisite—400 course in the same area and Art teacher recommendation.

SCULPTURE 504 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students "in-depth" experiences with selected materials and processes. The purposes of the course are to develop skills in handling chosen techniques and materials in spatial arrangements, increasing understanding of the uses of sculptural forms in our present-day culture, and expanding knowledge of sculpture, past and present.

Prerequisite—400 course in the same area and Art teacher recommendation.

PHOTOGRAPHY 505 (10th, 11th, and 12th grades)

A laboratory course offered as an "in-depth" study of design through an exploration of the visual environment. Composition will continue to be emphasized through particular attention to relationships of the elements of design: line, shape, texture, and value.

Students will become engaged in:

- A. Camera construction
- B. Use of cameras for special effect
- C. Correct darkroom procedures
- D. Printing, developing, and enlarging photographs
- E. Contact-printing and dry-mounting
- F. History of photography
- G. Use of a 35 mm. camera and technical aspects of its use.
- H. Use of photography to develop designs suitable for execution in other art materials and processes.

Prerequisite—Art 405 and permission of the Art teacher.

COMMUNICATIVE DESIGN 506 (not offered at present time) (9th, 10th, 11th, and 12th grades)

A course planned to provide opportunities for students to become involved in applying the principles of design as they relate to the field of direct communication in advertising art. The course will offer practical experience to students in the development of ideas and in preparing art work for the reproduction of signs, posters, invitations, folders, and direct mailing pieces with an introduction to commercial reproduction processes.

Prerequisite—400 course in the same area.

SCULPTURE (JEWELRY) 604 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students an opportunity to study and design small-scale (sculptural) forms used as personal ornaments. A variety of materials and combinations will be used in processes compatible with purposes and student capability.

Prerequisite—500 course in the same area and Art teacher recommendation.

CERAMICS 409 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students opportunities for experimentation in three dimensional clay design by exploring the use of open and closed forms and by pinching, pulling, modeling, and adding or subtracting clay. Emphasis will be given to developing a working acquaintance with clay and with the tools and other materials of ceramics. Also, emphasis will be given to the uses and relationships of design elements in three dimensional form in space. The use of commercial molds is prohibited.

Prerequisite—(Art 100, 101, and 102) or Art 200

CERAMICS 509 (9th, 10th, 11th, and 12th grades)

A laboratory course designed to offer students an "in-depth" experience in clay. The purposes of the course are to further develop skills in handling chosen techniques and materials, and increasing understanding of the uses of ceramic forms in our present-day culture, and expanding knowledge of ceramics, past and present. The student will also be introduced to the potter's wheel and its use in making ceramic forms.

Prerequisite—409 course in the same area.

BUSINESS EDUCATION PHILOSOPHY AND OBJECTIVES

The Business Education Department Chairmen have developed the philosophy and objectives stated below as a guide to a flexible program designed to meet the needs of boys and girls of academic, business, and general programs. Certain skills, attitudes, traits, and understandings must be developed during the early teens so as to ease the gaining of greater depth and understanding in the more mature years.

- A. All education should be predicated on the need for each individual to be aware of his rapidly changing economic and social environment, to develop attitudes based on truth, honor, and human dignity, and to attain competencies for making his greatest personal contribution to growth and progress.
- B. Business Education respects the rights of the individual and his intrinsic worth to society and helps him to be a free man through intelligent self-understanding and adaptability to achieve a stable society.
- C. Business Education fosters in the individual pride in his work, creativity, individuality, and self-discipline so that he can effectively relate to his society and economic system.
- D. Business Education recognizes that communication is basic for the individual to express himself and gain information for rational decision-making; therefore, Business Education seeks to further develop the individual's basic skills in speaking, reading, writing, computing, collecting, organizing, interpreting, and storing data in his personal and vocational activities.

The numbering system used indicates that basic courses for skills to enter the business employment field and understandings for living in a world demanding economic decisions, as well as to meet the demands of citizenship, are available in the 000-909 series. The specifically vocational courses are in the 080-989 series. Three areas are available—clerical, management, and stenographic.

BUSINESS EDUCATION**BEGINNING TYPEWRITING 101.**

Touch control of alphabetic characters, figures, symbols, and operative parts of the typewriter (manual or electric); emphasis on correct typewriting techniques; application of typewriting skill to simple centering, word study, composition of sentences and paragraphs at the typewriter; recognition of typewriting errors.

No prerequisite; however, students who have taken elementary school typewriting may go to the next course by passing a test administered by the department chairman or typewriting teacher.

BASIC TYPEWRITING 102.

Continued emphasis on techniques, skill building for control and speed; particular emphasis on accuracy in writing and reading numbers and symbols; application of typewriting skill to simple problems of a personal nature; word study, word division; sentence structure, composition of paragraphs; themes, poetry at the typewriter; simple outlines for themes (I.A.B.); personal letters, addressing envelopes; rough draft; note-taking on cards; typing on cards and composing from cards; simple tabulation of main heading centered and columns without headings; correction techniques. Prerequisite: Typewriting 101. A test may be taken to advance directly from 101 to the 103 course or from elementary school to 103. The test must be administered by the department chairman or a typewriting teacher.

INTERMEDIATE TYPEWRITING 103.

Continued emphasis on skill building for control, speed, techniques; composition at the typewriter; word study, sentence structure, paragraph structure, themes, poetry, rough draft from note cards, outline, simple proofreader's marks; personal business letters, styles and significance of styles, addressing envelopes; simple manuscripts with cover, title page, contents, simple footnotes or reference information in content, bibliography, pagination, tabulations—organization for statistics for decision-making, main and secondary headings, columnar headings, four or more columns; simple duplication; carbon, fluid masters, stencil, or other that might be available locally. Prerequisite: Typewriting 102 or test equivalent.

ENRICHED TYPEWRITING 104.

Continue skill building and techniques for control and speed; apply skills to personal, club and community jobs.

Prerequisite: Typewriting 102 or equivalent test.

BASIC NOTETAKING 106.

Basic principles of a brief writing system based on the alphabet of shorthand; how to read, listen, and organize material in notes, for term papers from reading and lectures with no emphasis on verbatim notetaking and transcription.

Prerequisite: Elective to all non-stenographic students.

APPLIED NOTETAKING 107.

Use of symbols in original writing; extension of basic principles; exercises in making notes from readings and lectures for research papers; use of notes in reviewing and preparing for examinations; use of notes at discussions, meetings, conferences and telephone.

Prerequisite: Basic Notetaking 106.

INTEGRATED STUDY ACTIVITIES 108.

Application of all notetaking skills in English and typewriting to produce finished copy; review of typewriting skills.

Prerequisite: Applied Notetaking 107.

BUSINESS ECONOMICS 200.

Develop in the students an appreciation of the economic system of the United States of America and the private business enterprise system which works with government to satisfy the wants of the consumer; use of economic analysis in solving problems; concept of scarcity; U. S. market economy; problems of growth and stability; distribution of income; interrelationship of U. S. economy and world economics; development of basic word choice; speaking techniques, sources of information and systematic organization of information, basic computations, management of personal resources; personal traits and attitudes; considerations in choosing a vocation and courses of support entrance into the vocation directly from high school or after post-high school or college training.

No prerequisite. Required of all Business Education students, or its equivalent, 408/601 at the 11th and 12 grade levels.

PERSONAL RECORDKEEPING 201.

Promote the individual's personal competencies in banking procedures, household records, personal tax records, credit, savings, investments, and insurance, understandings of the role of each activity in the economic system of the United States of America from the consumer's point of view.

Prerequisite: Introductory Economics 200.

COMMUNICATIONS IN BUSINESS 202.

Specific instructions in the use of communication systems supplemented with concepts of the role of the systems in facilitating the business and government activities in the private enterprise economy; legal monopolies; the role of communication in business decisions—gathering, organizing, storing, retrieving information; use in employment; vocational opportunities in communication industries.

Prerequisite: Introductory Economics 200.

TRAVEL AND TRANSPORTATION 203.

Develop an appreciation and understanding of the businesses engaged in supplying the equipment and services for meeting the needs for travel and transportation; types of organizations, labor problems, vacations available in trucking, railroad, automobile, airline, space, ocean, lakes, rivers; elements of risk and how these risks are handled; methods of capitalizing; related industries and services; government regulations and growth stimulation; consumer's problems and services.

Prerequisite: None.

BUSINESS AND COMMUNITY WELFARE 204.

Develop an understanding and appreciation of the role of private, civic, governmental agencies in aiding and protecting the consumer; introduction to government finance, labor relations in American business.

Prerequisite: None.

CAREER GUIDANCE IN BUSINESS 205.

Survey of business careers, qualifications, traits and attitudes necessary for successful employment.

TYPEWRITING SKILL-BUILDING 300.

An inventory of typewriting skills and understandings to be taken for each student during the first two weeks of the course; emphasis on skill in operating the typewriter as a copying machine; speed and accuracy to meet employment standards for reading, copying, proofreading alphabetic, numeric, and related symbols in typewriting; proofreading and correction of copy.

Prerequisite: Typewriting 102 or 103 or equivalent test. Required of all vocational students.

ADVANCED TYPEWRITING 301.

Application of typewriting skills to production of letters—copying, typing from direct dictation at the typewriter, from transcription machines; statistical copy, including tabulation planning, financial statements; cards and other irregular sizes of paper; reports and manuscripts—outline, organization and special sections, rough drafts, footnotes or reference citations, bibliography; duplicating; carbon, fluid, stencil, offset, error correction; proofreading; application letters, tax returns, purchase order, basic legal forms and business forms; letter styles and basis for selection of style; envelope address styles; chain-feeding envelopes and forms.

Prerequisite: Typewriting Skill Building 300. Required of all business education students.

BASIC SKILLS IN BUSINESS MATHEMATICS 305.

Reinforce skills in addition, subtraction, multiplication, division, whole numbers, fractions, decimals, mixed numbers, percentages; application of these skills to handle personal finances; cash and change making, recording income and sources of income, including commission, bank records of personal transactions, checking sales tickets, extensions, sales tax, excise tax, computing unit and average prices on orders; use of adding and calculating machines to check computations and to

give new setting to learning and use of skills where equipment is available; application of skills to sports records.

Prerequisite: None.

CONSUMER BUSINESS MATHEMATICS 306.

Sources of personal or consumer income: Choice of occupation, use of statistics, graphs, charts to determine factors to consider in making decision—sex, location, education, industry; understanding of payroll procedures and deductions for group insurance, income taxes, purchasing property, use of credit, cost of credit, use of financial intermediaries for substitutes for money; savings, and protection against risks; vocabulary and economic concepts related to consumer activities.

Prerequisite: Basic Skills In Business Mathematics 305.

BUSINESS MATHEMATICS OF HOME OWNERSHIP 307.

Factors to consider in locating a home; appraisal of surrounding property, the property tax rate in the area, the direction of growth of neighboring industries and institutions, the length of time the family would possibly occupy the home; the cost and the means of payment: conventional loans from banks and savings and loan associations, personal loans, mortgages, insurance companies, elements of risk and how to plan for them: life and health insurance as related to home ownership problems; handling of notes; installment buying for the home; investments.

Prerequisite: Business Mathematics 305 or Algebra.

MATHEMATICS OF SMALL BUSINESS OPERATION 308.

Mathematics of capitalizing a business: the type of organization, the age and resources of individuals; insurance; employees and their benefits, payrolls; records for business decision; basic resources—farming and other raw materials; buying and selling; manufacturing; taxes; pricing; determining and distributing profits; handling losses and bankruptcy; units of measure; commissions; negotiable instruments.

Prerequisite: Business Mathematics 305.

LEGAL TYPEWRITING 401.

Study of words, phrases, forms and procedures related to clerk-typist activities in the legal office; maximum accuracy in typing and proofreading and correction of errors; wills, power of attorney, leases, contracts, court reports; special problems of legal typewriting—copies, filing, correction; related readings and sources of information; personal traits; letter writing and transcription related to problems; backing sheets or endorsements.

Prerequisite: Advanced Typewriting 301.

MEDICAL RECORDS TYPEWRITING 402.

Study of medical terms—pronunciation and meaning of basic vocabulary; typing these words in sentences; copying medical records accurately; copying and filing medical records; proofreading, correction of errors; insurance forms for various companies and medicare; medical ethics—personality traits, attitudes, work habits peculiar to the proper relationships of the medical typist with patients and doctor.

Prerequisite: Advanced Typewriting 301.

GOVERNMENT AND TECHNICAL TYPEWRITING 403.

Study of problems involved in governmental typewriting and technical reports; emphasis on accuracy in typewriting numbers, names, and special vocabularies and symbols; tabulations, headings; production of charts and graphs; specialized vocabularies and related readings from technical journals; ethics; proofreading and correction of errors.

Prerequisite: Advanced Typewriting 301.

PERSONAL AND FAMILY FINANCE 405.

Develop a realization of financial responsibilities, plan income and expenses for individual and

family; sources of family income; budgets—realistic and flexible; banking services and their use; income tax records and returns; property and other taxes; installment buying; loans and other sources of funds; risks; planning for growth and stability in family finances.

Prerequisite: None.

FINANCIAL OBLIGATIONS AND TAXATION 406.

Obligations and taxations; negotiable instruments, types of business organization; relationships of business and government.

Prerequisite: None.

LEGAL ASPECTS OF PROPERTY MANAGEMENT 407.

Owning and transferring property; types of insurance; renting; preparation and importance of wills.

Prerequisite: None.

CONSUMER ECONOMICS 408.

A general course designed to focus the basic economic concepts of issues that an individual must consider as a consumer, citizen, and voter living in the United States of America with local, state and national relationships; wise management of one's economic affairs; appreciation of the inter-relationship of the role of an individual as a producer and consumer; readings from current literature and analysis of economic problems involved.

Prerequisite: None.

PRINCIPLES AND ORGANIZATION OF AMERICAN BUSINESS 501.

The private enterprise system of the United States of America—the nature and extent; opportunities in business; organization: sole proprietorships, partnerships, corporations, cooperatives; internal business organization; office organization and functions.

Prerequisites: None.

MANAGEMENT OF AMERICAN BUSINESS 502.

Decisions involved in starting a business: organization, location, housing and equipment layout, financing; type of operation—manufacturing, selling, service, purchasing, merchandising, production, promotion, marketing, transportation, credit and collection, personnel; government relationships; survival factors.

Prerequisite: None.

THE LAW AND LEGAL PROBLEMS 503.

Introduction to law and legal problems; origin of our legal system, types of law, crimes, legal rights and duties; Uniform Commercial Code.

Prerequisite: None.

CONTRACTS 504.

Basic elements of contracts; rights and obligations of parties; discharge of contracts; sales contracts; contracts of employment; warranties; agencies.

Prerequisite: None.

DISTRIBUTION IN THE AMERICAN ECONOMY 506.

Definition and function of distribution; economic setting of distribution and market mechanism; contribution to stability; role in international trade; methods of promotion and responsibility to the international trade, methods of promotion and responsibility to the consumer; determining consumer demand.

Prerequisite: None.

SALES PROMOTION AND ADVERTISING 507.

Place and function of sales promotion and advertising; classification of advertising; role of the ad-

vertising agency; scope of advertising; mechanics of advertising; media, campaigns as developed by businesses of different sizes; the consumer and advertising; agencies to protect the consumer.
Prerequisite: None.

PRE-EMPLOYMENT TYPEWRITING 508.

Intensive review of typewriting skills and techniques; emphasis on taking employment tests; writing letters of application, requests for interviews, completing application forms accurately and neatly, follow-up letters, preparation of style manual and job-application interview exhibit; research job opportunities and standards of employment for clerk-typist; handwriting and its place in typewriting forms; signatures; composition at the typewriter; business and economic terms from current literature and news media; sources of information on job vacancies; Labor Department; private employment agencies.

Prerequisite: Two courses in typewriting.

CENTRAL ECONOMIC PROBLEMS 601.

Importance of economics and the nature of economic understanding; dealing with economic problems, making economic decisions, thinking objectively; micro- and macro-economics, abstract reasoning; scientific method and economic theory; statics and dynamics; value judgments; wants, scarce resources, need for decision making, need for economic system; factors and principles of production.

Prerequisite: None.

MARKET PRICE SYSTEM 602.

Private enterprise economy; circular flow of income; markets; supply and demand; prices; competition; role of government; distribution of income; market determination of income; profits; labor, wages and labor unions; economic security.

Prerequisite: None.

ECONOMIC ISSUES AND POLICIES 603.

Economic growth and stability; measuring the performance of the economy; national production and income; fiscal policy; monetary policy; international trade and investment; comparative economic systems.

Prerequisite: None.

CLERICAL PROCEDURES 180.

Appreciation and understanding of clerical work in business and professions; occupational data; general office duties; desirable personal traits and attitudes; communications systems of the office—telephone, mail, telegrams, memorandums, business letters, reports, copying and duplicating processes, automation, filing, special emphasis on accuracy in reading alphabetic and numeric symbols, interpreting instructions, typing, filing, proofreading, correcting errors.

Prerequisite: Advanced Typing 301.

FILING AND RECORDS MANAGEMENT 181.

Understanding of filing procedures and records control, including processing, storing, retrieving, and re-storing records and correspondence, various types of filing systems: alphabetic, geographic, numeric, alpha-meric, soundex, and subject; use of filing equipment and supplies; automation in filing.

Prerequisite: Clerical Procedures 180.

BASIC COMPUTATIONAL MACHINES 182.

Introduction of techniques for operating the 10-keyboard and full-keyboard adding machines, the 10-keyboard printing, rotary, electronic and key-driven calculators to accomplish the fundamental arithmetic processes with speed and accuracy; occupational data; statistical reports.
Prerequisite: Business Mathematics 305 or its equivalent.

RECORDKEEPING IN BUSINESS 183.

Introduction to cashiering, figuring wages, preparing the payroll and tax reports, keeping retail sales records, and automated recordkeeping.

Prerequisite: Business Mathematics 305, Algebra or equivalent.

PUNCHED CARD DATA PROCESSING 184.

Introduction to data processing for understandings in facilitating the handling and interpretation of business data through recording source information and the processing cycle—source documents, key punch, verifier, punched tape, channel codes, sorter, collator, interpreter, reproducer, and accounting machine; practice on keypunch or simulated keyboard typewriters.

Prerequisite: Advanced Typewriting 301.

INTRODUCTION TO DICTATING AND TRANSCRIBING MACHINES 186.

Development of an understanding of the role of dictating and transcribing machines in the office; practice in planning and dictating correspondence and reports to recording machines; development of skill in transcription of prepared recordings with accuracy and speed.

Prerequisite: Advanced Typewriting 301.

WORK EXPERIENCE 189.

On-the-job experience in private industry or governmental offices; personnel reports from the industry will indicate what should be taught to each student. A student may need this type of experience for maturation and understanding of need for more education. It may be scheduled as part of the regular school day or a full-time job for one quarter.

Prerequisites to be determined by the local school system, based on community needs and student needs.

INTENSIFIED LABORATORY EXPERIENCES IN PURCHASING AND SELLING 281.

Intensive work with forms, equipment, and procedures used in selected businesses in purchasing and selling. Personal traits and business ethics; related readings.

Prerequisite: Advanced Typewriting 301, Machines 182 and Recordkeeping 183.

INTENSIFIED LABORATORY EXPERIENCES IN PAYROLL AND PERSONNEL 282.

Intensive work with forms, equipment, and procedures used in selected businesses in payroll and personnel departments. Personal traits and business ethics; related readings.

Prerequisite: Advanced Typewriting 301, Machines 182, and Recordkeeping 183.

INTENSIFIED LABORATORY EXPERIENCES IN ACCOUNTS RECEIVABLE AND PAYABLE 283.

Intensive work with forms, equipment, and procedures in selected businesses in accounts receivable and payable departments. Personal traits and business ethics; related readings.

Prerequisite: Advanced Typewriting 301, Machines 182, and Recordkeeping 183.

INTENSIFIED LABORATORY EXPERIENCES IN PUBLIC REVENUE DEPARTMENTS 284.

Intensive work with forms, equipment, and procedures used in local, state and federal revenue departments; personal traits and business ethics; related readings.

Prerequisite: Advanced Typewriting 301, Machines 182, and Recordkeeping 183.

MACHINE SHORTHAND TECHNIQUES 286.

Introduction of principles of expressing sounds by touch operation of a shorthand machine; practice in spelling, reading, and transcribing machine recorded notes. Vocational information.

Prerequisite: Typewriting Skill Building 300 and a C average or above in English.

MACHINE SHORTHAND DICTATION 287.

Reinforcement of machine shorthand theory with emphasis on taking dictation with speed and ac-

curacy. Students who complete this quarter's work should be scheduled to 482, 581, 582, 583, 681, 682, 683 to develop further ability in taking and transcribing dictation.

Prerequisite: Business Education 286 and 301.

WORK EXPERIENCE 289.

On-the-job experience in private industry or governmental offices; personnel reports from the industry will indicate what should be taught to each student. It may be scheduled as part of a school day or as full-time work for one quarter.

Prerequisite: To be determined by the local school system, based on community needs and student needs.

INTRODUCTION TO BOOKKEEPING AND ACCOUNTING 380.

An overview of the complete bookkeeping process.

Prerequisite: Business Education 305 or Algebra.

BOOKKEEPING AND ACCOUNTING SYSTEMS AND PROCEDURES 381.

Introduction to bookkeeping for a merchandising business: the bookkeeping cycle with special journals, subsidiary ledgers, and banking activities.

Prerequisite: Business Education 380.

SPECIAL BOOKKEEPING AND ACCOUNTING PROCEDURES 382.

Special problems: combination journal, sales and purchases, payroll accounting, depreciation and disposal of fixed assets, bad debts, accounts receivable.

Prerequisite: Business Education 381.

INTRODUCTION TO AUTOMATED DATA PROCESSING 385.

General information course presenting processes, concepts, terminology, problem-solving skills, instruction-writing, and use of logic; background information for business careers.

MACHINE TRANSCRIPTION OF LEGAL DICTATION 387.

Intensive practice in transcribing legal material from recordings; reading legal journals to improve spelling, vocabulary, and pronunciation and understanding of legal terms and procedures; the role of the machine transcriptionist and legal ethics. Prerequisite: Business Education 401 and 12 quarters of English with above average achievements.

MACHINE TRANSCRIPTION OF TECHNICAL AND SCIENTIFIC DICTATION 388.

Intensive practice in transcribing technical and scientific material from recordings; reading technical and scientific journals for improvement of spelling, vocabulary, pronunciation, and understanding of technical and scientific terms and procedures; the role of the machine transcriptionist and ethics of the secretary; occupational data.

Prerequisite: Business Education 403 and 12 quarters of English with above average achievement.

WORK EXPERIENCE 389.

On-the-job training in office occupations under professional supervision; clerk-typist duties; taken as part of the school day or in a full-time experience for one quarter.

Prerequisite: Business Education 301.

ELEMENTARY SHORTHAND 480.

Presentation of shorthand characters, brief forms, and word-building principles of expressing sounds by symbols; emphasis on correct penmanship, line of writing, and phrasing; practice in use of shorthand symbols in spelling, reading and copying from well-written shorthand plates; stress on increasing the student's business vocabulary; instruction in efficient notetaking techniques. Prerequisite: Business Education 300 and C average or above in English.

SHORTHAND DICTATION 481.

Reinforcement of shorthand theory with an intensive review of principles learned in 480; con-

tinued stress on increasing the student's business vocabulary, improving his ability to spell, punctuate, and apply the rules of grammar correctly; practice in reading and copying large quantities of well-written shorthand outlines; developing phrasing and word-building skills and the ability to write shorthand outlines for unfamiliar words rapidly from dictation; developing ability to take dictation on practiced and new material easily and rapidly from dictation; practice in transcribing on the typewriter.

Prerequisite: Business Education 301 and 420.

SHORTHAND PRE-TRANSCRIPTION 482.

Continued development of speed and accuracy in taking verbatim dictation; introduction of office-style dictation; transcription at the typewriter; review of brief forms, word-building principles, and phrase building; frequent drills on geographical expressions, similar words, common word roots, abbreviated words, omission of minor vowels, grammar checkups, and shorthand vocabulary; techniques for speed in producing accurate transcripts; integration of shorthand, English, and typewriting skills into the production of mailable copy.

Prerequisite: Business Education 481.

INTENSIVE REVIEW OF SHORTHAND THEORY 483.

Presentation of basic shorthand theory on an accelerated basis for students who have not followed the sequence and feel a need for further work in basic theory before entering the other courses, or for students who need additional skill-building time to prepare them for the following courses. Prerequisite: Business Education 480 or 301.

BOOKKEEPING AND ACCOUNTING IN BUSINESS 484.

Continue special bookkeeping transactions: sales tax, notes, interest, and accrued expenses; introduce bookkeeping and accounting for various types of business organizations. Prerequisite: Business Education 382.

ACCOUNTING FOR PARTNERSHIPS, CORPORATIONS, AND COOPERATIVES 485.

Compete study of elementary principles of partnership, corporation and cooperative accounting. Prerequisite: Business Education 382.

MANUFACTURING ACCOUNTING 486.

Minimum essentials of an accounting system for a manufacturing business; voucher system and inventory. Prerequisite: Business Education 382.

ELECTRONIC DATA PROCESSING 487.

Introduction to electronic data processing; history of computers, analog and digital computers, functions of business computer; electronic computer system; input and input media; storage unit, primary storage and secondary storage; arithmetic unit, decimal system and binary system; control unit and stored program; output and output media; block diagram; definition, organize data, devise procedure for solution, test procedure, carry out program; basic symbols of block diagram, coding, debugging, testing, electronic data processing applications to banking, inventory control, payroll. Prerequisite: Business Education 385.

WORK EXPERIENCE 489.

On-the-job training in clerical activities under the supervision of a qualified business education teacher; taken as a part of the school day or as a full-time job for one quarter. Prerequisite: Business Education 180, 181, 182, 183 or 380.

SHORTHAND SPEEDBUILDING 581.

Further development of shorthand skill in increasing speed of taking dictation of new material at an employable rate; further emphasis on production of mailable transcripts from dictation taken

on unfamiliar material; continued stress on techniques of handling materials, preparation for taking dictation, developing shortcuts for specialized vocabularies and high-frequency words, and efficient transcription techniques.

Prerequisite: Business Education 482.

SHORTHAND TRANSCRIPTION 582.

Development of efficient transcription techniques for accurate and rapid production of mailable letters with continued emphasis on the application of the correct fundamentals of English; continued emphasis on vocabulary building; practice in taking dictation on new material; improvement of ability to proofread rapidly and accurately and make neat corrections of errors.

Prerequisite: Business Education 482.

ADVANCED SHORTHAND SPEEDBUILDING AND TRANSCRIPTION 583.

Further development of transcription and rapid writing skills; further emphasis on spelling, vocabulary, punctuation, capitalization, use of reference materials, and accurate but rapid production of mailable materials; proofreading; personal traits and sense of responsibility for accuracy in every detail before submitting the correspondence or report for the signature.

Prerequisite: Business Education 581.

MACHINE TRANSCRIPTION OF MEDICAL DICTATION 584.

Intensive practice in transcribing material (medical) from recordings; reading medical journals for improvement of spelling, vocabulary, pronunciation, and understanding of medical terms and procedures; the role of the machine transcriptionist and ethics of the medical secretary.

Prerequisite: Business Education 402 and 12 quarters of English with above average achievement. Human Biology would be helpful.

MACHINE TRANSCRIPTION OF FOREIGN LANGUAGE DICTATION 585.

Application of all skills and knowledges to transcribing letters, memorandums, business forms, and reports required of a foreign correspondent; related inquiry into opportunities for employment and further training; ethics of the secretary.

Prerequisite: Business Education 301 and 12 quarters of English with above average competence in the foreign language to be used.

SIMULATED WORK EXPERIENCE PROGRAM 587.

Students will be assigned to a teacher who will place them on production jobs within the local school and direct reading and skill building activities according to their individual needs to enable them to become employable, as well as develop self-confidence.

Prerequisite: Business Education 301, 180, 181, 182, and 183 or 380.

WORK EXPERIENCE 589.

On-the-job training in office work under supervision of a business education teacher, taken as part of the school day, or as a full-time job for one quarter.

Prerequisite: Business Education 301, 180-183 or 380-382, or 482 according to the type of work to be undertaken.

LEGAL SHORTHAND DICTATION AND TRANSCRIPTION 681.

Practice in recording basic legal terms in shorthand symbols with speed and accuracy; spell, pronounce, define the most-used legal terms; intensive practice in taking and transcribing articles containing legal information of benefit to prospective legal secretary, including case abstracts, letters in regard to legal professional matters, testimony, legal forms, and instructions and direction; high degree of accuracy; ethics of the legal office.

Prerequisite: Business Education 401 and 582.

MEDICAL SHORTHAND DICTATION AND TRANSCRIPTION 682.

Introduction of shorthand outlines, spelling, definition, and pronunciation of basic medical terms;

intensive practice in taking and transcribing medical case histories, letters, and hospital records, articles from current medical journals; practice in the preparation of medical records; procedures and ethics of the medical secretary; accuracy and proofreading emphasized.

Prerequisite: Business Education 402 and 582.

TECHNICAL AND SCIENTIFIC DICTATION AND TRANSCRIPTION 683.

Introduction of shorthand outlines, spelling, definition, and pronunciation of basic technical and scientific terms; intensive practice in taking transcribing dictation of letters, reports, and records; reading technical and scientific journals; understanding the role of the secretary and ethics; accuracy and proofreading.

Prerequisite: Business Education 403 and 582.

BUSINESS COMMUNICATION 684.

Overview of language skills with emphasis on grammar strength—vocabulary improvement: development of word power through use of the dictionary, synonyms, thesaurus, antonyms; spelling, pronunciation; parts of speech and word patterns, punctuation, capitalization, numbers; emphasis on oral communication; sensitivity and accuracy in use of words; handling a proposed subject effectively; outlining the speech; presentation techniques; platform manners; reading development: comprehensive knowledge of business problems, current news stories, periodicals, book reports on contemporary novels and biography; readings on personal development; cultural background of English language and literature by reading from selected short stories.

Prerequisite: Business Education 301 and 12 quarters of English.

TECHNIQUES IN BUSINESS COMMUNICATION 685.

Implementation of grammar skills; emphasis on grammar competency; appreciation of cultural influences; review of grammar comprehension; competency in writing effective sentences; developing effective paragraphs; oral English; reading skills for better communication; cultural influence of literature.

Prerequisite: Business Education 684.

EFFECTIVE COMMUNICATION IN ACTION 686.

Emphasis on composition in business writing with accompanying development of reading and speaking skills: preview of language skills; implementation of sentence structure and paragraph development; effective writing by researching and use of library; personal business writing; oral communication emphasizing group participation and parliamentary procedure; reading from business articles and trade journals; critical reports on columnists and editorials; creative expression by dramatic presentation of current political and economic problems.

Prerequisite: Business Education 684.

EFFECTIVE BUSINESS MESSAGES 687.

Business writing and composition with presentation of all types of business messages currently used in today's business world; parts of a business letter; styles of business letters; qualities of successful business writing; types of business letters and correct approach in writing them; preparation of other business communications: telegram, memorandum, news release, minutes of meeting, agenda, itinerary.

Prerequisite: Business Education 684.

EFFECTIVE REPORT AND TECHNICAL WRITING 688.

Factual writing with research techniques; presentation of reports properly documented and statistical material; format of a report; announcements; informal reports; formal reports; news release; advertising materials; oral communication in action with discussion groups and oral reports on adventures in writing reports.

Prerequisite: 12 quarters of English.

WORK EXPERIENCE 689,

On-the-job training in office work or management area under the supervision of a business education teacher; taken as a part of the school day or as a full-time job for one quarter.

Prerequisite: Basic courses in clerical, management, or stenographic programs, depending on the type of work sought.

NOTE: This series of work experiences is designed for students who need this motivation during the high school program. It starts the student early at the non-skilled level and moves him through all phases of a given industry during high school and provides the basic work experience for management level decisions for further training and employment. High school is the time for these experiences rather than after extended education.

ENGLISH

All required English courses, regardless of ability level, emphasize literature, composition, and language as language. The differences among the courses lie in the nature of the literature and in the expectations of accomplishment. Classes of able pupils will read more difficult material, more material, or do a more probing analysis than classes of less able pupils. In writing, the greatest portion of which is related to the literature, the more able pupils will write longer, more thought-provoking papers. Teachers of all classes, regardless of level or ability group, teach integrated courses in which the language arts—reading, writing, listening, and speaking and the appreciation of literature—are correlated with each other in a functional, purposeful setting.

English Requirements:

Seventy-five (75) credit hours are required of all students for graduation. These English credits may be acquired as follows:

For Regular Students:

Language Skills 101, 201
Literary Types and Themes 102, 202

Word Study 103

Mythology and Poetry 203

Composition and Rhetoric 301

American Literature 300

English Literature 400, 401

Advanced Composition and Rhetoric 501

Twenty (20) credit hours of electives may be selected as follows:

Five (5) credit hours from American Literature 301, 302, 303, 304.

Five (5) credit hours from English Literature 402, 403.

Dramatics 501; Speech; 501.

Ten (10) credit hours from Speech 502, Linguistics 605, World Literature 606, Poetry 607, Development of the Novel 601, Literature of Tragedy 602.

For Honor Students:

Language Skills 141, 241
Literary Types and Themes 142, 242

Mythology and Poetry 143

American Literature 243 - 340

Composition and Rhetoric 341

English Literature 440

Advanced Composition and Rhetoric 541

Twenty-five (25) credit hours may be selected from the following:

Five (5) credit hours from English Literature 440, 441, 442, 443.

Twenty (20) credit hours from same groups available to regular students.

For English Lab series:

Basic Skills 131, 132, 133 or Communications Skills 134, 135, 136

English Lab 231
 Literary Types and Themes 232
Speech 233
 English Lab 331, 332, 333
 Practical English 431
 Readings in Literature 432
 American Literature 433 or Speech 433
 English 531
 Early English Literature 532
 Modern Novel and Drama 533

ENGLISH LAB 131.

This course is for students whose reading test scores and teachers' observations indicate that they have a reading, spelling and writing problem. The course emphasizes study skills, preparation and taking of tests, word attack, spelling, paragraph analysis, and oral reading.

Prerequisite: Students who are reading below 4.0 grade level as evidenced by reliable testing at the elementary school level are required to take this course.

ENGLISH LAB 132.

The basic principles acquired in English Lab 131 will be continued and strengthened. The continued use by the students of the daily journal is urged. The course stresses word perception skills, syllabication, reading skills, and written communication.

Prerequisite: See English Lab 131.

ENGLISH LAB 133.

The basic skills of 131 and 132 will be continued in all areas. The course emphasizes reading skills (including interpreting punctuation, increasing vocabulary, comprehension skills) and composition skills. A study of sentence patterns according to meaning and structure is introduced preparatory to writing short paragraphs.

Prerequisite: See 131 and 132.

ENGLISH LAB 134.

This course is to be offered only to students who have been pre-tested and found to read 4.0 to 5.5. It will emphasize the four communication skills: speaking, listening, reading and writing. The course will be designed to help the student compensate for his inability to read and write through an intensified program of oral-aural communication skill building. Skills to be developed include:

Listening: To follow detailed directions and instructions.

Speaking: To correct everyday errors of sub-standard usage through patterned oral drills.

Reading: Development of vocabulary and comprehension of expressed language.

Writing: Sentence sense through usage rather than by grammatical approach; legibility of handwriting, composition of simple sentence patterns, paragraphs, and poems.

Prerequisite: All students reading at 4.0 to 5.5 be placed in this class.

Recommendation: Students who progress beyond 5.5 may be transferred to average class upon recommendation of teacher and department chairman.

ENGLISH LAB 135.

This course is a continuation of 134—listening, speaking, reading and writing. The major objective is to teach individual skills needed by the student.

ENGLISH LAB 136.

See English Lab 134 for description, prerequisite and recommendation.

LANGUAGE SKILLS 101.

This course includes a guidance on "How to Study" Basic sentence patterns will be expanded to types

and kinds of sentences. Capitalization and punctuation will be strengthened through usage. Sentence structure to paragraph development will be built into the writing program.

LANGUAGE SKILLS 141.

See English 101 and Addenda in the Course requirements.

LITERARY TYPES AND THEMES 102 and 142.

Stress will be placed on understanding the themes in fiction and nonfiction. Poetry and drama will be included with writing experiences coming from ideas suggested from selections read. Vocabulary study will include literary terms related to the types of literature studied plus new words used in selections studied.

MYTHOLOGY - POETRY 143.

This course is designed for the accelerated students in the eighth grade. All reading skills will be stressed in the hope that a deeper appreciation for literature will result. This course is designed to create an appreciation for beliefs and legends of peoples of ancient times—to see myths and folk tales as a part of our heritage.

WORD STUDY 103.

This course is composed of a practical and usable study of words showing their relationship to reading and writing. The etymology of words will provide students with a background for reading and for a broader understanding of the importance of using the right words for meaning and beauty in expression of both oral and written communication. Skills in using sentence patterns will be continued through the writing program. A broader experience in reading will be offered by providing an abundance of suitable reading materials.

LANGUAGE SKILLS 201.

This course is designed to help students to see the relationship between sentence structure and language—spoken and written. Reading skills and study of vocabulary and spelling will be continued. This course also develops the paragraph through a variety of methods.

LANGUAGE SKILLS 241.

Course includes the study of agreement (verbs, pronouns) levels of modifiers (words, phrases, and clauses) recognition of verbals, and special uses of case forms. Composition stresses the limitation of subject matter, developing the thesis statement, parallel outlining of topic ideas, and the use of transition; capitalization and punctuation will be studied as needed.

LITERARY TYPES AND THEMES 202.

This course is designed to emphasize forms, elements and characteristics of various literary types and offers opportunities to compare the various types. The course also includes opportunities for oral and written composition.

LITERARY TYPES AND THEME 242.

Particular emphasis will be placed on forms, elements and characteristics of the short story, novel, essay and biography and poetry. Advanced students will be expected to master such and will be expected to grasp some of the finer points of writing. Oral and written activities will be included.

MYTHOLOGY AND POETRY 203.

This course familiarizes students with classical allusions needed for later study of literature and for reading in general. The course offers the study of poetry to gain knowledge of rhythm, rhyme, alliteration, verse form, imagery, and emotional intensity and provides opportunity to develop themes and sketches.

ENGLISH LAB 231.

This course is designed for those students who read below 5.5 and have a poor record of achievement in English. Instruction in language, sentence and paragraph development, reading skills, spelling, and library skills is provided.

Prerequisite: Diagnostic testing for placement.

LITERARY TYPES AND THEMES 232.

This course will be designed to help the student gain enjoyment and understanding from his reading. The student will be encouraged to understand the themes of the various types of literature he reads in the course: a novel or novelette, short stories, nonfictional types, appropriate poems, and drama. Written compositions will be geared to the students' abilities. Frequent opportunities will be given to the students for oral participation. Available A-V materials will be used.

Prerequisite: Diagnostic testing—student still not reading above 5.5.

SPEECH (MASS MEDIA) 233.

This course provides training in the development of skills in oral reading and public speaking. Audio-visual materials will be used as much as possible; newspapers and periodicals should be emphasized.

Prerequisite: Diagnostic testing—student still not reading above 5.5.

AMERICA'S LITERARY HERITAGE 300 AND 340 (HONORS).

This course provides a comprehensive study of American Literature covering the period from 1620 to 1865. Included in this course will be the works of Benjamin Franklin, James Fenimore Cooper, Edgar A. Poe, Washington Irving, Nathaniel Hawthorne, and William Cullen Bryant. The course includes an in-depth study of a novel.

CHANGING TRENDS IN AMERICAN LITERATURE 301 AND 341 (HONORS).

This course provides an analytical survey of major writers of American Literature covering the period from 1850 to 1914. The course is designed to examine the techniques and revolutionary influences which molded the literary thoughts of such writers as Walt Whitman, Sidney Lanier, Emily Dickinson, O'Henry, Stephen Crane, Jack London, and Edwin Markham.

MODERN TRENDS IN AMERICAN LITERATURE 302 and 342 (HONORS).

This course provides opportunities for in-depth study of literary types—short story, novel, drama, poetry, and non-fiction—and their relationship to human values.

SOUTHERN LITERATURE 303.

This course is designed to help the student evaluate the literary types of southern literature. A thematic approach involving humor, the early South, war literature, and modern literature will be used.

AMERICA'S LITERARY HERITAGE 330.

This course is a modified version of America's Literary Heritage 300. The course is designed to study literary types through a thematic approach to such themes of life as ideals, principles, and faith. The course shows the continuity of the "American Dream" from 1608 to present.

Pupil placement will be determined through testing for reading level, and by department recommendation.

COMPOSITION AND RHETORIC 301.

This course provides a review and mastery of fundamental language structures and usage. It introduces basic writing skills and related mechanics. It offers intensive examination of the drama as a literary genre. The study of research techniques and the writing of a short library paper are included.

COMPOSITION AND RHETORIC 341.

A course designed to provide mastery of the concepts of language structure and related mechanics. The main emphasis in literature is on drama—understanding the dramatist's techniques, i.e. diction, mood, tone, point of view, etc., and understanding the drama's reflections of the basic concerns and values of mankind. See Composition and Rhetoric 301 for research paper.

ENGLISH LAB 331.

This course emphasizes the meaning, usage, and structure which are necessary for correct writing and speaking in practical daily experience. The study provides opportunity for motivating and arousing student interest in areas of experience that involve him. It is recommended that the class consist of no more than twenty-five students who are above 5.5 reading level. Pupil placement will be determined through scores from diagnostic tests given at the beginning of the year.

ENGLISH LAB 332.

Fiction and Non-fiction. This course provides a variety of reading for enjoyment and notes the characteristics of literary forms—short stories, essay, poetry, and newspaper and magazine articles. Reading, writing, speaking, and listening will be stressed rather than a critical analysis of the literary work. The class should consist of no more than twenty-five students who are reading above 5.5 level.

ENGLISH LAB 333.

Drama. Drama 333 will include a brief history of the theater so that a student may have a concept of drama as a literary form. Oral interpretation of one act plays should be emphasized. A comparative study of two longer plays should be attempted. The class should adapt a short story into a play. The class should consist of twenty-five students who are reading above 5.5 level.

EARLY ENGLISH AND RENAISSANCE LITERATURE 400 - 440.

The purpose of this course is to acquaint the student with the beginnings of English literature primarily through a study of the epic and the writings of Chaucer. Early Renaissance poetry of Spenser and other writers will be introduced; emphasis will be on Shakespeare: Poet and Playwright. Late Renaissance prose and poetry of Jonson, Donne, the Cavalier poets, and Bacon will be included. Recommendation: This course should be the first of English literature courses studied.

AGES OF REASON AND ROMANTICISM 401 - 441.

This course, beginning with Milton and Bunyan of the 17th Century, offers a comparative view of the 18th Century and the age of Romanticism. 18th Century authors studied include Dryden, Pope, Swift, Goldsmith, Addison, and Steele. The Romantics covered include Wordsworth, Coleridge, Byron, Shelley, and Keats.

VICTORIAN WRITERS 402 - 442.

A study of the Victorian Period in which essayists, poets, and novelists were deeply concerned about the state of English culture, religious and scientific conflicts, growth of democracy, and industrial problems. Representative writers include Tennyson, Browning, Arnold, Huxley, Hardy, and Conrad.

MODERN BRITISH LITERATURE 403 - 443.

This course is designed to provide an overall view of English literature from 1900 to the present. Both prose and poetry will be examined as well as developments in the modern dramas. Modern novels will be studied in depth.

PRACTICAL ENGLISH 431.

This course is designed for the non-academic student with a record of poor achievement in English. Students who read on or below the seventh grade level will be eligible for this course. The student's need to be convinced that skill in the use of language will benefit him in school and in the future is paramount in this particular course.

READINGS IN LITERATURE 432.

This course is for students who may have a wide range of potential ability who have achieved little success in the English classroom. A study of various types of literature related to a number of activities and projects serves both to teach recognition of these forms and to encourage the student to see in their reading revelations of life and of people. No established formula will work in any given class, but some activities, with related work in composition, are suggested in the Course Outline Guide for English.

ADVANCED COMPOSITION AND RHETORIC 501-541.

Mechanics of grammatical construction and usage with emphasis on clear, correct and effective composition; writing of research paper; review of verb tenses, time sequence, verbals, ambiguity, semantics, rephrasing for emphasis; intensive study of models for style and imitation.

INSIGHTS INTO COMMUNICATION 531.

This course is designed to reach the student who is not college bound, the student who has not been successful in the study of academic English, and the student who seeks to sharpen his understanding and awareness of social thought in order to function intelligently within a complicated society.

EARLY ENGLISH LITERATURE 532.

This course is designed for the student who is not college bound, the student who has not been successful in academic English, and the student who is curious about and interested in his literary heritage. Being familiar with the established classics gives confidence and poise to the student. Being able to trace the values of present society from early history gives the student a wiser grasp of the complexities of social change.

MODERN NOVEL AND DRAMA 533.

This course is designed for the student who is not college bound, and who must be equipped to judge intelligent modern writing, television, and movies. Use of skill-building materials can be reduced in favor of class reading together with modern materials of worth.

**GENERAL ELECTIVES
ENGLISH CREDIT**

DRAMATICS 501.

This course is for the student who is interested in better knowledge and appreciation of dramatic arts but not in personal involvement in productions. The course offers instruction in the basic steps in play production, such as designing sets, types of acting, lighting, and adaptation of dramas to the stage.

SPEECH 502.

Speech (mass media) offers training in the basic speech skills of pronunciation, enunciation, vocabulary building, and voice training. Class activities include oral reading, role playing, story telling, and speech making. The purpose of the course is to improve the student's personal speaking habits in informal speech situations and to develop skills in the practices of reading aloud, telling stories, and making specific kinds of speeches.

NON-ENGLISH CREDIT

JOURNALISM I — NEWSPAPER 501, 502, 503.

The purpose of this course is to make students aware of the values of mass media as seen through the study of television, radio, motion pictures, and periodicals. In addition to this evaluative study, the beginning student should be made aware of the techniques of producing student publications. 3 quarters.

JOURNALISM II — NEWSPAPER 601, 602, 603.

The purpose of this course is to enable students to experience the complexity of producing, selling, and distributing student publications. The student in this course should be offered the opportunity to become familiar with all aspects of the student publication.

JOURNALISM I — ANNUAL 504, 505, 506.

The purpose of this course is designed primarily to introduce students to the production and sale of the school yearbook. Attention will be given to journalistic writing techniques, photographic skills, compository techniques, and business management responsibilities. This course also includes an intensive study of the various forms of mass media and their influences on modern society.

JOURNALISM II — ANNUAL 604, 605, 606.

The purpose of this course centers around responsibility for the actual production and sale of the school yearbook. Other possible publications include a spring supplement for the yearbook, a guidebook of procedures for the upcoming staff, and a school handbook.
3 quarters.

PLAY ANALYSIS 507 - 607.

This course in Acting and Play Production are designed for the students interested in involvement in actual production dramas. Play Analysis is intended to acquaint students with a significant number of important playwrights with emphasis on adapting their works to the stage and their individual techniques.

ACTING 508 - 608.

This course will acquaint the student with the basic rules of the stage that govern an actor, make the student aware of the problems of an actor's trade, and give the student the opportunity to act in an assortment of plays assuming a variety of roles.

PLAY PRODUCTION 509 - 609.

This course will acquaint the student with the technical aspects of producing a play and employ methods and processes of various aspects of play production learned in previous courses in the actual choice and production of a play.

Prerequisites for all 600 level courses are two American Literature courses and two English Literature courses.

ELECTIVES FOR ADVANCED STUDENTS**DEVELOPMENT OF THE NOVEL 601.**

Analysis of the novel as a genre—its background, structure and themes. Emphasis on representative works illustrating the evolution and progress of the form from Tom Jones through the works of Faulkner.

DRAMA OF TRAGEDY 602.

Background and themes of tragic drama. Understanding of dramatic form and essence of tragedy (both Greek and Elizabethan). Emphasis on Oedipus, Macbeth, Hamlet, Cyrano, and The Emperor Jones. (or similar suggestions at the teacher's discretion.)

WORLD LITERATURE 606.

This course is designed for the student who is familiar with his native American Literature and with English Literature and its inherited traditions. World Literature will aid in the gradually developing concepts of world understanding.

Selected Materials: grouping from modern European languages; studies from Greek and Roman classic literature; selections from Oriental writers. Types: poetry, short stories, essays, folk tales; excerpts from novels, biographies, and epics; drama.

Prerequisites: 2/3 unit (each) in American and English Literature.

POETRY 607.

Study of poetic devices, terminology, themes and figurative language. Critical analysis of selected poems in class interpretation of elements of poetry as applied to specific poems.

LINGUISTICS 605.

A course designed to make students aware of language as man's tool of communication. It includes five aspects of linguistics: morphology, phonology, etymology, grammar systems, and semantics.

FOREIGN LANGUAGE

The rationale for this Course Guide has developed over recent years with the reading of current books and periodicals, attendance at conferences and meetings, and discussions of language teaching within our own group, with language teachers of other systems, and with visiting consultants. It is based upon the following premises:

- That it is desirable for a great number of students to have the benefits of language study to the extent of their individual talents and interests
- That the primary aim of such study in the modern languages is the ability to communicate satisfactorily with native speakers in the language with courteous awareness of differing cultural points of view
- That an early beginning facilitates excellent pronunciation and intonation; an extended sequence, adequate control of the fundamental skills of understanding, speaking, reading, and writing
- That Latin has its place in a humanistic education and should broaden horizons, especially for those of some academic talent
- That the primary aim of Latin study is the ability to read easily in the language and, through acquaintance with the linguistic structures, to acquire a broader concept of linguistic growth and development, and thus to see new dimensions in one's own language.

Toward these purposes, the Fulton County Schools make the following provisions in the foreign language program:

- A FLES program in either French or Spanish as may be practical for a given school, planned progressively from the beginning in grades four and three respectively through the seventh grade, for all pupils of the school
- Careful articulation of the FLES program with the high school eighth grade program for those whose achievement and interest make it feasible to continue.
- Provision for an extended sequence, either continued from FLES or begun at ninth or tenth grade level (minimal recommended sequence three years in a modern language, two in Latin).
- Provision for additional electives above the minimal sequence in the three languages presently offered, with these courses in the modern languages taught in the target language.
- Provision for continuing in one language while adding a second language if desired.

Note: For those students on the Academic Program who choose a science-language combination for graduation are required to have thirty (30) credit hours in a language. Eighth grade FLES credit may be included in the thirty (30) credit hour requirement here.

The sequential nature of the language program should be noted. That is: French and Spanish programs are sequential for nine (9) quarter courses. The Latin program is sequential for six (6) quarter courses.

SEQUENTIAL

SPANISH 101 - 102. (Alternate Sequence 104 - 105 and 107 - 108)

Places primary emphasis on the establishment of the sound system and facility in using patterns and vocabulary.

SPANISH 103 - 201. (Alternate Sequence 106 - 204 and 108 - 207)

Makes the transition to the written language, with increasing attention to skills in reading and in accuracy in writing what has been taught.

SPANISH 202 - 203. (Alternate Sequence 205 - 206 and 208 - 209)

Continue to stress oral fluency, but also places increasing emphasis upon reading for understanding in the language and on controlled composition. There should be distinct growth in vocabulary and sentence patterns for functional use.

SPANISH 301.

Begins the transition from controlled reading and composition to gradual independence.

SPANISH 302.

Continues the growth toward independence in reading and writing. This is the place for growing awareness of the total language pattern through consistent teacher-use of the appropriate terminology in the language.

SPANISH 303.

Offers opportunity for individual reading, and unstructured oral and written reports. While grammatical terminology and analysis are not essential for a successful grade, it will be helpful, especially for college-bound seniors, to have opportunities to see the total language pattern and to understand the structure, which by this time the entire class should use easily in speech and writing.

NOTE: Alternates are provided for various texts in use in different schools.

NON-SEQUENTIAL (ELECTIVES)•**SPANISH 401.**

Hispanic Character and Attitudes

SPANISH 402.

Hispanic History and Legend

SPANISH 403.

Some Aspects of the Cultural Scenes

SPANISH 404.

News Media

SPANISH 405.

Social Behavior and Education

SPANISH 406.

A Glimpse at Spanish Art and Literature

• Continuing progress in oral and written compositions with discussion centered about subject matter of the reading material; growth in acquaintance with cultural background.

SPANISH 501.

A Visit to Spain

FOREIGN LANGUAGE IN THE ELEMENTARY SCHOOL:

Students who have taken Spanish in elementary school and have been recommended, will take the following courses in high school:

SPANISH 192. See Spanish 102 for description

SPANISH 193. See Spanish 103 for description

SPANISH 291. See Spanish 201 for description

SPANISH 292. See Spanish 202 for description

SPANISH 293. See Spanish 203 for description

SEQUENTIAL

FRENCH 101. (Alternate Sequence 104)

Places primary emphasis on the establishment of the sound system and facility in using the patterns and vocabulary taught.

FRENCH 102. (Alternate Sequence 105 or French 192 for FLES group)

See description of French 101.

FRENCH 103. (Alternate Sequence 106 or French 193 for FLES group)

Makes the transition to the written language, with increasing attention to skills in reading and in accuracy in writing what has been taught.

FRENCH 201. (Alternate Sequence 204 or French 291 for FLES group)

See description of French 103.

FRENCH 202. (Alternate Sequence 205 or French 292 for FLES group)

Continues to stress oral fluency, but also places increasing emphasis on reading for understanding in the language and on controlled composition. There should be distinct growth in vocabulary and sentence patterns for functional use.

FRENCH 203. (Alternate Sequence 206 or French 293 for FLES group)

See description for French 202.

FRENCH 301. (Alternate Sequence French 301-Transition or French 391 for FLES group, if kept separate; otherwise, 301.)

Begins the transition from controlled reading and composition to gradual independence.

FRENCH 302. (Alternate Sequence French 302-Transition or French 392 for FLES group, if kept separate; otherwise, 302.)

Continues the growth toward independence in reading and writing. This is the place for growing awareness of the total language pattern through consistent teacher-use of appropriate terminology in the language.

FRENCH 303. (Alternate Sequence French 303-Transition or French 393 for FLES group, if kept separate; otherwise, 303.)

Offers opportunity for individual reading, and unstructured oral and written reports. While grammatical terminology and analysis are not essential for a successful grade, it will be helpful, especially for college-bound seniors, to have opportunities to see the total language pattern and to understand the structure, which by this time the entire class should use easily, in speech and writing.

NOTE: Alternates are provided, based on different texts in use in various schools.

NON-SEQUENTIAL (ELECTIVES)****FRENCH 401.**

The French People: Sentiments and Spirit

FRENCH 402.

Life in France Today

FRENCH 403.

The Artistic View of Life

FRENCH 404.

Teenagers and Teen-age Life

FRENCH 405.

Introduction to Reading Literary Selections

FRENCH 406.

A French Drama

FRENCH 501.

A Visit to Paris

** Continuing progress in oral and written composition with discussion centered about subject matter of the reading material; growth in acquaintance with cultural background.

SEQUENTIAL**LATIN 101 (Alternate Latin 105)**

To develop competence in Latin pronunciation and sounds; to develop the ability to read with comprehension simple sentences using structures and vocabulary presented.

LATIN 102. (Alternate Latin 106)

To develop the following: 1) a growing skill in oral reading; 2) ability to read with comprehension simple sentences using structures and vocabulary presented; 3) growing ability to understand simple Latin sentences without recourse to English; 4) ability to reflect understanding through replies to questions or summary statements.

LATIN 103 (Alternate Latin 107)

Mastery of oral reading with adequate comprehension of Latin and mastery of Latin forms and vocabulary presented.

LATIN 201 (Alternate 205)

To review basic syntax, complete advanced syntax, and to develop increased ability to read with comprehension.

LATIN 202 (Alternate 206)

Mastery of syntax, emphasis on facility in reading Latin with understanding, and acquaintance with Roman history through reading selections from Livy.

LATIN 203 (Alternate 207)

Ability to read selections offered with understanding and to convey meaning in English; to develop an understanding of the overall schematic structure in Latin grammar.

NOTE: Alternates are based on Waldo Sweet, Programmed Latin.

NON-SEQUENTIAL (ELECTIVES)**LATIN 401.**

The Catalinian Conspiracy: Cicero and Sallust

LATIN 402.

Cicero: Oration for Archias and Other Readings

LATIN 403.

Latin Prose Readings: Selections from Cicero, Pliny, and Cellius.

LATIN 405.

The Aeneid: Juno's Wrath

LATIN 406.

The Aeneid: Aeneas and Dido

LATIN 407.

The Aeneid: Aeneas in the Underworld

LATIN 408.

The Aeneid: Aeneas in Italy

HEALTH AND PHYSICAL EDUCATION

The strength of our Nation lies within the strength of the individuals who compose it. Therefore, physical education has the obligation and opportunity to serve as the medium for a well integrated individual; intellectual, emotional, developmental and social; using movement as the experience.

GENERAL OBJECTIVES

1. To develop acceptable social and cultural standards, appreciations, and attitudes in the proper environment under qualified leadership.
2. To promote the understandings and skills necessary to the worthy use of leisure with emphasis on activities having lifetime values.

A. REQUIREMENT

1. Health Education. Two quarters required.
 - a. Health Education 111 or 121—one quarter at 8th grade
 - b. Health Education 211 or 221—one quarter at 10th grade
2. Physical Education. Ten quarters required as follows:
 - a. Physical Education 110 or 120—one quarter at 8th grade
 - b. Physical Education 119 or 129—one quarter at 8th grade
 - c. Three quarters in team sports
 - d. Three quarters in individual sports (Note: For simplification, any activity not a "team" sport is classified as "individual")
 - e. Two quarters elected from either category

B. ELECTIVES

Beyond the required quarters, there are many opportunities for students to take courses of special interest.

PHYSICAL EDUCATION

BOYS' COURSES

HEALTH EDUCATION 111.

Units of study in understanding the body, personal grooming, posture, first aid, sex education, venereal disease education, personality development, common health problems (tobacco, drug abuse). Required at 8th grade.

HEALTH EDUCATION 211.

Units of study in dynamic living, mental and emotional health, modern medical discoveries, common health problems (alcohol, drug abuse, health fads), medical self-help, congenital diseases, degenerative diseases. Required at 10th grade.

PHYSICAL EDUCATION 110.

Introduction to physical education and a cardio-vascular and skeletal fitness program. Required at 8th grade.

PHYSICAL EDUCATION 111.

Beginning soccer and volleyball. No prerequisite.

PHYSICAL EDUCATION 112.

No prerequisite. Beginning basketball and flag football.

PHYSICAL EDUCATION 113.

No prerequisite. Angle ball, crab-ball, 4-square ball and softball.

PHYSICAL EDUCATION 114.

Beginning track and field and tennis.

PHYSICAL EDUCATION 115.

Prerequisite: Physical Ed.

PHYSICAL EDUCATION 116.**PHYSICAL EDUCATION 117.**

No prerequisite. Beginning archery and weight training.

PHYSICAL EDUCATION 131.

Adapted program. Recommendation of department.

PHYSICAL EDUCATION 211.

Intermediate soccer and volleyball. Prerequisite 111.

PHYSICAL EDUCATION 212.

Intermediate basketball and gator ball. Prerequisite 112.

PHYSICAL EDUCATION 214.

Intermediate tennis and track and field. Prerequisite 114.

PHYSICAL EDUCATION 215.

Intermediate gymnastics.

PHYSICAL EDUCATION 216.

Intermediate wrestling and stunts and tumbling.

PHYSICAL EDUCATION 218.

Intermediate swimming. Prerequisite 118 or successfully passing beginners' swimming test. Offered 4th quarter.

PHYSICAL EDUCATION 231.

Adapted program. Recommendation of department.

PHYSICAL EDUCATION 315.

Advanced gymnastics. Prerequisite 115, 215.

PHYSICAL EDUCATION 318.

Advanced swimming, life saving. Prerequisite 118, 218, or successfully passing intermediate swimming test. Offered 4th quarter.

PHYSICAL EDUCATION 331.

Adapted program. Recommendation of department.

PHYSICAL EDUCATION 411.

First quarter as student assistant. Prerequisite 302 and recommendation of department.

PHYSICAL EDUCATION 412.

Second quarter as student assistant. Prerequisite 302 and recommendation of department.

PHYSICAL EDUCATION 413.

Third quarter as student assistant. Prerequisite 302 and recommendation of department.

PHYSICAL EDUCATION—COEDUCATIONAL COURSES:**PHYSICAL EDUCATION 101.**

Beginning badminton, bowling, golf and recreational games. Prerequisite 5 quarters physical education.

PHYSICAL EDUCATION 201.

Intermediate badminton, bowling and golf. Prerequisite 101 and five quarters of physical education. 4th quarter.

PHYSICAL EDUCATION 202.

Intermediate archery, angling, camping and outdoor education. Prerequisite 117 or 127 and five quarters of physical education.

PHYSICAL EDUCATION 301.

Advanced tennis and volleyball. Prerequisite 111, 114, 211, 214 OR 121, 124, 221, and 224.

PHYSICAL EDUCATION 302.

Student leadership preparation. Prerequisite 9 quarters of physical education and department approval.

PHYSICAL EDUCATION 303.

Boating skills and safety, water skiing. Prerequisite swimming skill. 4th quarter.

GIRLS COURSES.

HEALTH EDUCATION 121.

Units of study in and understanding the body, personal grooming, posture, first aid, sex education, venereal disease education, personality development, common health problems (tobacco, drug abuse). Required at 8th grade.

HEALTH EDUCATION 221.

Units of study in dynamic living, mental and emotional health, modern medical discoveries, common health problems (alcohol, drug abuse, health fads), medical self-help, congenital diseases, degenerative diseases. Required at 10th grade.

PHYSICAL EDUCATION 120.

Introduction to physical education and a cardio-vascular and skeletal fitness program. Required at 8th grade.

PHYSICAL EDUCATION 121.

Beginning soccer and volleyball. No prerequisite.

PHYSICAL EDUCATION 123.

Flag football, softball and speedball. No prerequisite.

PHYSICAL EDUCATION 124.

Beginning track and field and tennis. No prerequisite.

PHYSICAL EDUCATION 125.

Beginning gymnastics. Prerequisite 126.

PHYSICAL EDUCATION 126.

Beginning modern dance and stunts and tumbling.

PHYSICAL EDUCATION 127.

Beginning archery, rhythms and self-defense. No prerequisite.

PHYSICAL EDUCATION 128.

Beginning swimming. 4th quarter.

PHYSICAL EDUCATION 129.

Introduction to individual and the team sports. Required at 8th grade.

- PHYSICAL EDUCATION 221.**
Intermediate soccer and volleyball. Prerequisite 121.
- PHYSICAL EDUCATION 222.**
Intermediate basketball and field hockey. Prerequisite 122.
- PHYSICAL EDUCATION 224.**
Intermediate tennis, track and field, and weight training. Prerequisite 124.
- PHYSICAL EDUCATION 225.**
Intermediate gymnastics. Prerequisite 125.
- PHYSICAL EDUCATION 226.**
Intermediate modern dance and stunts and tumbling.
- PHYSICAL EDUCATION 228.**
Intermediate swimming. Prerequisite 128 or successfully passing beginners swimming test. 4th quarter.
- PHYSICAL EDUCATION 231.**
Adapted program. Recommendation of department.
- PHYSICAL EDUCATION 325.**
Advanced gymnastics. Prerequisites 125 and 225.
- PHYSICAL EDUCATION 328.**
Advanced swimming, life saving. Prerequisite 128, 228, or successfully passing intermediate swimming test. 4th quarter.
- PHYSICAL EDUCATION 331.**
Adapted program. Recommendation of department.
- PHYSICAL EDUCATION 421.**
First quarter as student assistant. Prerequisite 302 and recommendation of department.
- PHYSICAL EDUCATION 422.**
Second quarter as student assistant. Prerequisite 302 and recommendation of department.
- PHYSICAL EDUCATION 423.**
Third quarter as student assistant. Prerequisite 302 and recommendation of department.

HOME ECONOMICS

RATIONALE

"Home Economics is the field of knowledge and service primarily concerned with strengthening family life through:

- educating the individual for family living
- improving the services and goods used by families
- conducting research to discover the changing needs of individuals and families and the means of satisfying these needs
- furthering community, national, and world conditions favorable to family living"

The first purpose is the major responsibility of the secondary Home Economics program.

The Teachers in Fulton County believe that Home Economics Education's unique contributions center around:

1. Managing Personal and Family Resources
2. Directing Growth and Physical Care of Children.
3. Developing Satisfactory Interpersonal Relationships
4. Providing for the Physical Needs of Family Members

Note: Requirement of all students:

Family Development: Five (5) credit hours from 301, 401, 501 at 10th, 11th, or 12th grade. All girls on the general course program are required to have fifteen (15) credit hours of Home Economics.

Home Economics.

- a. Home Ec. 301, 302, 303, 304; are non-sequential.
- b. Home Ec. 203 prerequisite for Home Ec. 303.
- c. Home Ec. 204 prerequisite for Home Ec. 404.
- d. For Home Ec. 901 at least one Development course a prerequisite.
- e. For Home Ec. 902 at least one Housing course as a prerequisite.
- f. For Home Ec. 903 at least one Nutrition course a prerequisite.
- g. For Home Ec. 904 at least one Textile a prerequisite.
- h. A 10th grade student may take Home Ec. 100 courses upon recommendation of department chairman.

HOME ECONOMICS EDUCATION

PERSONAL, HOME AND FAMILY DEVELOPMENT.

TEENAGE DEVELOPMENT 101.

Designed to help the individual to gain a sense of identity, to analyze personal goals, values and attitudes, to accept responsibility, to recognize and solve problems, and to investigate and analyze future occupational role.

FAMILY DEVELOPMENT 201.

Designed to help the teenager understand the patterns of family life in all cultures as these relate to the roles of family members and the relationship of family structures, traditions, and beliefs to values and goals.

CHILD DEVELOPMENT AND CARE 301.

A study of the child from prenatal to adolescence, the contributions of the family and the community to the development of the child.

PREPARATION FOR ADULT ROLES 401.

Designed to prepare the teenager for the various roles an adult may assume: marriage, parenthood, citizenship, social life and employment.

CONTEMPORARY FAMILY LIVING 501.

A study of the various phases of family life, resources available to meet family goals, areas of adjustment and family crises.

INDEPENDENT STUDY 901.

An opportunity to work independently to further develop previously acquired skills and knowledge in personal, child and/or family development.

Prerequisite: Any one course in this area.

HOUSING AND MANAGEMENT.

MANAGEMENT FOR TEENAGERS 102.

Designed to develop skills for decision making in order to have more money, energy, time for desired activities, special interest, occupational activities.

DECORATING AND DESIGNING INTERIORS 202.

A study of creative combinations of furniture and accessories, arrangement of furniture, selection of fabrics for the home, improvising furnishings, providing adequate storage and simple household repairs.

BASIC HOME FURNISHINGS 302.

A study of the selection and care of furniture, major equipment and appliances, accessories, tableware, arrangement of space.

FINANCIAL EDUCATION FOR FAMILIES 402.

A study in management of family income with emphasis on sources, budgeting, credit, investments, and laws relating to family finances.

HOUSING 502.

The study of choices of housing and its influence on people; the relationship of furnishing, equipment, maintenance, and improvements to family housing needs.

INDEPENDENT STUDY 902.

An opportunity to work independently to further develop understandings, attitudes, and skills previously acquired in the field of housing, home furnishings, management and finance.
Prerequisite: Any one course in this area.

NUTRITION AND FOOD.**FOOD FOR TEENAGERS 103.**

Basic principles of nutrition with emphasis on the individual and his food habits; understanding of relationship of diet to health and appearance; use and care of equipment in the preparation of quick meals and snacks.

FOOD SELECTION, PREPARATION AND SERVICE 203.

Fundamental principles and skills of selecting, buying, preparing and serving each of the major food groups.

MEAL MANAGEMENT 303.

Preparing various types of family meals involving several cost levels, time limits, types of equipment and table accessories; knowledge of factors influencing consumer practices; arrangement and use of space.

Prerequisite: Nutrition 203.

THE SCIENCE OF FOOD 403.

A study designed to utilize scientific principles of food preparation.

INDEPENDENT STUDY 903.

Applying knowledge and skills of nutrition and food in planning and carrying out individual projects.

Prerequisite: Any one course in this area.

TEXTILE AND CLOTHING.**CLOTHING FOR TEENAGERS 104.**

A study of clothing of choices, clothing selection, clothing care, as related to personal appearance, individual values and available resources.

FUNDAMENTALS OF CLOTHING CONSTRUCTION 204.

Development of skill in use and care of sewing and pressing equipment, selection of commercial patterns, fabrics and notions; construction of simple garments.

CONSUMER TEXTILES AND CLOTHING 304.

A consumer approach to the study of purchasing practices and clothing trends as affected by economic conditions, marketing control, and aesthetic characteristics; and extensive study of the science of textiles.

TAILORING TECHNIQUES 404.

A study designed to increase skills as related to tailoring: altering and fitting patterns, preparation of fabrics, specialized construction and pressing techniques.

Prerequisite: Textiles and Clothing 204.

CREATIVE DESIGN IN TEXTILES AND CLOTHING 504.

A study designed for planning and carrying out of creative projects in personalizing garments and in designing textiles and clothing.

INDEPENDENT STUDY 904.

An opportunity to work independently to practice and further develop understandings and skills acquired in previous Textiles and Clothing courses.

INDUSTRIAL ARTS

Definition

Industrial Arts is that part of the total educational process which deals with the study of materials, tools, processes, methods, opportunities and working conditions of the technical or industrial society in which we live and work.

Aim

The Industrial Arts Program seeks to develop desirable habits, interests, and character traits through cooperative work. It also seeks to stimulate an appreciation for good workmanship, design and the values of industry.

Objectives

The objectives are to develop in each student

1. Desirable work habits
2. The appreciation of logical thinking
3. Good workmanship
4. An interest in Industry
5. A knowledge of good design
6. A knowledge of tools and materials and the fundamental processes of Industry
7. Consumer knowledge
8. A basis for leisure-time activities
9. An appreciation of fiscal values
10. Aesthetic values
11. Orderly performance

Drafting 200, Wood 200, Metal 200, Electricity 200, Graphic Arts 200, Ceramics 200 are each prerequisite to subsequent courses in these respective areas. All other courses in an area are non-sequential.

DRAFTING 200.

This course is prerequisite to all drafting courses. The purpose is to show the scope of work done in drafting and to give the student an opportunity to use basic equipment in making a drawing. Correct use of lines and instruments is stressed.

DRAFTING 201.

Additional operations required to make a three-view working drawing are presented. This includes a study of dimensioning. Basic methods of pictorial drawing are considered.

DRAFTING 202.

Sections, developments, rendering and job opportunities in the field of drafting are considered.

DRAFTING 301.

This course is designed to acquaint the student with engineering drawing: Charts, graphs, applied geometry and auxiliary views are covered.

DRAFTING 302.

A detailed study of production drawing methods and manufacturing processes is made.

DRAFTING 303.

A major portion of this course will be used to familiarize the student with industrial machine operations. Special consideration is given to gears, cams, splines, pulleys, bearings and friction drives.

DRAFTING 401.

This is the first course in architectural drafting. A study of architectural history, home site considerations, physical facilities and local ordinances is made. Skills are developed in the use of architectural lettering and symbols and abbreviations.

DRAFTING 402.

Building practice is considered. Foundations, types of construction, brick masonry, framing practices, roof construction, windows, and doors are discussed. Floor plan development procedure is considered.

DRAFTING 403.

Pictorial representation, specifications, financing construction and related study of the building industry is made.

DRAFTING 901.

Provision is made for individual research, design development and modeling for the advanced drafting student. Courses are offered only with the approval of the instructor. Independent study methods will be used.

DRAFTING 902.

Continuation of Drafting 901.

DRAFTING 903.

Continuation of Drafting 901 and Drafting 902.

TOPOGRAPHIC OR MAP DRAFTING 601.

This is a special field of drafting which gives the student experience in all phases of Topography, landscaping and terrain mapping. It deals with such things as city and state planning, communications, transportation and developments.

WOOD.**WOOD 200.**

A prerequisite for all other wood courses. Wood 201 is an exploration course designed to show the beginning student the scope of the work presented in the wood shop program. It is designed to acquaint the student with the hand processes.

WOOD 201.

The student continues work started in Wood 201 with the additional benefit of power equipment. Basic operations are shown and the student has an opportunity to design and build projects which use them. This is a prerequisite to all Wood 300 series courses.

WOOD 202.

A study of furniture making is made. Advanced joints are considered as well as more advanced wood finishing methods.

WOOD 301.

An advanced course designed to allow the student to develop skill in desired areas of woodworking. Project selection is worked out on an individual basis. Advanced operations are presented as needed.

WOOD 302.

Continuation of Wood 301.

WOOD 303.

Continuation of Wood 302.

WOOD 901 - 902 - 903.**METAL TECHNOLOGY 200.**

A prerequisite for all metal courses. Designed as an exploration course to show the type work done in various metal courses. Shop work is conducted in the areas of bench metal and wrought metal.

METAL TECHNOLOGY 201.

A course designed to acquaint the student with the areas of sheet metal and art metal. Tools and equipment required to perform operations in these areas will be used in the instructional program.

METAL TECHNOLOGY 202.

A study is made of welding, forging, heat treating and foundry work. The student has an opportunity to experiment in various areas.

METAL TECHNOLOGY 301.

A study of welding is made. Various methods of welding and cutting metals are discussed.

METAL TECHNOLOGY 302.

Machine shop operations are considered. Machine tools are used to construct projects which require the student to perform many basic operations.

METAL TECHNOLOGY 303.

A continuation of Metal 301. Machine tools are used to develop additional skills.

POWER TECHNOLOGY 100.

This unit is designed to provide the student with the basic knowledge of the types and uses of Power Technology which are available to him now or will be available to him in the not too distant future. How power is developed from the transfer or the conversion of energy through the various mediums. The relationship of power to our everyday living.

GRAPHIC ARTS TECHNOLOGY 200.

This course is designed to furnish the basic knowledge and understanding of the Graphic Arts Industries. It is intended to furnish some information concerning tools, materials, processes, working conditions and opportunities associated with the graphic arts industries.

GRAPHIC ARTS 201.

This course includes methods of composing type, basic materials used in printing, research in the

printing industry and photography from a basic point of view.

GRAPHIC ARTS 202.

A study of the basic types of cameras, principles of photography, developing of film, equipment care and use, enlarging, photography as a hobby and photographic services.

HOME MAINTENANCE 100

This course is designed to give knowledge and practice in the making of needed home repairs as associated with any of the fields or areas of Industrial Arts. To acquire a degree of skill in the use of the common tools and their care. This course will associate primarily with the areas of metal, wood and electricity.

HOME MAINTENANCE 201.

To learn certain fundamental concepts about plumbing and heating units of the home and to acquire skills in the maintenance and repair of such units.

HOME MAINTENANCE 202.

This course is designed to give the student some basic knowledge in finishing materials as applied to the interior and the exterior of a house. A basic knowledge of the maintenance and care of appliances, electrical circuits, basic automobile body repair and auto electric circuits as well as minor motor adjustments.

CERAMICS 200.

A prerequisite to all ceramics courses. This course is designed to give the student knowledge application and the opportunity for investigation into the history of ceramics, products, manufacture job opportunities, etc. which have to do with the ceramics industries. The student experience includes practical application of the development of ceramic products, glazing, curing and study of the practical uses of the products as well as time and study in their production.

BRICK MASONRY 201.

This course is designed to give the student an insight into the manufacture of concrete products, as well as clay products, and to furnish the opportunity for practical demonstrations in the use of these materials in the construction industry.

TRANSPORTATION 901.

A history of transportation, a knowledge of the basic means of modern transportation. The transportation of energy as compared with bulk transportation.

INDUSTRY 901.

From idea to finished product. Production planning, mass production, automation, quality control, marketing, profit and loss, influence of government.

ELECTRICITY 200.

Prerequisite for all electricity courses. General survey of the fields of electricity and electronics. Includes the history of electricity—electronics, project planning, materials, tools, and processes. A study is made regarding electron flow and the factors which influence it.

ELECTRICITY 201.

Includes a unit on how electrons work, sources of electrical energy, tests, measurements and equipment. A study made of electric motors, generators and transformers.

ELECTRICITY 202.

Methods and communication such as the telegraph, telephone, radio transmitters, radio receivers, radar and television are discussed. Related study includes a unit on what a person should know to be an intelligent consumer of the products of the electricity-electronics industries.

ELECTRICITY 301.

A review of earlier electricity courses is followed by a detailed study of magnets, resistance and capacitance.

ELECTRICITY 302.

This study includes inductance, alternating and direct current, electrical measuring instruments, the oscillator, electron tubes, power supplies, amplifiers and transmitters.

ELECTRICITY 303.

Antenna systems, radio propagation, receiving principles, the superheterodyne, television and semi-conductors are considered.

LIBRARY EDUCATION

Library education courses survey the fundamental techniques in locating and using multi-media. These courses are designed to help the student become more adept in the use of library materials, to enable the student to give optimum service to the school population, and to encourage the development of initiative and leadership qualities.

Each student shall serve one period each day in the library or a comparable period of time before or after school. He will be expected to complete independent study units and laboratory activities relative to the particular course scheduled. Since this elective course is a combination of service to the school and learning experience for the library education student it is essential that special regulations be applied to the selection and scheduling of students into the course.

Six (6) courses in library education are possible assuming three (3) such courses are 8th grade courses. If no 8th grade courses are taken, only three courses of library education are possible from grades 9 - 12.

LIBRARY EDUCATION 100.

An introduction to the use and location of multi-media. Orientation in classification and arrangement of the library collection will be emphasized. Laboratory activities to develop skills to serve the school population in the library will also be stressed. Special independent study units to challenge the library education student's initiative and curiosity in the use of basic reference tools will be developed.

LIBRARY EDUCATION 101.

Opportunities to deepen the student's understanding of library services to the school population and to improve his personal skills of assisting librarians, teachers and students through continued, appropriate laboratory activities. Planned programs to improve insights into availability and use of selected encyclopedias will be assigned. Continued selection of independent study units to challenge individual research will be encouraged.

Prerequisite: Library Education 100.

LIBRARY EDUCATION 102.

Extension of Library Education 100 and 101. The use, similarities, and differences and unabridged dictionaries will be emphasized. Laboratory activities to improve service skills will be stressed. Continued selection of independent study units will be encouraged.

Prerequisite: Library Education 100.

LIBRARY EDUCATION 200.

Above 8th grade level.

In-depth instruction in the location and the use of multi-media. Increased skills in using card catalog and special reference tools will be emphasized. Laboratory activities appropriate to services performed will be developed through special study and practice. Course purposes to improve student's acquaintance and skills in using library resources and to direct his personal growth through service to the school population.

LIBRARY EDUCATION 301.

A course designed to extend the library student's competence and experiences in locating and using multi-media. A study of biographical dictionaries that emphasize authors and illustrators will be stressed, but a survey of specialized biographical media will also be considered. Attention will be given to the continued practice of appropriate laboratory activities to enable the student to become more adept in developing skills in serving the school population. Diagnostic testing over Library Education 200 will be administered to determine problems and activities requiring independent review.

Prerequisite: Library Education 200.

LIBRARY EDUCATION 401.

General survey of advanced reference books and research techniques. Independent study units will emphasize a variety of sources such as: quotation books, poetry indexes, literary handbooks, specialized dictionaries, e. g., Bible, economics, politics. The development of additional library service skills will be continued through such laboratory activities as assisting in teaching local library procedures to new library education students, filing cards in the card catalog, and compiling bibliographies for teachers. Diagnostic testing of Library Education 200 will be administered and evaluated to determine independent study areas needed for special review.

Prerequisite: Library Education 200.

MUSIC EDUCATION

Music is a subject area and field of knowledge unique and complete within itself. The satisfactory composition and performance of music, based upon knowledge gained through careful preparation, constitutes one of the great arts of our civilization. Knowledgeable listening to music, with its accompanying achievement of understandings and literacy constitutes some of the great aesthetic experiences, pastimes, intellectual pursuits, emotional outlets, and enjoyments of our society. Music is everywhere.

The study of music leads toward a complete education; it can build the aesthetic and spiritual values so important in the overall development of personality and character. It contributes toward the physical, intellectual, social, and emotional growth of the student. It enriches and supports other learnings.

The music curriculum of the Fulton County Schools has been built for the needs, both immediate and long range, of the various member communities. It is far-reaching, with scope enough to meet the differences within and between these communities. With the exception of the two quarters of basic musicianship, which must be taken in sequence, all courses are capsule into single quarter units, which need not be taken in any special order. There are courses for those who would learn music through the knowledge of the techniques of performance. There are many performing groups of varying types and ability levels. Classes are maintained for those who would produce music through its writing or arranging. There are also studies for those who would perform music in a more social setting, such as through knowledge of recorder, or the production of Broadway-type musicals or operettas. And, equally important, there are courses for those who would consume music. These range from general to specific, and are designed to shape and widen the future audiences of our communities. As this curriculum grows and develops, it is our desire that it will contribute substantially to performance, production, and the consuming of future music in the communities of Fulton County Schools.

MUSIC

BAND.**WOODWIND TECHNICS 101 and 201.**

The study of the woodwind instruments taught in classes of mixed woodwind instrumentation. The level of each quarter's work should roughly equal that found in half of a book of any of the standard three-book methods currently in use. These classes are concerned with the knowledge and skills necessary for the performance of the instrument which the student is studying. Supplementary materials will be correlated with the methodology.

WOODWIND TECHNICS 102 and 202.

Prerequisite: Woodwind Technics 101 and 201. See description above.

WOODWIND TECHNICS 103 and 203.

Prerequisite: Woodwind Technics 102 or 202. See description above.

BRASS TECHNICS 101 and 201, 102 and 202, 103 and 203.

The same as above (Woodwind Technics), only for instruments of the brass family.

PERCUSSION TECHNICS 101 and 201, 102 and 202, 103 and 203.

The same as above (Woodwind Technics), only for the instruments of the percussion family. In this series of classes, as they advance, students will be introduced to and study as many of the various percussion instruments as time, class level, and class size will permit.

STRING TECHNICS 101 and 201, 102 and 202, 103 and 203.

The same as above (Woodwind Technics), only for instruments of the string family.

MIXED BAND INSTRUMENTS TECHNICS 101 and 201, 102 and 202, 103 and 203.

The same as above.

RECORDER TECHNICS 101, 102 and 103.

The study of the performance technics of the recorder, taught in the class setting in the same manner as the courses outlined above. Special emphasis will be placed here on the knowledge of recorder literature and period style.

BAND 201, 202, 203 and 204.

Maximum 15 quarters per student career. Study of the literature and rehearsal and performance technics of the band ensemble. A performance organization for the student who might wish to elect membership in such a group, but has not yet reached the achievement level necessary for membership in the school's advanced instrumental performing organization.

ADVANCED BAND 401, 402, 403, and 404.

Maximum 15 quarters per student career. Study of the literature and rehearsal and performance technics of the band ensemble on the highest level achievable within the given school. A performance organization to be elected by students of high achievement and talent, with the understanding that there will be out-of-school performances required of all members during the school year.

ORCHESTRA 201, 202, 203, and 204.

Same as above (BAND), only for orchestral instrumentation. Depending upon the needs of the individual school, this may be taught in a class of strings only, or of full orchestra instrumentation.

ADVANCED ORCHESTRA 401, 402, 403, and 404.

Same as for Advanced Band, only for orchestral instrumentation. Depending upon the needs of the individual school, this may be taught in a class for the strings only, or of full orchestra instrumentation.

STAGE BAND 301.

Maximum 2 quarters per student-career. Study of the literature, and rehearsal and performance technics of past and current popular-jazz music as it relates to the stage band, with special em-

phasis on performance style and improvisation. A performance organization for more talented and advanced students, which requires out-of-school performances of all members.

INSTRUMENTAL ENSEMBLE 401.

Maximum 3 quarters per student-career. Study of the literature, and rehearsal and performance techniques of chamber music from the various eras of musical composition. Open to students of select instrumentation, including piano, brass, woodwind, string, and percussion. Class size in this course should be limited to a maximum of approximately thirty students. During a given quarter each student will perform in several different ensembles and will be expected to attend out-of-school performances both of their own making and of professional ensembles.

CHORAL.

BASIC VOCAL TECHNIQUES 101 and 102.

Placement by teacher. 9-12 grades. An introduction to tone production, breath support, proper vowel and consonant enunciation and general fundamentals of voice building. Gradual development of voice and related musical vocabulary (staff, notation, etc.,) through appropriate repertoire.

GIRL'S CHORUS 321, 322, 323, and 324.

9-12 grades

Development of musicianship through singing of unison, two, three and four-part choral literature. Accompanied and easy unaccompanied literature will be studied and prepared for limited performances.

Prerequisite: Basic Choral Techniques or Permission of the teacher.

BOYS' CHORUS 211, 212, 213, and 214.

9-12 grades.

Development of musicianship through singing of unison, two, three and four-part choral literature. Accompanied and easy unaccompanied literature will be studied and prepared for limited performances.

Prerequisite: Basic Choral Techniques or Permission of the teacher.

MIXED CHORUS 301, 302, 303 and 304.

9-12 grades.

Development of musicianship through singing of unison, two, three and four-part choral literature. Accompanied and easy unaccompanied literature will be studied and prepared for limited performances.

Prerequisite: Basic Choral Techniques or Permission of the teacher.

ADVANCED GIRLS' CHORUS 421, 422, 423, and 424.

9-12 grades.

Emphasis will be placed upon learning and performing various choral styles, ranging from medium to difficult literature. Three, four and multi-part accompanied and unaccompanied literature will be sung. Prerequisite: Permission of the teacher.

ADVANCED MIXED CHORUS 401, 402, 403 and 404.

9-12 grades.

Emphasis will be placed upon learning and performing various choral styles, ranging from medium to difficult. Four, multi-part, double chorus selections unaccompanied motets, and contemporary works will be sung.

VOCAL ENSEMBLE 501.

10-12 grades.

200

A course offered to a select group of blended, mixed or like voices to give experience in duet, trio, quartet, octet, etc., singing. Many styles of ensemble type singing will be explored, such as madrigals, barbershop, and contemporary ensemble work. Special emphasis will be placed upon development of the ability to carry an independent part in an ensemble group.

Prerequisite: Permission of the teacher.

MUSICAL THEATRE 401.

9-12 grades.

Emphasis of this course will be in dramatic music productions. Students interested in solo and ensemble singing may elect.

Prerequisite: Permission of the teacher.

BASIC MUSICIANSHIP THEORY 100 and 101.

A two-quarter course to be taken in sequence. No prerequisite.

A basic survey of fundamentals and vocabulary of music involving experiences in rules and terminology of notation, ear training, sight singing, harmonic and melodic dictation and basic small form analysis. Students who elect this course should make arrangements to have a keyboard instrument readily available for practice and assignments, either at home, school, church, etc.

SIGHT SINGING 201.

8-12 grades.

A specialized course involving study and drill in the technics of singing from the written score.

Prerequisites: Basic Musicianship or Permission of the instructor.

HARMONY 201.

A study of the fundamentals of musical structure; melody and melodic components; with basic written, aural, vocal and keyboard experiences in unison, two, three and four-part music. Students who elect this course should have a keyboard instrument readily available for practice and assignments, either at home, school or church, etc.

Prerequisite: Basic Musicianship 1 and 2 or Permission of the instructor.

GENERAL MUSIC 101 and 102.

8-9 grades.

An overview of all phases of music including singing, learning to play informal social instruments, music appreciation, and basic fundamentals. A variety of materials and resources including films, concerts, visits, and television will be utilized.

OPERA APPRECIATION 201.

9-12 grades.

A brief history of opera, terminology, and several representative works will be studied. Films, television, recordings, and performances will be greatly utilized.

THE HUMANITIES 301, 302, and 303.

11-12 grades.

A study of the historical and aesthetic relationship of painting, sculpture, architecture, drama, poetry, music and the dance.

MUSIC APPRECIATION SURVEY 301.

10-12 grades.

An introduction to constructive and critical listening of music, for the purpose of broadening any students' insight through use of recordings, tapes, films and scores. The class activities will be tied to actual live performances of music groups which reside or perform in the area.

MATHEMATICS

PHILOSOPHY:

One of the underlying concepts inherent in the mathematics program of Fulton County is that every student should have some experiences with mathematics beyond the elementary level. As a result, the belief that opportunities for successful experiences in mathematics must be provided to all students, becomes not only natural but necessary.

In the Fulton County program, an attempt has been made to create a curriculum which is success oriented as far as students are concerned. The flexibility of course offerings and the variety of courses provide a program in which ideally every student can find some success. This provides an additional challenge to the teacher, however, who must not only be particularly sensitive to each student's abilities and needs but who must also be thoroughly familiar with the scope of the entire program in order to provide all possible assistance in the proper placement of the student.

As another means of assuring successful experiences for students, pedagogy must be developed by each teacher to stress student understanding of logical bases for mathematical procedures rather than manipulations to be memorized. Recent changes in mathematics teaching philosophy encourage the development of the art or skill of questioning which stimulates creative discovery on the part of all students at all levels.

Math Requirement:

1. Academic: Algebra 200-201-202 Sequential
Geometry 300-301-302 Sequential
Algebra 300-301-302. Algebra 300 prerequisite for 301, 302.
Algebra 301, 302 non-sequential.

2. Business Course:

- Thirty (30) hours required from the following:
 Math 101, 102, 103, or 131, 132, 133 or 104, 105, 106 or
 134, 135, 136 or
 Business Arithmetic 305, 306, 307, or thirty hours of Algebra
 or Geometry.

Note: Fifteen (15) hours of Business Arithmetic or fifteen hours of Algebra is required.

3. General Course

Thirty (30) hours required.

4. All 100 level courses and all courses above the 300 level are non-sequential.

ARITHMETIC 131—UNDERSTANDING COMPUTATION

This course is a laboratory approach to understanding numeration, numbers and computation with whole numbers. It is a remedial course for those students who are achieving three or more grades below placement.

Prerequisite—Below S.S grade achievement upon entering high school or recommendation of teacher after failure of a 100-level course.

ARITHMETIC 132—UNDERSTANDING FRACTIONS

The emphasis in this course is on operations with simple fractions and decimal fractions developed through a laboratory approach using shop and homemaking problems in measurement.

Prerequisite—Same as for Arithmetic 131.

ARITHMETIC 133—UNDERSTANDING RATIO AND PERCENT

Simple models for ratio are used to develop understanding. Attention is given to problem applications of ratio and percent in a practical setting.

Prerequisite—Same as for Arithmetic 131.

ARITHMETIC 134—METRIC GEOMETRY AND NUMERICAL TRIGONOMETRY.

This course uses a laboratory setting to develop concepts of measurement in scale drawings, metric geometry, and numerical trigonometry. Attention is given to linear, area, volume, and angle measures. Prerequisite—Arithmetic 132 and one other 130-level course.

ARITHMETIC 135—EXPERIMENTAL GEOMETRY

Experimental methods such as paper-folding and construction are used to develop such geometric concepts as congruence and similarity. Models for three dimensional geometric figures are made and their properties explored.

Prerequisite—Any two 130-level courses.

ARITHMETIC 136—GRAPHS, THEIR CONSTRUCTION, AND INTERPRETATION

Graphs are used as a means of problem solving. Newspapers and magazines serve as resource materials for learning to read and construct graphs. The concept of ordered pair as coordinates of points in a plane may be used with some students as appropriate.

Prerequisite—Same as for Arithmetic 135.

MATHEMATICS 101—ELEMENTS OF NUMBER THEORY

Some of the topics included in this course are numeration systems, number systems and a study of some interesting properties of numbers such as: evens and odds; primes and composites; factors and factor trees with applications in fractions and computation; divisibility. This course is designed to strengthen fundamental arithmetic concepts as a basis for beginning algebra.

Prerequisite—Arithmetic achievement score of 5.5 grade or higher at time administered in seventh grade. (See Arithmetic 131 and Algebra 200 for alternate courses for students entering high school.)

MATHEMATICS 102—THE REAL NUMBERS

This course includes a systematic study of properties of rational numbers with operations. Irrational numbers are introduced either through decimal representation or through geometric construction. Computational skills may be reinforced but emphasis is on the development of the real numbers as a system and on the field properties.

Prerequisite—Same as for Mathematics 101.

MATHEMATICS 103—RELATIONS AND FUNCTIONS

The Cartesian plane will be used to introduce the concepts of relation and function. Simple algebraic symbolism will be used as appropriate. Concepts of slope, line graphs, inequalities are developed.

Prerequisite—Same as for Mathematics 101.

MATHEMATICS 104—NUMBER SYSTEMS

This course is designed to reinforce basic understandings introduced in Mathematics 101 and 102. It may serve as strengthening in pre-algebra concepts for the student who is not ready for algebra or it may serve as one of the terminal quarters for the non-college bound general student. Topics include review of properties of non-negative rationals and irrationals.

Prerequisite—Any two 100-level courses.

MATHEMATICS 105—ORIENTATION TO ALGEBRA

The language of algebra is developed carefully and open sentences are used to solve simple problems. The polynomial is introduced with simple products and factors. Directed numbers and operations on them are emphasized.

Prerequisite—Same as Mathematics 104.

MATHEMATICS 106—PRE-ALGEBRA

This course reviews and extends previous structure ideas into beginning algebra. Topics include open sentences, coordinate plane, polynomials and operations.

Prerequisites—Same as for Mathematics 104.

MATHEMATICS 107—METRIC GEOMETRY

This course is designed for the general student and may be a terminal quarter for him. The concepts of linear, area, and volume measurement are reinforced. Attention is given to estimation, precision and accuracy. Other topics are measurement in science, metric system and use of exponents in writing large and small numbers.

Prerequisites—Any two 100-level courses.

MATHEMATICS 108—NON-METRIC GEOMETRY

This course is designed for the general student or for the weak academic student. In conjunction with Mathematics 109, it may provide additional preparation for Geometry 300. Emphasis is placed on similarity, concepts of congruency, and properties of right triangles.

Prerequisites—Any two 100-level courses.

MATHEMATICS 109—INTUITIVE GEOMETRY

This course reviews basic ideas of intuitive geometry with a study of properties of geometric figures and an introduction to vectors. The concept of proof in a geometric setting is introduced. This course serves the same dual purpose as Mathematics 108.

Prerequisites—Any two 100-level courses.

ALGEBRA 200—ELEMENTARY ALGEBRAIC CONCEPTS

This course develops basic algebraic concepts and skills necessary for continued study in algebra. A high level of mastery is expected. Emphasis is on such topics as algebraic symbolism, polynomials and operations on polynomials, equalities and inequalities, problem solving, and an introduction to products and factors.

Prerequisites—For most students Math 101, 102, 103; for students who evidence readiness as indicated by teacher recommendation after one or more 100-level courses; or for students entering high school with an achievement score of 9+.

ALGEBRA 201—QUADRATIC FORMS AND ALGEBRAIC FRACTIONS

This course extends topics of factors and products, irrationals, quadratic equations and their application in problem solving. Algebraic fractions and operations are included.

Prerequisite—Algebra 200.

ALGEBRA 202—ALGEBRAIC EQUATIONS AND INEQUALITIES

This course includes an extension of equation solving and problem applications with an emphasis on equations in two and three variables. An introduction to some basic ideas of analytic geometry are included, such as, point-slope form of an equation of a straight line, slope-intercept form, function and variation.

Prerequisite—Algebra 201 or Algebra 200 and recommendation of mathematics department.

ALGEBRA 203—DIAGNOSTIC BASIC ALGEBRA

Since this course is designed for those students who are weak in elementary algebraic concepts, a diagnostic review of the topics of Algebra 200, 201 and 202 will be given and time will be spent on individual topics as needed.

Prerequisite—Algebra 201 and 202 with a below B average and teacher recommendation.

ALGEBRA 204—EXPLORING CONTEMPORARY ALGEBRA

This is an enrichment course and is adapted to student interest and ability level. Some suggested topics are digital computer methods, systems of equations in three variables, matrices and determinants, probability and statistics, logic and truth tables.

Prerequisite—Algebra 201 and 202. (Exception: this course may be taken simultaneously with a third quarter of algebra but must be taken prior to Algebra 300 not in lieu of it.)

GEOMETRY 300—ELEMENTARY GEOMETRY

This course introduces the basic ideas of two and three dimensional geometry; concepts of definition and assumption in a Euclidean geometry setting; postulates, deductive and inductive proof.

Prerequisite—Three quarters of algebra or Algebra 200 and teacher recommendation.

GEOMETRY 301—EUCLIDEAN GEOMETRY

In this course the ideas of geometry are extended to include theorems on congruency; parallel lines and planes; similarity, circles, arcs and angles; constructions and loci. An introduction to application of the sine, cosine, and tangent ratios may be included.

Prerequisite—Geometry 300.

GEOMETRY 302—COORDINATE GEOMETRY

This course introduces methods of coordinate geometry, including proofs. Additional topics are areas of polygons and circles, areas and volumes of polyhedra, spheres, cylinders and cones.

Prerequisite—Geometry 300.

ALGEBRA 300—INTERMEDIATE ALGEBRAIC TOPICS

The concepts of elementary algebra are extended. New topics include synthetic division, remainder theorem, determinants in the solution of three variable systems. Rational algebraic expressions are treated in depth.

Prerequisite—Three quarters of 200-level algebra and three quarters of 300-level geometry or less with recommendation of mathematics department.

ALGEBRA 301—INTERMEDIATE FUNCTIONS AND RELATIONS

The basis of this course is an extensive and intensive study of quadratic relations and systems of quadratic equations. The function concept is extended in an introduction to exponential and logarithmic functions. In the solution of quadratic equations, imaginary numbers are introduced.

Prerequisite—Algebra 300.

ALGEBRA 302—ADVANCED ALGEBRAIC TOPICS

Included are such topics as sequences, series, limits, progressions, binomial expansion, mathematical induction, matrices and determinants, group and field properties, properties of an integral domain.

Prerequisite—Algebra 300.

ALGEBRA 303—ALGEBRAIC REVIEW AND ADDITIONAL TOPICS

This course constitutes an in-depth review of fundamental concepts in algebra. It is intended for those students who have a below B-average in previous algebra courses. This quarter should strengthen algebraic background for students who plan to attend a college which requires freshmen to take a course in college algebra. Students who have a B-average or better in mathematics are not allowed to take this course.

Prerequisite—Algebra 301 and below B-average in previous algebra courses.

ALGEBRA 304—ALGEBRAIC TOPICS

This course presents some more advanced algebraic topics for the below B-average student. Included is further study in functions and relations with emphasis on algebraic functions. The algebra of vectors and matrices is introduced.

Prerequisite—Algebra 303 or Algebra 302 and teacher recommendation.

TRIGONOMETRY 305—TRIGONOMETRIC FUNCTIONS

This course is provided for those students who need trigonometry credit for college but who have averaged below B in their academic mathematics. The emphasis in this course is on basic ideas and skills in trigonometry including radian measure, definitions, formulas, identities, equations, complex numbers with only an introduction to circular function treatment. Students who have higher than a

B-average in mathematics and wish trigonometry credit must take Trigonometry 402.

Prerequisite—Algebra 301 and below B-average in mathematics.

ANALYSIS 400

This course includes an in-depth study of logic, ordered fields, mathematical induction, sequences and series, and polynomial functions.

Prerequisite—Algebra 301 and 302 with a B-average or higher in 200 and 300-level courses.

ANALYSIS 401

This course introduces an algebra of vectors and develops a vector approach to analytic geometry. A review of exponential and logarithmic functions is included. The study of complex numbers is extended.

Prerequisite—Algebra 301 and 302 with a B-average or higher in 200 and 300-level courses.

TRIGONOMETRY 402—ANALYSIS OF CIRCULAR FUNCTIONS

This course uses the circular function approach to trigonometry and includes, in addition to trigonometric identities, formulas, equations, etc. a vector treatment of trigonometry and polar forms of complex numbers, with consideration of DeMoivre's Theorem.

Prerequisite—Analysis 401.

Additional 400-level courses include:

402 ANALYTIC GEOMETRY: ANALYTIC GEOMETRY OF POINTS, LINES AND SPACE.

The emphasis in this course is on a careful treatment of plane analytics with some extension to three dimensions. Included is a treatment of points, lines, planes, conics, distances, rotation and translation of axes.

Prerequisite: Analysis 400.

404 MODERN ALGEBRA: MATHEMATICAL SYSTEMS.

This course includes a study of group, field, integral domain properties. Particular attention is given to ordered and non-ordered fields with careful study of the field of complex numbers.

Prerequisite: Analysis 400.

405 ADVANCED MATHEMATICS: ADVANCED TOPICS IN MATHEMATICS.

Content of this course are to be developed by the mathematics department of a school wishing to offer it. This might vary from class to class but should represent in depth study and may be conducted as individual projects or group projects within the class.

Prerequisite: Recommendation of 400-level teacher and department chairman.

406 MATRIX ALGEBRA: INTRODUCTION TO MATRIX ALGEBRA.

Topics include matrix operations, algebra of 2X2 matrices, matrices and linear systems, row and column matrices as vectors.

Prerequisites: Six quarters of algebra with B-average or higher.

407 PROBABILITY: INTRODUCTION TO PROBABILITY.

This course is intended as a rather formal approach to probability and includes such topics as conditional probabilities, mathematical expectation, applications of the binomial distribution, and an introduction to the theory of sets.

Prerequisite: Nine quarters of 200, 300 or 400-level courses with B-average or higher.

501, 502, 503 CALCULUS WITH ANALYTIC GEOMETRY.

This course may be offered in those schools which have staff and a sufficient number of students who will have completed Trigonometry 402 by the end of their fourth year in high school.

Prerequisites: Trigonometry and recommendation of mathematics department.

541 CREATIVE MATHEMATICS.

The topics of this course are to be developed by the students under the guidance of the teacher. It might include such topics as famous unsolved problems in mathematics, game theory, or problems in number theory.

Prerequisites: Recommendation of the mathematics department.

901 RESEARCH IN MATHEMATICS.

Independent study at any level as need is indicated.

Prerequisites: Recommendation of the mathematics department.

SCIENCE

In the eyes of the Fulton County Science Department, emphasis on science—on the national and local level—represents not an unbalancing toward science but a correction of balance in order that the spirit of the modern age may take its legitimate place in the modern curriculum.

Science Requirements:**A. Academic Students**

1. Thirty (30) credit hours of science and thirty (30) credit hours of a language required.
2. Sixty (60) credit hours of science required of those students electing no language.
3. Fifteen (15) credit hours of science requirement must be from Science 200 series and fifteen credit hours of science must be from Science 300 series (Biology).

B. All other Students

Thirty (30) credit hours of science required. Fifteen (15) hours may be from the 100 series or 200 series and fifteen hours must be from Science 300 (Biology).

C. Fifteen (15) credit hours of General Science 101, 102, 103 and fifteen (15) credit hours of Biology will meet graduation requirements but not college entrance requirements.

SCIENCE 101-102-103—GENERAL SCIENCE.

This course is designed for the following purposes: 1) To serve the student with little or no previous science background courses; 2) to serve the student who is not scientifically or mathematically oriented; 3) to serve the student who has a reading level of 6 and below on the seventh grade standardized county achievement test; 4) to serve the student who wishes to pursue science in his first year of high school and who is not placed in or recommended for first year algebra; 5) to serve the needs of the non-college bound student who meets one of the above criteria and who needs a science course in addition to biology in order to graduate; and 6) this course is restricted to 8th and 9th grade students.

SCIENCE 201-202-203—PHYSICAL SCIENCE

This course is designed for the student who needs fifteen hours of science in addition to biology to meet minimum college requirements and local graduation requirements. This is a college preparatory course and one for which normal progress in basic courses like English and Mathematics is recommended. This science is a prerequisite for Science 400 and Science 501-502-503 (Physics). This course is available at grades 8, 9 and 10. A student should not be pressured into taking it unless it is indicated. The Science 200 courses may begin at the 9th grade, or in some cases, even at the 10th.

SCIENCE 204-205-206—EARTH SCIENCE.

This is a course which will satisfy college entrance requirements as well as the Physical Science course. However, for students desiring to take Chemistry and/or Physics in their upper levels, Physical Science 201-202-203 is recommended rather than Earth Science 204-205-206. The latter program is not impossible but the former is recommended. It is for those students who are interested in the study of natural phenomena of the earth and its environs and who have a reading level score of 8.0 or above. Earth Science 204-205-206 is available at grades 8, 9 and 10.

SCIENCE 301, 302, 303—GENERAL BIOLOGY.

Required unless the student takes 304-305-306. This course is designed to study such areas as "What is Life?", Microscope, The Chemical Basis of Life, Cell Structure, The Cell and its Environment, Microbiology, Invertebrates, Vertebrates, The Mammals, The Biology of Man, Multicellular Plants, and Ecology.

SCIENCE 304-305-306—BSCS BIOLOGY.

Required unless student takes 301-302-303.

SCIENCE 400-401-402—CHEMISTRY.

Science 400 is prerequisite for any additional course in chemistry and any course in physics. All Science 400-401-402 is sequential. The course in Science numbered 400 should be labeled Chemistry-Physics 400. If the student later elects to take courses in Chemistry, the 400 course would become an element in Chemistry; if the subsequent courses are taken in Physics, only the 400 course will be counted as one of the Physics elements.

SCIENCE 501-502-503—PHYSICS.

Prerequisite is Science 400. If Science 400 is not followed by Science 401 and 402 and the physics course is the student's next course, then the number 501 physics will replace the number 400 chemistry and be followed by 502-503 on the permanent record card.

SCIENCE 601-602-603—HUMAN PHYSIOLOGY.

Selected students. A second course in biological science devoted exclusively to the study of the human body with a comparative laboratory based on the anatomy and physiology of a laboratory mammal. Recommended that students have had Chemistry and Algebra.

SCIENCE 601-602-603—CHEMISTRY.

Second level course; selected students.

SCIENCE 900 SERIES—INDIVIDUAL STUDY.

Selected students following an approved and guided research problem.

NOTE: The minimal requirement in Science for any course—Academic, Business Education or General—is six (6) course elements or thirty (30) hours. Three (3) course elements must come from science series numbered in the 100's or 200's and three (3) additional courses must be biology.

SOCIAL STUDIES

RATIONALE

The study of man and his behavior, past and present, encompasses such an extensive range of knowledge, it becomes desirable to design a curriculum dedicated to providing pupils with the ability for developing a method of study.

Today scholars from seven academic disciplines, each with their own methodology, contribute their knowledge toward this total understanding of man. For secondary educational purposes these seven disciplines were combined into three methods: a geographical, an historical, and a behavioral social science (anthropology and archeology, sociology, political science, economics).

One cannot say that any one method is more valuable or more difficult—each has its own appeal. This desire to give pupils something of the nature of knowledge, the formation and testing of hypotheses, rather than extensive coverage of factual information, is the very heart of the "New Social Studies" and the core of this proposed curriculum.

Requirements for all students:

Bth Grade: Anthropology 100-130
 Georgia History 100-130
 Sociology 100-130

9th and 10th Grades:

Geography 200
History 200
Political Science 200
Economics 200

11th Grade: U.S. History 304-305-306

Plus ten (10) hours of additional electives:
100 series: non-sequential
200 series: non-sequential
Two 200 series prerequisite to 300 series.

ANTHROPOLOGY 100 & 130—GEORGIA CULTURE.

8th grade. The course will be an introduction to the study of man as an individual, man as part of the physical world, and man as a participating member of community life. Models for culture and social structure will be developed and used to examine communities from three periods of Georgia history: Pre-Columbian, Colonial and Contemporary. Pupils will also be introduced to the methods of study of the Behavioral Social Scientists.

HISTORY 100 & 130—GEORGIA HISTORY.

8th grade. The influence of the American values and beliefs are examined in selected periods from Georgia and U.S. History. Special emphasis will be on the State's contributions to national development. Documents and artifacts will be used to illustrate the techniques of interpreting history and applying historical perspective.

SOCIOLOGY 100 & 130—GEORGIA CITIES.

8th grade. Contemporary Georgia provides the background for an examination of change brought about as the state converts to an industrial urban culture. Case studies in population movements, land use patterns, the economy of a city, and social control will illustrate some of the characteristics and problems of urban culture.

ALL 100 COURSES MUST BE COMPLETED BEFORE MOVING TO 200 COURSES!!!
GEOGRAPHY 200 & 230—WORLD PATTERNS.

Required. The world patterns course presents a global view of man. Major emphasis is given to the analysis of physical and/or environmental patterns in relationship to cultural diversity in the earth.

GEOGRAPHY 201-231—ECONOMIC GEOGRAPHY.

Through analysis of economic activities, the course presents inquiry into the economic questions of production, exchange and consumption in a locational context

GEOGRAPHY 202-232—CULTURAL GEOGRAPHY.

In a cultural framework, the student will examine four countries: South Africa, China, India and Brazil; analyzing in each case the traditional society, the impact of Western ideas and institutions, and one major contemporary problem, such as economic growth.

HISTORY 200-230—THE NATURE OF CIVILIZATION.

Required. The theme is civilization in a world setting. The course approaches the study of history in three ways. First, it examines how historical data may be organized, questioned and interpreted. Second, it identifies the advance stages of social influence of the external and internal forces on the rate of growth or change. Finally, it will give pupils an insight as to history's pertinency to their own lives.

WORLD HISTORY 201—THE NATURE OF REVOLUTION.

Analysis of revolutions will enable the student to see the causes, processes, and results of revolutions. Study will stress both patterns and variations in revolutions. Students will compare the processes that revolutions will follow and the means by which these revolutions leave their influence.

WORLD HISTORY 202.—THE NATURE OF THE STATE AND THE NATION.

Pupils will study the phases of and factors in the development of the nation-state, and the continuing struggle of nations to maintain their sovereignty will be developed.

POLITICAL SCIENCE 200-230—COMPARATIVE POLITICAL SYSTEMS.

Required. A comparison of a primitive political system with the governments of the United States and the Soviet Union examining the nature of leadership, the institutional setting, decision making, the role of the individual citizen, and ideology.

ECONOMICS 200-230—COMPARATIVE ECONOMIC SYSTEMS.

Required. A comparison of a traditional economy with systems where most decisions are made in the market (United States) and where most decisions are made by command (Soviet Union), focusing on three basic questions: what is to be produced, how it is to be produced, and for whom it is produced.

ALL REQUIRED 200 COURSES MUST BE COMPLETED BEFORE MOVING TO 300 OR ABOVE COURSES.**HISTORY 304-334—U.S. DEMOCRACY.**

Required. This is a study of the origin of our beliefs and values as established in our documents and as interpreted by laws and decisions of the Executive, Legislative and Judicial branches of government. It includes the study of the struggle within the democratic ideal over the concentration of power. The continuous testing of the Constitution, through the will of the people, will be emphasized. The concept of democracy is defined as rule by the people, which becomes a republic form of government, free enterprise business organization, and a mobile-class-structure society.

HISTORY 305-335—U.S. REFORM MOVEMENTS.

Required. The course begins with an examination of National Goals. The course focuses on the role of reform movements in the process of developing a nation, including pre-Civil War, reconstruction, populist, and progressive movements, New Deal, Great Society, and the problem of minorities. The study examines concern for protest and civil disobedience as they relate to the American tradition.

HISTORY—306 - 336—20th CENTURY U.S. FOREIGN AFFAIRS.

Required. This is an analysis of the complexity of the present period of history. Case work in the nature of life created by the combined economic, political and social forces will be the core of study. Special attention is given to the relevance of America's basic beliefs as they are challenged by the forces evolving in a highly technological world society. The study will embrace the nature and mechanics of Foreign Policy, an evaluation of the impact of domestic affairs on Foreign Policy, and the complexity of peace efforts.

CULTURAL GEOGRAPHY SERIES

An indepth, multi-discipline, microscopic, cultural study of a selected area. Man living on the land has produced specific patterns that may be called a region. In this study the student is led to identify and locate the specific cultural region under study. The student investigates such aspects of the region as site and situation in the world; resources, utilization of resources; cultural heritage; urban development; agricultural systems in relation to domestic and international affairs. One specific area would make up the bulk of the quarter's work.

GEOGRAPHY 301.

Oriental Culture

GEOGRAPHY 302.

Latin American Culture

NATIONAL HISTORY (OTHER THAN U.S.) SERIES

The history of a nation presents these possibilities: (1) select a period which is significant to life today;

(2) select a theme and trace it throughout several periods; e.g., secularization. Under no circumstances should this become a survey course.

HISTORY 301.

Russian History

HISTORY 302.

Middle East History

HISTORY 303.

English History

ANTHROPOLOGY 301—COMPARATIVE CULTURES.

This course will compare the cultural development of selected aborigines cultures with selected industrial complex societies. Topics might include social organizations, cultural development, technology, value systems, allocation of resources. Case studies will be used.

POLITICAL SCIENCE 301-901—POLITICAL BEHAVIOR.

(laboratory type study) This course is intended to provide an analysis of how things are done politically. Processes will include electing, legislating, administrating, judging, and influencing.

SOCIOLOGY 901—HUMAN BEHAVIOR.

Pupils will primarily be concerned with methods of inquiry and will consider the involvement of the ordering of elements into a system. Perhaps the most important aim will be to develop in students a cautious, critical attitude toward generalizations about human behavior, whatever its source. Through readings and through designing and conducting their own behavioral research, students acquire a deeper understanding of the great complexity of human behavior and the difficulty of acquiring verified knowledge about it.

SOCIOLOGY 301—U.S. SOCIAL STRUCTURE.

This is a study of the institutions and processes of United States society. Emphasis will be on contemporary problems: Impact of affluency, impact of technology, racial discord, disassociation, leadership, social control and dissent

SOCIOLOGY 302—SOCIAL DYNAMICS.

The course will survey the causes, complications and consequences of social change. Case studies in poverty, crime, and urbanization can be used.

POLITICAL SCIENCE 302—U.S. LAW.

This course is designed to examine the role of law in U.S. life, including the origins of U.S. Law, the structure of the legal system and the role of law as an instigator of change and as an agent of social control. Major legal issues as reflected in contemporary court decisions will be examined.

POLITICAL SCIENCE 303-333—CASE STUDIES IN U.S. LAW.

This course will consist of a series of case studies in the judicial processes, both criminal and civil. Georgia Annotated Code and "Everyman's Law" are the materials to be used.

POLITICAL SCIENCE 401—INTERNATIONAL AFFAIRS.

This study is an analysis of international affairs, including the basic factors of nationalism, conflicting ideologies, international law, diplomacy, policy-making, interlocking alliances, strategic geographical and cultural influences. Case studies in international institutions and/or critical areas will be developed. Games of simulation may be used.

POLITICAL SCIENCE 902—POLITICAL THEORY.

Ideas from selected political thinkers will be compared. Topics for comparison may include man as a political being, political ethics, mutual responsibility of state and citizen, and delegation of authority.

HISTORY 901—IDEAS OF MANKIND.

The course centers around three major questions: What is the good man? What is the good life? What is the good society? For substantive material we could choose the civilizations such as ancient Athens, Renaissance Florence, and modern New York. Students examine answers given to these three basic questions by men in each of these civilizations. The readings and lesson plans challenge each student to think about the implications of the new ideas he encounters for his own conception of the nature of man.

SCHEDULING PROCEDURE

This new curriculum, developed in the quarter concept, is student-centered and provides an opportunity to build master schedules based on student need.

The number and variety of courses provided for in this program offers the administrator of each school the flexibility to develop a schedule to meet the needs of his school community.

The flexibility of this program provides for students to move horizontally toward graduation, grades 8-12, and at the same time move vertically through the program at any level to meet his needs. In other words, a student must be able to move from the regular program to the honors program, or from the basic program to the regular or in whatever direction his need requires.

If the basic provisions of this new curriculum are to be realized, it is necessary to reschedule each student each quarter. This means a new master schedule based on student request, student need, and teacher recommendation.

A scheduling procedure which allows student involvement to a greater degree than before has been developed and is in operation in all Fulton County High Schools. This student participation takes the form of course selection, class and period selection, and literally scheduling themselves into classes. There are several significant features of this procedure to consider:

Pre-registration:

During the seventh (7th) week of each quarter a pre-registration is conducted to determine the course offerings for the following quarter. Under the guidance of the classroom teacher, the student makes course selections according to his need and interest. This selection is recorded on a form provided and signed by the teacher.

This is obviously the most significant part of the scheduling procedure. It is here that the student and/or the teacher decide if the student is in the proper course level, whether the student should pursue another subject field, take a course just for fun, or whatever consideration should be given to course selection.

Master schedule:

The data obtained from the pre-registration are used to develop the master schedule for the school. The selection of courses to be included in the master schedule will depend on several factors, among which are: the number of students who request a course, faculty competence, and space availability.

The master schedule is duplicated and a copy given to each student. This copy shows only the course, time and room number. The teacher's name is omitted. Along with this master schedule is a list of singletons and doubletons, with instructions in homeroom for use in preparing the schedule.

Scheduling information:

The students are given instructions for preparing their registration and scheduling form. This information sheet also contains general recommendations for scheduling, dates of registration and bus schedules. A step by step registration procedure is given to each student and reviewed in homeroom prior to registration day.

Registration Day:

Two days are provided between each quarter at which time the students are transported to

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school. Usually the three upper grades register on the first day and the two lower grades on the second day.

The gym is set up with each curriculum department represented at a table. The students go into the gym and schedule themselves into class by registering for each appropriate course.

The student has made his choice of courses, has worked out his schedule, and now has actually scheduled himself into class.

If this procedure is properly organized and followed, the schedule will be operative on the first day of each new quarter.

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A GENERAL REPORT

ON THE

FRANCIS HOWELL YEAR-ROUND

SCHOOL PLAN

Compiled by

Alan M. O'Dell
Administrative Assistant, Elementary Education

May, 1972

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FOREWORD

Dr. M. Gene Henderson, superintendent of the Francis Howell School District, summed up the district's experience with these words as quoted in the March 1972 Reader's Digest: "...on the whole the year-round school has been successful. There are no appreciable savings in operating costs, but for the long term we expect to cut our new building costs to 80 per cent of what we might ordinarily have spent. Parents have gradually adjusted, and the continuous school, with three weeks vacations during four seasons of the year, seems better suited to human nature. Both students and teachers get in the doldrums and need a break."

The same Reader's Digest article concluded with the following thought-provoking statement. "Nevertheless, in spite of limitations, the all-year school does appear to be an idea whose time has come." The purpose of this report is not necessarily to provide evidence of a national trend, but rather to show that year-round education is surely an "idea whose time has come" for one small segment of America.

This booklet will attempt to give a brief history of the development of year-round education from its beginning as an idea in 1968 to its initial implementation at the Becky-David Elementary Schools in the summer of 1969, to further expansion to Central Elementary School in July 1971. The district's planning for further and final implementation will also be presented. The financial, curricular, and operational implications will also be discussed. An updating of community opinion shall also be presented.

ACKNOWLEDGEMENTS

Francis Howell School District thanks those who have contributed so heavily to the continuing success of the year-round experiment--especially the youngsters attending and their parents.

It goes without saying also, that no degree of success could have been attained without the dedication of the district's outstanding faculty and the inventive leadership of the principals.

The St. Louis area news media, particularly the St. Charles Journal, The St. Charles Daily Banner News, The St. Louis Post-Dispatch, KMOX and KSD Radio and TV, KTVI-TV, and KCLC/FM, have also provided an open and fair forum for the year-round school.

The favorable reporting received in several notable publications, including The Wall Street Journal, U.S. News and World Report, and the Reader's Digest, has done much to instill an added sense of pride in the people of Francis Howell.

The DANFORTH FOUNDATION is gratefully acknowledged for its generous assistance in the evaluation of the project and in the production of this report.

Special thanks must also go to the Francis Howell Board of Education upon whose shoulders rests the ultimate responsibility for the year-round plan.

A final word of gratitude goes to Dr. M. Gene Henderson whose dynamic and mature professionalism has provided the leadership necessary to ensure the successful planning, operation, and evaluation of this program.

FRANCIS HOWELL SCHOOL DISTRICT

Route #2
St Charles, Missouri 63301

BOARD OF EDUCATION

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Alan M. O'Dell, Administrative Assistant, Elementary Education

SCHOOLS

Becky-David Primary, Grades 1-3 Intermediate, Grades 4-6 1155 Jungs Station Road St. Charles, Missouri 63301 Wilma Cole, Primary Principal Dale Dunivan, Intermediate Principal	Weldon Spring Elementary Route #2 St. Charles, Missouri 63301 Jim D. Grimes, Principal
Central Elementary 4525 Central School Road St. Charles, Missouri 63301 Herman Wilfong, Principal	Francis Howell Junior High Route #2 St. Charles, Missouri 63301 W.R. Koelling, Principal James R. Engelage, Ass't. Prin.
Daniel Boone Elementary Route #1 Wentzville, Missouri 63385 Jim D. Grimes, Principal	C. Fred Hollenbeck Junior High 4555 Central School Road St. Charles, Missouri 63301 Wayne P. Gronefeld, Principal
	Francis Howell High School Route #2 St. Charles, Missouri 63301 Edwin G. Mossop, Principal Gerald M. Reisinger, Ass't. Prin. Frank H. Davis, Ass't. Prin.

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ACCREDITATION

Francis Howell District is accredited by the Missouri State Department of Education. The 1971-72 classification was AA. AAA is the highest classification rating.

ASSESSED VALUATION	\$29,917,500
BUDGET	\$ 4,825,410
TAX LEVY	\$4.96 per \$100
ENROLLMENT	4802 (1962 enrollment: 1516)
PAYROLL	\$ 2,609,274
PERSONNEL	
Certified Teachers and Administrators	241
Secretarial	24
Maintenance, drivers, food service, and health	<u>100</u>
TOTAL	365

BACKGROUND

The Francis Howell Public School District is located in St. Charles County, Missouri, southwest of Interstate Highway 70. It extends about thirty miles along the Missouri River to the Warren County line. It is about five miles wide and thirty miles long. The total enrollment is approximately 4900 students. The population of about 18,000 persons is predominately middle class.

The area is typically that referred to as a "bedroom district." The tax base or valuation per student is about \$6,000--60% of the Missouri State average. State Foundation monies help offset this difference, but some services and equipment cannot be provided.

The low valuation is a handicap in providing buildings since Missouri law limits bonding to 10% of the valuation. It became apparent in the fall of 1968 that buildings could not be provided to take care of ever-increasing enrollments if the nine month term were continued. Double or split sessions are always possible but they are less desirable for Francis Howell than for the many districts because the schedule, including transportation time, would require almost fifteen hours per day.

The purpose of the year-round plan at Francis Howell is economy--not so much dollar economy as space economy. The Board of Education had discussed year-round scheduling many times, but had always rejected it, thinking in terms of the four-quarter plan for all students. The main objection to most year-round plans has been the vacation schedule which under the four-quarter plan mandates a recurring winter vacation for some children. This plan also retains the three month "forgetting period" and a once a year opening and closing for students, which seem a waste.

For these reasons this plan was chosen (note year-round schedule) for one attendance area served by the Becky-David Schools--Primary (1-3) and Intermediate (4-6) housed in one building. The two schools are connected by a kitchen, with 48 classrooms, two principals, and about 1600 students. Concentrated planning began in the fall of 1968 with a target opening date of July 1, 1969, on a year-round schedule. Plans involved parents and staff. (See Appendix A.)

In late 1968, parent information meetings were held to present the tentative plans for parents' questions and discussions. Shortly after these meetings, a questionnaire was sent home to parents asking if they would support the year-round schedule for a one-year period. The results were as follows: 83% returned the ballots; 61% indicated "Yes," 38% indicated "No", and 1% were undecided. Of those who attended the information meetings 70% indicated "Yes" and 30% indicated "No". Those responding who did not attend the information meetings: 54% indicated "Yes", and 46% indicated "No". (See Appendix B.)

During the fall and winter of 1968-69, planning continued and at its November 19, 1968 meeting the Board of Education gave its final approval

for beginning year-round school at Becky-David on July 1, 1969.

The transition from the traditional schedule to the year-round calendar progressed amazingly well. A series of questionnaires for parents and teachers have been distributed and tabulated. (See Appendices C,D, E, and F.) These indicate a high degree of satisfaction with the plan.

Because of the obvious support for year-round school within the district and also because of the need for additional space, year-round school was extended to Central Elementary School in July 1971.

Because of increased enrollment at Becky-David, and since ten additional teaching stations were under construction at Central, plans were announced at Christmas time, 1971, to transfer students from the Becky-David attendance area to Central School. Because of this change it became additionally necessary to recycle several students to equalize numbers in the cycles at Becky-David and Central. These changes are to become effective in July 1972.

As a result, several parents voiced some dissatisfaction with changing cycles and further made recommendations to the school administration and Board of Education. These recommendations are being carefully considered and may well result in minor changes in the year-round schedule.

DESCRIPTION

The students are divided into four groups, referred to as Cycles A, B, C, and D. They are divided geographically, so students of a family and subdivisions attend the same cycle.

Every cycle has four nine-week sessions in school with each session followed by a three-week vacation. There is one vacation in each of the seasons of the year. After nine weeks of school, most children are ready for a break. The short vacations seem to prevent a good deal of "summer forgetting" and boredom.

At first thought, it is a little hair-raising for a principal to realize that there is a beginning and an ending every three weeks. Initially school officials were quite concerned about this, but everyone has adjusted well to the routine of opening and closing. As each group finishes a nine-week session, the buses that transport them must shift to a new area and a new group, which must be carried to school the next nine weeks.

The teachers have two basic kinds of schedules. Some Teachers have the same schedule as that of the students. They teach nine weeks followed by a three-week vacation. These teachers are scheduled for exactly the same number of days as teachers who work on the traditional nine-month schedule. Teachers also have the option of working full time. The great majority of specialists (P. E., music, art, Educable Mentally Retarded, Learning Disabilities, Emotionally Disturbed, speech correction, remedial reading) work on a year-round basis. Becky-David Intermediate School operates a semi-departmentalized program and these teachers also teach the full year. Full year teachers normally take two or three weeks vacation in the summer at which time they are replaced by a fully qualified person who is on vacation from the nine week-three week schedule, from a nine month school within the district, or from a neighboring school district.

A few teachers who are working on advanced degrees request all or a large part of the summer off to attend school. In this situation they are replaced for six, nine, or even twelve weeks in the summer and then subsequently work continuously until the end of June of the following year. It has been quite easy to find teachers from other schools in the Howell District and from surrounding districts to fill in during the summer months. Teachers and students are out of school for the usual vacations: Christmas, Thanksgiving, etc.

The contract for Howell teachers on the traditional schedule is nine and one-quarter months, or 185 days. Contracts for shorter or longer terms are pro-rated on the 185 day term. The great majority of Francis Howell teachers involved in the year-round school prefer and are on the nine week-three week schedule.

Becky-David and Central Schools are also ungraded. This is the third

year of ungradeless for the Intermediate School, the fourth year for the Primary School, and the second year for Central School. The nine week segments seem to strengthen this program because there is no long break in the school year. The upgraded scheme was planned and implemented by the staff and principals with the help of staff provided under a Title III program sponsored by the St. Charles City School District which is adjacent to the Francis Howell District. The continuous progress structure is slightly different in each of the schools but is founded on the similar philosophy that each child should achieve at a maximum rate in relation to his ability. Howell's ungraded philosophy is further based on the concept that a child must experience success in school in order for school to be truly meaningful.

PROBLEMS

As might well be expected, the year-round school did present the district with several problems. Some of these were anticipated, others were not. The intent here is to state our major problems and discuss the manner in which they were attacked. In addition, an assessment of the district's success in alleviating these problems is attempted.

1. Air conditioning

The extreme humidity of the St. Louis area makes the summers most uncomfortable. The great majority of homes are air conditioned and when youngsters are in the school setting, concentration and attention are difficult to attain unless air conditioning can be provided.

During the summer of 1969 when the year-round program was implemented on a trial basis, air conditioning was not provided. Most observed that the kids operated in the heat more efficiently than the teachers. School beginning and closing were moved back an hour to avoid the hottest part of the day.

In 1970, Becky-David school was air conditioned at a cost of \$80,000. This was less than one-fourth the cost of the classroom space saved by year-round school. The most recent bond issue included funds to air condition Central Elementary School and Hollenbeck Junior High School. These contracts are to be completed by May, 1972.

2. Maintenance

When schools are no longer vacant during the summer, certain problems especially with painting and floor maintenance present themselves. Painting is still accomplished in the summer. However, the crew works from three to eleven on Friday and all day Saturday in the year-round schools. By concentrating more men in fewer rooms at a time, the same number of rooms can be painted during the summer. This painting schedule has presented no problems to the functioning of the school program.

Much the same procedure is followed in the program of floor care.

However, since floor maintenance is a more extensive and time consuming procedure, it has been necessary to design a program of continual maintenance rather than merely a summer program. This has actually resulted in some improvement in the overall condition of our floors.

Some additional salary for time and a half pay has resulted from the year-round schedule, but it has been minimal.

3. Year-round Classroom Teachers

The staff at Becky-David Intermediate School works on year-round schedules. During the first two years of the program these teachers switched groups of students at the end of the nine-week session. This procedure meant that each teacher taught four different classes in a year. This worked a definite hardship on both teachers and pupils as neither attained a large degree of familiarity with each other. It is generally agreed that the constant changing of students and teachers was the most obvious mistake made in setting up the year-round plan.

At the beginning of the 1971-72 school year a semi-departmentalized structure was designed by the faculty and administration at Becky-David Intermediate. Pupils now have the same teachers throughout the year. Parents, students, and teachers are much more satisfied with the total school program as result of this change.

4. The Recycling Concept

It is urgent that a school district considering the nine week-three week year-round schedule take a careful look at the ways in which students may be transferred from cycle to cycle. This plan is usually considered by districts which are growing. It is possible in making the initial cycle assignment to include growth areas in each cycle. However, imbalance is almost certain to occur sooner or later. Imbalances among cycles or among grades within a cycle can become disturbing enough to require recycling or reassignment among cycles.

Recycling seems to have become desirable but not absolutely necessary at Becky-David schools after three years of operation. The decision was made to reassign some students at Becky-David and Central (Central after one year of operation) because additional classroom space was becoming available at Central, so some students from Becky-David area were transferred to the Central attendance area effective July 5, 1972.

The transfer of students down the cycles, i.e., A to B, C, or D; B to C or D; or C to D, adds three weeks vacation time to the student's schedule. Transferring up the cycles from D to C, C to B, or B to A, eliminates a three week vacation. In some areas of the country this would perhaps be desirable during the winter months. A transfer up from D to B, or C to A, would eliminate three weeks of schooling

for such transferred students, and moving from D to A would eliminate six weeks schooling.

The various ways of accomplishing the recycling should be studied carefully and explained to all involved before this type of year-round schedule is adopted. Upon first examination it seems to be a confusing disadvantage, but it need not be so if understood.

FINANCIAL IMPLICATIONS

An oft repeated question in the interviews with visitors concerns the cost factors associated with the year-round schedule. Some authorities are sure it costs less; others, just as certain, say it must cost more.

The Francis Howell Board and Administration were eager to make cost comparisons and indeed such comparisons were the subject of a grant. A report was published. The results were not conclusive.

Some thoughts on fiscal matters which may apply to year-round school are:

1. The instructional cost per student can be raised or lowered at any time by spending more or less. An increase in such costs should not be attributed to the schedule because it is not a function thereof.
 - a. The schedule change does not make additional materials or supplies necessary.
 - b. The teacher-pupil ratio should not change unless someone wishes it changed. It is true that extended contracts are likely to go to higher paid teachers, but this, too, is a matter of choice.
2. The needed capital outlay per student should be reduced under the year-round schedule to about 80% of that which would have been on the traditional schedule.
 - a. Three rooms serve four classes of students.
 - b. Three busses transport four complements of students.
 - c. Three sets of furniture serve four sets of students.
 - d. Offices, hallways, restrooms, parking lots, walkways, and sites all serve four students for each three previously served.
3. Finally, any expenditure deemed to be additional and attributed to the schedule change should be determined carefully since the implementation of a change is often the excuse for added expense, but not the reason.

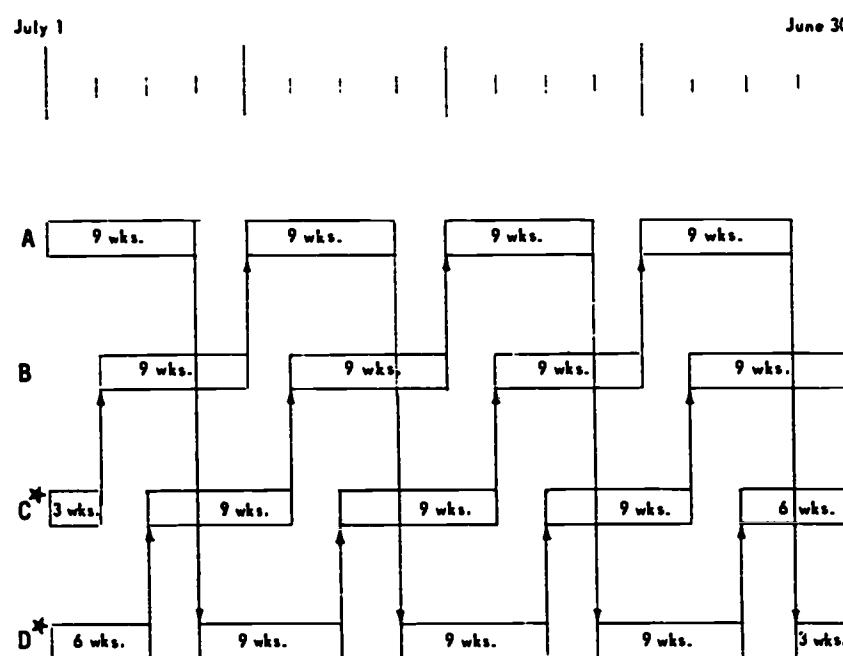
FUTURE PLANNING

On July 5, 1972, C. Fred Hollenbeck Junior High School will open as a year-round school. The first phase of the building, just completed, will house only the district's seventh graders. Seventh year students living in the area which presently attend on a year-round schedule will continue to attend on the same cycles as they have while in elementary school. About sixty students now attending elementary school in two small schools which do not operate on a year-round basis will continue to attend school on the traditional nine month calendar. In essence, then, Hollenbeck will operate on the year-round and the traditional schedule simultaneously.

The school district has recently received a grant from the Danforth Foundation to plan the transition of the remainder of the district to the year-round schedule. A great deal of curriculum revision is planned for the secondary level. A steering committee made up of secondary teachers and administrators has been formed. These people will have a major responsibility for plotting the future course of year-round school in Francis Howell.

Many course offerings in 1972-73 will be affected by the move toward year-round school. Present plans call for a large amount of experimental and pilot activities to take place in the 1972-73 school year with further implementation scheduled for July 1973.

YEAR-ROUND SCHEDULE



*State statutes require that the school year (174 days of classes) fall between July 1st and June 30th of the following year. For this reason, one 9 week session for cycles C & D was divided into a three and six week sessions. It should be noted, however, that after the first year all sessions are in reality nine weeks in length since the three and six week sessions at the beginning and end of Cycles C and D join to make up the nine-week sessions. Legislation will be introduced in the Missouri legislative session beginning on January 1, 1973 which will permit a staggered beginning for Cycles C and D and thereby eliminating the short session.

APPENDIX A

**QUESTIONS AND ANSWERS
ABOUT THE YEAR-ROUND SCHOOL AT BECKY-DAVID
From Parent Meeting on October 29-30, 1968**

1. Has this been tried before elsewhere?

Year-round school is fairly common in the journals, but this particular schedule is unique.

2. Will the children in the same family go on the same cycle? Yes.

3. How would holidays work out?

There would be little or no change in the academic year. All schools would be closed for Thanksgiving, Christmas, and Easter holidays. Schools would be closed for teachers' meetings, teacher-parent conferences, etc.

4. How long will this keep us from having split sessions?

This particular plan will solve the space problems for one year. Additional bond money and the year-round school applied to Central should help avoid split sessions for at least one additional year.

5. How many extra teachers will we need on this plan?

The plan itself has no effect on teacher-pupil ratio.

6. How will it affect pupils transferring in or out of the district?

"In" transfers between July 1 and September could lose a maximum of four weeks, and "Out" transfers could lose the same amount. This is not considered a serious problem, because schools are seldom teaching on the same page in the same book at any given time anyway. It is more important to provide careful and complete information so the child can be properly placed upon reaching a new school.

7. Can children concentrate as well in the summer heat?

Summer school has been common for years in elementary, secondary, and colleges. No adverse effects have been reported. Air conditioning would be desirable but not until trial periods has elapsed. Businesses and factories and virtually every institution continue in the summer. Why should not schools?

8. Why can't it be done at high school?

The high school is far too small to allow economical use of the year-round plan. Many subjects are taught once each day. On the four cycle plan each would have to be taught four times.

9. Will students forget too much in the three-week vacation period and require too much time for review each time?

No. Teachers feel that the three-week vacation period will not be much different than Christmas vacation which is often two weeks. About a day of review is usually sufficient for this vacation. The three-month vacation usually requires several weeks of review.

10. Compare the cost of air conditioning Becky-David with building the needed classrooms.

Air conditioning Becky-David is estimated to cost about \$150,000. To build the fifteen additional classrooms which would be made available by the year-round plan would cost something over \$300,000.

11. Will we need a tax increase to operate on the year-round plan?

The year-round plan is less expensive in the long run than any alternative now open to the school district. A tax increase will be needed for 1969-70, but not because of the year-round plan. A tax increase will be needed because valuation does not rise as rapidly as does enrollment. If there were a radical increase in State funds, a tax rise might not be necessary. This is unlikely.*

12. Will this plan stretch our taxes?

Using furniture, buses, and buildings for an additional three-month period each year is certainly more economical than having these things unused during that time.

* Note: Taxes were decreased in 1970 by 8 cents per 100 dollars valuation.

APPENDIX B**INITIAL PARENT SURVEY**
November 1968

The Francis Howell Board of Education must make a decision concerning the year-round school. The Board would like to know your opinion before making that decision. Please complete the form below and return it to the school by November 15.

1. Schools must have parent support to be effective. Will you support the year-round school at Becky-David for a one-year trial period?

____ Why? _____

2. Please check the sources of your information concerning the year-round schedule:

____ Parent meeting at school
 ____ Newspapers
 ____ Friends and Neighbors
 ____ Other: _____

APPENDIX C**QUESTIONNAIRE FOR TEACHERS**
SUMMARY
October 1969

A total of 48 questionnaires were given to the faculty of Becky-David Primary and Intermediate School - 47 were returned. The items on which opinions were requested along with the responses are as follows:

1. Do you feel that your classes' attitude toward year-round school in general has: a) Improved - 36.2%; b) Remained unchanged - 59.6%; c) Become worse - 4.2%.
2. How do you believe the year-round plan has affected learning: (a) Hindered - 10.6%; b) Helped - 44.7%; c) No change - 26.5%; d) No answer - 17.1%.

3. Do you believe summer heat adversely affected learning: a) Yes - 21.3%; b) No - 42.5%; c) Uncertain - 21.3%; d) I did not teach in summer - 14.9%.
4. Does it appear to you that students have progressed more rapidly since September 1st than during July and August? a) Yes - 21.3%; b) Uncertain - 21.3%; c) No - 25.5%; d) I did not teach during July and August - 21.3%; e) No answer - 10.6%.
5. Do you believe that the year-round plan has hindered the ungraded school plan? a) Yes - 36.2%; b) No - 36.2%; c) Uncertain - 25.5%; d) No answer - 2.1%.
6. Are you satisfied with your teaching schedule? a) Yes - 74.5%; b) No - 14.9%; c) No answer - 10.6%.
7. Has changing groups of students each nine weeks been educationally: (Answer only if this applies to you). a) Advantageous - 21.3%; b) Disadvantageous - 14.9%; c) No answer - 63.8%.
8. Would you like to see the year-round plan continue: a) Yes - 74.5%; b) No - 2.1%; c) Uncertain - 19.1%; d) No answer - 4.3%.
9. List the main problems with the year-round plan.
 - a. Returning during teachers' vacations for meetings.
 - b. Difficulty in going to summer school.
 - c. Some cycles overcrowded.
 - d. Difficulty in grouping.
 - e. Too many levels in one classroom.
 - f. Heat.
 - g. Some children have difficult time in adjusting to different teachers.
 - h. Teachers changing to different rooms.
10. List some ways in which the plan might be improved.
 - a. More intensive co-operation among the faculty members.
 - b. Conferences twice a year (maybe in Oct. or Nov. & Feb. or Mar.).
 - c. More parent education on the subject.
 - d. Applied district-wide so that Junior-Senior High children won't have different schedules.
 - e. Air conditioning.
 - f. All teachers teach on the 9 week-3 week method.
 - g. Instead of changing teachers each 9 weeks, keep the same teacher with 9-3 for slower students.
 - h. More information circulated and public relations improved as to informing parents of cycling, etc.
11. In your opinion, what are the main advantages of the year-round plan?
 - a. Pupils forget less during the shorter vacation periods.

- b. From a teacher's point of view the plan is splendid. More and different experiences, challenges, and findings.
- c. After a break, students and teachers come back with a refreshed feeling to get in and work harder.
- d. For the teacher, the three weeks gives a chance to catch up on work, renew lesson plans, get fresh ideas, and for a new teacher a chance to make bulletin boards.
- e. Three week vacation cuts down on review.
- f. This plan seems to be built to meet each child's physical, emotional, social and academic needs. It is flexible and allows constant evaluation.
- g. Gives teachers full employment year-round.
- h. Makes use of school building year-round.

APPENDIX D

**QUESTIONNAIRE FOR PARENTS
SUMMARY
September 1969**

A questionnaire for parents designed to determine initial parent opinion concerning the year-round school was sent to Cycle A, B, and C, groups during the third week of August, 1969, and to Cycle D on the day following their return from their first vacation period in early September 1969.

A total of 793 questionnaires were sent home - 508 from the Intermediate School and 285 from the Primary School. Questionnaires were sent home with the oldest child attending Becky-David from each family. There were 575 questionnaires returned - 380 from the Intermediate School and 195 from the Primary School. Translated to percentages, the total return was 72.5% - Intermediate School 74.8% and the Primary School 68.4%.

The items on which opinions were requested along with the percentage of responses are as follows:

1. Concerning the children's attitude toward the year-round school:
Our child has preferred the 9 week-3 week plan over the traditional nine month year, 23.96%. He/She has expressed that either way is fine with them, 13.14%. He/She has stated that he/she would prefer the nine month year, 29.45%. He/She has expressed little or no opinion either for or against the year-round plan, 28.61%. Uncertain, 4.82%.
2. Do you feel that your child's attitude toward school in general: Has improved, 17.45%; has remained unchanged, 64.43%; has become worse, 13.2%; uncertain, 4.89%.
3. Do you believe that the year-round plan has hindered or helped learning? This question is stated poorly and was misunderstood

by many parents. For this reason it was difficult to ascertain what parents meant by many of their answers.

4. What has been the relationship between your elementary youngsters and the junior and senior high youngsters?
Elementary children are envious of junior-senior high students, 21.21%; junior-senior high students seem envious of elementary children, 5.05%; uncertain, 73.73%.
5. Because of the year-round plan, our vacation plans: Were eliminated, 8.71%; were changed to the point we were disappointed, 12.99%; were alerted, but everything worked out fine, 25.12%; did not have to be changed at all, 58.08%; uncertain, 3.07%.
6. Because of the year-round plan our usual summer activities (baseball, swimming, camping, etc.); Were hindered severely, 11.92%; were hindered moderately, 28.96%; were hindered very little, 56.38%; uncertain, 2.72%.
7. What, in your opinion, has been the attitude of school officials toward vacations and other summer activities?
Very accommodating, 11.92%; cooperative, 37.90%; begrudgingly cooperative, 1.95%; uncooperative, 1.06%; antagonistic, 0.71%; uncertain, 46.44%.
8. What, in your opinion, has been the attitude of teachers toward vacations and other summer activities?
Very accommodating, 13.28%; cooperative, 34.96%; begrudgingly cooperative, 1.57%; uncooperative, 0.96%; antagonistic, 1.39%; uncertain, 48.07%.
9. Do you believe that the weather has hindered your child's ability to learn satisfactorily?
Yes, 30.63%; no, 59.38%; uncertain, 9.98%.
10. Do you feel that hot weather has been the main difficulty of the year-round plan?
Yes, 49.40%; no, 42.56%; uncertain, 8.03%.
11. Do you feel that the year-round plan should continue if air conditioning is not provided?
Yes, 48.12%; no, 41.83%; uncertain, 10.03%.
12. Would you be willing to vote for a bond issue which provided air conditioning for Becky-David School?
Yes, 60.17%; no, 26.31%; uncertain, 13.50%.
13. Has your opinion the year-round school changed since the questionnaire in the spring?
No, I'm still against it, 23.91%; no, I still think it's a good idea, 42.11%; yes, I thought it was a good idea and now I'm against it, 3.46%; yes, I was against it, now I think it's a good plan, 12.65%; uncertain, 17.85%.

APPENDIX E

**SECOND QUESTIONNAIRE FOR PARENTS
SUMMARY
March 1970**

A second questionnaire for parents was sent home to Cycle A, B, and C parents on March 2, 1970, and to Cycle D parents on March 12, 1970. A total of 878 questionnaires were sent, 567 from the Intermediate School and 311 from the Primary School. There were 590 questionnaires returned - 384 from the Intermediate School, 206 from the Primary School. Translated to percentages, the total return was 67.1% - Intermediate School, 67.7%; Primary School, 66.2%. These figures and percentages were figured on April 27, 1970. Questionnaires returned after that time were not included.

The items on which opinions were requested along with the percentage of responses are as follows:

1. Children's attitude toward year-round school:
Our child has preferred the 9 week-3 week plan over the traditional 9 month year, 33.3%; he/she has expressed that either way is fine with them, 14.2%; he/she has stated that he/she would prefer the 9 month year, 31.5%; he/she has expressed little or no opinion for or against the year-round plan, 22.3%; no opinion, 2.7%.
2. Do you feel that your child's attitude toward school in general: has improved, 23.2%; remained unchanged, 55.5%; become worse, 12.7%; no opinion, 6.7%.
3. Generally, how do you feel the year-round school has affected your child's learning?
Hindered, 14.9%; helped, 25.2%; no noticeable effect, 51.5%; no opinion, 6.2%.
4. What has been the relationship between your elementary youngsters and junior and senior high youngsters:
Elementary children seem envious of junior/senior higher, 11.5%; junior/senior higher seem envious of elementary children, 5.9%; no opinion, 19.4%. (Remainder of parents surveyed did not have students in junior/senior high).
5. How do you feel about the shorter 3 week vacation instead of the 3 months summer vacation?
Seems desirable, 39.4%; no strong feelings, 23%; undesirable, 32.8%; no opinion, 2.0%.
6. Do you feel that the year-round plan should continue if air conditioning is not provided?
Yes, 37.2%; no, 48.4%; no opinion, 8.1%.
7. In your opinion, changing of teachers each nine weeks has been:
Educationally desirable, 22.0%; of no consequence, 19.8%; educationally undesirable, 25.4%; no opinion, 7.6%. (Children of remainder of parents surveyed did not change teachers each time). 231

8. Would you be willing to vote for a bond issue for air conditioning Becky-David?
Yes, 50.0%; no, 29.3%; no opinion, 8.8%; no answer, 11.9%.
9. In your opinion has the change of bus drivers each 9 weeks been:
Satisfactory, 32.2%; of no consequence, 32.3%; unsatisfactory, 17.1%; no opinion, 14.0%.
10. After experiencing the year-round plan would you:
prefer to remain on the year-round plan, 61.0%; prefer to go on split sessions at the junior/senior high campus, 5.0%; prefer to increase property taxes to a level which provide enough building for 9 month school throughout the entire district, 16.0%; other, 5.0%; no opinion, 5.5%.
11. Has your opinion toward the year-round school changed since the last questionnaire in August/September 1969?
No, I'm still against it; 21.1%; No, I still think it's a good idea, 44.2%; yes, I thought it was a good idea and now I'm against it, 6.6%; yes, I was against it but now I think it's a good plan, 5.2%; I did not receive an earlier questionnaire but I think the year-round plan is a good idea, 6.2%; I did not receive an earlier questionnaire but I think the year-round plan is a poor plan, 3.0%; no opinion, 6.9%.

APPENDIX F

THIRD QUESTIONNAIRE FOR PARENTS

SUMMARY
May 1971

A third questionnaire for parents was sent home to all cycles in May 1971.

A total of 901 questionnaires were sent home--573 from the Intermediate School and 328 from the Primary School. There were 478 returned ---293 from the Intermediate School and 185 from the Primary School. The total return was 53%; from the Intermediate School 51.1%, and from the Primary School 56.4%. These percentages were as of July 9, 1971.

The items on which opinions were requested along with the percentage of responses are as follows:

1. Children's attitude toward year-round school: Our child has preferred the 9 week-3 week plan over the traditional 9 month year - 40.5%. He/She has expressed that either way is fine with him/her - 10.2%. He/She has stated that he/she prefers the 9 month year - 22.6%. He/She has expressed little or no opinion either for or against the year-round plan - 20.1%. No opinion - 6.3%.

2. Generally how do you feel the year-round plan has affected your child's learning: Hindered, 7.5%. Helped, 37.4%. No noticeable effect, 41.9%. No opinion, 13.1%.
3. Do you have youngsters in Junior or Senior High as well as at Becky-David:
Yes - 40.4%. No - 59.5%.
4. Would you be in favor of extending year-round school to the junior and Senior High School? (Answer only if you checked "Yes" on #3.):
No - 38.9%. Yes as rapidly as possible - 28.8%. Yes, as need for space dictates - 32.1%.
5. How do you feel about the shorter 3 weeks vacations instead of the 3 months summer vacation: Desirable - 54.3%. No strong feelings - 24.4%. Undesirable - 16.6%. No opinion - 4.5%.
6. Do you feel that it was wise to provide air conditioning for Becky-David:
Yes - 87.9%. No - 7.1%. No opinion - 4.9%.
7. In your opinion, has the year-round plan functioned better in 1970-71 than in 1969-70: Yes - 40.9%. No - 9.9%. No opinion - 49.1%.
8. After experiencing the year-round plan, would you: Prefer to remain on the year-round plan - 83.9%. Prefer to go split sessions at the junior-senior high campus - 1.6%. Prefer to increase property taxes to a level which would provide enough buildings for 9 months school throughout the entire district - 10.5%. Other - 3.8%.
9. If the money were available to build the necessary buildings, would you desire to return to the 9 month schedule: Yes - 35%. No - 55.2%. No opinion - 9.6%.
10. Has your opinion toward the year-round plan changed since the last questionnaire in April 1970: No, I'm still against it - 12.2%. No, I still think it's a good idea - 48.8%. Yes, I thought it was a good idea and now I'm against it - 2.1%. Yes, I was against it, now I think it's a good plan - 4.5%. I did not receive an earlier questionnaire but I think the year-round plan is a good idea - 19.1%. I did not receive an earlier questionnaire but I think the year-round plan is a poor idea - 0.6%. No opinion - 12.4%.

LA MESA—SPRING VALLEY SCHOOL DISTRICT,
EDUCATION CENTER,
La Mesa Calif., April 17, 1972.

Hon. JOHN B. ERLENBORN,
House of Representatives,
Washington, D.C.

DEAR SIR: It was with interest that I read in the San Diego Union, Saturday, April 10, 1972, of the formation of a general subcommittee on year-round school education.

I am taking the liberty of sending you a copy of the two booklets prepared by the La Mesa-Spring Valley School District in La Mesa, California, regarding our first year of piloting Year-Round School for Continuous Education.

At the present time we have a citizens advisory council which is now in the process of evaluating the program for the first school year. Should you desire further information regarding the evaluation, please feel free to inquire.

I hope the enclosed material will aid in your committees' work.
Sincerely,

DOX COCHENOUR,
Administrative Assistant, Public Information.

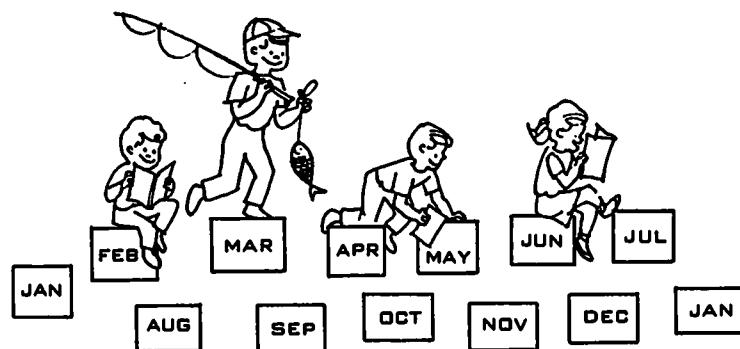
Enclosures.

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YEAR-ROUND SCHOOL...

for CONTINUOUS
EDUCATION



L. MESA-SPRING VALLEY SCHOOL DISTRICT
1750 Date Avenue (714) 469-5171
La Mesa, California 92041

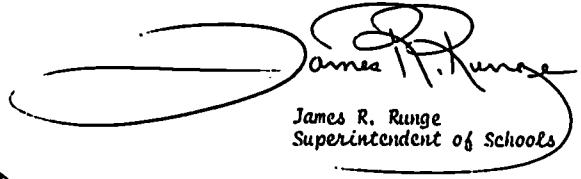
November 1971

FOREWORD

A pilot program for Year-Round School for Continuous Education has been initiated in one junior high school and two elementary schools in the La Mesa-Spring Valley School District. Members of the staff and community, responsible for development of the program are searching for improved ways of educating children and for maximum use of buildings and equipment.

When a school district attempts a significant innovation, it is necessary to plan in terms of local conditions and characteristics. The following pages outline and describe the local setting, procedures used in approaching the problem, plans developed, and methods of assessing the results of year-round school organization.

This information is documented for reference in the study of our pilot program, and it is hoped that it may be useful to others interested in year-round school organization.

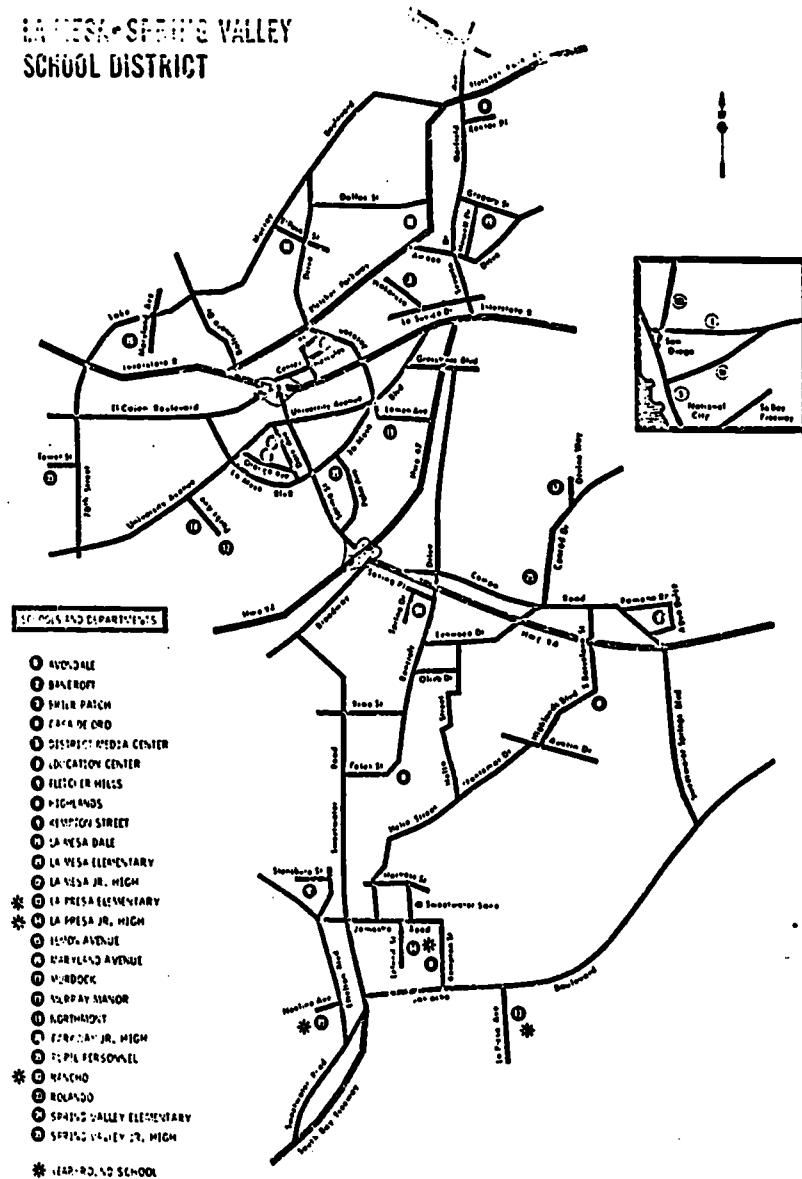


James R. Runge
Superintendent of Schools



CLIACTV

LA MESA-SPRINGS VALLEY SCHOOL DISTRICT



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THE LA MESA AND SPRING VALLEY COMMUNITIES: A DESCRIPTION

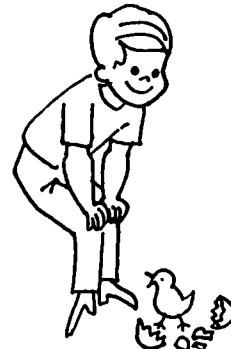
Schools must reflect the unique attitudes, values, and needs of the communities they serve. Innovative programs can be successful only to the extent that they are attuned to local situations...

The La Mesa and Spring Valley communities lie east, and adjacent to, the City of San Diego, California. Together with several small unincorporated areas, they cover an area of 26.5 square miles and encompass a population estimated in excess of 75,000.

Although these communities are most accurately described as *suburban-residential*, and are comprised principally of single-family dwellings, recent construction shows an increasing percentage of large apartment units and mobile home facilities. Several large parcels of undeveloped land remain within this geographical area, and building and subdivision are continuous. Plans for a major housing development in South Spring Valley promise to bring the total population well over 100,000 within the next few years. At the present time the concentration of minority ethnic groups is low.

While two large shopping centers and a variety of light industries are located within these communities, most residents find employment in the greater San Diego business-industrial-military complex. Since local taxes must be generated principally from small residences, tax rates are comparatively high.

With average daily maximum temperatures ranging from 84° during the months of August and September to 66° during January and February, year-round recreational activities abound. Ocean, bays, mountains, and deserts all are within easy driving distance via the several major freeways which serve the area.



THE LA MESA-SPRING VALLEY SCHOOL DISTRICT: A DESCRIPTION

The staff, the buildings, the equipment...
*all exist for a single purpose: to create
 a setting in which children can best grow
 and learn.*

THE EDUCATIONAL PROGRAM

Within broad philosophical parameters and practical limitations imposed by available resources, exploration and innovation are encouraged on the part of children, teachers, and administrators. Adaptation to local needs and conditions is favored, rather than district-wide uniformity of program. In addition to the Year-Round School Program initiated in three La Mesa-Spring Valley schools in July, 1971, a number of other unique programs are in operation in individual schools, clusters of schools, or districtwide. Among these are:

- Kitchen Conversions to School Media Centers
- Kindergarten Assessment
- Language Arts and Math Project (LAMP)
- Junior High School Media Centers
- Staggered Primary Program
- Nuffield Mathematics
- Inquiry-Conceptual Social Studies (TABA)
- Cross-Age Tutoring
- Differentiated Staffing
- Ungraded Primary
- Team Teaching

Special programs of education for handicapped children are also offered:

- Hearing Handicapped
- Multiple Handicapped (Deaf-Blind)
- Trainable Mentally Retarded
- Educable Mentally Retarded
- Speech Correction
- Home Tutoring
- Specialized Teaching in Reading (Basic Reading Act)
- Educationally Handicapped (Learning Disability Groups and Engineered Classrooms)

Additional specialized programs of education are also available to La Mesa-Spring Valley children through cooperative agreements with neighboring school districts.

PHYSICAL FACILITIES

The La Mesa-Spring Valley School District is comprised of eighteen elementary schools and four junior high schools which serve approximately 15,000 children in preschool through eighth grade. School plants constructed prior to 1965 are of the traditional *finger plant* design with self-contained, single-class units. The two most recently constructed schools feature open space, climate control, and a central media center. Elementary schools are designed to house approximately 700 children on a regular nine-month program; junior high schools can accommodate 1,100 students.

GROWTH PROJECTIONS

Over a period of twenty-five years, the La Mesa-Spring Valley School District has grown from a single kindergarten-eighth grade school to its present size of twenty-two schools. The period of most rapid growth during the 1950's and 1960's has slowed, but new residential and commercial construction continues to take place. Plans for several housing developments, some already in progress, promise to again send school enrollments soaring. While certain areas in the northern and central portions of the District are actually declining in school population, heavy increases are occurring in the southernmost area. The situation, therefore, becomes one of imbalance: available classroom space in the area geographically furthest removed from the area where school housing pressures are mounting. Finding a feasible solution to this problem is complicated by the fact that the area in question is fourteen miles long and bisected by several major freeways. The implications of this situation, in a district which is dependent upon the State School Building Aid Program, are severe. Building entitlement is accumulated slowly since the net gain in enrollment is slow.

PERSONNEL

The staff of the La Mesa-Spring Valley School District is composed of a total of 1,025 full-time employees. Of this number 660 are certificated teachers and administrators. Noncertificated positions include clerical, maintenance, transportation, food service, gardener, and technician assignments as well as a growing number of paraprofessionals who work directly with children. Approximately 137 noncertificated positions are filled with hourly employees.

Salaries and benefits for both certificated and noncertificated employees are commensurate with those in surrounding metropolitan areas. Desirability of the greater San Diego area as a place of residence, and a favorable salary schedule, have permitted selectivity in hiring staff.

FINANCIAL RESOURCES

Although La Mesa and Spring Valley are considered prime residential areas, the La Mesa-Spring Valley School District is properly classified as an impoverished district. Despite a consistently high tax rate, the modest homes which comprise the bulk of the community simply do not generate sufficient local school income to operate an adequate instructional program.

The La Mesa-Spring Valley School District is heavily assisted by the State of California Equalization Program for current operating expenses. The District is also tied closely to the State School Building Aid Program in constructing new school facilities. Assessed valuation per child approximates that of the average California school district, as does the cost of education per pupil. While local school tax and bond issues have met with notable success for a quarter century, the current community climate does not encourage additional tax and bond increases.

Approximately 85% of the operating budget is invested in staff salaries. Solvency is maintained through operating at a relatively high pupil-teacher ratio of 31:1 in kindergarten, 30:1 in the primary grades, 34:1 in grades four through six, and 28:1 in the junior high school. (The 28:1 ratio nets out at 33:1 when the variance between the junior high school pupil day and teacher day is taken into consideration.) Averages can be deceiving, and many District classes operate in excess of the figures stated. Maintaining close proximity to these target averages frequently forces midyear reorganization of District schools. Average class sizes in La Mesa-Spring Valley School District are the highest in the State of California among districts of comparable size.

An overview of the La Mesa-Spring Valley School District financial capability may be obtained from a study of the percentage analysis of income and expenditures on the next page.



LA MESA-SPRING VALLEY SCHOOL DISTRICT FINANCIAL ANALYSIS

TOTAL BUDGET - 1971-72	<u>\$ 13,683,857</u>
------------------------	----------------------

Sources of Income:

Federal (P.L. 874, National Defense Education Act, Elementary and Secondary Education Act, etc.)	5.20%
State	36.30%
Local	<u>50.04%</u>
Total Income	91.54%
Beginning Balance	<u>8.46%</u>
GRAND TOTAL	100.00%

Expenditures:

Administration	2.73%
Instruction	65.55%
Health Services	.90%
Operation of Plant	6.64%
Maintenance of Plant	2.54%
Mixed Charges	3.72%
Pupil Transportation	<u>2.29%</u>
Total Current Expense of Education	84.37%
Capital Outlay	2.66%
Debt Service	2.73%
Other Expenses	.74%
Undistributed Reserves	<u>8.01%</u>
Total Budget	98.51%
Ending Balance	<u>1.49%</u>
GRAND TOTAL	100.00%

THE LA MESA-SPRING VALLEY YEAR-ROUND SCHOOL CALENDAR

The year-round school attendance calendar of the La Mesa-Spring Valley School District provides for a continuous cycle of education distributed throughout the calendar year. Special characteristics of this calendar are:

- Children assigned to each of the four attendance schedules attend school an equal number of days (177) during the school year.
- Intersessions operate continuously.
- Maximum utilization of staff and facilities is accomplished through 240 days of plant operation with children in attendance.
- Strict adherence to the 45-15 pattern of school attendance has been modified. Attendance periods may vary from 43 to 47 days in order to avoid beginning an attendance block on a Friday, or ending an attendance block on a Monday.
- A one-week vacation period at Christmas, and elimination of a spring vacation, permit adding several days to the summer seasonal vacation of each attendance group. Thus, all children have a five-week vacation at some time during the mid-June to mid-September period.
- A single week at Christmas is justified on the basis that one group is ending a three-week vacation period, and another group is beginning a three-week vacation. A third group is only fifteen days from a vacation, and the fourth group has been back to school for only fifteen days. A longer Christmas vacation would interrupt the continuous education cycle for all groups.
- All legal and local holidays are recognized, as well as the Friday after Thanksgiving and the two days preceding Christmas.
- At two times during the year, only two groups are in attendance. Major maintenance and classroom refurbishing may be accomplished during this period, since not all classrooms are in use.
- The La Mesa-Spring Valley calendar is semi-repeating and can, with minor yearly modification, continue indefinitely.
- The calendar is coordinated with the nine-month calendar of the local high school district in such a way that children entering high school from eighth grade have a minimum of five weeks of vacation before entering high school.
- Sufficient flexibility is gained, through eliminating spring vacation and reducing Christmas vacation, that minor calendar modification would permit closing the entire school plant for an additional two weeks each year should this be desired.

**THE LA MESA-SPRING VALLEY MODIFIED 45-15
YEAR-ROUND PLAN: A DESCRIPTION**

*"Year-round school places education in
a context where we dare to think differently..."*

James R. Runge
Superintendent of Schools

GENERAL ORGANIZATION

The La Mesa-Spring Valley Year-Round School for Continuous Education presently operating in two elementary schools and one junior high school is most aptly described as a modified version of the 45-15 design popularized by the Valley View, Illinois, School District. It is modified in the sense that attendance periods may vary from forty-three to forty-seven days in order to avoid awkward school attendance blocks caused by the unequal distribution through the year of legal and local holidays. Essentially, however, children attend school for nine weeks and are on vacation for three weeks, aside from one week at Christmas when all groups are on vacation. Three-week vacations actually encompass twenty-three calendar days, and fall roughly into the four seasons of the year for all attendance schedules.

The duration of the school year for children is not extended by this plan. They attend school 177 days - the same as children in La Mesa-Spring Valley schools which are not on the plan. Their school year is simply distributed more broadly across the calendar year than is the case in traditionally organized schools. At any given time three-fourths of the children are attending school while one-fourth are on vacation.

STAFF ASSIGNMENT

Classroom teachers in the La Mesa-Spring Valley plan are, for the most part, tracked with their pupils. That is, when the children go on vacation, their teacher also leaves. When they return for their next nine-week attendance period, they are assigned the same teacher, but return to a different classroom. It is intended that teachers will remain with a group through four nine-week blocks which would be equivalent to a traditional school year. This general rule is subject to modification at the junior high school level where teachers and groups of children rotate more frequently, depending upon the nature of the course offering.

In order to maintain the same level of auxiliary services to all children, regardless of their particular attendance schedule, it has been necessary to extend contracts of some specialized personnel up to 220 days. In such cases, salary is increased by a per diem amount. Contracts have been extended for personnel who work on a continuing basis with children: librarians,

health education specialists, speech and hearing specialists, reading specialists, and others. It is not necessary to extend contracts of those who work with children on a per diem basis such as would be the case with psychologists, audiometrists, resource teachers, and others. Special services in the latter categories were simply redistributed equally throughout the year.

ADMINISTRATION

Contracts of year-round school principals have been extended to 212 days from the 199-day contracts of nine-month school principals. Salary was increased commensurately at a per diem rate. At each of the participating elementary schools, a qualified certificated aspirant was identified who, in addition to regular classroom teaching duties, is assigned certain administrative tasks. He is paid a stipend for this added responsibility. On two of his four yearly vacations this teacher-additional duties assumes full charge of the school, thereby releasing the principal for vacations. He is paid a per diem rate for this extended service in addition to the stipend. This procedure places the administration of the school in the hands of one who is fully acquainted with the student body, staff, and community. It has the added advantage of providing a practical administrative internship to those who aspire to nonclassroom positions.

Contracts of the school secretary and the junior clerk-health have been extended to 262 days. Custodial and maintenance services are on a year-round basis at all district schools. To date it has not been necessary to expand central office administrative and clerical positions beyond the number which existed prior to year-round school operation.

INTERSESSIONS

The traditional summer school program has been redesigned to articulate with the Year-Round School Program. Intersession courses are offered continuously during all of the three-week vacation periods. By administrative decision, the California State Department of Education has granted permission to redistribute summer school in this manner, and will provide ADA reimbursement at the same level as in the past. Intersession courses are staffed either by teachers from within the District who are on vacation, or by teachers hired on a limited contract from outside the District. Intersession teachers are paid the same daily rate as summer school teachers.

Great flexibility is encouraged in planning intersession courses. Duration of the courses may be from one to three weeks, and from one to four hours per day, depending upon the nature of the course, and the age and interests of the children. Since enrollment in these courses is optional, it has been necessary to take a conservative posture in planning and staffing the first few until sufficient data is accumulated to permit accurate enrollment projections.

As the intersession program develops, we propose to explore a number of exciting possibilities. Cross-age tutoring and individualized contract learning, centered in the school media centers, have already been successfully implemented. Among other possibilities which remain to be explored are courses with a seasonal emphasis utilizing out-of-school recreational facilities and personnel, chaining or linking courses of a related nature through two--or several--intersession periods, and extended travel courses.

Since intersession courses operate concurrently with regular school operation, certain savings accrue to this program which help offset Year-Round School Program administrative and clerical costs. That is, while the courses generate ADA reimbursement, no additional administrative or clerical costs are involved.

PLANT UTILIZATION

Available classroom housing space is generated, under the 45-15 plan, through continuous use of existing school facilities. Pupils returning from vacation move into classrooms vacated by those just leaving for a vacation period. Thus, when operating at full capacity, three schools can house the equivalent of four school populations. Classrooms are changed every nine weeks, but children remain with their teacher and with the group to which they were originally assigned.

The La Mesa-Spring Valley Year-Round School Program was specifically designed for less-than-saturation utilization of school plants. In each school on the plan, one or two open rooms are retained to allow for intersession and recreation use, and for special-interest centers. This available space may also accommodate a schedule of major maintenance since classes may be temporarily relocated while classrooms are refurbished.

OPTIONAL ATTENDANCE FEATURE

Early in the planning stages it was determined that community acceptance of the Year-Round School Program might be enhanced if it were possible to offer an option to parents concerning their choice of plan. The rapidity with which the plan was implemented, February to July of one year, meant that some people were already committed to unalterable vacation plans and could not participate regardless of their general attitude toward year-round school.

Four elementary schools in the South Spring Valley area contribute children to the junior high school. It was determined, through an analysis of new housing construction, rate-of-growth projections, etc., that by placing the junior high school and two of the four elementary schools on the plan, anticipated growth could be accommodated. By doing so the two remaining schools could continue on a traditional calendar and be teamed with the year-round schools, thus providing an option to parents. As it developed, more children entered year-round school than were lost.

The optional attendance feature is one that might well be considered by those planning a Year-Round School Program. Not only does it provide a safety valve which eliminates the necessity of forcing the plan onto unwilling patrons, but community interest in the Year-Round School Program is twice as broadly based since other schools are indirectly involved. While no specific proposal for expansion of the program to other La Mesa-Spring Valley schools has been developed (pending a thorough analysis of pilot program results) the optional attendance feature will be retained as an important element in any expansion model.

JUNIOR HIGH SCHOOL ORGANIZATION

Extending the Year-Round School Program through the junior high school level is another feature of the La Mesa-Spring Valley plan. Although considerable creative effort was required in organizing basic and exploratory courses, accommodating performing music groups, staffing, and student scheduling, no problems were encountered which have not been solved.

The target school, La Presa Junior High School, is a departmentalized seventh- and eighth-grade school of approximately 700 students, presently built to 60% of its ultimate size. Constructed in 1970, it is a flexible open-space plant and is fully climate-controlled. Four large classroom pods surround a central media center. Each of the pods can be subdivided into four spaces approximately the size of a standard classroom.

Each of the classroom pods is staffed with a team leader on extended contract, three standard-contract teachers, and paraprofessionals as needed. Team leaders assume a share of scheduling, supervision, and student discipline tasks in addition to their basic teaching duties. While not an integral part of the Year-Round School Program, differentiated staffing has provided great flexibility in teaching assignments. Teaching contract periods, during the first year of year-round school operation, have varied from 137 to 225 days. The interchange of administrative-teaching assignment of team leaders has generated additional paraprofessional and clerical help without added program cost. This differentiated assignment design has been in operation since the opening of the school and provided an ideal vehicle for introduction of the Year-Round School Program.

In organizing for year-round education, essentially four small schools-within-a-school were formed. Children are scheduled more or less independently within each of the four attendance groups. A variety of staffing patterns are employed depending upon the special competencies of the individual teacher, the nature of the courses he is teaching, and the duration of his contract.

Children remain with their teaching team for basic subjects (science, mathematics, English, and social studies) through the four nine-week attendance blocks which constitute a school year. Exploratory courses

(foreign language, homemaking, industrial arts, music, etc.) are nine weeks in duration and teachers change groups with each cycle.

In the case of performing music groups, children on vacation are encouraged to continue with this activity by returning to the school for a specified period each day. Technically, they are enrolled as *intersession pupils* for this hour. Many choose also to enroll in other intersession activities for a total of as much as four hours per day.

ELEMENTARY SCHOOL ORGANIZATION

The two elementary schools operating a Year-Round School Program are of the self-contained classroom variety. One is climate-controlled, one is not. Both have small, but well-stocked media centers staffed with a half-time librarian and a full-time library aide. Each school serves from 750 to 850 pupils in grades kindergarten through six.

As in the case of the junior high school, the Year-Round School Program requires the organization of four small schools-within-a-school. Enrollment in each of the four attendance groups is approximately 190 children distributed through the grades. Combination classes are the rule, although some single-grade classes are formed when enrollment at a single grade level is sufficient.

Preliminary study indicates that entry into the Year-Round School Program has not had major effect upon curriculum content although the pacing of instruction is, of course, quite different. It appears that less time is spent in review. The relatively small number of pupils in each attendance group makes homogeneous ability grouping difficult, if not impossible. This factor, coupled with the preponderance of combination classes, appears to have the positive effect of encouraging multigrading and greater individualization of instruction.

CITIZENS ADVISORY COMMITTEE

Representatives of major community agencies and service organizations have been invited to participate in a Year-Round School Citizens Advisory Committee. In addition, each year-round school Parent-Teacher Association unit will provide two members. District staff members will serve as consultants to the committee. An action steering committee will be identified from among the membership-at-large. Initial response to the invitation to participate has been enthusiastic.

Following the definition of goals and objectives, this unit will serve as a clearing house for problem identification, broad communication of program objectives, and as a resource for others anticipating entry into a Year-Round School Program.

Among the organizations invited to provide representation are:

Mount Miguel Community Council - PTA	Mount Miguel High School PTA
Valley Grove Council - PTA	Avondale Elementary PTA
Mt. Helix Council - PTA	Spring Valley Junior High PTA
La Mesa Chamber of Commerce	La Mesa Taxpayers Association
Spring Valley Chamber of Commerce	La Mesa City Council
La Mesa Park and Recreation Dept.	Spring Valley Welfare
Spring Valley Park and Recreation Dept.	La Mesa-Spring Valley Classified Employees Association
La Presa Junior High PTA	La Mesa - Church
La Presa Elementary PTA	Spring Valley - Church
Rancho Elementary PTA	La Mesa-Spring Valley Teachers Association
Kempton Elementary PTA	
Monte Vista High School PTA	

PROCESSING PARENT REQUESTS FOR CHANGES IN GROUP ASSIGNMENT

Unusual circumstances sometimes dictate the transfer of individual children from one attendance schedule to another. Care must be exercised that provision is made for making up lost time. This is best accomplished through individual assignment to intersession programs.

Such requests may be initiated by parents or, in exceptional cases, by school officials. When requests are received by parents, they are processed in much the same manner as intradistrict school transfer requests. Parents are alerted to the fact that school attendance time may be lost, and that contact with the child's natural neighborhood group may be affected. If the parent still wishes to pursue a transfer, each case is judged individually upon the criteria of (1) child care, (2) family hardship, and (3) availability of space in the class to which the transfer would be made.

After parents had chosen to enroll their children in the Year-Round School Program, a number of requests for changes in group assignment were received prior to program implementation. This number declined rapidly once the program was operational. Of the approximately 8% who initially requested a change, half this number withdrew their request after hearing the possible negative effects of such a change. The remaining requests were honored if based upon acceptable reasons.

PROMOTION AND RETENTION

In keeping with the *continuous education* concept inherent in the Year-Round School Program, formalized promotion from grade to grade is minimized. Rather, a continuous flow of pupil development from one attendance block to the next is possible. Many alternatives exist for accelerating or delaying the progress of individual pupils, depending upon their individual needs and capabilities. Individuals may be retained for one or two nine-week attendance periods rather than for a full year as is the case in traditionally organized schools. Children may also be encouraged to pursue individual learning.

prescriptions during intersession periods in order to achieve remediation of specific learning difficulties. Children may also be moved ahead in small, comfortable increments should their maturity and school progress so indicate.

Care must be exercised, of course, in moving children from one attendance group to another in order to avoid disruption of family plans, loss of school time, frequent change of teachers, etc. However, the potential psychological advantage to pupils of such flexibility in school placement presents one of the more exciting possibilities of the Year-Round School Program.



**THE LA MESA-SPRING VALLEY YEAR-ROUND SCHOOL
FOR CONTINUOUS EDUCATION: A CASE STUDY**

"We can easily become prisoners of our own folklore. The greatest tragedy is not that we sometimes try and fail, but that we often fail to try

THE CONDITIONS

Like many educators throughout the nation, La Mesa-Spring Valley staff members had, for several years, discussed the possibility of initiating some form of year-round operation of schools. Such discussions usually centered about four-quarter plans, or extended-year plans, and were discarded as unsound on the basis of cost, questionable educational value, or lack of community readiness. With the publication in December, 1971, of a Parade Magazine article reporting the success of the Valley View, Illinois, "45-15" year-round plan, widespread community interest was generated, and a fresh look at continuous education was indicated.

When it became apparent soon after the first of the year 1971 that rapidly growing school enrollments in one area of the District could not be accommodated during the 1971-72 school year, staff members began discussing the possibility of designing a plan similar to that of the Valley View School District as a possible solution to the projected school housing shortage. Of even greater appeal to educators was the educational advantage which such a program appeared to hold for children. Improvement of the educational program, therefore, became the overriding motivation; the shortage of classroom space provided the catalyst.

STAFF PILOT STUDY

Formation of a staff pilot study committee was the first step taken. This committee was comprised of teacher representatives and principals of the five schools which were later to become participants in the plan. These schools, one junior high and the four elementary schools located within its attendance area, constituted the focal point of greatest District school housing pressure. A preliminary proposal was developed, and permission was granted by the Board of Education to approach the community with the idea of a year-round school plan as one possible solution to the projected school housing shortage.

COMMUNITY INVOLVEMENT

An intensive series of thirty-four neighborhood coffees was initiated, in addition to five community meetings--one at each of the target schools.

Attendance at the coffees was initially light, but the response to the year-round plan was unmistakably positive. As word spread throughout the community, attendance at meetings increased. Parent-Teacher Association units were briefed and assisted in carrying the message to the community.

Coffees and group meetings were conducted by teams of principals and teachers. The message was essentially this: "We can't stand still. We can accommodate growth in enrollment next year in one of three ways: (1) we can place some Spring Valley schools on double sessions; (2) we can transport children to available classroom space elsewhere in the District; or (3) we can generate space by entering a year-round school program. The choice is yours." Feelings against bussing and double sessions ran high, and a clear mandate was received from the community to proceed, with all possible haste, in further study of a year-round school plan.

At each coffee and community meeting, a questionnaire was distributed which sought responses to these alternatives:

<u>Questions</u>	<u>Responses</u>
In favor of year-round school	77%
Opposed, but would participate	7%
Opposed, favor bussing or double sessions	12%
Opposed, but might change mind	4%

While these results were based upon responses from 360 of the approximately 1,200 families which would be affected by the plan, they are consistent with community response in the Valley View, Illinois, district and with that of a neighboring San Diego County district which has also initiated a plan. The results of this sampling were subsequently validated by response to an additional choice offered to all parents in the target school communities to participate in the program.

FEASIBILITY STUDY

Concurrently with the community contact, staff members at all levels were dispatched to gain as much information as possible relating to year-round school programs. Visitations were made to Valley View, Illinois, and to the Frances Howell School District near St. Louis, Missouri. A search of the literature was conducted, and District representatives took part in a series of year-round school seminars which were conducted during the spring of 1971.

Close liaison was maintained with representatives of the California State Department of Education, and with Southern California legislators whose assistance was needed to sponsor legislation which would permit entry into the year-round school program.

A feasibility study was conducted by the Instruction, Business, and Personnel Divisions of the School District. Their preliminary findings indicated a positive prognosis. From an instructional point of view, the year-round school concept was consistent with, and even encouraging to, individualization of instruction, multigrading, and the pacing and content of the instructional program. From a business-finance point of view, the proposal was deemed feasible with minimal added cost for program initiation. Problems relating to contracts, salary, and staff availability were identified by the Personnel Division, but appeared not to be insurmountable.

ENABLING LEGISLATION AND APPLICATION APPROVAL

On May 3, 1971, a progress report was presented to the Board of Education, and permission was granted by that body to draw up a year-round attendance calendar and to implement the plan on July 6, 1971, provided the required permissive legislation had been enacted. Pending the passage of legislation, the District developed and submitted its own application to conduct a year-round school to the California State Department of Education. The application to the State encompassed the following areas:

- Effective date
- Proposed program description
- Course of Study
- Instructional time
- Enrichment provisions
- Calendar
- Support services
- Teachers' work year

On June 11, 1971, State Assembly Bill #673, introduced by Senator Burgener and co-authored by Assemblymen Cory, Deddeh, and Wilson, was written into law. The State Department notified the District that their application had been approved and the Year-Round School Program could be conducted as proposed. The final organizational phase was then initiated.

SETTING THE CALENDAR

Establishing a workable and equitable calendar was a major undertaking of a task force of the Staff Pilot Study Committee. It was decided (1) to stagger the entry of attendance groups into the program at three-week intervals, and (2) to modify strict adherence to the 45-15 schedule in order to avoid awkward attendance periods and to equalize seasonal vacation opportunities. The calendar was finalized in mid-May, 1971, and approved by the Board of Education.

ASSIGNMENT TO ATTENDANCE GROUPS

Each target school community was geographically subdivided into four attendance groups of approximately equal size. Care was taken to avoid division of natural neighborhood areas, and to allow for impending construction which might overload certain areas. In this way, members of the same family and their neighbors could continue to attend school on the same schedule. Each area, thus identified, was assigned an attendance schedule through a drawing conducted by a local newspaper editor.

CHOICE OF PLAN BY PARENTS

The stage was now set for parents to indicate their choice of school attendance options. Each parent was mailed an attendance calendar and a parent response card on which they were asked to indicate if they wished to enroll their children in the Year-Round School Program or preferred to enroll them in an adjacent school which would continue on a nine-month program. Transportation would be provided by the District to the school of their choice. Responses were consistent with the original reactions expressed by the community, with only 8% of those residing in year-round school attendance areas electing to send their children to nine-month schools.

The reverse choice was also offered to parents of children residing in the attendance areas of *teamed* nine-month schools. Approximately 12% chose this option. Eighty-eight percent elected to stay in their regular school of attendance regardless of the program.

IMPLEMENTATION

On July 6, 1971, one-fourth of the children in two elementary schools and one junior high school began their first school year under the Year-Round School Program. On July 26, another one-fourth joined their classmates. August 17 saw the third group enter, and the plan was fully operational. On September 7, one week before most California school children were due to return to school, the first group of year-round school children began a three-week vacation.

Parents, principals, and teachers reported the *smoothest* school opening in their memories. The children were there with their new shoes and lunch pails, and no more than the usual percentage of late entries was noted. Attitudes of children, parents, and teachers toward reentering school after a short vacation period appeared to be positive. Problems which had been expected never occurred--perhaps because they had been anticipated.

As of September, 1971, when the Year-Round School Program became a fully-functional reality in one area of the La Mesa-Spring Valley School District, participation was as follows:

Elementary (kindergarten through sixth grade)

Entering nine-month schools from year-round schools	7% (99 children)
Entering year-round schools from nine-month schools	12% (162 children)

Junior High School (seventh and eighth grades)

Entering nine-month school from year-round school	17% (137 children)
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(No option offered for transfer into year-round junior high school.)

(N: 2,000+ children)

CONCURRENT SUMMER SCHOOL

During the initial phase of year-round school operation (July and part of August of the year of entry) only a portion of the children had begun regular school attendance. Therefore, in order to maintain the traditional level of pupil services, regular summer school class offerings were made available to children assigned to attendance groups which would not begin regular school until mid-August or September. These summer school classes were housed side-by-side with classes attending regular school under the Year-Round School Program. Since administrative and clerical personnel were already on duty, no additional supervisory staff was required for summer school operation. This saving in personnel helped offset the cost of operating year-round schools during the stages when the plan was only partially operational.

PROBLEM IDENTIFICATION AND SOLUTION

It is important to note that throughout the development of this plan, staff and community had been involved in program design rather than simply receiving information. From the beginning, the orientation of staff and parent groups was one of problem identification and solution. The Year-Round School Program was perceived by them as their choice and their responsibility to make it work. This orientation may be directly attributed to the fact that the original movement was generated at the local school-community level, rather than imposed by a Board of administrative decision.

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At the community level, Parent-Teacher Association, Scout, Little League, recreation, and church leaders set out, not to oppose the plan on the basis that it might impinge upon their activities, but to accommodate this change within the structure of their organizations and even adapt it to their ultimate advantage.



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THE LA MESA-SPRING VALLEY MODIFIED 45-15
YEAR-ROUND PLAN: EVALUATION COMPONENT

If it can't be measured it doesn't exist....

EVALUATION OF ACHIEVEMENT

The evaluation component of the Year-Round School Program in the La Mesa-Spring Valley School District is divided into two major strands: cognitive and affective measures. The Pupil Personnel Services department accepted the responsibility to evaluate the scholastic achievement of the students enrolled in year-round schooling.

An applied research design was developed, aimed at discovering whether or not attendance in a year-round school leads to a higher level of achievement in the skill areas of reading, arithmetic, and spelling than does attendance in a nine-month school. It was hypothesized that attendance in a year-round school would minimize forgetting over the long vacation period (summer loss) and, further, that year-round school would require less reviewing of the previous semester's work, resulting in more time for new instruction which would, in turn, result in a higher level of achievement.

The study is of a nonrandomized control group pretest post-test design.

<u>Pretest</u>	<u>Treatment</u>	<u>Post-test</u>
T ₁	X	T ₂
T ₁	.	T ₂

The Wide Range Achievement Test will be administered to 100% of the students in grades one through eight in the year-round schools and a 25% sample of the students in a control elementary school (selection of every fourth student, grades one through six, from an alphabetical listing of the students enrolled). The testing time line is reproduced below:

GROUP	N	DATE OF PRETEST	T	DATE OF POST-TEST
I Year-Round School	(450)	July 12-16	X	May 22-26
II Year-Round School	(540)	August 2-6	X	June 12-16
III Year-Round School	(480)	August 23-27	X	July 5-7
IV Year-Round School	(520)	September 13-17	X	July 31-August 4
V Nine-Month School	(150)	September 20-24	.	June 5-9

The post-test sample will be smaller than the pretest sample by the number of students who move out of the attendance area prior to the scheduled date for post-testing.

Pretest scores will form the base line data for the groups. Considering the effect of summer loss and assuming groups equal in intellectual capacity (this assumption is supported by District standardized test results for the school year 1970-71 in the project schools), it is hypothesized that the median grade equivalent in reading, arithmetic, and spelling as measured by the Wide Range Achievement Test would be highest for Group I (because they were out of school for only two weeks) and next highest for Group II, then Group III, then Group IV, and lowest for the control group (out of school for twelve weeks).

The base line data which was completed on September 24, 1971, is being data processed. An analysis of the findings will be appended to this description when the data is returned and analyzed.

It is further hypothesized that the median grade equivalents derived from the post-tests will show even greater differences in favor of Group I, and then in descending order for Groups II, III, IV, and finally the control, as a function of more instructional time devoted to presentation (less time spent in review). It is assumed that the size of the N is large enough to wash out any differences in teacher competence. All scores will be reported in terms of measured grade equivalent.

One final observation is offered. All students in the Year-Round School Program will also participate in the District standardized test program (administered in the thirty-first and thirty-second week of instruction in grades one through three, and the sixth week of instruction in grades four through eight). The standardized testing instruments are the Cooperative Primary Test in Reading, (grades one, two, and three), and Comprehensive Tests of Basic Skill in Reading, Language, and Arithmetic in grades four through eight. It is anticipated that the educational advantage of year-round schooling will, over a period of several years, result in significantly higher increments of academic achievement from grade-to-grade for the students in the year-round schools, when compared to the students in the teamed nine-month schools.

EVALUATION OF ATTITUDE

A second strand in the evaluation component of the Year-Round School Program in the La Mesa-Spring Valley School District is an assessment of the attitude of students, teachers and other staff, and the community, including parents whose children are receiving year-round schooling.

Questionnaires are being developed for administration to the three groups mentioned previously. These survey instruments will be administered to a sample of students and parents, and to all teachers and other certificated staff participating in the Year-Round School Program.

The questionnaires will elicit recommendations for change and improvement as well as attitude toward the various elements of the program. At this writing, the instrumentation is still in the developmental stage. It is planned to append the instruments developed to this description when they are ready and to append an analysis of the questionnaires after they are administered.

ADDITIONAL DATA ANALYSIS

The evaluation component of the La Mesa-Spring Valley Year-Round School Program will also include periodic analysis of data relating to teacher and pupil absence due to illness, pupil truancy, and level of pupil participation in intersession courses. The incidence of vandalism in the community and longitudinal comparisons of juvenile delinquency will also be assessed. Information relative to these areas is readily obtainable from existing sources and additional evaluation instrumentation is not required.



DEVELOPING A SYSTEM OF COST-ACCOUNTING
YEAR-ROUND SCHOOLS: A DESIGN

*Pounds, shillings, and pence....they have
no worth beyond what they will buy....*

GENERAL HYPOTHESES

La Mesa-Spring Valley entry into the year-round school program was prompted by the need to solve a school housing shortage and a desire to examine possibilities for improved instruction, rather than as a means of saving money. No savings in operating costs are anticipated. Long-term savings in school construction and bond redemption appear certain. An important satellite advantage of the Year-Round School Program, from a business-finance point of view, is the capability it provides for comfortably housing up to one-fourth more pupils in existing facilities while additional new school housing is planned, funded, and constructed in advance of critical classroom shortages.

COST ANALYSIS DESIGN

It was deemed necessary, from the outset, to establish a definite procedure for assessing both direct and indirect costs accruing to the Year-Round School Program. Conversely, certain savings which are directly attributable to this program must be accountable as cost credits. A credit-debit ledger system is being developed and will later be transposed to the formal program budgeting system of the District.

SAVINGS VERSUS COSTS

Many items are readily identifiable as added cost factors in year-round school operation. Obvious cost items include the extending of selected administrative, teaching, and clerical contracts. However, several subtle factors offset this apparent added cost. For example, since fewer individuals serve more children, certain savings are generated in the areas of employee benefits and personnel processing. Also, while the continuously operating intersessions are generating added *summer school* ADA reimbursement, it is not necessary to employ administrative, supervisory, and clerical help since these responsibilities are assumed by employees already on duty. The problem then becomes, when determining the year-round school program costs: "To what extent are apparently added cost factors offset by indirectly related savings?" Similar questions need to be answered in all areas of school operation, and any proposed accounting system needs to be flexible enough that continuous revision can be accomplished as additional hidden cost and credit factors are identified.

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CREDIT-COST CONSIDERATIONS IN SELECTED AREAS OF SCHOOL OPERATIONIntroduction

It is assumed that there will be no increase in per pupil teacher costs provided the District pupil-teacher ratio is maintained. A percentage of the per diem increase for specialist teachers on extended contract will constitute an added cost, as would be the case with administrative, clerical, and custodial personnel. District level support services will be maintained at the same level as in the past and cost in this category will not increase.

Other Expenses of Instruction

The cost per ADA of basic and supplementary state textbooks, certain reference materials, and some items of equipment which are replaced due to obsolescence rather than use damage, may be reduced up to 25%. The cost of consumable supplies per ADA should remain the same.

Transportation

There will be no per ADA cost increase in the consumable supplies for transportation. Increased cost would result from placing bus drivers on a twelve-month contract and providing for their vacation period. There should, however, be significant savings created by a reduction in the number of buses needed to provide transportation, and through more continuous use of expensive equipment which depreciates regardless of the amount of use. In other words, the same long-range savings which apply to new school construction under the Year-Round School Program should constitute a similar factor in most major capital outlay expense.

Operations

There will be an increase in expenses for custodians, necessitated by providing coverage during their vacation period. It may reasonably be expected that there will be savings in the consumption of utilities since most utilities are left on during summer vacation periods, so the ADA cost of utilities should be reduced. Certainly there would be a savings derived from the fewer number of service connections required.

General Maintenance

General maintenance of buildings should be reduced by approximately 25%. This savings could be eroded somewhat by the efficient use

the facilities would receive; however, the maintenance of such items as roofs, asphalt areas, and service systems should be the same regardless of the number of students enrolled, and a savings of 25% should definitely be experienced in the ADA costs in these areas. The replacement of equipment should be reduced to some degree. However, such items as projectors, record players, etc., where the hours of use per ADA would probably remain the same, could not be expected to show any reduction in costs. Other items whose useful life is not dependent on wear, but is based upon other factors such as obsolescence, should definitely show a savings.

Food Services

Costs in this area may increase slightly due to the necessity of extending some personnel contracts to twelve months and providing vacation coverage. However, food costs and utilities costs should remain the same on an ADA basis.

Community Services

Some savings might accrue in this area due to the fact that during the summer months service personnel would be on duty during the hours the facilities are used for community activities, where they might not be if the schools were operating on a nine-month basis.

Capital Outlay

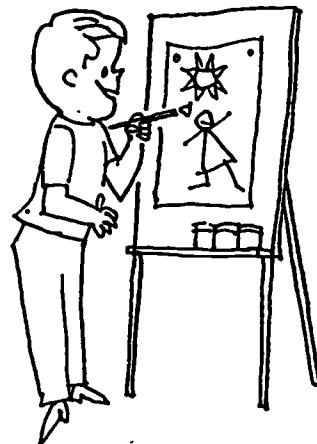
Capital outlay for such facilities as buildings, service systems, and non-mechanical equipment should ultimately be reduced by 25% under the La Mesa-Spring Valley program. In districts operating year-round at total saturation of facilities, up to 33 1/3% savings could theoretically be realized.

Debt Service

This is the area where the greatest savings should ultimately result. As a district operating on a year-round basis is filled to capacity, it will reduce the need for facilities by up to one-third and should result in a most significant savings in the areas of bond interest and redemption payments, or other funds utilized for capital expenditures. It must be re-emphasized that these financial effects are dependent upon the facilities of the district being utilized at their maximum capacity. Any utilization at a lesser level will immediately result in some increase in the ADA costs of building-level administration, instructional supplies, classified salaries and other expenses of instruction, operations, health services, and transportation.

Summary

It is anticipated that ultimately the savings resulting in areas such as maintenance, capital outlay, and debt services, will more than offset the increased amount in other budget categories. However, this can only be ascertained on an actual basis after a district has accumulated a number of years experience in the year-round operation. Since this is the first year of operation of the Year-Round School Program in the La Mesa-Spring Valley School District, it is impossible to make such a projection at this time. After a year or two's experience it should be possible to accurately determine the operational costs of the Year-Round School Program. We would then be able to project the capital outlay, maintenance, and debt services savings which would accrue to the District in the near future, and give a reliable estimate of the long-term financial effects of year-round school operation in a district of similar size and composition.



IDENTIFICATION OF POTENTIAL PROBLEM AREAS: A SUMMARY LISTING

To be forewarned is to be forearmed...

EQUALIZING AND BALANCING ATTENDANCE GROUPS

The comparative enrollments of the four attendance groups within each school community are determined, to a great extent, by the initial geographical division of the area. Unless these groups are approximately of the same size, problems may arise in equalizing class loads, maintaining appropriate class averages, and fully utilizing the school plant. On the other hand, frequent readjustment of attendance area boundaries may precipitate a severe reaction from parents whose family schedules are interrupted, disturb children who lose contact with their familiar group, and even result in loss of school attendance time.

When the initial division of the school attendance area is made, consideration should be given to the potential for new home construction within the various quadrants. Large housing developments, particularly, can rapidly cause great imbalance in the enrollment of any one group. Such a situation is often solved best by considering the new development a *community-within-a-community* and resubdividing the total development in order that one-fourth of the children are placed on each of the attendance schedules. Local conditions, of course, may dictate other solutions.

Care must be exercised in geographically dividing neighborhoods with heavy concentrations of minority group children. It is entirely possible, if these children reside in a particular section of the community, that a segregated school will inadvertently be created.

MAINTAINING PUPIL-TEACHER RATIO AVERAGES

Since under the Year-Round School Program four small schools exist within each school plant, minor fluctuations in enrollment at any given grade level may have a magnified effect. If, for cost-per-pupil purposes, a school district is forced to maintain a pupil-teacher ratio which is close to the State-mandated maximum, arrival of only three or four children at any one grade level may jeopardize the entire organization of that particular attendance group and force a major class reorganization. Therefore, District finances permitting, an added growth factor should be considered in staffing year-round schools. It should be noted, however, that this practice can result in added per-pupil cost of the program.

ADMINISTRATIVE-CLERICAL WORKLOAD

In particular during the planning and implementation phase of the Year-round School Program, heavy demands were placed upon the administrative and clerical staff, both at the school and central office levels. The implications for change in traditional methods of dealing with personnel contracts, attendance reporting, transportation, food services, achievement testing, etc., are obvious. All departments within a school district are affected, with the greatest workload increase lying at the local school level.

Fortunately, once the program is fully operational and new procedures have been developed and field tested, the pressure upon clerical and administrative staff appears to return to near normal. It is recommended that this initial pressure be recognized and that sufficient staff be temporarily added to accommodate the increased workload.

SCHEDULING SUFFICIENT LEAD TIME

Several sources recommend that districts planning initiation of a year-round school program allow at least eighteen months lead time prior to implementation. Local circumstances do not always permit this luxury, but a realistic timetable must be developed. A design for staff and community involvement should precede the development of a final plan. Although the target area is only one section of a total district, the staff and community at large should be involved in receiving information and providing suggestions for designing a plan which is adapted to meet local conditions. Educational professional organizations and community service organizations are excellent sources of support. Involvement of Parent-Teacher Associations is, of course, essential. It is recommended that a citizens advisory committee be formed far in advance of implementation.

RESEARCH DESIGN

It is essential that a design for research and evaluation be incorporated in the original planning. Once caught up in the thousands of details immediately preceding entry into the plan, it is easy to lose the base line data necessary for thorough evaluation--be it attitude, pupil progress, or cost-comparison figures.

COST ANALYSIS

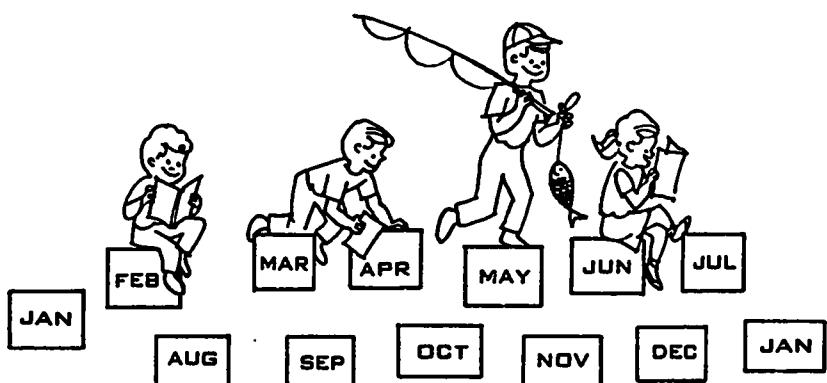
Some means of program budgeting, appropriate for local conditions, must be developed prior to entry into the plan. Unless such a plan is carefully designed, items of added expense for year-round school operation will be overlooked and costs will be added which do not legitimately

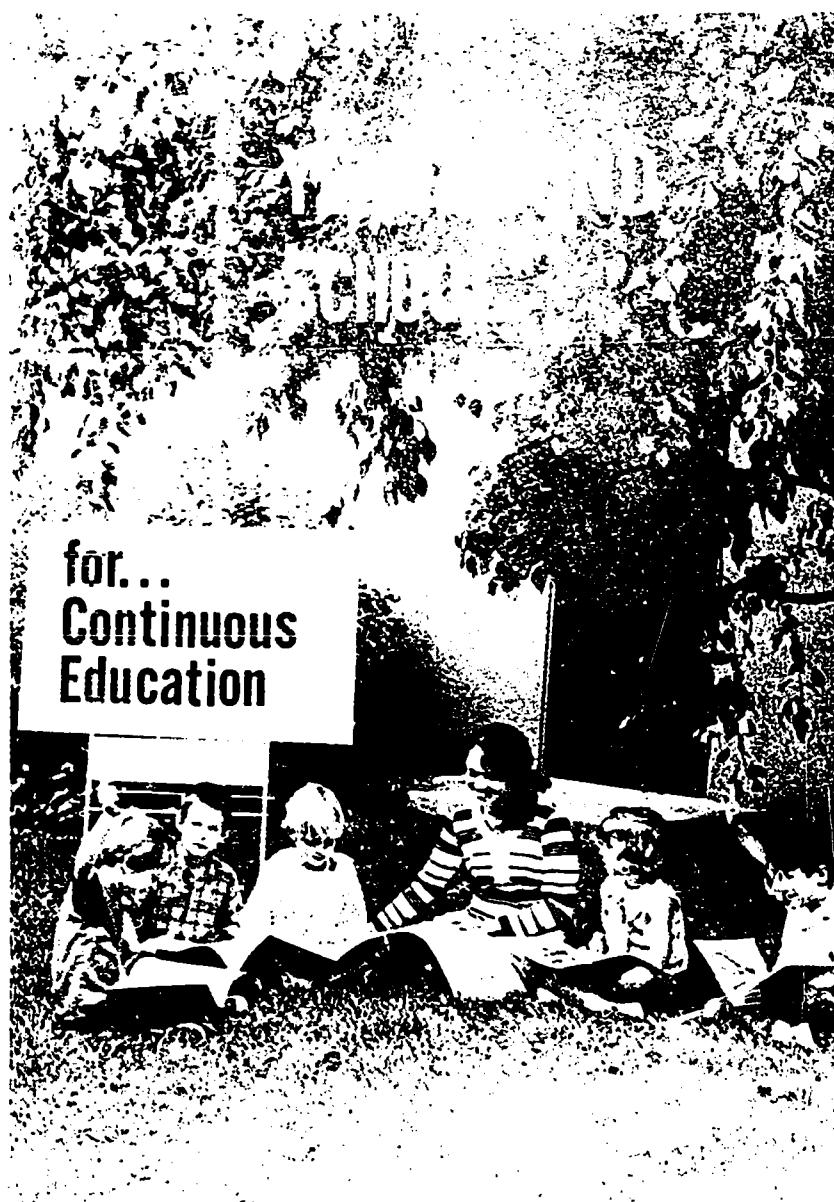
accrue to the program. The questions, "When is a cost not a cost?" and "When is a saving not a saving?" need to be anticipated and answered through definite procedures for assessing indirectly related cost factors, as well as those which are obvious.

ACTION ORIENTATION

Despite the care exercised in planning, daily problems and questions will arise during the first months of program operation. Many of these will relate to very technical or legal problems. All departments of a district must be geared to act quickly and decisively. All possible latitude must be given to site administrators to solve their unique local problems within broad parameters of district policy. Lines of communication to the State Department of Education, County Departments of Education, and community agencies must be kept open and operative.

Problem solution is greatly facilitated if the teaching staff perceives their responsibility in suggesting solutions as well as in presenting problems.





YEAR-ROUND SCHOOL



DR. RUNGE

This year, with a critical school housing shortage in certain areas of our school district, we have initiated a new and unique school attendance plan which appears to hold much promise for an improved educational program and more efficient use of existing school facilities.

Since the program is new to our district, this brochure is provided to assist you in understanding the "year-round" school for continuous education. In addition, you are encouraged to visit your schools and become acquainted with the staff.

You will find that we are dedicated to the same objectives and purposes as you.....the most effective education possible for our youth. Working together is the best insurance for a sound educational program.

James R. Runge
Superintendent of Schools

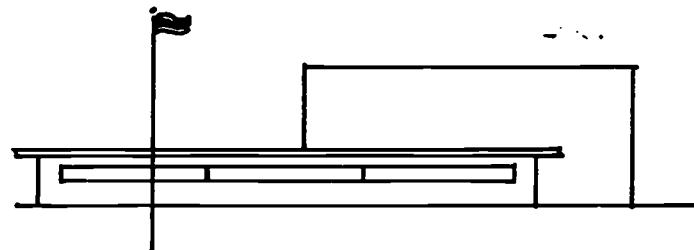
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La Mesa-Spring Valley School District
4750 Date Avenue
La Mesa, California 92041
469-6171

July 6, 1971

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PARTICIPATING LA MESA-SPRING VALLEY SCHOOLSTEAMED SCHOOLS - OPTIONAL ATTENDANCEYEAR-ROUND SCHOOLS

RANCHO ELEMENTARY
8845 Noelne Avenue
Spring Valley, CA 92077
Principal: Elvin Fong
Phone: 479-1158

TEAMED NINE-MONTH SCHOOLS

AVONDALE ELEMENTARY
8401 Stansbury Street
Spring Valley, CA 92077
Principal: Eric Sanders
Phone: 463-9275



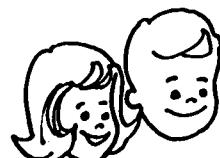
LA PRESA ELEMENTARY
519 La Presa Street
Spring Valley, CA 92077
Principal: William Paslay
Phone: 479-0110

KEMPTON STREET ELEMENTARY
740 Kempton Street
Spring Valley, CA 92077
Principal: J. Smith Jacobs
Phone: 463-9225

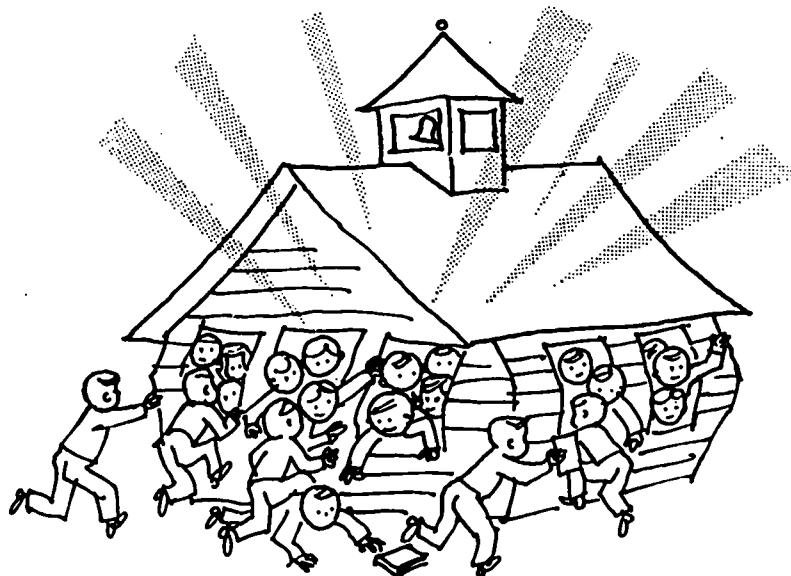


LA PRESA JUNIOR HIGH
1001 Leland Street
Spring Valley, CA 92077
Principal: Roy Williams
Phone: 461-2611

LA MESA JUNIOR HIGH
4200 Parks Avenue
La Mesa, CA 92041
Principal: Pearl McLean
Phone: 466-4137



SPRING VALLEY JUNIOR HIGH
3900 Conrad Drive
Spring Valley, CA 92077
Principal: Marl Brown
Phone: 469-0141



WHY WAS THE YEAR-ROUND SCHOOL STARTED THIS YEAR IN
SOUTH SPRING VALLEY?

- New housing and anticipated growth in school enrollment exceeded the amount of available classroom space.
 - A choice had to be made among double sessions, bussing of children, or year-round use of some schools.
 - There is a growing demand for more efficient use of school plants.
-AND, PERHAPS MOST IMPORTANT.....
- Parents and educators alike recognize the need for a better and more continuous education for children.

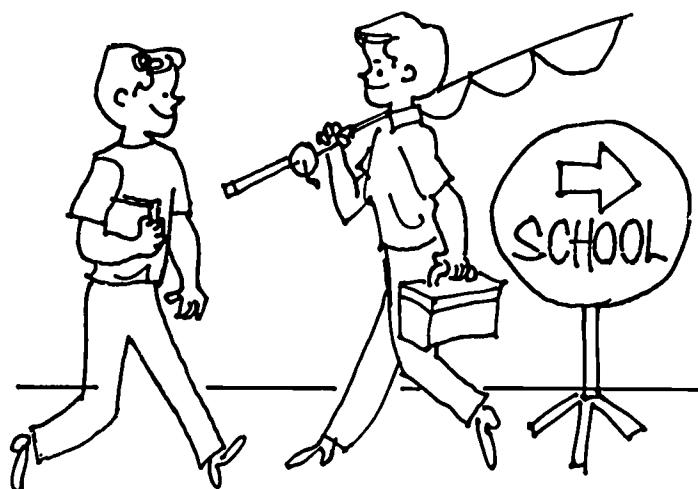
A YEAR-ROUND SCHOOL PROGRAM IS CONSIDERED BY MANY PEOPLE AS
THE MOST EDUCATIONALLY SOUND AND ECONOMICALLY FEASIBLE SOLU-
TION TO PROBLEMS WHICH EXIST HERE AND IN MANY SCHOOL DIS-
TRICTS.

HOW DOES YEAR-ROUND OPERATION OF SCHOOLS HELP
SOLVE OVERCROWDING?

The year-round plan permits three schools to house the equivalent of four school populations. These schools will operate continuously for 240+ days, but individual students will attend 177 days.....the same as in the regular nine-month school program. Vacation periods are staggered.....

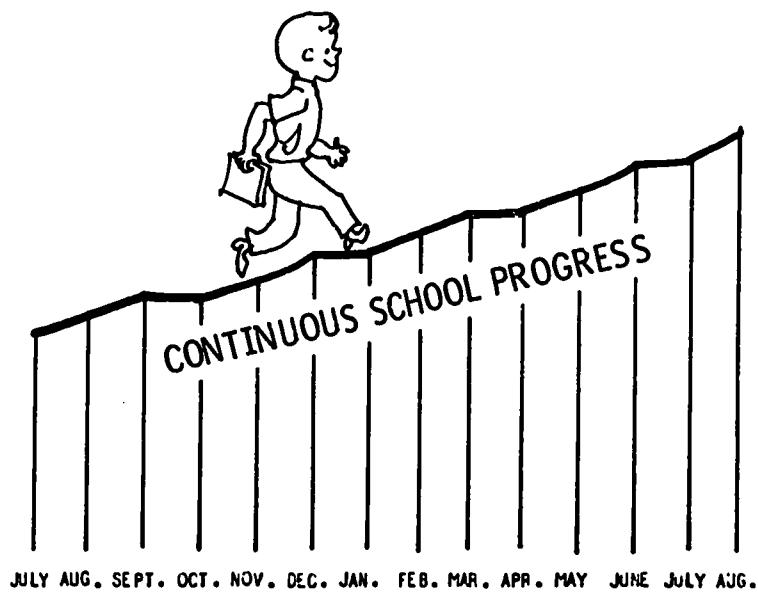
SO... 

.....AT ANY ONE TIME, THREE-FOURTHS OF
THE CHILDREN ARE IN SCHOOL WHILE ONE-FOURTH ARE
ON VACATION.

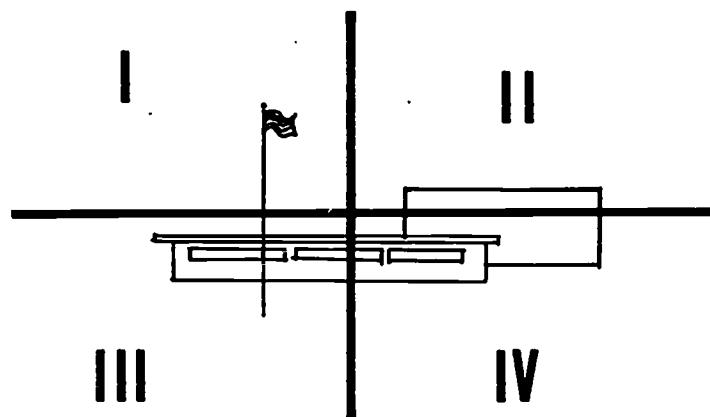


WHAT EDUCATIONAL ADVANTAGES FOR CHILDREN
ARE ANTICIPATED IN THE YEAR-ROUND PLAN?

- The need for long periods of review following summer vacation will be eliminated.
- Nine-week periods of instruction followed by shorter, more frequent vacation periods provide for a more continuous educational program.
- Attendance at optional three-week "intersession" courses may provide children with the opportunity to review, extend and enrich their previous learning.
- Vacation periods in each of the four seasons of the year may provide children with a wider variety of family vacation experiences.
- By more equally distributing periods of intensive learning and briefer periods of relaxation throughout the year, the intellectual and emotional growth of children is enhanced.



HOW WERE CHILDREN ASSIGNED TO THE
VARIOUS NEIGHBORHOOD ATTENDANCE GROUPS?



- Each elementary school attendance area was divided geographically into four neighborhood groups: I, II, III, and IV. These groups are color-coded on the calendar which appears on the next pages.
- Each child attends school on the days marked in his neighborhood group color.
- This plan allows elementary and junior high school pupils to attend school on the same schedule as other children in their family and in their neighborhood.
- Three of these four groups are in school at the same time, while one group is on vacation.
- In addition to the four "seasonal vacations," children in each group are out of school for one week at Christmas and on all legal holidays.

ARE FAMILIES GIVEN A CHOICE IN PLACING THEIR CHILDREN
IN THE YEAR-ROUND PROGRAM OR IN A NINE-MONTH SCHOOL?

YES...

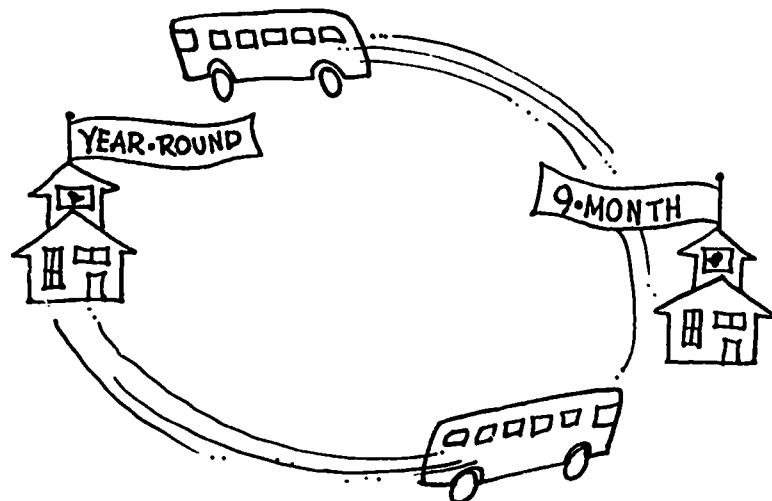
The La Mesa-Spring Valley year-round plan includes an "optional attendance" feature. Each year-round school has been teamed with a nearby school which will continue on a regular nine-month schedule.

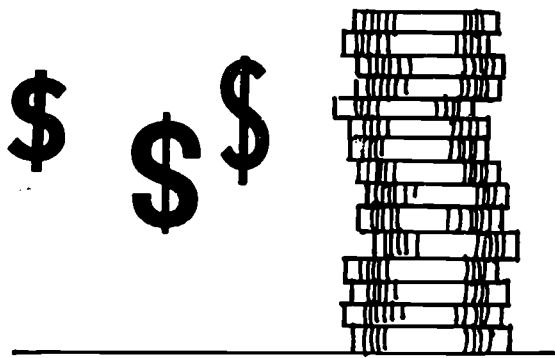
- Parents residing within the attendance area of a year-round school may choose, instead, to enroll their children in the nearest nine-month school.
- Families with junior high school children may choose to enroll them in a nine-month junior high school.

ALSO...

Parents residing within the attendance area of the teamed nine-month schools may enroll their children in the nearest year-round school.

IN ANY CASE, THE SCHOOL DISTRICT WILL PROVIDE TRANSPORTATION WHERE DISTANCE REQUIRES IT.





DOES THIS PLAN SAVE THE
TAXPAYER MONEY?

YES and NO...

NO SAVINGS IN OPERATING COSTS

The same number of teachers, amounts of supplies and materials, and level of services will be required to educate each child.

LONG-RANGE SAVINGS

Relieves pressure to build and equip new schools

at **1,000,000 +** per school.

QUESTIONS FREQUENTLY ASKED BY PARENTS

Have other school districts tried a year-round plan?

Yes. Several school districts throughout the country have initiated similar plans. The La Mesa-Spring Valley year-round school is a modified "45-15" plan--year-round instructional periods followed by brief vacation breaks. This should not be confused with other types of 12-month school attendance such as "extended year" or "4-quarter" plans.



Will my children "change" teachers every nine weeks?

No. Elementary teachers will be "tracked" with their pupils. That is, your children will remain with their teachers through at least four "attendance blocks" for the 177 days which constitute a school year.



Will my children have access to special services such as psychological testing, speech therapy, learning disability groups, reading specialists, health services, sixth-grade camp, etc.

Yes. All important auxiliary education services will be continued in the year-round plan. In some cases this will be accomplished through extending contracts; in some cases by redistributing the work year of specialist teachers.



Will my children be able to participate in Scouting, summer recreation, and other out-of-school activities?

Attempts are under way to coordinate year-round school schedules with other youth agencies and activities. We anticipate a year-round recreation program some time in the near future.



Is it possible to move my children from one attendance schedule to another during a school year?

Yes. It is possible, but may not be desirable. When children are moved from one group to another they (1) lose contact with their neighborhood group, and (2) may lose instructional time during the year when they are moved. Such requests have been granted when parents fully understand the possible complications of such a move. Usually, changes in attendance groups are made on the basis of "child care" arrangements.



Since the local high school district is not on a year-round plan, will graduating eighth-graders enter the regular high school program late?

No. Our schedule was planned to avoid this problem. However, depending upon the attendance group to which your children are assigned, they may have a shortened "summer vacation" in the year they enter high school.



Has summer school been eliminated?

No. It is planned to offer several three-week "intersession" classes during the year to provide review and enrichment experiences which were previously offered in summer school. Attendance at these courses will be optional.



Will summer hot weather interfere with my children's learning?

This is a question which will need to be evaluated. Local temperature tables for the past several years indicate that the highest average temperatures fall in the months of September and October. Children have traditionally been in school during these months and learning has not appeared to be hampered.



The staggered program in the primary grades has proved to be very beneficial to my children. Will it be possible to continue the staggered program in the year-round school?

Yes. School daily schedules will not be affected by this plan.



Does entry into this plan mean that no new schools will need to be constructed?

No. The need for additional schools will be delayed, since four school populations can be housed in three existing schools. However, as school enrollments continue to increase it will be necessary to build additional schools in the future, but fewer than would be required under a nine-month program.



When children move to a school which is on the nine-month plan will they miss out on some school attendance time?

It is possible that some time will be missed, depending upon the child's particular attendance schedule. It is more likely that they may spend additional time in school during that year, and that some of the instruction may be review for them. Since schools tend to "take children where they are and move them along" (individualized instruction), this should not present a major problem. A similar situation has occurred in the past when children have moved to a different school during the year.



Will children entering a year-round plan from a nine-month school miss instructional time?

Children may miss some school attendance time. We plan to deal with this by offering "intersession" classes during three-week vacation periods where learning can be enriched and extended. If we view the year-round school as a "continuous progress" program, the problem of "missed instruction" is diminished. Again, teachers attempt to tailor instruction according to the needs, interests, and abilities of the individual pupil.



Will it be necessary to frequently change neighborhood attendance boundaries, thereby causing families to change schedules?

It may be necessary to adjust some boundaries in the future as large numbers of new homes are built within a given neighborhood. It is our wish to avoid doing so unless the problem becomes critical.



Do year-round K-6 schools have more "combination grade" classes?

Yes. Since we have essentially created four small "schools within a school" it becomes necessary to form more combination classes in order to avoid increased cost per pupil. A trend in modern education is toward multi-graded classes which include children of three, or even four, "grade levels." Research indicates there are advantages in having children of many ages working together.

This booklet is not intended to answer all the individual questions posed. It is an overview of the year-round plan as it exists in three schools in the La Mesa-Spring Valley School District. If you have general concerns or questions, please contact the district Education Center, 469-6171, ext. 13. If your question is related to your children's school, please contact your neighborhood school principal. (Names and telephone numbers appear on page 2.)

.....AND, REMEMBER.....

You are always welcome and encouraged to visit your school and become acquainted with staff members.

MOLALLA CONSOLIDATED GRADE SCHOOL,
 CLACKAMAS COUNTY—DISTRICT NO. 35,
Molalla, Ore., May 3, 1972.

Hon. ROMAN PUCINSKI,
*Chairman, Committee on Education and Labor,
 General Subcommittee on Education, Washington, D.C.*

DEAR MR. PUCINSKI: Thank you for the opportunity of testifying before your Committee on Education by means of providing you with the following statement concerning our year-round school plan.

Never before in American history have people felt less sure about what's happening and where it's all taking us. Whether you are a bell bottoms and beads person or a gray flannel suit executive, everybody knows that the world is spinning at a dizzying pace toward tomorrow.

Change is affecting the last bastions of American orthodoxy—industry, government, education and public institutions of all kinds. Women's hemlines go up and down. Automobiles change their shapes. Books and theater become more "permissive". Many of our traditional ways of thinking and behaving, of assigning people to categories, and of relating to one another, are as obsolete as 1950ish movies on the Late Late Show.

John W. Gardner lays down a challenge to American education and points out the difficulty in change:

"The toughest question facing us now, in my judgment, is whether we have the courage and flexibility and imagination to innovate as the times require. Let us not deceive ourselves. The old ways of doing things are not good enough. But giving up the old ways will be painful. Institutions fear change. In the face of change we all grow defensive, we all move toward protecting our particular vested interests. But the overriding vested interest of all of us is in the vitality of American education."

Molalla Elementary School District accepted the challenge to change to meet today's needs. We are an elementary district located in the suburbs of Portland and are experiencing a phenomenon familiar to other districts across the nation. Our enrollment was increasing more rapidly than our financial ability to build needed buildings—buildings that normally would stand empty three summer months. Our enrollment rate of increase was approximately 15-20% per year.

A serious school deficiency existed because of a shortage of classrooms. There was no way to improve our program without more space. We asked our patrons to approve 1.5 million dollars for new construction but with the failure of the bond levy looked for a new alternative.

We made the commitment to change for one purpose only—to improve the educational opportunity for the students in our district. Ours is a child centered program. There can be no other reason for the development of a new educational change or program. The school district and the community decided to improve the educational climate for our children rather than to let it continue to deteriorate because of growing class sizes and the lack of money to construct needed classrooms and to improve the curriculum.

The plan chosen by Molalla is basically a rotating "four quarter" plan. The arrangement divides the school year into four equal quarters of twelve weeks each. Each pupil attends three quarters and vacation the fourth. All students attend school the same amount of time as under the traditional school year, but the school is in operation throughout the year, so that at any time three fourths of the students are in school and one fourth are on vacation. In addition, there is one week of vacation between each quarter.

This plan was chosen by the district and people of our community for several reasons: To the school administrators, it was much easier to schedule and caused less shifting of students and teachers from room to room. To the teachers it offered more options and advantages for flexible work schedules. For the community the feeling in our rural area where students participate in harvesting of berries and beans was that it would be better to have one group of students for the entire harvest season than to get a new group every fifteen days under the 45-15 plan.

Our four quarter plan is designed to use efficiently the school facilities and teaching staff the full year and at the same time provide a program which fits closely the varying needs of the students.

The change to a four-quarter system added 10 new classrooms without a bonding and building program. The adequacy of support facilities, such as the li-

library, cafeteria and gymnasium was greatly improved. There is no longer a period when the school plant, one of the community's largest businesses, is idle and not making a return on the taxpayer's investment.

One-fourth less equipment is needed and bus loads and schedules were reduced adding a bonus of safety for our students.

Heavy maintenance is on a continual basis as one would find in a fully operated industrial plant. We like to compare our maintenance to that of the Golden Gate Bridge. You start at one end and work to the other and never is traffic stopped. Contrary to some belief it has proved not to cost more than the usual summer maintenance. Last summer we proved that at least in our beautiful Pacific Northwest, air conditioning is not a necessity to the year-round school. We started classes at 7:30 A.M. and turned out at 1:30 P.M. before the heat of the day. Teachers like this schedule and some students said because of the long afternoon to play they hardly felt like it was a school day.

In the future, when building becomes a necessity, for every three classrooms we build, we will get a fourth free.

But more important and exciting is the change that was brought to the curriculum and quality of instruction with its benefits to our students.

Because of added classroom space and the lowering of class loads, significant changes in the curriculum have been made possible. Four quarter organization means flexibility and it is especially evident in the curriculum. Subjects previously squeezed into or stretched to fit the traditional two term school year can be taught in terms of a more suitable time schedule to keep student motivation at the highest level. Curriculum was reorganized in 12 weeks modules and it was possible to add thirty eight new mini courses (one term) ranging all the way from fun recreational courses to advanced courses in science and mathematics.

The use of summer for school opens up the greatest dimension to instruction. (The four walls disappear and the classroom is any place within fifty miles of our community. Outdoor activities in science, geography, and history along with outdoor camping, 4-H activities, and vacationing become a part of our curriculum.

Parent conferences are held with all parents at the end of each quarter. Report cards are a thing of the past. Personalized curriculum programs with a loss of grade placement consciousness have become a reality.

We have great respect for the student and how the new program affects his pattern of life. All students can participate in team sports and group activities during the quarter they are on vacation. We have a "Call in for Education" telephone number at which a recording gives the events of the day and permits the students on vacation to participate in those that interest them.

Students have four chances to pick up work rather than only when the job market is flooded during the summer.

Perhaps the most important advantage of our plan is the educational progress made possible by the flexibility provided by it. The lowered class size provides much more individual attention for the students. The slow learner or the pupil with classwork deficiencies caused by excessive absences, health, or other reasons, need not be held back a whole year. Since each school year's work is studied in three quarterly units, he need only obtain remedial work or repeat the work in the deficient unit. This is done by shifting him to another cycle. The traditional retention of pupils is a thing of the past.

It is also much easier to accelerate or enrich the program for mature children with exceptional ability. The child may progress more rapidly or widely by permitting him (her) to attend classes during the quarters they would have otherwise been on vacation.

With a flexible vacation schedule, the children and their families may now take full advantage of recreational activities and sports which are offered in all the different seasons of the year. For example, in the winter months, families may now avail themselves of the hunting season, of skiing, ice skating, and winter carnivals and sports tournaments in the North, and of warmer weather activities and trips in the South. By taking trips in different seasons of the year, such as in the spring, fall and winter, families are able to have enjoyable vacations at substantially reduced off-season rates frequently applicable for airlines, lodging, and other tourist accommodations available in the United States and abroad. Off-season travel is more pleasant in terms of avoiding highway congestion and crowded facilities. Some businesses welcome the opportunity of spreading employee vacations over various parts of the year rather than having all employee vacations concentrated in only eight weeks or so of the summer. A

great savings on the amount of extra vacation help needed comes from a year-round scheduling program.

Community activities such as Vacation Bible Schools, and recreational programs are now year round programs.

Any plan for change in organization must involve the instructional staff as they are the most important people in the operation of the plan.

The teachers of School District No. 35 were involved from the start in the planning of the program and the implementation of it. We feel the support of the teachers and their local educational association has been the basis for the success.

Teachers have the opportunity to work three months, six months, or nine, months, or on a full year contract. Working on a full year contract has greatly increased the economic earning capacity of the teacher and has provided the profession with fully employed master teachers.

For those teachers who are seeking to return to school, there is the opportunity to take 3 month vacations back-to-back and return to school for a 6 month period with full pay. For those women seeking to raise a family, vacation periods can be arranged to coincide with the termination of their pregnancies.

It is possible for teachers to work on a full year schedule for four years drawing a regular nine month salary and to take a full year off the fifth year drawing full salary.

To fill the positions of those teachers on vacation, specialists from traditionally organized school districts are available. Because of their special strengths and different professional outlooks our professional staff is strengthened.

Teachers on vacation from each of the grade levels provide an excellent substitute list and no longer do we have baby sitting by substitutes unfamiliar to the district.

Although possibly it is yet premature, evaluation of our program to date shows the following:

1. Complete acceptance by our community, students, and staff.
2. Tremendous increase in amount of learning and quality of our education.
3. When taking the increase in the number of our students into consideration the cost of a 12 month school is below that of the traditional school year. Besides the fact there is no 1.5 million dollars capital outlay for new buildings, our cost per pupil will drop approximately \$157.00 next year.
4. Fourth and more important we feel, it is a step toward more efficient school operation.

In conclusion, I would say we do not work at selling our program to others. Our plan has benefited our district, students, community and staff but it possibly would not work in other areas with climate and problems different from ours. We are most happy to share our knowledge and experience with you in the interest of the vitality of American education.

Please feel free to contact me if I may be of further service.

Very truly yours,

SAM D. WILSON, Superintendent.

MORA PUBLIC SCHOOLS,
INDEPENDENT SCHOOL DISTRICT NO. 35 KANABEC COUNTY
Mora, Minn., May 9, 1972.

Hon. JOHN N. ERLENNORN, Hon. ROMAN C. PUCINSKI,
House of Representatives,
Washington, D.C.

GENTLEMEN: Pursuant to your request for information regarding our extended school year plan, I submit the following information:

PARENTAL RESPONSE

At the time of the announcement of our Board of Education, our people were aware that we were in desperate need of additional school facilities, but because of the concern about raising property taxes, they were also aware that they had turned down two successive bond issues. Therefore, the general public attitude was a "wait and see" attitude. Several surveys showed that they were willing to give the plan a chance and the opposition that we had was minimal. We contracted with an outside evaluation firm and this firm did a parental survey recently, after nearly a year on the plan. We were pleased to see the strong majority favor this plan and the statement that the extended school year changed the life style of the family very little. The plan sold itself throughout the year and is well accepted by our public today.

STUDENT ATTITUDE

Similarly, we also did a survey of grades three through six. Our extended school year plan only covers grades one through six. The strong majority of students prefer the year-around plan with the four season vacation over the traditional nine month with a one-long summer vacation. We have been able to show a considerable improvement in the learning atmosphere with the extended school year.

TEACHER WILLINGNESS

We found approximately 75% of our elementary staff very favorable to the proposition when it was first submitted. After operating on the plan for a full year, we now have 100% support from our staff. Although the plan calls for increased evaluation of student progress and more accountability on the part of a teacher which both require more time on the part of the teacher, our teachers were very willing to provide this time because of the flexibility of contracts available to them with this plan. We have eight different contracts with our elementary staff. Approximately 50% of them work the year around and earn 25% more than they did under the traditional program.

CAPITAL COST SAVING

There are two purposes for the extended school year. One, the improvement of instruction without a great increase in operational costs, and two, a saving of both operational costs and capital outlay. Both can be achieved, but rarely together. In our school district we spent only an additional \$18,000 in up-start costs to implement the year-round school. We are able to show a substantial saving over other alternatives. Our research shows that we would have to increase the property tax on a \$20,000 home by \$83.00 a year and on a \$30,000 home by \$137.00 a year to build the classrooms we were able to create by extending the school year. There is also a saving in staffing because of increased efficiency.

UNANTICIPATED PROBLEMS

We anticipated many more problems than we actually had. We are pleased at the ability of the parents, teachers, and students to adjust to a changed situation when the situation calls for it. I believe that most Americans are resistant to change but can work very constructively within that change once the change is brought about. The 45-15 plan, which is the plan we operate under, has many, many advantages but also has some disadvantages and problems. I differentiate between a disadvantage and a problem because a disadvantage is something you learn to live with and a problem is something one can solve. We had many more problems than disadvantages and are still solving problems as they arise.

LEGISLATION

We did seek State legislation which would provide State Aids for our unique school year. We are the only system in the State of Minnesota and our school laws were written for a nine-month school term and a twelve month fiscal year. We now have overlapping school years and, therefore, had to make arrangements through legislation and through our Department of Education to provide for this type of school year. After operating for a year on this plan we have become cognizant of additional legislation that we will seek in 1973 when our State legislature meets again. Likewise, we have some difficulty with Federal legislation which is also geared for a nine-month school year and does not take into account the fact that we will have three-fourths of our student body in attendance during the three summer months. I plead with you that this be considered in Federal legislation that is adopted.

COMPULSORY AND VOLUNTARY

Our plan was a compulsory plan for grades one through six. Because of the size of our school district, we were not able to offer this on a voluntary basis. The larger the system the more fluid this thing operates and a system our size, with only 2,000 students, must make it compulsory if it is to operate at all. The fact that it is compulsory makes the parent and student survey all the more meaningful.

LENGTH OF PLAN

We have operated on this plan since July 1, 1971.

PLANS IN THE FUTURE

With the information received by the public response and their statement in the questionnaire that they would prefer to see the continuation of this plan over an additional building plan, leaves us little choice but to continue with the plan. We feel it is educationally as well as financially superior to the nine-month school plan and we see no reason why it will not continue for years to come. However, I am realistic and realize we do not operate in a vacuum, and I am sure that if the extended school year idea does not develop we will not be able to operate the only extended school year plan in Minnesota for many years. However, I am confident that the advantages so far outweigh the disadvantages that it is the idea of the future.

I appreciate and am honored by the opportunity to present testimony to you and I would be most pleased to submit further information to any member of Congress that seeks additional information.

Respectfully yours,

Pius J. Lacher,
Superintendent of Schools.

THE COUNTY SCHOOL BOARD,
PRINCE WILLIAM COUNTY,
Manassas, Va., May 9, 1972.

Hon. ROMAN C. PUCINSKI,
Committee on Education and Labor, General Subcommittee on Education, Washington, D.C.

DEAR CONGRESSMAN PUCINSKI: Thank you for the opportunity to present information regarding the Prince William County Year Round School Program to the Congressional Subcommittee on Education.

In response to your specific questions regarding the program, I have prepared a brief overview and a more detailed analysis of the major elements which appeared to have impact on the Year Round School Program in Prince William County. You may feel free to use these materials in the manner best suited to your needs.

Sincerely,

ERNEST H. MUELLER,
Assistant to the Superintendent for Administration.
Enclosures.

FACTS ABOUT PRINCE WILLIAM COUNTY'S YEAR-ROUND SCHOOLS

(By Stuart M. Beville, Division Superintendent)

1. What is the Prince William County YRS plan and who is affected in 1971-1972?

The initial plan calls for three elementary schools (grades 1-5) and one middle school (grades 6-8) to operate on a 12-month basis starting June 29, 1971. All four schools are in Dale City—a residential planned community located just south of Woodbridge, Virginia.

All homes in Dale City have been assigned to one of four attendance patterns (see enclosed calendars). Each group will attend school for about 9 weeks (45 days) and then be on vacation for about 3 weeks (15 school days). The four vacation periods fall in each of the four seasons. Normal holidays and a one to two week period in the summer are in addition to the four 15 day periods. The vacation periods are so assigned that only 3 of the 4 groups are assigned to attend school at any one time. Each group has the same total number of days for attendance (180). The assignments are made so as to obtain approximately equal numbers of students at each grade level on all four attendance patterns. Students from any given home attending schools operating on a year-round basis will attend on the same pattern regardless of grade placement or school assignment. As near as possible, neighborhoods are scheduled as a unit. (Until new high schools are completed, high school attendance times will not be affected by the

year-round plan. High school schedules will continue to be planned independent of the elementary and middle school schedules.)

2. What steps lead to the implementation of this plan?

AWARENESS

In October, 1969, the Research and Development Office which had been established four months earlier, requested the School Board to conduct a study and survey of the County population concerning the concept of year-round schools. The Board directed a more extensive study and information gathering effort in pursuit of this concept.

VISITATION

During the following year, visitations to other divisions and a review of the literature were conducted. The concept was discussed with the County Council of PTA's and a number of other civic groups; a 1970 summer workshop of teachers, principals, and administrators explored, with consultants, the details of some designs for year-round school use. Prince William became one of fifteen counties in Virginia organized under the Division of Educational Research and Statistics of the State Department of Education to pursue continuous progress in a year-round structure.

ANALYSIS/RESEARCH

In September, 1970, the School Board established an "overcrowded" committee of about 60 staff members to consider alternatives to the overcrowded conditions in our schools. The committee worked intensely and reported to the Board in November. The method that seemed to hold most promise was the year-round use of schools program. At the time of this report the question was raised, "if we implement the year-round use of schools, can we be ready by 1971-1972?"

COMMITMENT

On March 3, 1971, the School Board unanimously passed a resolution adopting the plan, as previously stated, subject to funds being made available from the County Board of Supervisors. They also approved the attendance calendars and boundaries for the participating schools. On March 4, 1971, the Board of Supervisors appropriated the funds. These actions finalized the series of activities leading to the year-round use of education resources.

3. What was the cost of getting the plan started?

FINANCE

The "one time cost" funds appropriated by the County Board of Supervisors were in the amount of \$145,673. These funds: (1) Provided for the cost of air-conditioning two elementary schools in Dale City, (2) curriculum work, (3) administrative assistance, (4) clerical assistance, (5) maintenance, and (6) publications and other materials.

Federal funding of a portion of the project is being provided for through the Educational Professions Development Act, Title V, Sections D and B-2. These funds are designated for staff development. The State Department of Education is providing assistance in the area of research for and evaluation of the project.

4. Why did the Prince William County School Board consider the use of school buildings on a year-round basis?

QUALITY

Facilities most promising trends in education such as continuous learning and individualized instruction.

Permits continuous or more timely remedial work, enrichment, and acceleration programs.

ECONOMY

Increases the capacity of school building by up to 33%.

Delays and, if permanently adopted, decreases new construction; however, this is partially offset by the cost of required air-conditioning in existing buildings.

CONVENIENCE

Permits the 16 weeks of vacation to be more evenly spread throughout the calendar year.

5. Are any other school division in the United States using their schools on a year-round basis?

Atlanta, St. Louis, Chicago, and various divisions in New York, Pennsylvania, and California are operating on something other than a regular school year. Also, an estimated 600 other divisions are seriously considering plans for the near future. Virginia has a group of 15 divisions that are working with the State Department of Education to develop model plans.

6. Are other community agencies affected by year-round use of schools?

Since different groups of students are out of school throughout the year and the time that all students are out at the same time is reduced drastically, this will most likely affect:

Park and Recreation programs	Summer church schools
Community libraries	Camps and camping
Day care and baby sitting services	Travel agencies
Employers using student and teacher workers	Moving van operations

7. Did any laws have to be changed to permit the operation of such a plan? No, an administrative ruling which allows a small variation in the method of reporting attendance was needed to permit full state aid reimbursement to Prince William County. This was received on March 2, 1971.

8. What financial considerations were made?

Except for the "start-up" cost mentioned above, no increases in cost are anticipated for the operation of the YRS plan. For example, while it is true that a teacher may elect to work all year at an increased annual salary (same per diem rate), this cost is offset by the corresponding lower number of teachers required.

9. Do students change teachers at each vacation period?

No, students are scheduled with the same teacher or teaching team for the entire year just as they would be on a "regular" calendar.

Project evaluation was initially designed to include evaluation of three components by separate agencies: Impact on the Community, Impact on Achievement, and Impact on Finances. In addition, the design called for an accountability check on each of the agencies evaluation techniques and methods.

YEAR-ROUND SCHOOLS

Listed below are the dates of the 10—15-day instructional periods in the 241 day year-round calendar:

- | | |
|----------------------------------|----------------------------------|
| (1) ABC—June 29-July 20 | (9) ABC—January 3-January 21 |
| (2) AB D—July 21-August 10 | (10) AB D—January 24-February 11 |
| (3) A CD—August 11-August 31 | (11) A CD—February 14-March 6 |
| (4) BCD—September 1-September 22 | (12) BCD—March 7-March 27 |
| (5) ABC—September 23-October 14 | (13) ABC—March 28-April 19 |
| (6) AB D—October 15-November 5 | (14) AB D—April 20-May 10 |
| (7) A CD—November 8-November 30 | (15) A CD—May 11-June 1 |
| (8) BCD—December 1-December 22 | (16) BCD—June 1-June 22 |

I.—Cycle of four groups of students through a school year of 16 3-week modules.

Group/modules	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A—Red.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
B—Blue.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
C—Green.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
D—Gold.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

II.—Roman numerals I, II, III and IV represent the first four 8-week modules in the cycle. The cycle repeats itself every four 8-week modules.

Groups	Modules I					Modules II					Modules III					Modules IV				
	Grades					Grades					Grades					Grades				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
(A) Self-contained.....	0	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1
(B) Self-contained.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
(C) Self-contained.....	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
(D) Self-contained.....	1	1	1	0	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	0
Team.....	3	3	1	3	0	3	3	1	3	0	3	3	1	3	0	3	3	1	3	0
Totals:						13					12				11			12		
Self-contained.....						10					10				10			10		
Team.....																				

YEAR-ROUND SCHOOL FACT BOOKLET—ELEMENTARY SCHOOL—CURRICULUM WORK

CURRICULUM REVISION NECESSARY

The advent of year-round schools predicated the need for curriculum change. The cry for relevance for pupils, the plea for greater accountability on the part of educators and the need for a program compatible with the 45-15 schedule of the year-round school provided fuel for the curricular design.

The elementary supervisory staff met early in February, 1971, to consider the philosophical basis for the revision of curriculum. Above all, it was concluded, the projected design should be highly motivational for children, should provide a balanced skills program through the elementary school years, and should be paced for compatibility with both the 45-15 plan and the traditional school year plan. The supervisory staff agreed that this emphasis on motivation would not be in place of a solid skills program which would provide the foundation for all learning operation, but in addition to it.

PRELIMINARIES TO WRITING

Next, principals of the Dale City schools were brought in to discuss the possibilities being opened up by the approaching change and a committee of five teachers from several schools was identified to be released full time from their teaching responsibilities for the remainder of the year to develop a practical curriculum guide. The teacher committee began work on March 1, 1971.

Pacing of the curriculum was made adaptable to the 45-15 school calendar by planning the units to meet 15 day blocks of time. In this way, as groups of children move in and out of school according to attendance patterns, the curricular progression can go on without unnatural breaks or unfinished work.

THREE MAJOR COMPONENTS

To meet both skill and motivational requirements and to provide for correlation of what had formerly been considered as subject matter areas, the curriculum was planned along three major component lines: language arts; mathematics, and themes. Although physical education, music and art activities are integrated into the themes, skills programs in these areas are drawn from existing county guides with the help of area specialists in the schools.

LANGUAGE SKILLS

The language arts skill component represents the primary emphasis of the elementary school program. While former programs incorporated the language arts skills in the content areas such as reading, spelling, language, social studies, etc., the design of this component provides that the skills be introduced in a systematic fashion isolated from the content areas. Every pupil will be exposed to all the basic skills of the language arts in a spiraled, sequential way. The content areas are used as a means of reinforcement of skills already presented. The sixty phases of language arts skills presented during the five years of elementary school (approximately three weeks per phase) provide for a spiral organization that assures sequential order, review, sophistication, improved

diagnostic procedures and evaluation. Reading, language, and spelling have been tied together in the language arts skill program.

MATHEMATICS SKILLS

The mathematics skill component, based on Modern School Mathematics, is a sequential program with a spiraling presentation of ideas and methods through successive levels. Like language arts, the math program has been divided into sixty pieces paced at twelve phases per year. The time schedule of three weeks per phase is not intended to be restrictive, but to help teachers pace their work and to provide a reasonable unit for teaching. A student is not expected to repeat a phase more than one time. Teacher judgement as well as the testing program play an important role in determining advancement.

INTEGRATED THEMES

The thematic component of the curriculum offers a vehicle through which the learner may become highly motivated and personally involved in the learning act. Although themes selected were based on the high interest of children, there remains a systematic sequence to learning and a balanced curriculum. The correlation of subject areas is part of the design but some themes are single subject oriented, such as in science or social studies, and may not lend themselves to correlation of all subject areas. Subjects omitted in a particular theme will receive necessary attention within another of the scheduled themes.

EVALUATION

The three components together hold the possibility of contributing to more individualized teaching, more personalization for pupils, increased evaluation of skills growth, and a program with greater balance and highly motivational school experiences. The guide which resulted is not a finished product and is being evaluated in terms of teacher-pupil acceptance and pupil achievement. The teacher committee which produced this guide worked hard and long against a difficult time table. The first edition of guides to the three components for grades one through five was printed and ready to go when school opened on June 20, 1971. The curriculum design now in operation is being monitored for evaluation and revision by the Department of Instruction of the Prince William Public Schools.

COMMUNITY INVOLVEMENT

Evaluation of the total program which will include involvement of members of the Dale City community will be carried out under the auspices of an independent research organization so that objectivity can be assured.

MIDDLE SCHOOL CURRICULUM DEVELOPMENT

DETERMINING THE SCOPE OF THE UNDERTAKING

The reality of a year-round school program necessitated staff analysis of existing curriculum and the ramifications the extended term would have on the instructional program. In order for subject area people to have the necessary time for conceiving, writing and implementing a new curriculum, the county school board in the spring of 1971, provided the Godwin staff with three full-time and three part-time substitute teachers. The net effect of these additional people was to "free" total academic departments for blocks of time for curriculum planning.

TASK ORIENTATION AND SOLUTIONS

The initial task of all departments was to design the curriculum around a nine week time frame so that a conceptual aspect of each subject could be introduced, pursued and completed within the time period. A student could, therefore, enter school on one of his nine week blocks and complete a segment of each course within this period. He would leave school at the end of the nine weeks without scholastic obligation and be evaluated for this portion of the year's work.

The second hurdle of curriculum design facing the staff was the matter of academic continuity. It was feared by some that vacation breaks every 45 days might be detrimental in certain courses such as mathematics, foreign languages,

performing music and science. Once again the method selected to surmount the problem was the development of the curriculum into nine week conceptual "packages," each being an entity of its own.

UNIQUE FEATURES OF GODWIN MIDDLE SCHOOL PROGRAM, PRINCE WILLIAM COUNTY, VA.

Year Round Schedule (45-15 Plan).—*Block/Modular Scheduling; *Odd-even Scheduling; *Activity Schedule.

Flexible Scheduling for People.—*Inter-discipline Teams; Intra-discipline Teams; *Personal Advisor Assigned for three years to each student (20-1 ratio); *Multi-Age Grouping; *Community Aides; *Multiple Contracts Offered to Staff; *Student Aides; *Teacher Aides.

Materials.—*Multi-Text Approach; *Thematic Curriculum; *Contract Learning; *Inquiry Approach; *Simulation Techniques; *Co-ed Programs in Industrial Arts and Homemaking; *Self-Instructional Packets; *Performance Based Curriculum; *Programmed Guest Offerings.

Space.—*Open Concept Multi-Group Areas for Instructional Use; *Seminar Areas; *Planning Areas.

Many other modifications of traditional curriculum designs were faced and hopefully solved by the staff. Such occurrences as new students coming into the program, the expected requests in summer for parental vacations and related problems are all handled on an individualized instructional program.

MIDDLE SCHOOL FUNDING

The fusing of a year-round concept with a flexible middle-school schedule calls for some degree of modification in master schedule design. Very early in the planning stages of the year-round school, this matter was given detailed attention by the faculty and administration of Godwin Middle School, with aid from subject area supervisors and outside consultants.

With students coming and going continuously throughout the year, it is necessary to have additional management tools that are unnecessary to the operation of the "traditional" school calendar. The scheduling system designed for year-round school usage contains the following features. A student receives a new schedule each time he begins a new group-term. Although many (most) "class" groupings maintain their identity throughout an entire year, some "classes" (study hall sections are a good example) are reorganized for each 15-day year-module. New class lists are provided. Since most year-round schools operate in rapidly-growing communities, provision is made for the continuous enrollment of new students and for their inclusion in the system during the year. The system responds with new statistics and student rosters to reflect the changing population.

Although not directly related to the requirements of a year-round operation, the system accommodates a flexible, modular schedule. Each school-day is divided into twenty 20-minute modules for a total of 400 minutes of scheduled time. Meeting times for each pupil activity are expressed in terms of these day-modules. Example: "01-04" as the meeting time for a course means that the course begins at the start of the first 20-minute module of the day and runs through the end of the 4th 20-minute module for a total meeting time of 80 minutes.

Course Times.—Each 7th and 8th grade student is scheduled for a certain number of day-modules in each of his school activities. The minimum number of 20-minute modules scheduled for each student is:

	Odd days	Even days	Hours per year
Block.....	4	5	270
Science.....	2	2	120
Math.....	2	2	120
Science-math option ¹		1	30
Arts.....	3	3	180
Physical education/health.....	3	3	180
7th grade reading.....		2	60
7th grade music.....	2		60

¹ Science and math classes for a student are always scheduled in adjacent time periods. On even days 1 20-minute module is scheduled between the science and math class to be used for either activity.

Optional activities include:

8th grade music; 2 mods, alternate days.
8th grade French; 2 mods, alternate days.

In addition, certain 7th grade students take French instead of Reading.

In summary, the schedule in operation at Godwin Middle School reflects certain modifications as needed in the year-round program. It encompasses the necessary flexibility required in the middle school program.

SCHOOL DESIGN AND INSTRUCTION

While not specifically designed for a year-round program, the Godwin plant offers many possibilities for innovative instructional practices. Such practices as team teaching, individualized instruction and the open concept may be implemented as a result of school design.

The Godwin plant in particular lends itself quite readily to such design as a result of the lost areas and related large instructional spaces.

Very effective utilization of instructional personnel and of materials can be accomplished with a lost area. Large spaces afford many different groupings of students. They can be divided or grouped in any way to accomplish the instructional objective, whether it be a large group of 90 or a small group of 5.

Students from two or more groups doing the same activity can be supervised by one teacher, freeing other teachers for enrichment or supplementary instruction to another group. Any common presentation need be given only once, since students can be assembled into a large group quickly and efficiently.

In addition to facilitating large group instruction, areas of the lost room can be set aside for very small groups of about 5 students and an instructor, to give the students more individualized instruction. The teacher can work with the small group and still supervise a large group activity. Thus, regrouping of students is continuous.

Materials as well as teachers are used more effectively with a large area. Enrichment materials can be made available to all students by placing them in the lost area. Smaller numbers of any material are needed, hence allowing a greater variety. Since all materials are readily available to students at all times in the area, not just when they are in a particular room, a broader spectrum of materials is available to students.

In summary, the school plant is designed for innovative instructional practices. This aspect of school operation would be possible on a year-round calendar or regular school term.

CONTRACTUAL ARRANGEMENTS WITH TEACHER

The advent of year-round schools created some flexibility in contractual agreements with the teachers. The majority of our teachers, 57 out of 65, chose the extended, or 241 day contract, where they teach the entire school year. The number of teaching days is increased from 191 to 241, but the per diem rate remains the same as that agreed upon for the salary scale.

Eight members of our teaching staff had made previous commitments for extended vacations, summer school attendance and travel. These teachers selected the regular 9-½ month teaching contract and began fulfilling their obligations on the same day the returning and new teachers reported to schools on the traditional nine-month calendar. Middle school teachers from other schools within the county taught in their places during the summer months.

Professional staff members could have selected a nine-month teaching contract whereby they would teach with a particular group of students on one of the four schedules. This would have necessitated a self contained class for the teacher and students. The staff unanimously agreed this type of contract was impractical for the middle school since the teachers have special areas of interest and no one felt comfortable teaching all subjects.

The 241 day contract with the additional salary increase was favorably received by the faculty, especially the men who would normally have looked for summer work.

PRINCE WILLIAM COUNTY EVALUATION PROPOSAL

A discussion of the elements to be included in the proposed Prince William County Evaluation Project was undertaken by the School Board. It was pointed out that there were five components to the study. These components included:

1. A survey of community attitudes and opinions in the Dale City area and in the total County;
2. A survey of the effect on academic achievement of year round school and the revised curriculum;
3. The financial impact produced by the year-round school and other factors;
4. An evaluation of the effect of year-round school on parks and recreation; and
5. An accountability component which would be used to improve coordination between all other elements of the evaluation program and to insure that the goals of the evaluation task force are achieved.

Different organizations or agencies, such as universities and private research firms, are being considered for the various components of the program. The intention is to insure internal monitoring between the various agencies so that there is an automatic built-in coordination device designed to reduce overlap of efforts. This technique also provides for increased validity for each element of the study as all agencies will have input into the development of all evaluation instruments put into operation. A tentative time line for the project has been established and the intent is to have the total evaluation task force designed during the month of October, the production of testing instruments and the pre-testing of those instruments to take place during the early part of November, and the gathering of data to commence as quickly thereafter as possible. A more formal time line will be developed as soon as agreement is reached as to which agencies will be responsible for the various components of the study.

EVOLUTION OF YEAR-ROUND SCHOOLS—A PLANNED CHANGE PROCESS

The sounds of taxpayers' revolts, population explosions, relevance in education, efficiency, economy, individualized instruction, and humanizing education resound throughout the land with a common underlying question running throughout, "Can public education keep pace and meet the demands of societal and technological change?"

The concern for the impact of these forces on education is heightened by the knowledge that the need for planned change is often overlooked, and that unstructured change can become cancerous in nature enveloping all in a chaotic process that projects little regard for its ultimate effect on mankind. The mobility of modern man and the complexities of modern society increase man's anxiety and are added evidence of the need for structure in the process of change if chaos is to be averted. In emphasizing the need for a structured-coordinated effort in the societal change process, Lawrence Frank made the following observation:

How much ambiguity, contingency, ambivalence, confusion, and conflict can we endure without being individually destroyed or without destroying our social order is a very pressing question today.¹

Karl Mannheim further emphasized the importance of humanness when he described a democratic planning method as follows:

Its method is either to find new ways to free the genuine and spontaneous social controls from the disintegrating effects of mass society, or else to invent new techniques which perform the function of democratic self-regulation on a higher plane of awareness and purposeful organization.²

Mindful of the above factors, an educational change process founded on the concepts of democratic planning received its impetus in Prince William County, Virginia.

In Prince William, the overriding concern was to produce a flexible educational organization with sufficient vitality to meet the present needs of society and the capacity for perception and alterability to accommodate society's future needs. In writing about educational change, Miles evidenced a similar concern in the following statement:

It is time for us to recognize that successful efforts at planned change must take as a primary target the improvement of organization health—the school system's ability not only to function effectively but to develop and grow into a more fully functional system.³

¹ Lawrence Frank, "Fragmentism In The Helping Professions," *The Planning of Change*, Edited by Warren B. Bennis, Kenneth D. Bennis, and Robert Chin (New York: Holt, Rinehart, and Winston, 1961), pp. 43-44.

² Ibid., p. 108, Karl Mannheim, "Roots of the Crisis in Education."

³ Mathew R. Miles, "Planned Change and Organizational Health," *Change Process in the Public Schools*, Richard O. Carlson, et al. (Eugene, Oregon: Center for the Advanced Study of Educational Administration, University of Oregon, 1965), pp. 11-12.

The societal and educational factors previously cited in this monograph existed in Prince William County. They were the integral factors in the process of planned democratic change and produced a climate that made the rescheduling of the school year a viable solution to the present and future needs of the County.

The evolution of Prince William from a quiet, rural community to an activated suburban community encompassing a multiplicity of cultural and attitudinal concepts is vividly illustrated through a review of local population and enrollment trends. In the 1960 U.S. Census Report, County population was tabulated to be 50,104, compared to a population of 111,102 reported in the 1970 U.S. Census Report. The population growth was determined to be 121.5 per cent during the time between 1960 and 1970. The highest percentage growth for any large county of 100,000 population in the State of Virginia and in the Nation.

The student enrollment in Prince William County Public Schools was 3,543 in 1950-51; 10,303 in 1960-61; and 32,581 as of February of the school year 1970-71. During the twenty year period between 1950-51 and 1970-71, student enrollment grew approximately 920 per cent.

Reflecting the demands of growth, the school operating budget in 1960-61 was approximately \$2.5 million, with a total budget of \$2.8 million, as compared to a 1970-71 school operating budget of \$24.8 million and a total budget of \$45.1 million. The tentative 1971-72 school operating budget was \$30.1 million with a total budget of \$62.8 million.

The magnitude of the construction program in Prince William County from 1959 to 1970 also reflected the stimulus for change which population growth produced. In 1959, fourteen schools were operating; and in 1970 (with the passage of a \$21.7 million referendum in 1968 and a \$28.7 million referendum in 1970), 42 schools were operative or under construction, with 33 additions, renovations, or conversions underway. In 1973-74, 51 schools were planned to be operative or under construction; and 57 additions, renovations, or conversions were to be completed or underway.

Utilizing the preceding figures as background, one can readily envision the economic, social, political, and educational problems that would accompany a comparable burgeoning growth pattern in any community. Prince William County was no exception. Included in the growth problem was the problem of the evolution of an accepted county-wide set of community attitudes and values within a population consisting of many divergent social and cultural patterns. The unique combination of these elements produced a variety of forces focusing interest on educational development with the subsequent production of a vibrant climate for change.

In 1969, the public was brought face to face with the realities of a much prophesied classroom space shortage and the awareness that the future education of their children was in jeopardy. Split-shifts, staggered schedules, changing attendance boundary lines, and overcrowded conditions heightened this awareness, redirecting passive public concern over the shortage of school space into an active and vital one.

The School Board and Administration also recognized the need for the development of alternative schedules designed to educate more children in the available space, and they actively engaged in the investigation of potential solutions. To facilitate research in the area of the rescheduled school year and to carry the public along in the role of informed participants as the research was conducted, extended school days, school weeks, and school years were made the subjects of formal and informal school and community discussions.

In the fall of 1970, the School Board organized a formal committee for the study of various year round school programs. In November of 1970, with visits to on-going year round school programs and research of the available literature as background, the committee recommended that the School Board consider a mandatory nine-week school, three-week vacation student attendance schedule for Prince William County. The School Board accepted the committee's report and directed the school Administration to develop a procedure whereby the school-community could become enlightened as to the intricacies of the 9-3 year-round use of school program and to assess the public attitude toward the initiation of such a program in Prince William County.

One of the first steps that the School Board undertook was to identify obstacles which had to be positively resolved or ameliorated if year round use of schools was to become a reality. It was immediately recognized that community and staff

acceptance and backing were essential to the success of the program. To insure that the community and staff were not considered as afterthoughts in the decision-making process, provision was made for a continuous information flow to all community elements. Other obstacles were the obtainment of finances for curriculum work and air conditioning and the agreement of officials of the State Education Department to interpret existing attendance keeping and reporting procedures so as to permit full payment of State Aid Funds to Prince William County Public Schools operating on the year round school program.

As the county governmental body, School Board, community, educational staff, and news media were informed and involved from the inception of the change process, so was the State Department of Education. The State Education Department was instrumental in providing the project with continuing outside validation, a factor of utmost importance to the development of credibility between the local school division and its community.

While information meetings were being conducted, the School Board developed procedural plans and time lines for the project. The plan was to accomplish air conditioning, architectural, and engineering designs while the community and the staff were being informed and their opinions on the year-round school project assessed. This sequence was suggested because regardless of the outcome of the year-round project, the schools presently without air conditioning were to add air conditioning in the future. In this way, no loss would result if the present community climate proved to be inconducive to year-round school. Under this same premise, curriculum work also was begun as the benefits of rejuvenating the curriculum would be as valuable to a regular school year program as to a year-round school program.

Another rationale considered was that educational innovators were prone to devote such extensive time to preliminary study and analysis that the process proved debilitating to the personnel involved. In other words, educators seem to have the tendency to study and "committee" things to the point beyond which people no longer have vitality. The process of thinking about producing the change appears so monumental to the change agents that the change itself never takes place. To avoid this stultifying effect and because of the limited time available, the decision was made to go ahead as if the program were to become a reality. Following this rationale, instead of merely investigating what to do, the decision was to go ahead and actually produce the program. In this manner, the amount of energy, enthusiasm, and insight generated by the participants would be the determining factors as to how far the project could go. Each problem was to be confronted and overcome as it appeared. Extending the same "all-ahead" full rationale to all elements of the project, the School Board Year-Round School Committee set out to develop a community opinion survey and a cost analysis for air conditioning schools, curriculum development, and personnel.

The impact of this unique challenge, the realization that their professional competencies were in demand, and the opportunity to actually alter their educational climate provided the staff with the necessary stimulus and personal dedication to accomplish the task.

In concert with these efforts, the School Board passed a resolution to initiate a year-round school program if a commitment for financing was made by the county governmental body. The belief existed that the local elected government officials had to be publicly committed to the program. A public action of this type by the government officials would provide increased external validation, reduce the temptation to repudiate the program in time of stress and give the officials an opportunity to feel that the program was partially theirs.

The initial financial request of \$35,000 for air conditioning studies, and in-service curriculum planning was approved by the governmental body on January 14, 1971, and the project was officially underway.

The original School Board consideration of the year-round program included elementary schools and middle schools where overcrowding would cause a need for split or staggered shifts and where a year-round program could negate that need. Further contemplation indicated that in its initial form, the program design that would produce the smallest degree of community and social restructuring possible would be most desirable. This would require a community to be so geographically situated as to have all of the children residing in the community attending the same schools. Only one community was so situated as to have all children in the elementary schools in the community provide the total enrollment of that community's one middle school. This was the Dale City community which

encompassed the three elementary schools of Bel Air, Dale City, and Neabsco, all serving the Godwin Middle School. In January of 1971, the Dale City community was identified as the area where the year-round school project would be initiated. Consideration for a year-round school program to include the high school level was not undertaken in the original concept, because a 100 per cent increase in student capacity was required to house the high school students, and the year-round school program would only produce a 33½ per cent optimum increase.

In March, with air conditioning, planning, and installation costs, along with personnel costs for curriculum development determined, the School Board conducted a survey of community opinions on year round school. The School Board's survey was mailed to homes containing school children and preschool children who would enter school during the ensuing year. One vote was allowed for each school and preschool child in a family. The people surveyed were 66.4 per cent in favor of initiating a year-round school program in the three elementary schools and in the middle school. The results also indicated that most people were opposed to the year-round school program if the middle school was not included in the project. With evidence of a positive community attitude towards the program, a financial request for approximately \$145,000 to initiate the year-round school program also was funded, and the School Board, governmental officials, and community were committed to develop and initiate a year round use of schools program by June 29, 1971.

One of the most persistent problems was the need for constant reassurance and dialogue between the community and the school personnel. Although the entire project was anchored on a foundation of information and involvement (over a hundred presentations were made and more were scheduled, coupled with extensive coverage by the press), misunderstandings did develop. Those which developed were usually based on distorted interpretations of what was to occur.

One outcome, the subject of much introspection, was the development of negative forces not originally in evidence in the information dissemination stage of the program. It appeared that a more critical investigation of the impact which the sequence of those events had on public attitude determination needed to be made. It was hypothesized that when the decision was actually reached to undertake the development of the year-round school program, the forces actively engaged in information dissemination relaxed believing that they had accomplished their task. The interim period between announcement of the program and actual implementation appeared to provide fertile ground for the development of conjecture and rumor. With no forces immediately on the scene to offset or challenge these allegations, a credibility gap was in the offing.

To allow for the establishment of greater balance, the need for community involvement in activities designed to actually aid implementation of the program appeared essential. Community involvement in curriculum development, investigation of activities for students out of school during the 15 day breaks, changes in Bible School schedules, Little League schedules, etc., all were pursued to offset any negative impact, but, not to develop a confrontation situation. The feeling was that any School Board action to denounce the stand of negative groups would only exacerbate the situation and produce greater divisiveness between opposing elements in the community. The approach was to provide information requested and to allow the community to decide if the ramifications of the information were positive or negative to them. A continuing effort was made in this direction with visitations and a summer in-service program as major projects.

A large part of the final success of the entire project hinged on the ability of the individual school personnel to incorporate into their programs the educational values available as a result of the flexibility provided in the year-round concept. Total school-community support for the program could conceivably be realized if pride of accomplishment produced through active, open participation continued to be implemented as an integral element of the overall program design.

The 45-15 Year-Round School Program began on June 28, 1971, and proceeded without event until October of 1971. In October, the School Board undertook the development of an evaluation task force designed to evaluate the effect of the year-round school program on Prince William County education. Community elements initially negative to the development of year-round school opposed this action and attempted to obtain a court injunction to stop the evaluation. The court refused the injunction and in January 1972, the evaluation of the year-round school program was underway.

In February 1972, the School Board held an open hearing on the year-round school program. The community residents in attendance at the meeting gave the School Board an overwhelming display of confidence in the year-round school program. At the opening, the School Board announced its decision to continue the year-round school program and to expand it to other new schools in the Dale City area. This School Board action was met by a standing ovation from the 600-700 people in attendance at the open hearing.

Results of the year round evaluation should be available in August of 1972, and this information should be helpful in the determination of the future of year-round schools in Prince William County. The decision to continue and expand year-round school to other county schools also will be influenced by the cost and availability of funds for new school construction as compared with the cost and availability of funds to air condition all buildings for year-round school use. Another factor, perhaps the most important one, is the continued acceptance and enthusiasm of staff, students, and community for the program.

OVERVIEW—PRINCE WILLIAM COUNTY RESCHEDULED SCHOOL YEAR

(Implemented June 20, 1971)

The announcement of the intent to develop a year-round school program in Prince William County contained three distinct phases. The first phase was designed to expose the community to information regarding year-round schools. This was considered to be a non-threatening process which would allow for maximum internalization of information and create a little emotional impact. The desire was to allow the community time to feel comfortable with the concept and thereby reduce the degree of fear normally generated when people are asked to accept an unknown quantity.

A 180-day school year with a mandatory 45-15 attendee pattern consisting of 45 days of school interspersed with 15 days of vacation was presented to the public as the scheduling pattern with the most promise for Prince William County.

The second phase of the announcement was the identification of specific schools in which the first year-round school program would be conducted if the program was found acceptable by the community and approved by the School Board. This phase produced a certain amount of anxiety in the people whose children were to attend the year-round schools. However, the anxiety which developed in these people did not produce a polarization of attitudes. A reaction of this nature was desired as it produced a climate where people eagerly sought information about the year-round school program. Positive outcomes, such as easy access to people and the opportunity for personal contact between staff and the community, accompanied this demand for information.

The third phase contained the School Board's formal pronouncement that the plan was to be funded and that it would be initiated on a specific date. Several major hurdles, such as the funding of the program, a staff opinion survey, and a community opinion survey, had to produce positive outcomes before the School Board could make its decision. With the announcement came the polarization of community factions—those for and those against the program.

A unique condition developed when political aspirants or opportunists decided that the year-round school could be used as a springboard to political identity. The individuals who were motivated to use the educational program for personal gain did not announce their political ambitions along with their initial display of antagonism toward the implementation of the year-round school program. Their crusade against the year-round school program was founded on the credo that they were out to stop the subversive, misguided School Board from tampering with the traditional summer vacation, and thereby produce an inferior educational program. This opposition culminated in a legal attempt to enjoin the School Board from initiating the program. When the injunction attempt failed, the opposition became less militant and the community resigned themselves to wait the remaining month for the program to begin.

Rumors of walk-outs, stay-homes, and picketing were covertly discussed, but on opening day, none materialized. The beginning of the year-round school program was singularly uneventful and actually produced evidence that many people were positively disposed toward the program.

Through the entire implementation period, the staff members of the year-round schools presented a totally united position of support for the program. Staff mem-

bers from other Prince William County schools were not as singular in their opinions about the program. The Teachers Association supported the pilot program and this support produced the impression that, in general, teacher negativity was mild.

Students readily accepted the program and produced no extraordinary problems. Those students who had some early misgivings about the program were quickly caught up in the contagious enthusiasm which emanated from teachers and students alike. The program proceeded with an absolute dearth of negativity forthcoming from any of the schools.

The political aspirants, previously discussed, were not ready to accept the popularity of the program. They continued their harassment by bringing legal action against the School Board when the Board sought to undertake an evaluation of the year-round school program. This effort failed and the courts upheld the School Board's right to conduct the evaluation.

After eight months of year-round school operation, the Prince William County School Board conducted an open hearing to reevaluate community attitudes regarding the program. Forty-seven people addressed the School Board on this topic, and there were 46 favorable comments and one negative comment. At the close of the hearing, the School Board announced that the year-round school program would be continued through 1972-73 and expanded the program to include two new schools located in the Dale City area. The 600-700 people who attended the open hearing accorded the School Board a standing ovation when the announcement to continue year-round school was made.

The Prince William County Year-Round School Program is continuing, and studies are being conducted to determine what future direction the program should take. An extensive evaluation of the program covering the areas of achievement, attitude, and cost, combined with an accountability and auditing element, will provide valuable data to be used in the development of a decision regarding the year-round school program. Initial data from the evaluation should be available by August of 1972.

The question of cost benefits cannot be factually responded to at this time, as no financial analysis has been completed. The year-round school program was designed to expend no more or no less money per child in the areas of equipment, materials, and staff. Teachers were offered an opportunity to select the conventional 9½ month (193 days) contract or an 11½ month (241 days) contract. Those teachers who accepted the longer contract were paid their regular daily rate of pay for the extra days. These teachers also were responsible for more children and therefore the actual per pupil expenditure was not altered. During the 1972-73 school year, the contract options have been increased to include a 231 day contract.

In the area of advice to others contemplating a similar undertaking, I make the following observations.

The need for staff support and staff public commitment to the program is paramount if there is to be reasonable hope for success. Program development should be a staff obligation if staff dedication to the project and more than average assurance of positive outcomes are to be realized.

External validation of the program must be obtained if more than a limited degree of community confidence is expected to develop. The forms of external validation are many and encompass, among others, university, state education department, political and staff public acknowledgement of support and commitment to the program.

Timing appears to be of ultimate importance, and the amount of time required changes with each element of the operation. Whereas extensive time for information dissemination prior to the announcement of the intention to implement a program may be considered desirable, extensive study, feasibility or other, tends to dissipate enthusiasm. People need time to internalize change, feel comfortable with it and to reduce the fear produced by unknown quantities. This process is incremental in nature and requires time free from fear.

Furthermore, the time between the formal announcement that the program is to be implemented and the actual implementation appears to be very critical. The shorter the amount of time between announcement and implementation, the shorter the amount of time for conjecture and misinformation to work their magic.

It appears essential that reciprocity between the community and the institution must be a prime consideration in the implementation of year-round school.

There must be a give and take condition existing. The schools must become more responsible to the needs of individual families even if policies have to bend, as the community must become more responsible to change to the extent of altering life styles. This is especially true when the year-round school program has caused a problem, the people need to feel that they are obligated, socially, to explore the unknown.

No legislative change was necessary for the year-round school to meet the Virginia State Education Code. Attendance accounting was the only area needing interpretation and this was quickly resolved without significant change in the code.

The manner in which the program is presented to the staff and to the public is of major importance. Insightful actions, such as allowing staff and community the opportunity to develop self identification with the program and exploration of the potential educational and financial benefits are most helpful.

The "low key no sell," "no panacea," "we do not have all the answers" approach is important because unforeseen errors or shortcomings in the program will not lead to condemnation of the total program. In fact, the community will expect more discomfort than actually occurs from the program. Speaking generally, the community insists on de-emphasizing the problems.

The base for information dissemination should encompass as many people as possible. It is important to give staff a chance at ego-self-image development and allow them the opportunity to be the experts. The degree of failure can be drastically reduced when those who have the responsibility for making the program operate actually develop the program.

If the primary reason for developing a year-round school program is to create extra space and to save money, the program may have grave difficulty finding acceptance. Educational staffs and communities do not appear to be willing to risk altering their conventional patterns without a major improvement in the education process as a planned potential outcome.

WASHOE COUNTY SCHOOL DISTRICT,
Reno, Nev., April 27, 1972.

Re Your letter of April 14, 1972, requesting information concerning year-round school concepts.

Hon. ROMAN C. FUCINSKI,
Chairman, General Subcommittee on Education,
Washington, D.C.

DEAR SIR: In the 1969 and 1971 sessions of the Nevada State Legislature, attempts were made to gain funds which would have supported a feasibility study which would have had statewide implications for year-round schools. In the wisdom of the legislature, this study received a priority which did not allow funds to be spent on the project; subsequently, the Washoe County School District called for the formation of a Year-Round School Study committee. Its task was to look for some type of year-round program which would not increase the per student operational costs of the District, but at the same time provide an educational program which would produce educational results that are equal to or better than those in the existing program. The committee composed of 7 teachers, 7 principals, 4 representatives from the State Department of Education and representatives of the superintendent's staff. The committee decided to simulate a plan on paper and compare the results with those of the actual program that is presently in operation. The results of this simulation have shown that if the teacher-student ratio presently being utilized by the District is maintained in a new program, then the per student or per unit costs will remain at the same level that the District presently spends for each student unit.

In theory, the 45-15 increases the capacity of a given building by one-third. An attendance area can be divided into 4 groups, each of which are equal to $\frac{1}{4}$ of the capacity of the building. Thus a building has a 4/8 capacity. By relating this type of figure into potential construction, it would appear that a district can postpone or eliminate construction up to $\frac{1}{4}$ of potential need, depending upon the consistent growth factor of the District.

To this date most teachers have not rejected the concept of year-round education and have indicated a desire to gain more information concerning contract alternatives which would be available for teachers. The 45-15 allows for numerous

types of contracts to be offered to teachers. Thus a teacher has the potential of a maximum 240 day contract down to any number of days which would be agreeable with the teacher and the district involved. This type of project will allow a teacher the opportunity to be a full-time professional in a full-time profession.

At this time it does not appear that there will be a need for changes in the Nevada Revised Statutes concerning the year-round program.

The Board of Trustees of the Washoe County School District is scheduled to consider the possibility of implementing a 45-15 program in two of the elementary schools in this District. The District has 38 elementary schools.

This type of change represents a drastic change in the life style of the families of this area, but more importantly it represents an opportunity for parents and teachers to work together in establishing an educational program which has the promise of providing greater opportunities for the students and the community in which they live.

Thank you for the opportunity of providing input into these important hearings.
Sincerely,

Dr. MARVIN PICOLLO,
Superintendent.
RICHARD A. WRIGHT,
Coordinator Federal Program.

A RESTSTRUCTURED SCHOOL YEAR

A PROJECT OF THE WINSTON-SALEM/FORSYTH COUNTY SCHOOLS

A growing interest in the possibilities of extending or restructuring the school year led the administration of the Winston-Salem/Forsyth County Schools to undertake a study of this concept, beginning in January, 1968. As a result of that study, the local Board of Education determined to make a small beginning in one type of restructured year program.

The approach taken was a 45-15 plan, with the pupil year divided into four nine week terms interspersed with three week sessions designed for enrichment, remediation, and vacation. Attached is a more detailed explanation of how the 45-15 or 9 week-3 week plan will operate in one school in our system during 1972-73.

Our project has been very modest. We began in 1969-70 with one class of third graders, all of them volunteers. There was considerable enthusiasm from the parents, students, teacher, and principal. In 1970-71 we continued this group into grade 4 and created a new third grade section, again made up of volunteers.

When 1971-72 planning was underway, we had decided to open an elementary laboratory school in which would be incorporated many of the innovative programs which were being tried in several schools. The restructured calendar was one of these.

In July, 1971 the John W. Moore Laboratory Elementary School opened with 600 pupils in grades 1-6. All pupils were volunteers, and there has been much interest in this school throughout the community. We were unable to accept all children who applied in 1971-72 and the same is true for 1972-73.

Our experimentation with a restructured calendar was not designed to reduce costs. It was, instead, designed to strengthen the quality of the educational program. So far, our very limited evaluation seems to indicate that the intervals for remediation and enrichment plus the reduced "forgetting time" during the summer may have a positive effect on pupil achievement. We are, at least, encouraged to continue with the project.

During the next year, we plan to give attention to two additional questions. First, can the 45-15 plan be effectively modified to retain the educational gains which we believe it may have and at the same time yield some economies? Second, does the 45-15 plan seem appropriate for the secondary school or is there a better approach? By 1973-74, we hope to initiate some type of restructured year program in one junior high school.

One thing we have learned from our experience is that parents who voluntarily send their children to a school which operates on a restructured calendar are extremely cooperative; but many of them have children in other schools which operate on a traditional nine-month term. This poses hardships on parents and families. It is difficult to imagine our entire system moving to the restructured calendar; yet, moving slightly further in this direction seems almost as difficult.

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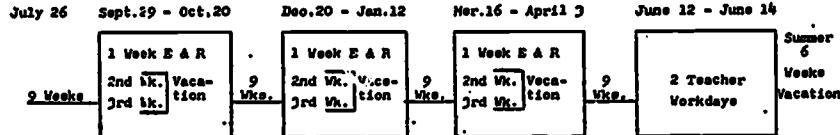
Our experiment is endorsed by the State Department of Public Instruction and no legislation has been required to permit it. Children in general have expressed opposition to going to school in July, but those who are in the program seem to like it very much.



Appendix C

**RESTRUCTURED SCHOOL YEAR
MODIFIED NINE-THREE CALENDAR**

School Year 1972-73



1. Teacher workshop = 7 workdays = July 17-July 25
2. During each of the three-week interim periods, teachers will work for 5 days.
3. January 5 will be a teacher workday.
4. Enrichment activities, as well as remediation, will be provided during three-week interim periods.
5. Including the 7 initial workshop days, each teacher will be employed for 205 days.
6. Both teachers and students will observe six weeks summer vacation.

STATEMENT OF RICHARD J. DEERING, WILBERFORCE UNIVERSITY, WILBERFORCE, OHIO

Mr. Chairman, have you ever wondered why we build lovely new school buildings and then use them only 180 days out of the year, or why we lock them up at three thirty in the p.m.? How many doctors, lawyers, and nurses do we know who give up their professions for three months each summer just so they can sell cars or encyclopedias, or work construction? Is it a little embarrassing to see the Nixon and previous administrations hustling to find summer jobs for city kids along about April and May each year? Do you think there is any way to avoid long hot summers?

These are leading questions, and indeed are meant to be. Was it always this way, or indeed is this the best way to run our schools? The answer to both questions is an emphatic no!

The traditional September to June school year was born of a compromise between urban and rural America. In the early 1800's, New York, Baltimore, Chicago, Cincinnati, and other city schools were operating the year round. Rural, country schools had relatively short terms of three to six months so youngsters could help with early planting and late harvesting. After all, the three R's weren't terribly important for work on the farm then. As the nation grew, it became necessary to develop a universally accepted school calendar and the nine month school year became general by the early 1900's. But there is no reason to assume the same calendar is appropriate for a modern, urban society with different work patterns and changing life styles.

The answer to the second question is more involved. The basic concept is simple enough, and is variously referred to as "year-round schools," the "extended year school," the "flexible calendar," and the "multiple access calendar." The school calendar can be rearranged so that school facilities are used throughout the year. Youngsters attend classes for nine months but on a different schedule. They have the equivalent of three months of vacation, but vacations may fall at different times of the year. What is done during the youngster's vacation time is up to him, his parents, the community, business, and government. It can be for work or play, vacation or travel, remediation or enrichment, sugararing in Vermont or bean-picking in Oregon.

At what educational levels does this concept apply? It applies to the primary, secondary, and university level and to anyone who sees the merits and benefits

in changing the calendar. However, people usually begin looking at year-round schools when their school district is running out of money and has lost several tax referendums in the fact of expanding enrollments.

The Valley View School District, southwest of Chicago, adopted a year-round calendar on June 30, 1970. Valley View is one of the largest elementary districts in area in Illinois and grew rapidly as Chicago's suburbanization proceeded. The district had 80 pupils in 1953, but 5,590 pupils in 1970, and was growing by 500 students each year. The State of Illinois had mandated that kindergarten space be made available for all youngsters by July 1, and the Valley View District had already exhausted its bonding power.

For the 1970-71 school year, Valley View somehow had to accommodate nearly 7,000 students in facilities previously used by about 5,500. They could have increased class size, gone to double shifts, or perhaps leased space in nearby churches. Instead, the Valley View Board of Education, with wide support from parents, teachers, and the community, decided to imaginatively use their existing school buildings the year round. The plan they developed has become a model for primary schools.

PRIMARY EDUCATION

The most popular calendar change at the primary level thus far has been the Valley View or "45-15" plan which mixes nine weeks of school and three weeks of vacation throughout the year. It is believed by educators, teachers, and parents that primary children are better served with shorter and snappier school terms combined with brief vacations. Youngsters are more refreshed and eager to begin each new term, and they will become bored with neither school nor vacation. Learning loss is minimized. Teachers have long recognized that the month of September is wasted reviewing material that youngsters forgot during the long summer.

If a youngster falls behind during the nine-week term, his problem can be identified and special tutoring sessions can be held during the three week break to catch up and get back with his class. In this way we can help youngsters immediately, and deal with educational problems before they cumulate and get out of hand.

This is exactly what is being done now in three Chicago elementary schools. A year ago in March, the Chicago Board of Education presented a series of possible school programs to local schools. One of these was a year-round school plan. Interested communities voted in May and so the Raster (90 percent white), Libby (80 percent black) and Lowell (70 percent black and Spanish) Elementary Schools began the "45-15" plan on July 1, 1971. The students are divided into four groups, and three groups are in school at any one time.

The curriculums were revised and broken into smaller 9-week units with logical cut-off points. Teachers received additional training to prepare them for small classes and more individualized instruction, the major purposes behind the plan.

Youngsters are encouraged to look upon school as a place for enjoyment and learning during their three-week break. Because all youngsters are using the school during the vacation, there is no stigma attached to those returning for remediation and special tutoring, as there often is under the "old" summer school system. Fully qualified teachers conduct these mini-sessions, as teachers follow the same "45-15" schedule as their pupils. Mini-courses for enrichment and remediation are held. There are also several day field-trips to museums and other educational points of interest.

It is still too early to evaluate the Chicago experience, but attendance rates are noticeably higher, and white, black, and Spanish parents appear equally enthusiastic. Another vote was held in March 1972 and all communities moved to continue the program.

In general, the "45-15" plan as now used in Valley View, Chicago, the Francis Howell School District in St. Charles, Mo., Dale City, Va., the La Mesa-Spring Valley School District in La Mesa, Calif., and elsewhere, is organized as follows:

The student population is divided into four groups usually on a neighborhood or area basis so that friends and youngsters in the same family will have the same calendar schedule. Each group begins school at successive three week intervals, and only three of the four groups are in school at any one time. Every three weeks one group is leaving class to go on vacation, and another group finishes their vacation to return to school and to occupy the classrooms just vacated. It sounds like a game of "musical classrooms," and it appears more complicated than it is.

TABLE NO. I.—INCREASE IN SCHOOL CAPACITY USING A MANDATED "45-15" PLAN (OR QUARTERLY PLAN) AND
THE TRIMESTER CALENDAR
FOUR-QUARTER OR "45-15"

[In a mandated 4-quarter or "45-15" plan, 34 of the student population will always be out of school]

	Fall	Winter	Spring	Summer
Group A.....	250	250	250	(1)
Group B.....	250	250	(1)	250
Group C.....	250	(1)	250	250
Group D.....	(1)	250	250	250

Note: Equals 750 students in school at any time, but a total of 1,000 students are being served overall. This represents a 33-percent increase in school capacity.

¹ Vacation.

TRIMESTER

[With a trimester calendar, 35 of the student population will always be out of school]

	Fall	Winter	Spring-summer
Group A.....	375	375	(1)
Group B.....	375	(1)	375
Group C.....	(1)	375	375

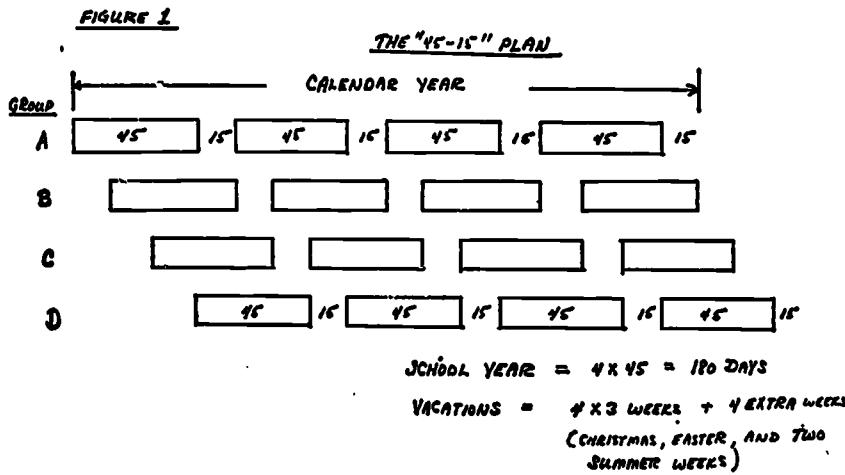
Note: Equals 750 students in school, but a total of 1,125 students are being served overall by the school. This amounts to a 50-percent increase in school capacity.

¹ Vacation.

It means that a school which houses 750 students can now service 1,000 students because one group of 250 is always on vacation. This is a 33 percent increase in school capacity without an increase in taxes. As those in the Valley View District like to put it, "For each three classrooms we have it's like getting a fourth free!" James R. Gove, Assistant Superintendent of the Valley View District, points out that they "have already realized a tax avoidance of 7.5 million dollars in not having to construct new buildings."

Although the initial impetus for going to year-round schools is economic, the real benefits occur in improving educational quality and choice. At the primary level, curriculum revision is not a major undertaking because what is done is to take the 180 day curriculum and carve it up into smaller, more digestible chunks which are nevertheless taken in sequence. That Chicago schools could vote in May and begin classes in July illustrates this fact. The pupil receives the same material whether it is covered in nine continuous months or four successive 45 day periods.

However, we hope that schools will take advantage of the calendar change to introduce other innovative ideas. A focus on individualized instruction, the open classroom concept, and open space dovetails extremely well with an educational philosophy that seeks to tailor education and the schools to the child. The Chula Vista City School District in California combines open space, team teaching, and continuous progress classes with a year-round calendar in what they call the "loft school."



The "45-15" calendar can be used to meet the needs of youngsters in so many ways. At six years of age some youngsters may be ready for the first grade and some may not. Because there are staggered entry dates for different groups under the "45-15" schedule, a youngster can begin when he is ready and able and not according to the legal dictates of his birthdate or the State Department of Education. When a youngster is ill or has an accident it is possible to move to another group and continue his work, albeit at a later date. If a youngster fails to get the necessary material in one nine-week period, and absolutely cannot catch up during the three-week break with extra help and tutoring, then at most the nine-week term is lost and not the entire year. This is especially important as for the city schools whenever poor or minority children fall behind their grade level in math or reading, the essential skills.

If a bright youngster can skip some work, it makes more sense to skip one or perhaps two nine week terms at a time rather than skipping an entire year.

School teachers gain the opportunity to teach a full year in their chosen profession. This is of course completely voluntary. A valuable by-product of longer teaching and proportionately higher salaries is that we may expect to see more men in the elementary schools. They are certainly welcome to provide a healthy balance of male and female models for children.

Taxpayers obtain practical benefits. Fewer classrooms are needed to serve expanding suburban enrollments. City school system, where enrollments have generally leveled off, can reduce class size and close or convert their older buildings for other educational purposes. They could become recreation centers and sites for vacation-time mini courses. There is some evidence that school vandalism is reduced because the buildings are constantly occupied.

Families can take vacations at different times of the year when travel and recreation facilities are less crowded and less expensive. Cooperating businesses and factories will schedule employee vacations throughout the year instead of bunching up during the summer. For many firms this has always been a major production problem.

Though there are clear advantages to a "45-15" calendar, not all schools have chosen it for the primary level. In Molalla, Oregon the elementary school began a four quarter schedule June 28, 1971. A long "winter" vacation presents no problem for mothers because of a generally hospitable climate. They have been able to avoid air-conditioning by scheduling classes from 7:30 a.m. to 1:30 p.m. during the hottest weather. Teachers have the option of teaching three, six, nine, or twelve months out of the year which can be just the thing for a pregnant second grade teacher or an older teacher who doesn't need the income and would like to travel.

Naturally, there are some conversion costs in going to a year-round calendar. Many school buildings will have to be air-conditioned. Though it may appear a bit extravagant, it is much less than the cost of a new class. Let's also remind ourselves that classrooms built today will still be used in the year 2000 when we

shall be either appreciated for our foresight or condemned for our parsimony. I make the flat recommendation that all new schools built from this day on be air-conditioned.

Neither the schools nor city and suburban governments are prepared to offer year-round recreation. But it is both necessary and important and a year-round calendar will prod us into doing what we should be anyway.

SECONDARY EDUCATION

Unfortunately, school districts and study groups sometimes assume they can find a common calendar which is best for all ages from kindergarten through the twelfth grade. This is certainly a heroic assumption because the needs of primary youngsters and secondary students are generally as different as night and day.

High school students will benefit from longer study terms combined with assured opportunities for work or service. The work-service period needs to be long enough (3 or 4 months) so the young person will develop some commitment and involvement with the job situation and make the experience more rewarding. Hence, a quarterly or trimester calendar appears most appropriate. A teenager can attend school for any three quarters and work the fourth quarter say, during the fall, winter, or spring when fewer young people would normally be looking for jobs.

There are a number of good examples where this concept is being applied. Atlanta and Fulton County around Atlanta began their elective four-quarter plan in the fall of 1968 after two years of intense study and preparation. Unlike the case in Valley View, metropolitan Atlanta adopted a year-round calendar not for the sake of economy, but to provide flexibility, quality, and enrichment for their educational program. This was prompted by the general feeling that the curriculum was generally inadequate and in particular was not meeting the needs of black and low-income students nor was it preparing students for the world of work.

The traditional academic year was divided into three quarters (approximately 60 days or 12 weeks each quarter), and the revised summer term was made as much like the other quarters as possible to attract students and to guarantee that summer be of the same quality as the rest of the year.

Curriculum revision was two years in the making. Atlanta school officials make it very clear that course revision was "not a matter of dividing the thirty-six chapters of an American History text by three and assigning twelve chapters to a quarter."

Because a student might be away during any quarter, it was necessary to ensure that scheduling conflicts would not arise upon the student's return. Hence, required courses are offered each quarter. No student need worry about missing a requirement and falling behind. A maximum number of courses were made non-sequential, and the number of prerequisite courses minimized. Approximately 70 percent of the courses do not have prerequisites. Naturally, in certain subjects such as foreign languages and basic math and science it is probably impossible to entirely eliminate prerequisites.

Each new quarter course was designed to be self-contained and logically integrated. Only when a series of principles and concepts could be logically grouped was a course established. Performance and behavioral criteria were set up for each course so teachers and students know what is expected of them. Because the basic principles in, say, literature can be discovered by reading different cultures, students are no longer compelled to take a particular English course. English, American, or Afro-American literature can serve equally well.

Each student has a wide choice in course selection and can develop an individualized program. "Of the eight hundred sixty courses developed thus far, no single course is required for any pupil unless it is part of his planned program and is necessary for him to obtain his goals. A student can begin in one area of interest and shift to another." He can follow his interests. He can sample. It's like dining at a smorgasbord restaurant. A touch of indigestion can be quickly remedied by trying something else on the menu. It breaks the lockstep of the traditional curriculum.

Instruction is improved. Good teachers have more opportunity to deal with subjects in depth and to teach their strengths. Poor teachers, always an unwelcome thought, now have clearly defined objectives and course outlines to follow.

FIGURE 3POSSIBLE SCHEDULES UNDER 4 QUARTER PROGRAM

	SEPT. 1971	FALL	WINTER	SPRING	SUMMER	SEPT. 1972
A		STUDY	WORK-SERVICE	STUDY	STUDY	
B		-- STUDY WORK --	-- STUDY WORK --	-- STUDY WORK --	-- STUDY WORK --	
C		STUDY	STUDY COLLEGE	STUDY COLLEGE	COLLEGE	
D		STUDY	STUDY	WORK	COLLEGE	

Atlanta has in effect created a large "educational bank" of well-organized courses which are available to all schools. Individual schools then select the combination of courses that best serves their student population, whether they are college, career, or vocationally oriented.

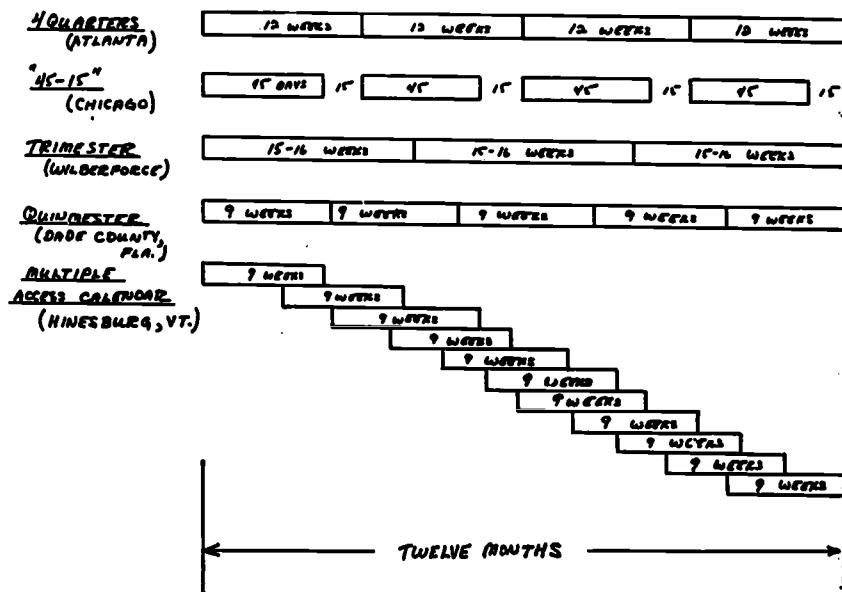
Because he selects the quarter to be out of school, the Atlanta student has a better opportunity to secure employment. (Example A, Figure 3) Once a student has attended four consecutive quarters and has accumulated credit ahead of his "normal" requirement, he can register for as few classes as he desires. A student could take one or two classes, and be on his own the rest of the day. Or a student could combine a half day of school and a half day. Or a student could combine a half day of school and a half day of work (Example B).

Atlanta enjoys a "joint enrollment program" with cooperating junior and senior colleges in the area. A high school senior may sign up for one or more courses at Georgia State, Georgia Tech, or Atlanta University while still attending his high school (Example C). His college credits count both towards high school graduation and a future college degree. This affords students the chance to see whether they would like college, or if they feel ready for it. The further possibility exists that a student can accelerate graduation by attending four quarters the year round, and either enter college early or work before going on for further education (Example D).

The joint enrollment process is facilitated by having the secondary and higher educational institutions all on the same quarterly calendar. This simplifies registration and transfers. We may hope that more cities and states will be this forward-looking.

The potential for curriculum revision and educational variation is not limited to larger schools or school systems. A relatively small school with imagination and planning can accomplish as much.

The Champlain Valley Union High School in Hinesburg, Vermont has combined the nine-week study term with staggered entry and exit dates in what it calls the "multiple access curriculum and calendar." For the Fall 1972, there will be a transitional extended year comprised of eleven nine-week terms beginning at staggered intervals. For 1973, there will be sixteen terms, beginning approximately every three weeks. The student simply chooses which terms to attend as long as no two overlap. In so doing, the student and his family can tell the school "which 175 days" he wants to attend.

FIGURE 4DIFFERENT SCHOOL CALENDARS

A DUO (Do Unto Others) program enables students to serve for from three to eighteen weeks in hospitals, the local police department, legal aid, social services, speech therapy, as teacher aides and library assistants. (See insert.) Students receive no payment for this work which is entirely voluntary. A further element of the Champlain Valley curriculum is an emphasis on individual student-directed activities (ISDA) which are designed to encourage students to decide for themselves how they will best use their "not-in-class" time. (See insert.) They can audit classes, use the art room, shops, or science labs, work out in the gym, or just take it easy talking with friends.

Even at this small school (950 students), a student can select from about 800 different courses. The new "quarter" courses are about as relevant as one could hope to find, and some would not be found in college catalogs. (See inserts.)

Who Am I?: The Search for Identity, Current Powder Kegs, Rights in Conflict, Values in Conflict, The Role of Women in Society, Managing a Vermont Farm, Eco-Politics, Paleface and Injun—Myth and Reality, Overpopulation?, How to Find and Apply for a Job, Bachelor Cooking, Afro-American Literature (in a school that has few black students), Folk/Rock Workshop, Dental Assistant, and Child Care Aide.

How many high schools, city or suburban, have this variety of courses? If the high schools of the future will look like this, what will happen in the colleges and universities? What will their educational role be as secondary students become more sophisticated and more used to freedom and flexibility of choice. This filtering down process undoubtedly will continue. Will students be able to cope with eight years of a "college-like" program? In any case, this is what quality education and educational relevance is all about!

Increasingly we may expect high schools to adopt an "open campus" policy where students are free to come and go as long as they meet their class and other attendance obligations. This no doubt looks like an idyllic and perhaps frivolous proposal to those teaching in city schools where police patrol the halls. But this is the direction schools will take.

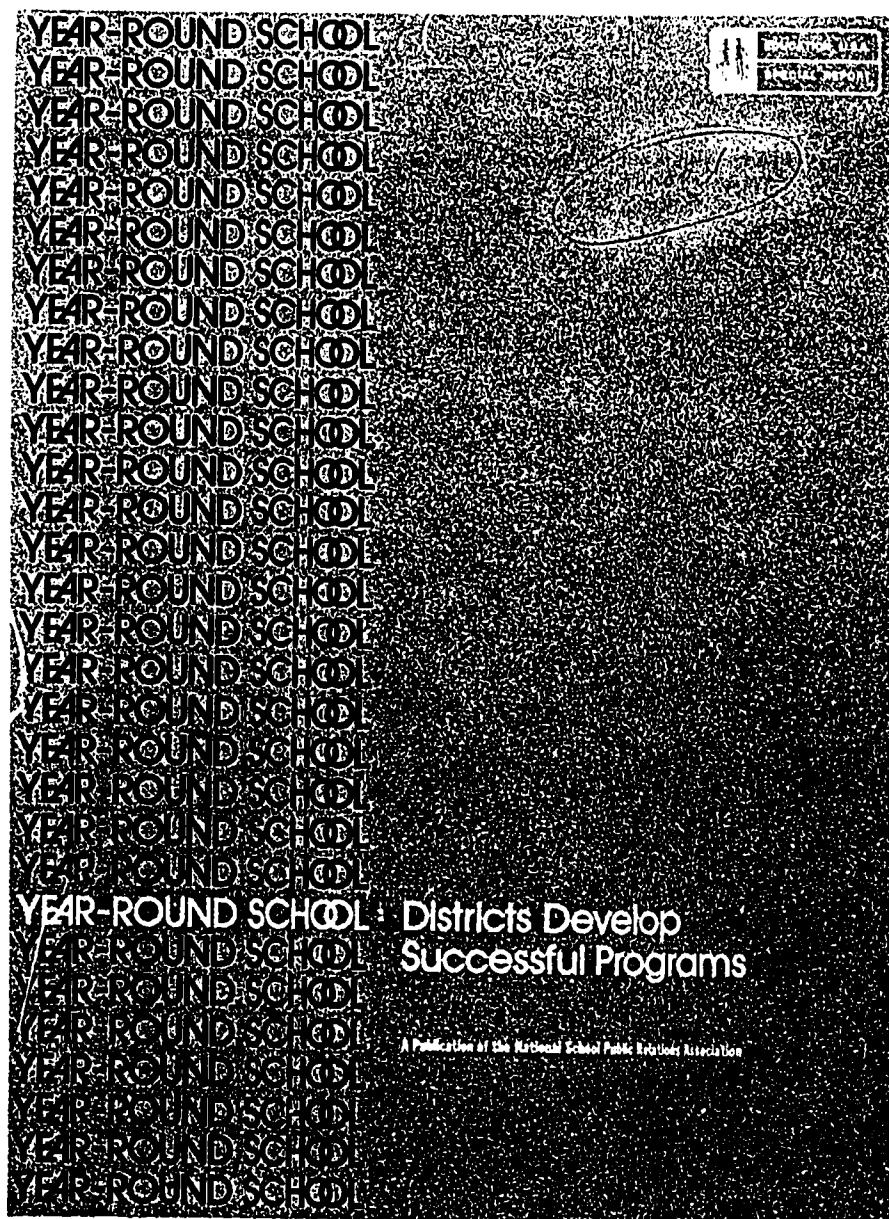
The "sixty-four thousand dollar" question throughout is whether a year-round program should be mandated or voluntary. Should students be assigned to a particular group and have their vacation patterns set by the school?

Smaller classes and increased space are effectively obtained only with a mandated program because one quarter of the students are always on vacation. The primary level "45-15" plans have virtually all been mandatory to this date, as is the four quarter program in Molalla, Oregon. San Diego will begin several year-round schools on July 1, 1972, and plans eventually to have all 153 schools on the extended calendar.

Potential community opposition to required attendance patterns has usually been avoided by involving the community early in the school's problems and often by involving the community early in the school's problems and often by giving people real alternatives. The Chicago school communities voted on their plan. The Chula Vista City School District in California offered to transport any students who so desired to other schools still on a traditional schedule.

At the high school level, initial trends favor a voluntary plan as in Atlanta and Fulton County. Champlain Valley Union High in Vermont had originally hoped to adopt the "45-15" plan for the 1971-72 school year. But the community rejected that for being as restrictive as the traditional calendar. A multiple access calendar was developed instead.

On August 30 of this year, Jefferson County around Louisville, Kentucky, begins their "elective four quarter plan" in 96 schools serving approximately 97,000 students in grades one through twelve. They anticipate from six to ten thousand students in their 1973 summer quarter.



YEAR-ROUND SCHOOL

OVERVIEW

One of the most discussed and controversial issues in education today is the proposal that the public schools be operated as close to maximum usage as possible all year long. To achieve this goal, a major overhaul of most of the nation's schools would be required, drastically affecting parents, students and the professional staff.

Today, most of our public elementary and secondary schools operate with a school year of approximately 180 days. Many of these schools sit locked up during the summer months, their facilities unused. Some teachers who work in the classrooms during the school year spend their summers vacationing or attending school; others seek temporary employment. Some pupils spend their summers in camps or vacationing with their parents; others face the summer layoff from school with "nothing much to do."

Many people consider this situation a great waste of costly facilities and equipment, valuable professional skills and important learning time. Many consider our system with its nine-month school and three-month vacation a remnant of our agricultural society. These people believe that schools must be redesigned to meet the needs of a highly urbanized society. In an effort to deal with these pressures for more and better learning needed by youth in an urban society and to meet the demands by taxpayers to reduce costs or, at least, hold the line, educators and others are looking for workable alternatives. One which is receiving a great deal of attention and support is the year-round school.

Plans, programs and systems for rescheduling the school year are not exactly new. In the early part of this century, vacation schools which provided recreational activities were developed as the first step toward eliminating the long summer break. Later, these vacation schools began to develop some academic orientation. They were made available most often to students who had failed courses during the regular school year and who wished to make up those courses. Today, many summer schools now offer a full range of enrichment and broadening courses.

And, even further, there were earlier attempts at using the year-round school. Bluffton, Ind., operated a short-lived program that started in 1904. Other school districts that operated for various periods of time on the year-round system were Omaha, Neb.; Nashville, Tenn.; Newark, N.J.; and Ambridge and Aliquippa, Pa. The Newark experiment is probably the most notable of all. It began in 1912 and continued until 1931. The program was considered popular with parents, teachers and businessmen, but it died during the lean years of the depression. One of the major pluses of the Newark experiment was its effect on juvenile delinquency. One study of the Newark program noted that the year-round school system was an important influence "which succeeded in keeping a large proportion of children out of 'mischief' during the summer."

The Newark, Omaha and Nashville plans operated on the basis of improving the educational program. The Ambridge and Aliquippa programs were aimed at utilizing existing buildings before constructing new schools. While the first three plans expired because of a shortage of funds during the 1930s, Ambridge and Aliquippa operated only until funds were available for new schools.

Today, the movement and acceptance of year-round schools isn't so isolated. Upwards of 25 school districts are either operating full year-round school programs or pilot programs in one or two schools. What's more, the number of other school districts that are studying year-round education programs with the idea of installing them soon is uncountable. The most conservative estimates indicate that school districts in some 27 states are actively studying the concept. How many school districts are examining the idea with a cautious and quiet approach no one knows. At least as impressive, and perhaps even more so, is the list of state education departments and state legislatures that are looking into ways to assist local districts in implementing year-round programs. Then, if we add in the number of national and regional conferences devoted solely to the examination of year-round education, we can get some idea of the growth and acceptance of the concept.

But what does it all mean? What effect will year-round education have on America? On American education? Concrete answers are, of course, hard to come by. So far, no year-round school program has been operating long enough. There are still too many ifs. But there are some possibilities. One very strong possibility is the complete structuring of the instructional system. Although the year-round school has nothing to do with the actual instructional program, a rescheduled school year could provide the framework for making marked revisions in instruction. There is also the possibility that under year-round school programs, school districts could improve their public relations position by regaining lost confidence and support of the general public. Given the idea that year-round schools are an indication of an attempt to make school operations more efficient, the recent trend toward public rejection of school budgets and other educational programs could be reversed.

Other possible effects of year-round education on American society could include a lessening of students' dependence by freeing them for employment or higher education at an earlier age, a reduction in juvenile delinquency, an elimination of the student glut on the summer job market which would be coupled with the opportunity for more students to get jobs during their vacation (non-summer) times and the opportunity for businessmen to change the work-vacation patterns of their businesses.

A CLOSER LOOK AT THE YEAR-ROUND SCHOOL

Just what is this year-round school we've been talking about? How does it work? And why does it appeal to so many people? Simply stated, year-round education is a program in which schools are open for 12 months with the same instructional program being offered on a continuous basis instead of a 9-month school year with limited summer offerings.

There are a lot of different names associated with the concept--year-round school, year-round education, extended school year (ESY), expanded school--but they all have the same basic aim. That aim is to make maximum use of all facilities and, wherever possible, to eliminate the need for constructing new schools, furnishing them and staffing them.

How this is accomplished varies. In fact, there are almost as many different types of year-round school programs as there are school districts implementing year-round school programs. There are quarter systems and trimester systems which try to spread the enrollment out over three or four school time segments instead of having everyone go to school at the same time. In each of these types of programs, either three-fourths or two-thirds of the students are expected to be in school while the rest are on vacation.

Under programs such as the continuous school year plan, extended K-12 plan, and multiple trials plan, the school year is extended from 204 to 210 days or more in order to save a year or two of school out of every 13. And then there are the modified summer school plans. In those plans, the regular school year consists of 180 days, but the summer school program is broadened and is arranged so that students are able to take a full-term academic course during the summer months.

To date, the more popular plans are voluntary. That is, the students, with the help of their parents, are allowed to choose the quarters or trimesters they wish to attend. Teachers, too, have various options. They can either work a full 12-month year and receive more money or they can take a quarter or trimester off in order to travel or go to school or whatever.

One of the bright spots of the year-round school program is its broad appeal. People closely involved with education can find things they like in it as well as people who are not deeply or closely involved in education. But the main reason for the appeal of year-round education is economic. Given today's revolt by taxpayers who have been rejecting school budgets with alarming frequency, anything that gives even the semblance of saving money or of using funds, facilities and people more efficiently appeals to a lot of people --school board members, administrators and the general public.

What's more, administrators and teachers find it doubly appealing because it is a possible way of eliminating the learning loss that accompanies long periods of vacation. Teachers see the year-round school as a way of reducing the amount of time they must spend rehashing material that had already been presented to students. Teachers also like the year-round school because it gives them the opportunity to continue to use their professional skills and make more money.

Another facet of the year-round school appeals to educational traditionalists. These people view the state of American education with alarm, stating their concern that American students are falling behind students in the Soviet Union and other European and Asian countries. To them the longer school year is vitally important because it puts American education into direct competition with the longer school years of Europe. They also believe that longer school years should not be voluntary, but mandatory because there is so much more to be learned.

Many businessmen support the year-round school concept, too. They like the idea of more efficient use of plants. They also believe that it will be easier to provide more jobs on a year-round basis than to have all job-hunting teenagers on the employment lines during the summer months.

Yet, for all of its appeal, the year-round school also has its detractors. There are some people who strongly oppose the concept of the year-round school because, simply, it is at odds with traditional school and vacation habits. Then there are people who have an axe to grind. These are the people who operate summer camps and resort areas. And, finally, there are those people who are opposed to any idea that brings with it changes in established patterns of living.

THE VARIOUS 'SOLUTIONS'

The following are some of the different ways used to operate a year-round school:

- The Staggered Quarter Plan
- The Consecutive Quarter Plan
- The Trimester Plan
- The Continuous School Year Plan
- The Multiple Tracks Plan
- The Modified Summer School Plan
- The Quinmester Plan

The Staggered Quarter Plan

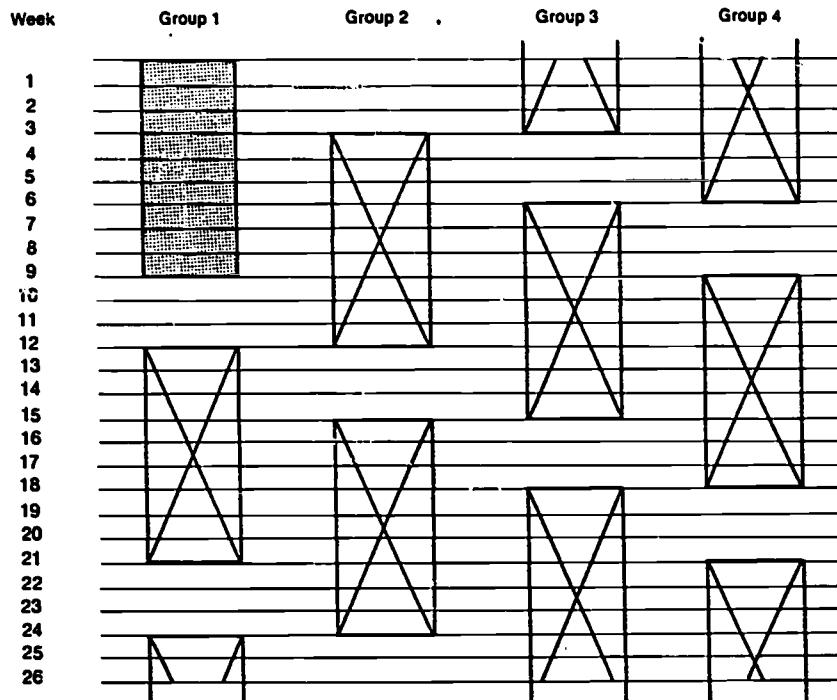
This plan is probably the most popular of all year-round school systems. It encompasses a 48-week school year divided into four terms of approximately 12 weeks each. Under this plan, students are divided into four equal groups and attend three of the four quarters. At any one time, three-fourths of the school enrollment are attending school and one-fourth is on vacation. Generally, this type of plan operates on a voluntary basis, and students are allowed to choose which three of the four quarters they wish to attend. Teachers, too, generally have the option of working either three or four quarters, with additional compensation if they work all four terms. (See figure 1.)

Figure 1: THE 48-WEEK STAGGERED QUARTER PLAN

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Group A	in school	vacation	in school	in school
Group B	in school	in school	vacation	in school
Group C	in school	in school	in school	vacation
Group D	vacation	in school	in school	in school

Under the basic plan, there would be 12 work weeks each quarter or a total of 48 work weeks and 30 days for vacation yearly. A variation of this type of plan is commonly called the 45-15 quarter plan. Generally used on the elementary school level, it calls for 45 days of school (9 weeks) and 15 days of vacation. The balance of the time off will be made up of regular holidays and traditional Christmas and Easter vacation periods. (See figure 2.)

Figure 2: THE 45-15 STAGGERED QUARTER PLAN
A Partial View of 26 Weeks



The Consecutive Quarter Plan

Another variation of the quarter system is the consecutive quarter plan. In this type of plan, all students attend school for 48 weeks, four quarters with each having 12 weeks. Approximately four weeks of vacation are built into this plan, and these are likely to be spread out at various times of the year, including traditional holiday vacations for Easter and Christmas. Under this type of plan, students have the opportunity to accelerate and complete four years of work in three years, or to take additional enrichment courses.

The proponents of the staggered quarter plan favor it primarily because it drastically reduces the need for new buildings and furnishings. Theoretically, 25% more students are cared for by approximately the same staff, with the same number of classrooms, libraries and other facilities. Also, it is considered a good way to stabilize teaching staffs. With full-time employment and increased salaries, it is believed that the teacher turnover problem can be eased.

However, there are inherent weaknesses to the plan. Without the traditional summer maintenance period, costs for maintenance could rise. Weekend and nighttime maintenance will require overtime pay for maintenance staff. Continuous use of facilities could require their replacement and repair more often than in a traditional school year. Other economic factors could include the cost of installing air conditioning in some parts of the country, less efficient bus and other transportation usage, and more expenses for instructional materials.

Other problems include adjusting prevailing patterns of family living and business operation, particularly with regard to standard summer vacation times. Student activities, too, would be difficult to plan for. For example, if a student wanted to play football, but was not enrolled in the quarter that overlapped the football season, would he be eligible to play? Would he be covered by insurance even if he were eligible, but not attending classes during that quarter? These questions may not seem important, but just consider the situation in Philadelphia. Although the problem there had nothing to do with year-round schools, for financial reasons the school board there eliminated all extracurricular activities. By the time the football season was ready to start, there was such pressure from parents and the community that the program was restored. This may not be an important point for educators, but for coaches, students and parents, it is.

A really difficult problem to solve with the voluntary staggered quarter plans is the division of student enrollment. In order to be most efficient, the student enrollment should be divided evenly--into four equal groups. And, going one step further, not only should each quarter have the same number of students, but the number of students enrolled in each grade at the elementary school level and in each subject in high school should be the same for each quarter. So far, no school system with this type of plan has shown that a full fourth of the students attends each quarter. A school system with a small enrollment may have difficulty in attaining optimum efficiency.

The Trimester Plan

Another plan, very similar to the quarter plan, is the trimester plan. Like the quarter plan, the trimester can be either staggered or continuous. The major difference between the quarter and trimester plans is that, instead of four groups of students, there are three. And, like the staggered quarter, only some of the students will be going to school at the same time. In the voluntary trimester plan, students have the option of attending any two or all three of the terms. So, ideally, there should only be two-thirds of the students in school at any one time. Teachers, too, have the same options as under the quarter plan. They can choose to teach two or three terms, with the

opportunity for additional money if they teach all three. The same advantages and disadvantages of the quarter plan hold true for the trimester plan. The major economic factor is reduction in the need for new school buildings and for furnishing and staffing them.

The Continuous School Year Plan

Also called the continuous progress plan, the continuous school year plan proposes a longer school year with pupils completing one grade's work in the traditional 180 days, and then spending the remaining time on the next grade's work. Generally, the school year is from 204 to 225 days. The length of the school year depends on the number of grades included in the plan and the corresponding number of years over which one year of school is saved. For example, if grades 1-6 are included, and one year in six is to be saved, the school year will be approximately 216 days. If the grades are K-6, a 210-day school year would be required to save one year in seven. (See figure 3.)

**Figure 3: THE CONTINUOUS SCHOOL YEAR PLAN
K-6, 210-Day School Year**

Year or Learning Level	Curriculum Adjustment*	
Level 1	Kindergarten—180 days	Grade 1—30 days
Level 2	Grade 1—150 days	Grade 2—60 days
Level 3	Grade 2—120 days	Grade 3—90 days
Level 4	Grade 3—90 days	Grade 4—120 days
Level 5	Grade 4—60 days	Grade 5—150 days
Level 6	Grade 5—30 days	Grade 6—180 days

*Curriculum Adjustment—to save one year in seven.

As opposed to the quarter or trimester plans, the continuous school year plan is based more on educational motives than on economic ones. While it is true that proponents say that by moving students through school by saving a year, more students can be educated with the same facilities, they are more often saying that this type of plan does away with the traditional grade system. For example, instead of moving from grade six to grade seven, pupils would actually be moving from learning level six to learning level seven.

The most difficult problem to overcome with this type of plan is that of parental resistance. Parents generally want to know what grade their child is in. They can understand you when you say grade six or seven. But

they have difficulty understanding learning levels. Also, the school staff must be prepared for and committed to nongraded and individualized learning programs.

The major opposition to other plans--no long summer vacation--is virtually eliminated. Under the continuous school year plan, the school year is lengthened, but a summer vacation of six or seven weeks plus regular vacations for Christmas and Easter are offered.

The Multiple Trails Plan

This type of plan provides for the reorganization of secondary schools, and emphasizes both educational and economic gains. The school day is no longer and is rescheduled into time modules of varying length. Some modules might be 15 to 17 minutes long, others 30 minutes. Also, classes might meet less or more often. Basically, the school year is 11 months or approximately 210 days. This also allows either a July or August summer vacation, plus traditional winter and spring vacations.

The ultimate aim of the program is the adoption of a program of continuous progress in which secondary school grade lines become insignificant. Instead, pupils move along a subject trail at their own rates. The traditional curriculum is reorganized into broad resource units that can be completed in four, five or six weeks.

The Modified Summer School Plan

Just as the name implies, this plan is the regular 180-day school year, plus an expanded summer school. In addition to the regular 36- to 40-week program, the summer program is changed to provide full-term academic courses instead of just remedial, make-up and enrichment courses.

The aim of this program, like some of the others, is to accelerate the student so that schooling is completed in one less year. The cost of operating such a program tends to be somewhat higher than others. This is especially true if too few students elect to attend the summer program.

The Quinmester Plan

Similar to the modified summer school plan is the Quinmester Plan. In this plan, the school year is divided into five 45-day units. Four of the units (180 days) comprise the regular school year and the fifth term occurs during the summer. The key to this program is educational gain. There is some economic advantage if students elect to attend all five terms, but that is not the main feature. In Dade County, Fla., where the plan is operating, school officials cite three primary educational advantages. First, it opens the door for a richer curriculum. Since each term is nine weeks long, the curriculum can be thought of as a series of minicourses. Thus, any number of minicourses can be developed to suit the tastes of virtually all students. This way the student has a choice of four offerings in order to complete one year's work.

A second advantage is that this type of plan encourages experimentation. The student can try a new subject for a nine-week term to find out if he likes it. If he doesn't, he can drop the subject at the end of the 45-day period, and try something else.

And finally, the quinmester plan has the potential to reduce failure. The student is not locked into a full-year course. If he fails a nine-week course, he only loses one-quarter of a year and he can elect to take some courses during the summer term to make up that loss in a different area.

Built-in Problems Confront the Concept

While each plan has its own built-in problems, there are some general problems that face the year-round school concept. The primary one is that of state education aid. Presently, most states allocate aid on the basis of the average daily enrollment of a school system for a traditional September through June school year. If school districts are going to switch to some other form of scheduling the school year, state legislatures are going to have to reform their methods of distributing state aid. Also, many state governments set the requirements for school operations. These, too, have to be changed to permit school districts to operate on a school year of more than 180 days.

Economics is another problem. As mentioned earlier, there is little savings between the traditional school year and the rescheduled school year. The major saving is in the area of new school construction and furnishing. But most of this saving goes into additional teacher salaries and more instructional materials. The real saving comes from not having to raise more money through taxes to purchase these materials at the same time as the district is embarking on a building program for new schools. Also, if the year-round school program is voluntary, there will be almost no dollar savings because there is bound to be an unequal distribution of pupils during the various terms. On the other hand, a mandatory plan can result in some savings.

Another real problem is getting community support. Too often communities have opposed year-round school plans because they were not involved during the initial planning or because they weren't given enough information to make a decision. In some cases, a community has rejected one type of plan, but has come out strongly in favor of a second choice because it is more appealing to them.

PROS AND CONS OF THE YEAR-ROUND SCHOOL

Most people who favor the year-round school concept see the major advantage as one of making the school system more efficient. Businessmen who support the idea can't understand how any facility can be closed or used at less than almost full capacity for two or three months at a time. And, certainly under mandatory year-round programs, this is eliminated. Too, businessmen have a great deal of trouble in adjusting to and providing for the great number of teen-agers who are available for employment during a very limited amount of time--two or three months. For many of them, making a student work force available throughout the year seems beneficial not only to them, but also to students. In this way, some businessmen say, those students needing a short-term job would have a better chance of finding it. Other businessmen, in the recreational and tourist business, like the idea because it would eliminate or reduce the strain on existing recreational facilities by making these year-round operations as well.

The benefits to students, too, would be improved. First, the year-round operation would permit students to eliminate the once-a-year lockstep enrollment. Instead of a child waiting until the September after his birthday to enter school, he could enter at the beginning of the new period nearest his birthday. Flexibility in scheduling, new types of courses (such as the mini-courses in the quinmester plan), individualized instructional programs and other instructional changes could eliminate the state of boredom that exists in many schools. In addition, since vacations would be shorter and more frequent, the amount and rate of loss of learning could be reduced. This, in turn, would cut down on the amount of time needed for "reteaching."

Also, many juvenile authorities agree that year-round patterns of education tend to reduce the historical crests of juvenile delinquency which occur in the late summer months.

The year-round school will also benefit teachers by helping to professionalize them in the eyes of other year-round workers, and it will provide 12-month positions for those who want them. In addition, sabbatical arrangements can be made so that teachers can still travel or continue their own education.

Also, the restructuring of the instructional program would permit teachers to try different techniques as well as teach subjects in which they might feel more competent. This type of reorganization would also permit greater use of paraprofessionals and teacher aides.

Thus, properly set up, the year-round school can benefit teachers, administrators, students and the public, its proponents claim.

What the Opponents Say

Opponents of the year-round school concept often use the same arguments that the proponents use, but just turn them around. For example, the opponents say that the year-round school will cost more because of additional salaries to teachers, overtime payments to maintenance men working on weekends and nights and more school expenses due to continuous presence of students.

Another argument is that the existing American school system is in need of reform and that adding two or three months of the same kind of education is not going to make it better. Opponents who use this argument say that it is more important to get at the roots of the instructional problems that are causing the one-third dropout rate, the one-third underachievers, and the bored and restless one-third who do make it in the system. They feel that cosmetic changes like lengthening the school year, or breaking it in quarters or thirds, do nothing to insure that the important changes will be made.

Also, colleges, employers and unions would have to work together in order to provide for the high school students who would be finishing their studies a year or two earlier than they do now. Child labor laws, too, might have to be revised to permit students to work part time or full time before they become 16 years of age.

And, third, there is the disruption of the traditional social and family patterns, particularly the customary practice of summer vacations. Many opponents of the year-round school feel that nonschool activities are as much a part of learning as school activities. In fact, they argue, forcing students to stay in school for 11 or 12 months is harmful because the students don't have the opportunity to develop in other, nonintellectual ways.

Then there is the argument that teachers, too, need time away from school. The traditional summer vacation offers teachers the opportunity to travel, to continue their studies and to use their talents in other ways. A sabbatical leave every five, six or seven years, these opponents say, is not going to help. The vacations from school and students have to be more regular than that.

Other people cite the problems involved in maintaining an activities program at the secondary-school level. Athletics, in particular, would pose problems of eligibility. Students could be permitted to attend terms during which they would be able to participate in the sports of their choice.

WHAT DO PEOPLE THINK?

What do people in various segments of life have to say about the year-round school concept? One thing, there is no consensus. Not all teachers favor or oppose the year-round school. The same can be said for any of the groups involved. And their reasons for favoring or opposing the idea also vary.

The Teachers

First, let's start with the two major teacher organizations--the National Education Assn. (NEA) and the American Federation of Teachers (AFT). NEA is much closer, as an organization, to accepting and promoting the idea of the year-round school. At its conventions during the past two or three years, the membership has consistently urged that the concept be considered as a major educational change and that plans be studied. Also, NEA members seem to be more willing to accept the kinds of change a-year-round school will bring.

On the other hand, the AFT has been somewhat reluctant to come out even tentatively for the year-round school concept. Albert Shanker, head of New York City's United Federation of Teachers, has called the year-round school concept just another game with which to have teachers put in more work for the same amount of money. "It would be better if they paid teachers more and allowed them to do their jobs now," he says.

The dichotomy of opinion between NEA and AFT can be seen in the remarks by William Herbert, executive secretary of the Massachusetts Teachers Assn., and John Desmond, president of the Chicago Teachers Union. Herbert said recently, in response to a proposal by Neil Sullivan, Massachusetts commissioner of education, that schools should remain open all year. "I'd like to think that the time can come, ought to come, when our school buildings are used throughout the year on a 12-month basis." Herbert then went on to cite the educational and economic advantages of doing it.

Desmond, on the other hand, responding to a plan to start a pilot project for year-round schools in Chicago, said "it would be unwise to rush into the experiment...before critical problems in scheduling and reorganization of the school operation can be resolved."

Their opinions aren't the only ones. A recent survey by The Instructor showed that 57% of the teachers who responded to their poll believes that children learn better with 10 months of concentrated work and a long vacation. Only 35% felt children learned better when school was continuous with short vacations.

In response to other questions, 21% said they believed that teachers would like year-round teaching; one-third said they would like to try teaching in such a program; and nearly 43% felt that the long vacation period was most necessary in order to repair the school buildings.

The written comments of the teachers also showed differences of opinion:

"A continuous school year would be ideal and especially rewarding for children from low-income families, who cannot afford to travel."

"The attitudes of many taxpayers possibly would change. When school plants are in full use for 12 months, there would appear to be no waste of expensive facilities."

"As much as I like the idea, year-round schools are not economically feasible. Teacher salaries would have to be adjusted, there would need to be special instructors to help those children who ordinarily do catch-up work during the summer, and it would limit family vacation time."

However, most of these comments and the poll results themselves, came from teachers who are not teaching in year-round school systems. How do year-round school teachers react? Here's what two of them have to say:

Jennifer Hastings, a first-year teacher at Becky-David Elementary School in St. Charles, Mo.: "Year-round really works for us. I interviewed a lot of schools, but I decided to teach here when I heard about the program."

Mary Ballard, English department chairman at Northside High School, Atlanta, Ga.: "There's no one on the staff who would go back to the old semester program. It wasn't good for teachers. It wasn't good for students."

Year-round schools seem to bring out the dedication of teachers, too. Take John White, Northside's oceanography teacher. "I feel so strongly about this course and its need to be team-taught that I'm volunteering my services this quarter. The schedule was late being set up and not enough students enrolled to justify two teachers. So, I'm working without pay."

Although some teachers don't seem to be bothered and concerned about more pay for teaching year round, others find the extra money a blessing. Harold Tennyson of Becky-David School says: "There's no such thing as the need to pay teachers for the inconvenience of teaching year round, for it's not an inconvenience."

But Berkin White, another Becky-David teacher sees it somewhat differently. Hampered by a two-week Air National Guard commitment, he hadn't worked during the summer for the past five years. "No one wants to hire a man for the summer and then give him two weeks off. The way I see it, by teaching year round, my salary has been boosted by 25%."

Other advantages stressed by teachers (especially those in staggered quarter systems where there are two- or three-week vacations between terms) were the short, frequent vacations and the flexibility of the programs.

"The 15-day vacations every season are great for recuperation," said a teacher at Becky-David School. "It's great to have a break every nine weeks to catch up on things at home," said another. "Being able to go skiing in the winter, or to Mexico in the fall, or just to do nothing, comes only with the year-round schedule," said another.

Flexibility also plays a great part in the acceptance of the year-round concept. A number of teachers cited the opportunity to adjust and adapt the curriculum to their own classes' needs. "You don't have a chance to stagnate under the year-round system. My philosophy is that you only live by the different things you do. If you do the same things over and over, it's too much like sleeping. With the year-round system, you don't have to worry about falling into the sameness trap," said a Becky-David teacher.

Other educators have other things to say. In Iowa, some 756 educators--elementary and secondary school teachers, administrators, counselors, teacher aides and school board members--responded to a survey on year-round education. According to the respondents, the major advantage of an extended school year would be the remedial and enrichment programs that could be offered. They also felt that a required summer school would be the least desirable plan for year-round education. When asked what the greatest obstacle to the year-round school program was, the Iowa educators overwhelmingly cited public acceptance. Most of the respondents considered administrative problems to be the least significant, but secondary school teachers felt additional costs would be the least major problem. Two letters to the Iowa State Dept. of Public Instruction summed up the varied opinions of the respondents.

Floyd J. Hutzell said he felt that teachers had to be employed on a 12-month basis before others would consider teachers professionals. "I believe you omitted one very logical option in the methods which may be used for implementing year-round schools," he says. "...It seems logical that students might find it more important to them to be able to attend school for a half-day and work on a job the other half. This, too, would help even out the summer employment problem."

A business education teacher argued against the year-round school. "I do not wish to be 'anti' but I strongly believe that we would be inviting many more emotional and social problems than we now have by taking away the summer freedom of young people. They need the opportunity to relax, to pursue personal interests on their own, and even to loaf if they want to."

This same kind of difference can be found all over. In the state of Washington, G. Wayne Hall, director of higher education for the Washington Education Assn., and Harold G. Smith, director of secondary education for the state superintendent's office, both came out strongly in favor of the year-round school that would "provide more educational opportunities and improve instruction." At the same time, Ross K. Rieder, president of the Washington State Federation of Teachers, opposed the concept saying that it was uneconomical and that "teacher wear and tear is of real concern." Perhaps the final statement from a teacher should be one made by Helen Faulkner of Atlanta's Northside High School. "There's a great relief in teaching year round," she says. "Most teachers find it stimulating to experiment with smaller groups, to work in a relaxed atmosphere."

The Administrators

If there is any group that views the year-round school concept with more favor than administrators and school board officials, it is hard to find. Even as far back as 1969, school administrators were looking at the year-round school as either an immediate or long-range possibility. In answer to a 1969 poll, 32% of the administrators responding said that the extended school year, in some form or other, was necessary because of rising student enrollments and growing costs. More important, 48% of the administrators who answered the poll felt the year-round school was a future possibility. Only 20% saw no future for the idea of a longer school year.

The poll went one step further. It asked the respondents to choose between three different types of year-round school program--extending the school year from 180 days to 210, lengthening class periods under the existing scheduling, or offering a four quarter plan with students attending three of the four terms and vacationing the fourth. In 1969, 38% of the administrators picked the 210-day school year; 44% selected the quarter plan as most feasible; only 7% favored lengthening the school day; and 11% would have chosen some other formula for achieving year-round education.

Today, it seems that many of those who in 1969 replied that year-round education was a future possibility now regard it as a present practicality. And, judging from the 1969 survey, the quarter plan is by far the most popular type of year-round school schedule in operation. As a matter of fact, Jack Nix, Georgia's state superintendent of education, says "this is one of the things that will have come in this country. It's coming in the next 5 to 10 years." A recent survey of some 333 educational authorities added to Nix's statement. About 84% of those interviewed in the survey predicted that all schools in the United States will be operated on a year-round basis within the next 15 years.

Why is this coming? Nix has this to say: "Why go to school only nine months? Why start in September? It's because our schools were organized to accommodate an agricultural society. But we're no longer an agricultural society. In Atlanta, we dump maybe 25,000 students out of school in June. What for? They could be learning. Or they could take some vacation at another time of the year. Longer vacations are a trend now. Why not adjust things so the father, if he wants, can take a vacation in the winter?"

Nix goes on: "An extended school year does not mean that all students are required to attend school all year long, although some plans do operate that way. What it does mean is that schools would be fully operational all 12 months of the year, adding substantially to their production of educated youngsters."

Curtis Henson, assistant superintendent of instruction for the Atlanta schools, has been closely associated with the development of the schools' year-round program. He says it was designed primarily as a curricular revision, to give students a broader and more flexible range of study. "There's been little change in enrollment for the fourth (summer) quarter and not much change in the percentage of students seeking to graduate early. But," he adds, "we do find an increasing number of students taking lighter course loads so they

can work the year round at jobs. Some 3,000 or so students work. Based on two years' experience, students are looking at the fourth quarter as a regular quarter rather than as summer school. I think, overall, it's going well."

J. Patrick Page, research director of Valley View Elementary District, located near Chicago, also has strong feelings about the year-round school program. Valley View operates a 45-15 continuous school year plan. Every youngster goes to school for 45 class days and then has a vacation of 15 class days. The students attend school in rotating shifts. Page says that the primary reason for implementing the program was economy. "A few years ago we reached the limit of legal borrowing and started to look around for some way to utilize what facilities we had because we couldn't build new schools. We chose the 45-15 plan."

Page listed five specific objections that a school district is likely to hear when it considers a year-round school plan:

1. Family vacations will be destroyed if students have to go to school in the summer. "How many families take a three-month vacation? Under our plan, every child will get three weeks off in the summer and will know a year in advance what those weeks will be. He will also get three weeks off at three other times of the year. In our district a lot of men work in the building and construction trades. They have never been able to take a summer vacation. Now, at least, they might be able to go away with their families at some other time of the year."
2. Kids won't adjust to such a plan, they need their summers off. "That's a complete myth. Our counselors keep a careful watch for any problems with students, and we rarely find any. In fact, it's sometimes better this way. If we find a student having trouble with his work, there's no need to fail him for an entire year. Under our plan he can switch to another group and all he loses is 45 days."
3. Teachers don't want to work all summer. "That may or may not be true, but they sure do like the extra money they can earn by teaching all year. And that's especially true of men who are supporting families and who would take a summer job anyway."
4. Students won't be able to get summer jobs. "For our school district, it doesn't mean anything since we are an elementary district and few of our kids work. But even if it were a secondary district, there could be some cooperation between the school district and local businesses so that some adjustment could be worked out."
5. Teachers need summer for graduate work. "This, too, is a meaningless argument. Most colleges and universities offer either night or Saturday courses, or both. If a teacher is really interested in taking courses, there is nothing that's going to stop him."

One problem facing many administrators who are thinking about converting to year-round education is parental reaction. Wilson Riles, California state superintendent of public instruction, believes there are ways to solve that. Riles believes that parents are a real key for the successful implementation

of year-round programs. "I've been urging any and all school administrators who inquire about year-round schools through my office to develop these programs with their staffs and boards and parents. Parents must be brought into the game early."

One California superintendent who has done that is Burton Tiffany, superintendent of the Chula Vista Elementary School District. The school population was rising faster than the district's ability to construct new schools. "So we looked around at possible alternatives. I've been hearing about the all-year concept for about 20 years, and after looking over the Valley View plan, we decided to take the plunge." One of the first things Tiffany did was to make parents aware of the changes planned. First, a question-and-answer sheet explaining the plan was mailed to parents. Since the district has a large Spanish-speaking population, the sheet had to be bilingual. Then five public meetings were held to answer any and all questions about the plan. "Prior to the meetings, parents generally opposed the idea of a year-round school. After discussions, a majority of parents (10 to one) favored the all-year program."

However, even among administrators there are some who don't entirely endorse the year-round school concept. Hazlett H. Wubben, associate professor at the U. of Colorado and director of the Bureau of Educational Research and Service there, is one who feels this way. In an article in the Colorado Education Review, he wrote: "It is my opinion that any form of compulsory year-round school is not likely to achieve widespread adoption. On the other hand, expansion of voluntary summer school programs, coupled with limited acceleration of some students, seems a logical step in education.

"A word of caution should be extended to school boards seeking panaceas for rising costs of education," Wubben said. "Educational costs are going to continue to climb, no doubt about it. The year-round school probably is not the most feasible way to keep expenditures down, and boards would be better advised to seek other ways to increase efficiency and eliminate waste."

But Wubben's view is still probably a minority one. Even school administrators who feel they will not be able to get adequate support from their communities still feel that the year-round school is not only acceptable but also vitally important. Northville, Mich., a district with 3,500 students, considered a year-round program, but dropped it initially because of community opposition. Yet, Northville Supt. Raymond Spear still feels strongly about year-round schools. He concluded, after a series of studies, that:

1. The concept is feasible and workable.
2. Millions of dollars in construction costs can be saved by districts that are growing.
3. Operation of a year-round school program will bring about measurable educational improvements.
4. Year-round school lends itself to meeting the needs of children who need instruction on a 12-month basis to accomplish the educational objectives of the normal nine-month school year.

5. With community acceptance, it is possible to mandate a year-round school.
6. The year-round school concept and its accompanying curriculum are better designed to meet the individual needs of children.
7. Year-round school operation will assist in relieving the problems of summer employment and social unrest which is accelerated by the current traditional program.
8. The extended school year will add flexible dimension to vocational education unattainable under the traditional program.

Perhaps Don Glines, former director, Wilson Campus School at Mankato (Minn.) State College, sums up best the frustrations and hopes of many of the administrators today who want better educational opportunity for their students and see the year-round school concept as a way of achieving it: "The concept of the humane year-round school will be accepted and well on the way to nationwide adoption by 1980, if we are patient and continue to provide national leadership to the movement," says Glines. "There appears to be little doubt that...such a trend is developing. In the meantime, there are two frustrations: (1) those who want such a program right now are currently fighting against the odds; and (2) unfortunately, no year-round program in operation yet provides complete answers. Therefore, needed immediately is a strong commitment from more educational and lay leaders that the concept of the year-round school makes tremendous sense.

"We must see that new relevant plans are created and implemented; basic year-round school blueprints must be developed with much more flexibility than provided in present plans so that the ideas can more readily be modified and utilized rapidly in any district throughout the United States....

"Will all this be successful nationally? If you look at 1970, the answer is no. Education nationally had been on an actionless plateau. The dramatic reorganizations of the 1960s--team teaching, flexible scheduling, nongrading and all--have leveled off. Now we are in a period of talking, planning and frustration. Little seems to be happening. But if we look ahead to 1980, there should be clearly visible an entirely new design in education emerging. It takes patience to wait until 1980, but to reach that vision, it also takes action during the 1970s."

The Students

Scholastic Magazine's National Institute of Student Opinion conducted a survey of student views in March 1971. The following question was asked:

How do you feel about keeping schools in session 12 months of the year? Check one.

- A. Keep schools open during the summer months for those students who wish to take courses.
- B. Keep schools going for 12 months but arrange for students to take long vacations at different times of the year.

- [] C. Close schools in the summertime.
 [] D. No opinion.

Some 25,000 junior and senior high school students responded to the question. Results for boys and girls were tallied separately. Here are the results:

Option A: 36% of the boys and 42% of the girls selected this choice--keep schools open for those students who wish to attend during the summer.

Option B: 12% of the boys and 10% of the girls agreed with keeping the schools open for 12 months with long vacations at different times of the year.

Option C: Almost half of all the respondents--49% of the boys and 46% of the girls--felt that schools should be entirely closed during the summer months.

Only 3% of the boys and 2% of the girls had no opinion about year-round schools.

Two years earlier, the New Jersey state department of education polled 300 students in 200 public, private and parochial schools about both year-round schools and mandatory summer sessions. Of the 300 students, an overwhelming 92% said absolutely no to both proposals. Only 8% favored either one of the two plans or both of them.

Judging from the results of these two surveys and the comments of many students both in and out of year-round school programs, this is one group that is not overwhelmingly in favor of attending school on a year-round basis.

In Hudson, Mass., some 60 pupils picketed the home of the superintendent of schools to protest a 12-month plan ordered by the school board. After the superintendent told the students that only the 185-day school year was required and that the additional time was available for students who wished to complete high school in three instead of four years, the students left.

Not all students would agree with those views. Kathy Darden, a fifth grader in Dale City, Va., said she liked the plan there. (It's a 45-15 quarter plan.) "I like the three-week vacation every season. I like to be off in the winter."

There are others like Kathy, too. In Atlanta's Northside High School, a number of students expressed their pleasure with the year-round system. "The courses, the atmosphere, the whole way everything is set up, just makes it great for learning," said one student. "The whole thing is just great. Everything is geared to making it easier for teachers and students to do things. I don't feel that I'm just sitting around taking up time and space," said another.

But this kind of comment is not heard as frequently as this kind: "It's okay, but I just like to be out all summer." Or, "I hate it. It interrupts everything. During a three-month vacation you can get a lot of things done, but not in those short stretches."

Businessmen and the General Public

The reaction of the general public to the year-round school concept has been, at best, mixed. There are those who support the idea wholeheartedly for various reasons, and there are those equally vocal in their statement against it.

Generally, those who favor the plans have either an interest in education or an interest in saving money or, at least, something that looks like it will save money. These people make comments like: "Well, why shouldn't schools be open all year round? You don't hear of businesses closing down for two or three months a year." "How can we expect our kids to learn everything they're going to have to know to survive in the world today? They have to get everything they can out of school, even if it means no vacations."

Many statements in favor of the year-round school come from deeply involved people, like former Pres. Lyndon Johnson, Sen. Hubert Humphrey, D-Minn., and Rep. Edith Green, D-Ore. As a former school teacher, Johnson had a deep interest in the state of education while he served in that office and in his previous post in the U.S. Senate. In an article for the 1969 Encyclopaedia Britannica Book of the Year, he said: "...We can no longer afford the great waste that comes from the neglect of a single child...the chance to learn and grow ought to be available to every person. National resource and social benefit that it is, education is first and last an inexhaustible treasure for the human spirit. So let us find ways to use our schools more than nine months of every year, and eight hours of every day. Let us make them a constantly available resource of pleasure, understanding and gain for all people."

Humphrey put it even stronger: "The traditional nine-month school year is an anachronism in today's world. It outlived its usefulness long ago. From a practical standpoint, there is no sense in letting our physical plant go to waste. However, we can't afford just to release the children from a relatively full school schedule to idleness in the summer. The full 12-month school year, I believe, is a must. But it should not be 12 months of the same old thing. We need imaginative and relevant summer programs covering a wide range of activities, including work experience, community service, recreation, culture and the arts." There are others, too, who have supported the idea of year-round operations of schools. Former U.S. Comr. of Education Harold Howe II often spoke in favor of the idea.

But there are also those members of the general public who are not in favor of year-round schools. Their opposition is usually based on the established family tradition of summer vacations. There are those who believe that students need time off from school just to do nothing, if they want to.

Differing Views on Summer Vacation Issue

Many questions are being raised about the summer vacation tradition. What about a construction man who lives in the North or Northwest? Can he really afford to take a summer vacation? Isn't that when his work is at its peak? Wouldn't he be better off if he could take his family on a vacation in the winter or spring?

One man recently returned from working for a number of years for an oil company in Saudi Arabia. "The year-round school was nothing new to us," he said. "My kids went to school all year round, except for about a month in the summer. But, what else were they going to do there? I only had a one-month vacation and it was pretty easy to time it so I got off with the kids." Another said: "I used to live in Minnesota. Come winter, there was nothing to do. If my kids had vacation time coming then, we could have taken off for Florida or some other place for a week or two."

The opponents of the year-round school, though, continue to exercise their right of opposition. In Hinesburg, Vt., a 45-15 quarter plan was started and later defeated in a referendum. According to one of the opponents there: "It [the plan] regimented family life. I just believe that we're in a free country and we have our summers off, and this is the time when families can get together. I don't think education is the ultimate in life. The [school] board is telling us how to live our lives, and not just how to educate our children."

Yet, Paul Rice, an assistant principal in Champlain Valley Union High School, which serves Hinesburg, said it was something different that led to the defeat of the program. "They [the opponents] felt they weren't involved in the initial planning and that something was being shoved down their throats." Rice's comments have special interest. In any number of cases, where plans have been approved as well as where they have been rejected, the successful implementation depended to a large degree on informing the public. In many cases, the public had been opposed at the start, but after hearing possible alternatives--more schools, split sessions--they favored the year-round school concept. Even more important, in a few school districts, one type of plan for year-round education was rejected by the public, but another type was accepted. The key, as any number of administrators will tell you, is to get the public involved early in the game, before any type of year-round plan has been adopted. Let the public have a say.

Now, what about business? How do businessmen feel about year-round schools? Generally, they favor the concept. Businessmen like the idea not because it can save money, but because education funds are going into educational programs instead of costly new buildings.

How do people react to the idea of vacations spread across the year, instead of being concentrated in the summer? A spokesman for the U.S. Chamber of Commerce says businessmen are not particularly tied to the summer vacation. "There are businesses today that can't afford to have summer vacations for key employees because it destroys their production schedules. And, more and more businesses realize that some employees want to take vacations at different times. Even more important, think what it would mean for businesses that could use part-time help during the fall or winter months. Many gift importers and manufacturers have their heaviest season in September and October. They could use extra warehouse help then. This is true of any number of businesses. In addition, no one likes to see a large segment of employable people not being employed."

A four quarter plan for Jefferson County (Louisville), Ky., was one that induced any number of comments from the business and educational community.

An editorial in The Louisville Times had this to say: "...There is nothing novel, of course, in the idea of lengthening the school year.... What may be possible is that the system [the Jefferson County school system], by making more efficient use of money, plant and manpower, would be able to give the community's children a better education."

The Kentucky State Chamber of Commerce also endorsed the plan. In a letter to the editor of Your Jefferson County Schools, the chamber said: "The Kentucky Chamber of Commerce is wholeheartedly in favor of consideration of the four quarter school year. "The state chamber has long been a leader in espousing the need for innovation, including a change in the present school calendar. No longer can we afford to settle for less than the ultimate in benefits and productivity from our educational facilities and personnel."

Other comments from businessmen in the Jefferson County area included these: "We support this plan because it makes good sense to use the multimillion dollar school facilities on a 12-month basis instead of allowing them to stand idle for three months of the year...." "It is therefore most encouraging that the Jefferson County School Board is developing a program which will permit year-round education. Not only will this program make maximum use of available physical facilities which represent a huge capital investment, but it will also permit the development of a broad curriculum...." "Much will be gained by our school system becoming a four quarter plan. Vandalism is one 'ism' that can and will be greatly reduced...."

Yet, despite all the favorable opinions from businessmen, there are some who do not agree. A great majority of these are operating summer resort areas and summer camps for youths. They feel that any change in the existing pattern of school year scheduling will greatly affect their chances of operating successfully. But even some of the resort operators and vacation spot owners concede that the picture isn't bleak. One ski resort owner said that he expected that a year-round school program that permitted winter vacations would probably give his business a shot in the arm. A camper said the same thing. "Right now, the national parks and campgrounds throughout the country are overloaded during the summer. It's getting to the point where it isn't fun anymore. But, if you split the load and had some people traveling in spring, some in summer and some in fall, then a lot more people would be able to see this country of ours without having to buck crowds everywhere."

The final word, perhaps, should go to Reid Gillis, vice president of Hardman Travel Industries in Atlanta, Ga. In the April 1971 issue of The School Administrator, he says: "...A new school calendar cannot be implemented in isolation from the community in which the school is located. As the school structure changes, it creates other by-products, such as changes in vacation schedules. Some industries may choose to schedule employees on a year-round rotating vacation plan. If students are allowed to opt out of school during midyear," Gillis said, "they might find jobs more readily. Another by-product is one related to college administration. When students are allowed to graduate at various time intervals, college matriculation times become more flexible. ...As we consider the different types of designs for the extended school year and their effects--saving money, using school plants, changing vacation patterns, influencing industry, expanding job opportunities--our main consideration, of course, must always be the welfare of the student."

WHAT'S HAPPENING IN THE STATES

One of the problems facing the year-round school, mentioned earlier in this report, is to get state legislatures to revise state education laws to (1) permit schools to operate on a year-round basis and (2) revise state education aid distribution formulas so that school districts could get money to operate schools during the summer.

The picture is getting brighter. Three states have passed laws that enable school districts to operate on year-round bases and provide funds.

California: The California law authorizes school districts to conduct year-round school in rotating shifts of four sessions of approximately 45 class days interspersed with vacations of approximately 15 class days. The law requires that school districts get the approval of the state superintendent of education in order to implement programs. Wilson Riles, California's state superintendent, has already stated his approval of the year-round school concept and it is expected that school districts wanting to reschedule the school year will have little difficulty getting his approval. However, the wording of the law does limit the options of school districts in the kinds of plans they can adopt. The only plan permitted under the California law is the 45-15 quarter system.

Texas: The Texas law differs from the California law considerably. Instead of giving school districts the flexibility of using the existing school calendar or rescheduling the school year, the Texas law requires that by Sept. 1, 1973, all school systems in the state operate the K-12 education system in three-month quarters. But this does not mean that school districts must operate their schools for more than three quarters, or nine months. It gives the option to districts of using the fourth or summer quarter as an additional period of instruction if "any school feels the necessity, either through failure of a bond issue or overcrowded conditions and does not want to build additional facilities." The law also permits the restructured school year to be put into effect by any school district as of Sept. 1, 1972. A stipulation in the new law provides that all members of the same family will have the same quarter off and hence will be able to vacation at the same time.

Illinois: Two bills passed by the Illinois legislature will permit both the operation of a year-round school and the funds for operation. A bill passed by the Illinois General Assembly in 1969 changes the method of computing state aid payments. Under the plan, state aid will be based on the average daily attendance for the best six months of the fiscal year. In April 1970, the Illinois State Senate passed a law that permits districts

to operate schools on a full year basis with the approval of the superintendent of public instruction. The bill requires that students be in attendance for a minimum of 180 school days, but not more than 185. Teachers, also, would not be required to teach more than 185 days.

During the past year, three state legislatures have defeated efforts to change state laws to permit year-round school operations. In Wisconsin, a bill to set up trimester and quarter systems for public schools never got past the joint finance committee.

In New York, a measure that would have allowed school districts to stagger vacation schedules and keep schools open all year round was withdrawn after heated opposition from representatives of major resort areas. And, in Florida, bills that would have permitted year-round schools died in committee without hearings before the state legislature.

What kinds of legislation are needed to implement and accelerate the adoption of year-round plans? George Thomas, a private consultant and formerly coordinator of the New York State Education Dept.'s Rescheduling of the School Year Project, offers these changes or new legislation as essential:

1. Grant authority to school districts to adopt a lengthened school year.
2. Assure school boards that they have the power to mandate school attendance during July and August.
3. Assure school boards that they will not lose state aid for attendance earned in July and August (if credit is still for 180 days).
4. Assure school boards that they can employ teachers for any 10-month period as well as for 11 or 12 months.
5. Permit adjustments in the minimum school year requirements to permit adoption of such plans as nonaccelerating quarter or trimester plans.
6. Develop legislation that would permit students to attend three trimesters or four quarters in designs not structured for student acceleration.
7. Develop special funding legislation to permit school boards to get through transition years with extended school year plans based on the acceleration concept.
8. Provide incentive or special planning grants to help school districts institute new organizational plans.
9. Permit schools adopting the continuous learning year plans to modify current entrance age requirements to allow birthday entrance.
10. To encourage adoption and implementation of year-round school programs, pass laws that prohibit part-time or double session schooling.

More succinct is the position paper adopted by the participants at the second national seminar on Year-Round Education held in Harrisburg, Pa., in 1970. It recommended action by three parties--state governments, local school districts and the U.S. Office of Education (USOE).

It recommended that each state:

- Provide enabling legislation and/or policies to permit flexibility so that various patterns of year-round education could be explored.
- Provide state aid on a prorated basis for extended school year programs.
- Encourage experimental programs through financial incentives or grants.

It recommended that USOE:

- Encourage experimentation in year-round education.
- Examine all year-round education models which seem to be widely acceptable in terms of well defined, established criteria.
- Foster the adoption of those plans or models which have demonstrated their value and acceptability so that nationwide patterns may emerge that are compatible with each other.

21 States Offer Flexibility

Here is what some other states offer in the way of flexibility which could lead toward acceptance of year-round programs.

- Alabama: Minimum school year, 175 days; no maximum. Flexibility in scheduling permitted within certain limitations. Teacher contracts a matter for local school districts. Summer school not compulsory, and legislation would be required.
- Alaska: School term is fixed by local districts, minimum 180 days. No legislation restricts flexibility in school scheduling, but because of intense summer activity and the large complement of military personnel, the state seems committed to the traditional school pattern.
- Arizona: School year begins July 1 and ends June 30. Teacher contracts prerogative of local school board. Additional funds and rewording of state aid legislation necessary.
- Arkansas: No restrictive legislation with regard to school scheduling. A uniform contract is used for teachers; no new legislation needed. Existing formulas for state aid would not have to be changed to permit year-round education.
- Colorado: Current legislation permits school districts to experiment with the extended school year. Minimum length of school year is 172 days; no maximum. State aid may be paid for year-round education. However, only 180 days by any given individual will be reimbursed.
- Connecticut: Present legislation permits flexibility in scheduling. Minimum school year, 180 days; no maximum. State aid is possible under present system for schools on a year-round program.
- Delaware: Year-round teacher contracts would require new legislation, and extension of the school year beyond 180 days would require legislative action.
- Georgia: Minimum length of school year is 180 days. This, however, has been amended to 177 days for school systems operating on a four-quarter program.

- Indiana: Public schools must operate for a minimum of nine months. Local school boards are permitted to extend the school year at their own discretion. Under existing legislation all types of year-round school programs, except the trimester plan, would require no new legislation for state aid distribution.
- Iowa: The State Dept. of Public Instruction requires that schools operate for at least 36 weeks and may be maintained during the entire calendar year. School finance statutes allow for distribution of state aid on the basis of average daily membership, regardless of the number of days in the school year.
- Kansas: Minimum school year is 180 days; no maximum. State aid, however, is paid on 180 days only. The state aid statute would have to be revised if schools were operated on a year-round basis.
- Maine: Minimum school year, 175 days. And, if funds are available, no changes would be necessary in the present state aid formula for year-round school operation.
- Maryland: Length of the school year is 180 days within a 10-month period. Flexibility in school scheduling is permitted only within the 10-month year. State aid to schools on a year-round program is not permissible under present legislation.
- Montana: Minimum school year is 180 days; no maximum. Existing laws permit flexibility in school scheduling and it would be possible to provide state aid to year-round school systems under present formulas.
- Nevada: Present laws require a minimum school year of 180 days and provide flexibility for most year-round programs. Slight changes in state aid distribution formulas would be required.
- New Mexico: Minimum school year is 180 days, and State Board of Education permits flexibility in school scheduling. A change in the present state assistance formula would be required for year-round programs.
- Ohio: Legislation has passed that permits districts to operate on semester, trimester or quarter plans, but slight changes are still necessary for complete funding of year-round programs.
- Oregon: Minimum school year is 180 days, and flexibility in school scheduling is permitted. The present state aid formula would not be in conflict with school districts operating voluntary, staggered quarter or trimester plans. However, school districts lengthening the school year to 220 actual teaching days would require special legislation.
- Tennessee: Minimum school year is 180 days, but there is no legislation permitting flexibility in school scheduling. Currently,

state aid is limited to a 200-day school term during one fiscal year.

Virginia: The minimum school year is nine months or 180 days. Upon request, local school boards may be permitted to revise school scheduling. The basic school aid fund is limited to 10 months, and some slight changes might be required to permit year-round school operations.

Wyoming: To be eligible for state aid, schools must operate for a term of 180 days or more.

One of the most effective arms of the education-legislation complex, particularly in the area of supporting year-round education programs, has been the Education Commission of the States (ECS). At its 1970 annual meeting, ECS members adopted a resolution stating that "the Education Commission of the States has as a major program element the promotion of the extended school year concept through identification of barriers to implementation; legal, financial and instructional implications; and methods of implementing these concepts; and further, to keep states informed concerning the latest developments in these areas."

The State Education Agencies

State education departments, too, can play a great role in the development and implementation of year-round education programs. And, even here, there is great variation. Some state education departments play a passive role, offering neither guidelines nor assistance to local school districts wanting information. Other state departments provide information and assist local school districts considering the installation of year-round school programs. And still others take a very active role, even to the point of initiating legislation to permit school-scheduling flexibility before there are local districts that request it.

In the state of Washington, for example, State Supt. Louis Bruno has asked the state legislature to permit school-scheduling flexibility and to allot funds for pilot projects around the state for various sizes of school districts to let them develop year-round school programs that would suit each community's needs best. In South Carolina, State Supt. Cyril Busbee and Gov. John C. West have publicly supported the concept of the extended school year.

Other state legislatures and departments of education, too, are moving to permit school-scheduling flexibility and aid formulas so that school districts can adopt year-round education programs. In Delaware, for example, the state department of education actively favors year-round education and has introduced measures to permit its development. In 1970 and 1971, measures were introduced, but not acted upon.

Many other states, as well, are studying the different types of year-round school programs being offered and evaluating them. Then this information is passed on to local school districts so they can make informed decisions about implementing year-round education programs.

WHAT'S REALLY GOING ON?

What is happening across the country--and what has happened in the recent past to develop year-round schools? Here are highlights over the past five years.

1966

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| 1. State of California | Conducted a study of year-round operation of their state colleges. |
| 2. Florida Educational Research and Development Council | Conducted a feasibility study. |
| 3. New York State | Published <u>Setting the Stage for the Lengthened School Year</u> . |
| 4. University of Toledo | Conducted an economic analysis of the year-round school. |
| 5. Harper Creek, Mich. | Feasibility study. |
| 6. L'Anse Cruse, Mich. | Feasibility study. |
| 7. Rockford, Ill. | Feasibility study. |
| 8. Polk County, Fla. | Feasibility study. |
| 9. San Jose, Calif. | Was to conduct an experimental program, but lack of interest on the part of students was the main reason the project never got off the ground. |

1967

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| 1. Findlay, Ohio | Feasibility study. |
| 2. Fraser, Mich. | Studied the possibility of extending the school year. |
| 3. Warren, Mich. | Feasibility study. |
| 4. Detroit, Mich. | Feasibility study. |
| 5. Houston, Tex. | Feasibility study. |

1968

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| 1. State of Delaware | Feasibility study. |
| 2. Anaheim, Calif. | Feasibility study. |
| 3. Avondale, Mich. | Feasibility study. |
| 4. Cincinnati, Ohio | Feasibility study. |

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| 5. Governor's Study Commission on the North Carolina Public School System | Contained a portion about year-round schools. |
| 6. Bloomfield Hills, Mich. | Feasibility study. |
| 7. Durand, Mich. | Feasibility study. |
| 8. Edwardsburg, Mich. | Feasibility study. |
| 9. Findlay, Ohio | Feasibility study. |
| 10. Louisville, Ky. | Feasibility study. |
| 11. Plymouth, Mich. | Feasibility study. |
| 12. Portage, Mich. | Feasibility study. |
| 13. Rochester, Mich. | Feasibility study. |
| 14. Rockford, Mich. | Feasibility study. |
| 15. Sault Sainte Marie, Mich. | Feasibility study. |
| 16. Seattle, Wash. | Feasibility study. |
| 17. Traverse City, Mich. | Feasibility study. |
| 18. Utica, Mich. | Feasibility study. |
| 19. Cook County, Ill. | Feasibility study. |
| 20. Atlanta and Fulton County, Ga. | Started a modified four quarter plan in September 1968. (Optional four quarter.) Park Elementary School--222-day quadrisemester in operation. |
| 21. Hayward, Calif. | |
| 22. Green Chimneys, N.Y. | Extended summer program. |

1969

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| 1. Pennsylvania Dept. of Public Instruction | Feasibility study. |
| 2. Southwestern Ohio Educational Research Council | Comprehensive study of the all-year school. |
| 3. Ann Arbor, Mich. | Feasibility study. |
| 4. Denver, Colo. | Looking hard at extended school year. |
| 5. East Lansing, Mich. | Feasibility study. |
| 6. Freeland, Mich. | Feasibility study. |
| 7. Syosset, N.Y. | Feasibility study. |
| 8. Hansdale, N.Y. | Feasibility study. |
| 9. Hartford, Conn. | Feasibility study. |
| 10. Lawrence, Tex. | Feasibility study. |
| 11. Knoxville, Tenn. | Feasibility study. |
| 12. Lansing-Okemos-Haslett, Mich. | Feasibility study. |
| 13. Ludlow, Vt. | Feasibility study. |
| 14. Muskegon, Mich. | Feasibility study. |
| 15. Northville, Mich. | Feasibility study. |
| 16. Oil City, Pa. | Feasibility study. |
| 17. Omaha, Neb. | Superintendent's Calendar Committee Report. |
| 18. Port Huron, Mich. | Feasibility study. |
| 19. Portage, Mich. | Feasibility study. |
| 20. Racine, Wis. | Feasibility study. |
| 21. Rockville, Md. | Feasibility study. |
| 22. Roseville, Mich. | Feasibility study. |

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- 23. Utica, Mich.
 - 24. Waterford Township, Mich.
 - 25. Atlanta and Fulton County Ga.
 - 26. Lockport, Ill.
 - 27. Brooklyn, N.Y.
 - 28. Winston-Salem Forsyth County Schools, N.C.
 - 29. Becky-David School, St. Charles, Mo.
 - 30. Wilson School, Mankato State College, Minn.
 - 31. Englewood, Colo.

 - 32. P. K. Yonge Laboratory School, U. of Florida
 - 33. Grand Forks, N.D.
 - 34. Butler, Pa.
- Feasibility study.
Feasibility study.
Four quarter plan operating.
- Valley View 45-15 plan operational.
John Dewey High School operating on modified year-round program.
Third grade class operating on year-round plan.
Elementary school 45-15 plan in operation.
- K-12 school open all year, students can vacation whenever they wish.
Cherry Creek Schools begin 5-year phase toward year-round school. Hope to have staff on year-round basis in four years.
Student body on year-round basis afterward.
Plan developed for flexible all-year school.
Year-round school plan delayed due to parent opposition.
Has comprehensive summer program, considering ideas for year-round education.

1970

- 1. California
 - 2. Colorado
 - 3. Florida
 - 4. Georgia
 - 5. Illinois
 - 6. Kentucky
 - 7. Massachusetts
 - 8. Michigan
 - 9. Minnesota
 - 10. Missouri
 - 11. Ohio
 - 12. Pennsylvania
 - 13. South Carolina
 - 14. Wisconsin
 - 15. Washington
 - 16. Anchorage, Alaska
 - 17. Berwyn, Pa.
 - 18. Battle Creek, Mich.
- Feasibility study.
Feasibility study.
Providing funds for pilot projects.
Studying results of pilot project in Atlanta and Fulton County.
- Feasibility study.
Feasibility study.
Preparing materials for legislative action.
- Feasibility study. Considering plans to provide funds for pilot programs.
- Feasibility study.
Feasibility study.
Feasibility study.
- Preliminary plans and regulations to govern year-round school programs adopted.
- Eight-weeks summer session attended by 30,000 students. Moving rapidly toward extended school year.
- One pilot program in state, requesting funds.
- Gathering material on year-round school.
- Feasibility study.
- Expanded summer school offerings.
- Feasibility study.

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| 19. Burlington, Iowa | Feasibility study. |
| 20. Cohasset, Mass. | Feasibility study. |
| 21. Centerline, Mich. | Feasibility study. |
| 22. Dalton, Mass. | Feasibility study. |
| 23. Danbury, Conn. | Feasibility study. |
| 24. Fayetteville, Ark. | Looking again at the extended school year. |
| 25. Ipswich, Mass. | Feasibility study. |
| 26. Kankakee, Ill. | Feasibility study. |
| 27. Lakeside, Calif. | Feasibility study. |
| 28. Lakewood, Colo. | Feasibility study. |
| 29. Manassas, Va.
(Prince William County) | Feasibility study. |
| 30. Marysville, Mich. | Feasibility study. |
| 31. Minneapolis, Minn. | One school district considering 45-15
plan. |
| 32. Omaha, Neb. | Feasibility study. |
| 33. Pontiac, Mich. | Parents urging school board to look into
year-round school concept and ideas. |
| 34. Richmond, Vt. | Feasibility study. |
| 35. San Antonio, Tex. | Taking a hard look at year-round school
concept. |
| 36. San Diego, Calif. | Moving toward pilot program. |
| 37. Saskatoon, Canada | Feasibility study. |
| 38. Seattle, Wash. | Teachers association is looking at
year-round school. |
| 39. St. Clair Shores, Mich. | Lakeview High School is considering year-
round school scheduling. |
| 40. Tucson, Ariz. | Looking at the year-round school. |
| 41. Tulsa, Okla. | Moving to extend the school year. |
| 42. Ukiah, Calif. | Feasibility study. |
| 43. Warren, Mich. | Starting second feasibility study. |
| 44. Allegheny County, Pa. | Completed extensive study of year-round
school plans. |
| 45. Jefferson County
(Louisville), Ky. | Plans to implement optional four quarter
plan in one to two years. |
| 46. Dade County, Fla. | Initiates its year-round school program
using quinnmester system. |
| 47. Okemos, Haslett and
East Lansing, Mich. | Based on results of 1969 feasibility study,
plans to start pilot program in 1972
or 1973. |
| 48. Utica, Mich. | Based on 1969 feasibility study, hopes
to start year-round school pilot pro-
gram in 1972 or 1973. |

Feasibility Studies and Results

The list on the preceding pages shows an increasing interest in the year-round school concept. As a matter of fact, if every district that conducted a feasibility study actually began a pilot program, the entire state of Michigan would probably be operating on a year-round basis by now. But, in reality, only a handful of those districts and state departments of education that conducted feasibility studies have converted their findings into pilot programs or single school experiments. Many of those programs under way earlier are still going on. The best known, probably, is Atlanta-Fulton County, Ga. (More about this program in Case Study #1.) Another, probably equally as talked about is the Lockport, Ill., Valley View 45-15 program. (More about it in Case Study #3.)

Many of the school districts that conducted feasibility studies did not reschedule the school year to provide year-round education as part of a continuing program. What many of them did do was to expand the summer school portions of the school year, but continue to operate them on a voluntary basis.

- One of the few districts that conducted a feasibility study and then did initiate a year-round program is Manassas (Prince William County), Va. Four schools in Dale City (within Prince William County) began to operate on a year-round basis with the 1971-72 school year. The reason for adopting the plan, according to Prince William County school board members, was that some 7,000 children in the county junior and senior high schools were on double session, and "we felt it was time to try something different." The schools will now operate on a 45-15 quarter plan.
- In nearby Fairfax County, Va., a feasibility study on year-round schools was approved by the school board in January 1972.
- In South Carolina, four local school districts have been awarded federal grants of \$25,000 each to study and plan extended year-round programs. The four districts are York County District No. 3 (Rock Hill); Spartanburg County District No. 7 (Spartanburg); Florence County District No. 1 (Florence); and Richland County District No. 1 (Columbia).
- In Wichita, Kan., public school officials developed a study committee to look into the year-round school. The committee came out in favor of year-round education and suggested using a four quarter plan.
- In St. Charles, Mo., an extended school year has been in operation since 1969. And according to administrators in this suburban St. Louis community, the plan is working "beautifully." The program is in operation in three of the district's schools and involves about 2,100 pupils. The plan is the 45-15 --nine weeks of school and three weeks vacation. The basic reason for the development of the year-round program was to provide more space.

Alan O'Dell, one of the district's administrators, says, "I wouldn't say we are spending any more money than we would otherwise, but we are getting more education out of our existing facilities." Teachers like the plan because it gives them a flexible work year; pupils are becoming used to it; and parents, according to surveys, support the plan by more than 60%.

• Mollalla, Ore., was faced with a choice of split sessions or extending the school year after voters rejected a building program. The choice was a staggered four-quarter, year-round school. The plan is to have about 700 of the school's 1,000 students in school at any one time. The program, which started in June 1971, has, in the words of Sam Wilson, the district superintendent, "given us tremendous economy and a much better curriculum. We've been able to reduce class size. But, most important, our normal nine-month budget of \$800,000 has gone up only \$68,000 to add a fourth quarter, and we've saved all the building costs and their related operating expenses." To avoid having to install air-conditioning in classrooms, the school day runs from 7:30 a.m. to 1:30 p.m. in hot months.

• In August 1971, all 2,500 students in the Rochester, Pa., schools were moved into a new \$5.2 million educational complex. At the same time, the school year was switched to a staggered four quarter plan, with students having the option of attending any three quarters, or all four. Although none of the school system's 117 teachers are required to work all year, many of them do.

• Four high schools in Baltimore, Md., began a four-quarter, year-round school operation in the fall of 1971. However, the success of the program is in doubt. School officials had asked for \$800,000 to fund the experiment, but the city council trimmed away more than \$700,000 because the public remains opposed to the plan. One school aide said he wasn't surprised. "To many people, year-round school means enforced school attendance all year long."

• In Evergreen, Wash., a committee was formed to study the year-round school. In its recommendations, the committee indicated that it favored 12-month school operation with students attending for only 180 days. The primary focus of the program would be to accommodate more students in the existing facilities in order to eliminate the need to construct new schools.

• In Cleveland, Ohio, students at Chamber Elementary School will be going to school for 11 months. The 300 youngsters will attend school during the months of June and July, but will have the month of August off as well as five week-long vacation periods throughout the year. The experimental program increases the school year by five weeks. A federal grant is being used to determine the feasibility of operating year-long schools.

• The Salem, Ore., School Board is also looking into the year-round school concept. It is considering the year-round school as an alternative to a massive school construction program. So far, no specific form of year-round school plan has been adopted.

• In Des Moines, Iowa, a recommendation for year-round schooling is expected from a study committee. The committee, made up of school administrators, teachers, students and parents, was to study the feasibility of implementing a 12-month school year in the public school system.

• In Utah, the Utah Adult Education Assn. has proposed that schools be open year round, to people of all ages for educational, cultural and recreational purposes. Although this is not to be considered a year-round school program, the use of school facilities on a full-time basis is the aim of the program.

Las Vegas, Nev.

A program similar to the one proposed by the Utah Adult Education Assn. is in operation in Las Vegas, Nev. There, one high school does the work of two. During the day, Valley High School operates as a standard public high school. At night, the name and purpose change. It becomes Urban High School, a school geared to the special needs of its students. Most of its students are dropouts who are holding down full-time jobs. Its aim is to give students a chance to succeed. "When we started this school," says Gerald F. Hunt, principal of Urban High, "we told teachers to encourage the students in every possible way. And that's the essential difference between us and the day school: Our teachers are trying to give youngsters every opportunity to succeed."

Many people say the program in Las Vegas is a success for several reasons. First, they say, the school facilities are being used more efficiently instead of being idle for long periods of time. Second, the program eliminates the need for new and special facilities. Administrators of the school admit there are some added expenditures for operating Urban High. But they calculate that even with the additional cost, they are actually breaking even--just by keeping the dropouts off the street.

El Camino High School, San Francisco

A long established program in El Camino High in the South San Francisco (Calif.) Unified School District is entirely different. Although this is not a year-round school program in the ordinary meaning of the term, it is an attempt to provide more teaching time in various subjects. All laboratory and activity-oriented classes (home economics, physical education, wood shop, etc.) meet for only three periods a week--one 50-minute period and one 105-minute period. The aim here is to eliminate nonteaching time in these subjects by cutting out the large amounts of time used to move between classes, setting up equipment, cleaning up after classes, dressing and undressing, and other beginning and ending classroom practices that are wasteful. Since the plan's inception in 1960, administrators say they have added 11 weeks every year for students in physical education and six weeks every year for students in industrial arts, art, crafts, science and homemaking.

Robert Keropian, El Camino principal, cites these reasons for adopting the program:

- There are no additional costs.
- There is no change in the physical plant.
- The schedule is voluntary, and any teacher or department can participate without the schedule being mandatory for the entire school.
- The option to return to the daily schedule is available at any time.
- No additional staff is required.
- At the teacher's request, classes can meet Monday-Wednesday-Friday, or Tuesday-Thursday-Friday.
- The length of the school day and school year remain the same.
- Individual instruction time is increased 250% over the daily schedule.
- Students experience greater interest and motivation.
- There is a greater utilization of buildings.

Dade County, Fla.

Five junior and senior high schools in Dade County, Fla., are now operating on a quinmester year-round school program. Under the quinmester program, the year is divided into five 45-day units, and students are given the option of attending any four semesters to meet the 180-day state requirement or can accelerate by attending all five quinmesters. The acceptance of the program by the students is indicated by the enrollment at Miami Springs Senior High School during the fifth quinmester in the summer of 1970. An unexpected total of 1,540 students attended. Dade County education officials cite three primary educational advantages of the program: (1) It opens the doors for a richer curriculum through the development of minicourses that can be related to a single subject. The student has a choice of any four offerings to earn a year's credit. (2) It encourages experimentation. The student may try a new subject at no great risk. If he doesn't like it, or doesn't do well, he has lost only one nine-week segment. And (3) it has the potential to reduce failure because the student isn't locked in on a year course.

Orange County, Fla.

Orange County, Fla., is also looking to the year-round school or some form of it for its school system. A study group looked into the increasing need for new facilities in 1969 and recommended three possible courses of action:

1. A 10-hour day--from 7:30 a.m. to 5:30 p.m.--split into two five-hour days for students. In effect, this would create two separate schools. In addition, the school year would be lengthened to 216 days. Teachers would work only one shift. Extracurricular activities would be held in the afternoons and those students who wished to participate would attend the morning session.
2. A staggered four quarter plan, with students permitted to attend any three of the four quarters.
3. A consecutive quarter plan with students in continuous attendance.

So far, no plan is operational in Orange County, but there is support for year-round schools. Particularly strong support has come from the Orlando Sentinel which said: "The best answer yet to Orange County's soon-to-double school population is the 10½-month school year with double sessions in all facilities."

Columbus, Ohio

The Dept. of Evaluation, Research and Planning for the Columbus, Ohio, public schools recently completed an extensive study of the year-round school concept and its feasibility for implementation in the Columbus school system.

As a result of its findings, the department recommended the following development plan to the Columbus school board: Move from the existing semester

plan to the semester term accelerated; then move to the voluntary four quarter plan; then move to the mandatory four quarter plan. The department also recommended that the program begin at the secondary level since the major need for space relief is at grades 7-12.

Akron, Ohio

A proposal in Akron, Ohio, calls for "an extended school program to use schools and selected school staff after school, evenings, weekends and summers to provide a range of services and educational experiences to supplement, extend, enrich and/or reinforce the customary school program." The reasons for the proposal included the advantages of such a program to:

- Disadvantaged children who have little direction or opportunity for meaningful occupation during the summer months and who need an uninterrupted school year to ensure continuous progress.
- Gifted children who need to accelerate their learning to meet the challenge of increased technology and to expand their opportunities for creativity.
- Children needing special services such as psychological testing and diagnosis, counseling and speech therapy could continue during the summer.
- Adults could be served by providing a program for them to develop both basic skills and marketable skills, and to expand in such areas as civic awareness and use of leisure time.

Other groups, too, would benefit, according to the Akron committee studying the year-round school, including teachers, children who find it hard to adapt to regular school situations, children whose homes are lacking, and families whose neighborhoods provided only limited opportunities for recreation.

As yet, however, the Akron school system has not adopted a plan or begun to implement any of its programs.

Chicago, Ill.

Three Chicago, Ill., elementary schools are presently operating on a 45-15 year-round school plan. The plan, which began July 1, 1971, was to encompass nine elementary schools, but opposition from the Chicago Federation of Teachers resulted in a smaller scale pilot program. In organizing its plan, the Chicago school system took into account geographical areas surrounding each of the schools so that children from the same family would be in the same cycle. This, Chicago officials believe, lessened opposition from the community. Also, special services such as tutorial and enrichment classes and recreational activities will be maintained during the 15-day vacations.

One of the major advantages of the plan for Chicago is lower class sizes. According to Richard Gernick, principal of the Raster School, one of

the schools in the year-round program, "the average class size last year was 45 students per room. Under the year-round plan, we will be able to reduce this pupil-teacher ratio to approximately 32 students per teacher."

Major support for the year-round school plan has come from the Chicago Tribune. In an editorial earlier this year, the newspaper said: "Year-round use of both physical plant and academic personnel has obvious advantages in terms of efficiency and economy. Fewer classrooms need be built; fewer teachers need be employed. Both buildings and people can give more extensive service in year-round operations than if nearly the whole system suspends work for three months. A longer working year with correspondingly higher pay is highly popular with most teachers. In Romeoville, Ill., where year-round operations are already in effect, teachers had their choice; nearly all men and many women preferred the longer year...."

Evanston Township, Ill.

Evanston Township, Ill., school district has an extensive summer school program. Summer courses are available in art, science, speech arts, social studies, business education, driver education and many other subject areas. The aim, however, is primarily for enrichment and remedial work. The school board's policy is that while these summer courses are for credit, a student may not use the credits to graduate earlier. The policy states that it takes four years of schooling to earn a diploma. The success of the program can be seen by student interest during the 1969 summer school when 2,204 students were enrolled. This included junior and senior high school students. There were students taking enrichment courses as well as remedial work.

Los Angeles, Calif.

Another major city moving toward the year-round school concept is Los Angeles, Calif. Since 1969, the Los Angeles Board of Education has taken steps leading toward year-round education in the city's school system. Principals and assistant principals are under a new assignment schedule through which they are stationed in all of the city's junior and senior high schools 12 months a year. And the summer school program is expanding, with more and more courses being offered and more and more students attending. A recent survey by the district's division of secondary education indicated why the students are attending summer school:

1. They hope to obtain additional credits to move ahead a semester as the midyear promotion of pupils was eliminated (36%).
2. They are participating in summer school for enrichment courses (18.8%).
3. They want to strengthen mastery in a subject field (16.7%).
4. They want to raise a mark, other than a failure (9.7%).
5. They want to make up a failing grade (9.6%).
6. Other reasons--parental insistence, self-improvement, to have something to do (9.2%).

Whether Los Angeles will adopt a year-round school program, such as the quarter or trimester plan, or some other form is not clear. School offi-

cials have felt for some time that their extensive summer session gives them maximum use of facilities and staff and provides additional learning and recreational opportunities for school children.

Hayward, Calif.

Perhaps one of the most important year-round programs is the one at Park Elementary School in Hayward, Calif. A year-round program has been in operation at Park Elementary School since 1968. It is a continuous four quarter plan with children attending school for 220 days with three-week vacations between quarters.

The evaluation report published in January 1970, after the program had been in operation for almost two complete years, concluded:

1. The parents of Park Elementary children like, accept and support the four quarter system.
2. Pupils at Park like the program and a majority do not want to return to the former system.
3. Teachers at Park support the program, but teachers at other schools do not.
4. Business, industry and college representatives like the Park four quarter plan and would like to see it extended.
5. The 36 principals in the Hayward Unified School District favor the program, but do not want it expanded to include all other elementary schools. They do, however, want the program broadened to include one or two other schools.
6. Costs for operating the Park program for the additional days over the regular school year (175 days) showed a 9.9% increase above the regular program.
7. Park Elementary students performed well in reading and mathematics achievement tests when net gains were matched with those of students in a comparison school. On a pretest, students in the comparison school earned consistently higher scores than the students at Park. After one year of operation, however, there was practically no difference in grade achievement levels, indicating that the Park students had generally gained and had caught up with the initially more advanced comparison students.

Based on their findings, the evaluation committee made these recommendations:

- Continue the extended school year program at Park for a period of four years to conduct a longitudinal study of the program and its impact upon the students, their parents and the community.
- Extend the basic design of the plan to one of the district's ESEA Title I schools in order to gain insights into the effect of the extended school year upon children from disadvantaged backgrounds. Such an expansion should be carried on for a four-year period to provide for a longitudinal study.

ALTERNATIVES TO YEAR-ROUND SCHOOLS

Here are some districts that either rejected year-round programs or have taken other steps to meet their immediate financial needs.

- North Allegheny, Pa., school officials completed a study of year-round schools nearly two years ago and, based on their findings, decided not to go ahead with the program. The initial study indicated that the projected costs of operating an 11-month school program were higher than the cost of building new schools to provide classrooms needed in the future. There was also some question at that time if the state would provide reimbursements for any program structured to eliminate the present 180-day school year minimum.

That was not the final word, however. North Allegheny officials are now going to take another look at the year-round school, especially if they can get the state to promise to pick up some of the extra costs of the program. Educators in North Allegheny say the state's attitude is changing, and if some agreement can be reached, a year-round school plan could be a reality in another two to three years.

- In East Orange, N.J., a year-round 45-15 plan was rejected by the school board because of lack of funds from the state and community opposition. Community opposition is based upon the fear that children would become unruly with such schedules, that working mothers would have considerable difficulty making arrangements for child care and that children would not learn.

- Although the New York State Education Dept. officially favors and supports the concept of year-round schools, the state legislature defeated a bill that would have allowed school districts to stagger their vacation schedules and keep schools open all year. Principal opposition to the bill came from legislators representing resort areas. They argued that such a change in the system would hurt businesses in their areas.

- In Hinesburg, Vt., there was a different kind of problem. After voters rejected a bond issue to permit the enlargement of a crowded building, the Champlain Valley Union High School Board okayed a 45-15 plan to start at the end of July 1971. The board had completed its study of the year-round school earlier and planned to implement it if the April bond issue failed. Three weeks after the year-round school plan began, it ended. Community opposition revealed itself to be too strong for the board to overcome. In a referendum, the year-round school was defeated by a 3-2 margin.

- In Dallas, Tex., an experimental 12-month program utilizing the quarter system for one high school was shelved. Under the plan, students could either

attend three of the four quarters and graduate with their regular classes or complete all four quarters to graduate a year earlier. School officials cited several reasons for not going ahead with the plan for the 1971-72 school year. Among the reasons: It was considered economically unsound because, according to one official, "we would have had to increase our staff by one-third to permit operation of the schools year round." Also, it was indicated that there was a lack of student and parent interest. One official said: "Our surveys show that parents want all their children to have a vacation at the same time rather than have their high school children get out in the winter and their elementary school children get out in the summer."

The principal of the experimental high school said the program would have to be organized on a citywide or cluster basis to gain parents' support. A cluster, he said, would include the high school and its feeder junior high schools and elementary schools.

• Public relations proved its point in Germantown, Wis. In 1968 and 1969, the district was considering year-round schools. In order to find out what the community and staff felt, it prepared a simple survey card. (See figure 4.) The card was distributed to a random sampling of 1,500 households in the school district and to the entire staff with a complete breakdown of the types of year-round plans possible for the district.

Figure 4:

YEAR-ROUND SCHOOL SURVEY CARD	
Please indicate your preference by checking the appropriate line.	
At the present time I prefer the:	
<input type="checkbox"/> Quarter System	<input type="checkbox"/> Extended Summer Session
<input type="checkbox"/> Trimester System	<input type="checkbox"/> Year-Round Employment of Staff
<input type="checkbox"/> Extended Semester System	<input type="checkbox"/> The Present Arrangement
Comments:	
_____ (Signature)	

The survey drew a 29% response from the community and a 94% response from the staff. The results showed 80% of the community and staff opposed all year-round alternatives. Among the commonly cited objections:

- Family vacations. A vast majority of respondents indicated a strong feeling about the importance of family vacations. According to school officials, this meant that any voluntary year-round plan would result in an extremely low attendance in the summer, or that any mandatory plan would meet with considerable opposition.
- Summer school for teachers. Many respondents felt that under either year-round system teachers would have difficulty completing advanced degrees.
- Summer camp. Respondents indicated strong feelings about religious and other camps serving an important part of their children's education.
- Summer repair and maintenance. The question of when buildings could be repaired without interrupting instruction was also raised.

After looking over the results, the Germantown school administration recommended that the year-round school be given no further consideration. Instead, it suggested that increased use of facilities and staff be made by expanding the existing summer program.

In a move in an entirely different direction, some districts are shortening the school year or school week. Faced with a 10% cut in its school budget, Thorndike, Maine, is testing the four-day school week. In this community, children from grades K-12 will attend school Monday through Thursday. Friday will be reserved for inservice training of teachers. In order to make up some of the time, the school day will be 35 minutes longer. State Comr. of Education Carroll R. McGary sees the experiment as a better way of finding out if children learn more--and better--with better trained and better prepared teachers, despite the loss of instruction time. "The central idea is to free some resources to devote to teacher education," McGary said.

The experiment was approved for two reasons. First, voters for the last two years have cut the district's budget, and school administrators are hoping to save on maintenance and janitorial costs and especially on busing costs. Second, the district has received a three-year federal grant of \$100,000 to develop an experimental teacher training program aimed at upgrading individualized instruction, primarily to help the slow learner. The four-day week will run continuously from September to the Christmas break, every other week from Christmas until March, and every fourth week thereafter until June.

It is doubtful that the four-day will become as important a trend in education as the year-round school, and so far, this is the only four-day week experiment. However, there has been a movement in some industries toward the four-day work week. If this gains momentum, there could be an entirely different shift in attitudes.

Another kind of school-year shortening hasn't exactly been planned by school officials. And, in many cases, it isn't particularly welcome. A number of school districts, notably in Ohio, have been forced to shut down because school tax levies have been turned down at the polls. A number of large cities, also, have threatened to shut down early if additional funds aren't made available.

However, Portland, Ore., seems to have taken its step through careful planning. A notice to employees dated July 30, 1971, announced that schools would close on May 11, 1972, approximately 20 days earlier than normal.

CASE STUDIES

Numerous school systems are operating year-round programs. With one or two exceptions, these year-round school plans should not be called experiments. In fact, Atlanta officials reject the word experimental when talking about their program. It is not something that is going to be tried for a few years and then dropped. It is the new pattern established for their district. The same can be said for the Valley View, Chula Vista, Jefferson County and Lake Oswego programs. And even the Houston program is more than just an experiment --even though it involves only one high school.

There is another general feature to all of the case studies. Although there is the hope of saving money by converting to year-round school operations, that is not the main feature. In each case there is at least as much, and perhaps more, interest in improving the educational program.

Case Study #1—Atlanta (Fulton County), Ga.

Probably the most talked about, most observed and most copied year-round education program is the one in Atlanta, Ga. But, it must not be forgotten that the Atlanta program includes six of the other school systems in metropolitan Atlanta. Each school system has its own year-round program. Neither Atlanta nor the school systems in Fulton County leaped into year-round education. For three years, the eight metropolitan Atlanta school systems studied the concept, formed joint committees to plan general curriculum and developed organizational structures. In order to coordinate the activities, five joint committees were formed.

A steering committee with two representatives from each system was set up to provide overall planning, schedule activities, receive reports, pose problems and questions and keep each individual school system and the Georgia State Dept. of Education informed. An intersystem curriculum committee was formed to provide overall assistance in the development of curriculum areas and in the blending of subject areas into a total curriculum guide. An intersystem subject area committee provided basic communication between the local school system and the intersystem curriculum committee. The other two committees—a local system's subject area committee and a local school's subject area committee worked closely with the major committees, but translated the overall information into data for each school district and each school within the districts.

But still the most important element of the total operation was the development of the city of Atlanta's four quarter program. And, perhaps the

key element in that development was the attitude of the Atlanta school officials toward their program. From the beginning Atlanta directed its efforts toward a total year-round program, and decided the program was not going to be changed after being tried for a year or two.

Historically, Atlanta had first considered rescheduling the school year during the early and middle 1950s. At that time schools were crowded, and the purpose of considering the year-round school concept was to save building space and, hopefully, to eliminate the need for new buildings. However, after careful study, the school system decided not to proceed with the change because the savings in building space utilization would not cover the additional operating costs of the year-round school. In the middle 1960s, the year-round school concept was considered again. This time, though, the principal idea was to determine the feasibility of reorganizing the high school calendar so that year-round educational opportunities could be provided and a more flexible, more workable and more relevant program realized.

Atlanta's calendar reorganization is the staggered quarter plan. Two 18-week semesters with an abbreviated summer program were discarded and replaced with three 12-week quarters and one 10-week quarter. Although the original idea was to have four equal quarters of 55 days, the three 12-week quarters were developed to meet the state requirement of a 180-day school year from September through May. Therefore, in order to make the fourth quarter equal in teaching hours to the other three, each subject class period during that quarter runs 10 minutes longer.

A major concern of Atlanta school officials was the revision and reorganization of the secondary school curriculum. A new curriculum had to be designed to provide each child with challenging educational opportunities. And the curriculum was to be appropriately adjusted to each student so that he could experience considerable success without becoming bored or discouraged. And that is the core of the program. The entire secondary curriculum has been reorganized and restructured in order to provide flexibility for the student's program and for the school schedule. It also eliminates the lockstep system of a required sequence of courses. All English is nonsequential (see figure 5), as is all social studies, all home economics, practically all health and physical education, business education and industrial arts.

Figure 5: SELECTED ENGLISH COURSES OFFERED IN ATLANTA SCHOOLS

This is a brief sample designed to show the kinds of single-theme courses available in the English curriculum. Often, there are beginning, intermediate and advanced courses in the same category.

Reading Improvement	Grammar	Poetry
Literary Themes	Myths and Legends	Sentence Patterns
Mass Media	The Paragraph	Shakespeare
The Short Story	Theatre Stage Craft	American English Dialects
Journalism	Drama	Creative Writing

About one-half of the science courses are nonsequential and many of the math courses above the beginning level fall into the nonsequential category. There are some exceptions, such as elementary Algebra, beginning French or any other foreign language. All in all, 860 courses that could be taught in any quarter are listed in the catalogue. The choice of the courses to be offered in any school was left to the staff of each school.

For example, one school that served students from affluent homes, most of whom were preparing to go to college, selected 126 courses that represented a traditional college preparatory program. Another school in which children came from families with average incomes and only about 40% planned to go on to college made different choices. This school selected 216 courses which represented a wider range of offerings and included many vocational courses. In addition, there was greater flexibility for students. They were not locked into a sequential type of program, but could take a variety of courses in each subject area. Also, by attending the fourth quarter, students had the opportunity to either accelerate their work and graduate earlier, or could take fewer courses in each of the four quarters. To many students, this meant they could hold full- or part-time jobs on a year-round basis.

School officials saw another advantage in this system. "Toward the end of the regular school year," one principal said, "we would see a lot of students starting to slack off because they were getting tired. With the quarter system, you can watch for this fatigue in students, and, when you see it coming after two quarters, you can suggest to the student and his parents that he ease up in the third quarter and take some courses during the fourth quarter."

There are some disadvantages in the quarter program that relate specifically to teachers and subject area preparation. One problem: Teachers often found themselves having to prepare for different courses for each quarter and, on occasion, two different courses in the same quarter. Also, there was the problem of selecting textbooks and other classroom materials to meet the needs of the varied and diversified courses being offered in each subject area. Most teachers in Atlanta consider these problems of minor import, however.

Another factor considered when the year-round education program was in the discussion stages was its effect on summer vacations. However, a careful study of the regular tuition summer school revealed that for several years approximately 25% of the student body had participated. Moreover, of those attending summer school, about 75% enrolled in advanced, accelerated or enrichment courses. Douglas MacRae, deputy superintendent of the Fulton County School District, said "the image of summer school had been changing. It was no longer a period in which flunk-outs made up failures. Instead, students were, for the most part, taking advanced work." But that was past history. The question that arose as the fourth quarter (summer) of 1969 started was: How many pupils would actually attend? The results spoke for themselves. Some 13,000 students indicated in preregistration that they would attend the tuition-free, full-day session. Actually, 12,770 students did attend, roughly 39% of the enrollment during one of the preceding three quarters.

But what about future summer quarters? Atlanta officials do not foresee any changes in the numbers of students attending the fourth (summer) quarter as an alternative to one of the other quarters. In fact, studies of future

enrollment and preregistration figures indicate no noticeable trend among students to exercise their option of taking vacations at other times of the year. There are indications, however, that many students are going to attend the summer quarter to either accelerate their studies or to continue to take special courses for enrichment purposes.

Teacher, Student and Public Reaction

How have teachers, students and the public reacted to the plan? Atlanta Supt. John Letson says "teacher reaction has been very favorable because a teacher can take time for study or vacation if he wishes or he can be employed on a full-year program at a larger salary. Generally this means a salary increase of about 25%." Nearly all Atlanta teachers who wanted to work during the fourth quarter could do so since about a third of the students attended that quarter. "In fact, in 1970, a majority of the entire professional staff--teachers, counselors, librarians--were employed year round," Letson said.

What about the students? "Students like the plan because it is voluntary," Letson says. "They can take part-time school work during the summer if they wish. If they don't find employment during the summer but can find it during some other time of the year, they can take the other time off. and attend during the fourth quarter. Or they can work part time throughout the year and take courses as well."

Now, what about the public, parents and other community interests? "Business interests here are very much for the program because it makes a better distribution of all kinds of activities that ordinarily slow down during the summer," Letson says. "Taxpayer reaction, too, has been favorable. I think the favorable evidence is that the state and local agencies did approve larger budgets resulting from the increased amount for salaries, and the program is being continued. The year-round use of teachers is one way to get better salaries for teachers without causing a lot of opposition from taxpayers. We can't get competitive salaries for teachers if we continue to use their professional skills on a part-time basis only," Letson says.

One of the key questions of course, is the problem of money for operating on a year-round basis. Atlanta officials admit freely that costs are up. "If you operate for four quarters each year, the answer is that it will cost more," says one official. "However," adds Asst. Supt. E. Curtis Henson, "we don't think it costs more per unit."

Another part of the question is state aid. So far, the state department of education has endorsed the program, and so has the state legislature. But there haven't been enough changes made in the state statutes to permit state financing of the year-round system. So, the first three quarters are financed through the regular state aid program supplemented with local funds. The fourth quarter is financed entirely from local funds. However, school authorities do anticipate changes in the state aid distribution schedule to permit the schools to receive money for students attending the fourth quarter.

In addition, although there is some saving on building space, the better use of facilities was not the main function of the Atlanta year-round program.

What Are the Benefits of Atlanta's Program?

In summing up their program, Atlanta school officials cite these important elements of their year-round program. "Structurally, the four quarter program is simply dividing the school year into four periods of approximately equal length rather than two equal semesters and a summer session. To be meaningful, a complete program must be provided during each quarter and only minimum prerequisites and/or sequential offerings must be required so that a student can choose to work or go on vacation at a time other than summer.

"To divide the textbook or course into four quarters instead of two semesters is not sufficient. Without extensive revision of educational goals and an intensive analysis of curriculum, four quarters of school will be no more of an exciting prospect than three or two semesters. Factors other than time, number and amount of days must be weighed. Each quarter course must be a complete and autonomous unit. The number of possible courses within a given discipline must be large enough to assure ease in scheduling while assuring continuous growth opportunities for the students. Only occasionally would a student be required to pass a specific course since there are others which deal with similar concepts of equal quality which would serve as well. Within the four quarter plan, a system can offer greater flexibility both in scheduling and in curriculum offerings. The possibilities appear unlimited and the benefits to students great.

"For the school system, advantages sought from a four quarter plan are not financial. Initially, such an operation is more expensive to implement and maintain than the traditional two-semester plus a tuition-supported summer school. Benefits to the students should be the prime reason for converting to a four quarter school program."

Case Study #2—San Jacinto High School, Houston, Tex.

A pilot, trimester, year-round school program is now operating at San Jacinto High School, Houston, Tex. If successful, the plan will be extended to all other schools in the Houston School District.

How does the plan work? Basically, it is a 12-month school program consisting of three unequal terms. It consists of two traditional 18-week semesters from September through May, plus a third term of 12 weeks which operates during the summer months. Also, it is a staggered program whereby each student can attend any two or all three terms.

School district officials picked San Jacinto High School as the testing ground for the trimester plan because it is the one school where a large variety of academic and vocational programs were already operating. The school year of two 18-week traditional semesters was kept so that students in all schools in the city could attend their own schools during the September through May period and then take additional credits or courses at San Jacinto during the summer. In this way, some sort of open enrollment plan is operational.

The strongest part of the school's program is its vocational effort. The basic vocational program includes 24 courses. Now, with the introduction of

the trimester program, a number of new, on-the-job training courses have been added. They include data processing, dental assistant cooperative training, homemaking-related cooperative training and distributive education. In conjunction with these offerings, the trimester program allows interested students to get jobs for either summer or winter periods and still obtain the necessary educational requirements by attending two of the three terms.

There were two other reasons for selecting San Jacinto as the site for the pilot program. The special education program at San Jacinto accommodates the needs of the blind or partially sighted, deaf or hard-of-hearing, the mentally retarded, the brain injured and the physically handicapped. With a year-round program in operation, full-time services and educational programs can be offered these students. And, last, a basic skills program is available for students who are below average in achievement.

Planning for the trimester project in Houston began in the early 1960s. Supt. Glenn Fletcher was ready in 1967 to recommend the plan to the school board. It was accepted, and a districtwide program to inform the public was undertaken. "The acceptance of the program was immediately indicated by the response of San Jacinto students, teachers and parents," says Fletcher. "In fact, we felt overwhelmed by the enthusiastic response. The whole idea of the pilot program was accepted by the community. Many people were acclaiming our trimester plan for its potential as an answer to overcrowded classrooms as well as the full utilization of the available school facilities." With that kind of response, the trimester plan went into the final planning stages and the first trimester began in the summer of 1970. So far, school officials say the plan is working out as well as they had planned and total acceptance of the pilot program is very high.

How the Trimester Plan Operates

Although the length of the terms varies, the number of teaching hours remains the same. During the two September through May semesters, there are six-period days, plus a home-room period. There is a total of 80 teaching hours for each course. During the summer term, the number of class periods per day is cut to five, but the class periods are extended to 80 minutes and the home-room period is eliminated. The school day in the summer term begins at 7:50 a.m. and ends at 3:20 p.m., so there is the same 80 clock hours for each course in the summer term as in the two traditional terms.

The trimester offers students:

- Early graduation or an opportunity to "catch up" in grade level.
- More flexibility in choice of electives.
- Chance to vacation during the fall or spring.
- Vocational education on a 12-month basis.
- Greater concentration of study through a longer class period.
- More gainful employment in the fall or spring than is ordinarily available to students in the summer months.
- More individualized instruction as a result of smaller class enrollment.
- Opportunity for study with fewer extracurricular distractions during the summer.

The trimester offers teachers:

- Full-time professional employment.
- More effective and satisfactory teaching experience as a result of smaller classes.
- Opportunities to experiment, to improve instructional practices and to provide more individualized instruction.
- Opportunities to travel or attend graduate schools during fall or spring.
- Opportunities to instruct students who have elected when they will attend school and who have fewer extracurricular distractions.

The trimester offers the public:

- Maximum utilization of physical facilities and the professional staff.
- Opportunities to assist in reducing the delinquency problem by providing school for students who cannot find employment during the summer.

There are some difficulties, however. Although the Texas legislature recently passed measures to permit districts to start year-round school programs, they do not become effective until September 1972. In the meantime, there have been difficulties in providing funds for summer operations of the schools. Since the start of the program in 1970, students who elect to attend all three terms have had to pay tuition. The state aid formula requires an attendance of 175 days. Anything over that is not covered. Thus, students who attended all three terms had to pay a tuition of \$112.50. So far, though, school officials say there has been no difficulty in getting students to fill the seats available at San Jacinto during the summer trimester. In fact, they say there has been a waiting list. How long it will take Houston officials to determine the total success of the pilot trimester program is unknown.

Case Study #3—Valley View Elementary School District, Lockport, Ill.

In 1953 the Valley View Elementary School District (one of the largest in Illinois, covering 41½ square miles) had five schools, 200 dwellings and 89 pupils. In 1971, there were seven schools, 6,700 dwellings and 7,000 pupils. The projections for 1980 show a possible 20,000 dwellings and 22,000 pupils. The number of additional schools is omitted from Valley View's 1980 projections because the district's new year-round program may eliminate the need for some, and perhaps most, of the new buildings required. One outcome is certain with Valley View's 45-15 year-round plan--the district is figuring on providing four schools for the construction price of three.

Valley View's 45-15 plan is, in effect, a quarter plan for year-round school operation, but there are some differences. First, pupils do not have an option to vacation at different times of the year. All students attend for the same number of days, but each has a 15-day vacation between each 45-day learning period. However, except for 12 days during July, three-fourths of the district's pupils are attending school at any one time.

Why are school officials so optimistic? Because of the overwhelming support from the community, the teachers, and, officials say, because it works.

What Makes Valley View Work?

In 1967, Valley View voters approved bond issues for two new elementary schools and brought the district to its statutory debt limit. Faced with a rapidly increasing school population, the school board and administrators began seeking other ways to utilize facilities. After discussing extended school year possibilities, they settled on a 45-15 plan.

A concentrated effort to inform the public was made from August 1968 through June 1970 when the 45-15 plan began operating. Newspapers, radio, a telephone answering service, talks before civic groups and talks over coffee with small groups of people were ways in which the information was spread throughout the community. School officials explained the three options the school district could use to solve its problems. First, double shifts could be instituted. This, however, was only a temporary solution, and had been rejected by the community in the past. A second alternative was to place more children in each classroom, but this would be detrimental to the education of all the children, especially if there were 50 or 60 in each class. And, finally, the third alternative was year-round education.

How does the Valley View 45-15 plan work? In simple terms, all pupils are divided into four groups. All children from the same family are put into the same group. Every effort is made to put children from the same neighborhood into the same group as well. Each group attends school for 45 days and then has a 15-day vacation. The attendance schedules for the groups are spaced 15 days apart so that only three of the four groups are in school at the same time. Schools are closed on all Illinois legal holidays, for a week at Christmas, a week at Easter and about 12 days in July. For the rest of the year the 15-day vacations, like the 45-day class periods, are staggered.

What Are the Effects of Valley View's 45-15 Plan?

The primary effect is on space utilization, since this was the major reason for instituting the program. The plan gives the district one-third more space. Because schools are open for 240 days instead of 180 days, existing buildings can be used more efficiently. For every 30 classrooms used, there's the space equivalence of 40 classrooms. The district does not foresee in the immediate future the elimination of constructing new buildings. Yet, for every new school built, there will be one-third more space. Or, more simply, for every three schools constructed, there will be the space equivalent of four schools.

The plan also affects student learning both beneficially and detrimentally. However, students learn as much as they did under the old system, according to school authorities. Students have adjusted well to the new type of schedule. Because there is no long summer vacation, teachers have fewer problems in getting students back into the groove after they've been out of school. Moreover, because students now spend fewer days in school before they have a vacation, there appears to be less boredom and restlessness. Despite the claims of many skeptics that the 45-15 plan with its three-week breaks might affect children adversely, school officials feel that so far the three-week breaks are advantageous.

Yet, there are problems. For one thing, as each group completes its 45-day learning period, another group begins. Often, if the teacher is working through the next 45-day period, he will have a different group of children. And, conversely, when the first group of students returns to school from their 15-day vacation, they could very well have a different teacher. At the junior high level (the Valley View District includes one junior high school) students may have as many as 24 different teachers during the school year. This continuous switching of teachers and pupils naturally restricts flexibility of curriculum, individual help and recognition, and correction of weaknesses. The most distressing part of the system is that the student-teacher relationship has become impersonal.

The year-round school plan in Valley View also affects teachers in both good and bad ways. On the good side is the increase in teacher salaries. Those teachers who work year-round earn one-third more income. And, of course, there are variations. In Valley View there are five basic contracts--180 days, 210 days, 225 days, 240 days and 270 days (the last one is actually possible only every other year and is essentially a 14-month contract). In other words, a teacher can now work when and for as long as he wants. He gets paid on the basis of how many days he works.

On the bad side, school officials report, is teacher fatigue. Although many people tend not to consider this a problem, fatigue is becoming a factor in teacher effectiveness and performance. The extended teaching period, shortening of traditional school vacations and the absence of the three-month separation from the classroom could have an adverse effect on teachers.

Benefits are also reported from the year-round education plan. School services such as libraries, multimedia departments and closed circuit television now operate on a 12-month instead of a nine-month basis. The transportation system has been streamlined by scheduling pupils for school in neighborhood groups. Thus, the same number of buses carry more pupils more miles. In addition, there have been some savings in bus transportation because even though the district enrollment increased, the number of buses is the same. Special education services for educable mentally handicapped children are now scheduled in the same way as those for regular students. Thus, these children get the benefit of continuous education with shorter vacations.

One of the major problems with the Valley View plan has been the calendar itself. Vacations under the new plan are not the same as traditional school holidays. For the 1971-72 school year, for example, classes will be held on the day after Thanksgiving and on Christmas Eve, Dec. 24. These school sessions restrict and disrupt family travel plans for both teachers and students. In fact, high absenteeism during these times indicates that despite families' acceptance of year-round schooling, many still observe traditional holidays.

How Much Does the Valley View Plan Cost?

But what about the cost of operating a year-round program? Other school districts with year-round education programs indicate an increase in operating costs. Valley View officials cite three different kinds of school costs: (1), fixed costs that stay the same no matter how many days the school is in

use; (2) indirect variable costs that vary a little depending on how many days the school is in use; and (3) direct variable costs that go up or down in direct proportion to the use of the school.

And, Valley View officials cite the example of teachers' salaries to prove their point. Salaries increase not because the school is in year-round use, they say, but because of the number of children in the district. The more children, the more teachers that are needed. Also, the salary for an individual teacher will increase only because of the number of teaching days that year. A comparative cost per-pupil breakdown of the traditional school year and the 45-15 plan shows the savings (see figure 6).

School authorities point proudly to the estimated savings in building construction costs for the district. They estimate a saving of about \$7.5 million of the total cost of building, equipping and financing two and one-half 30-room elementary schools.

Figure 6: COST PER PUPIL ON TWO BASES OF COMPARISON

	Valley View 1969-70 (Enrollment 5,580)		Valley View 45-15 (Enrollment 7,440)*	
	Total	Per Pupil	Total	Per Pupil
Administration	\$ 208,000	\$ 37.27	\$ 238,000	\$ 31.38
Instruction	2,859,300	512.42	3,800,000	510.75
Health	34,200	6.13	45,600	6.13
Operation	389,900	69.67	500,000	67.20
Maintenance	34,100	6.11	40,000	5.38
Fixed Charges	163,200	29.25	217,600	29.25
Other (except food)	45,100	8.08	60,000	8.06
Net Current	3,733,800	669.13	4,901,200	658.75
Transportation	296,400	53.12	390,000	52.42
Debt Service	488,400	87.53	488,400	65.65
Capital Outlay	(766,000)	(137.27)	(766,000)	(102.96)
	784,800	140.65	878,400	118.07
Total	\$4,518,600	\$ 809.78	\$5,779,600	\$ 776.82

*The enrollment in the 45-15 plan is one-third larger than that in the traditional plan because an extra one-third of the pupils could be taught in the same facilities. The 45-15 plan also assumes two additional administrators and other general increases in cost because of scheduling schools on a year-round basis. More pupils can be served in the same facilities which causes overall costs to go up, but the cost per pupil to come down.

Does the 45-15 Plan Work?

School officials feel that the 45-15 plan is working and is serving its purpose in the community. So apparently do many other officials from around the country. The Valley View 45-15 plan is the one most closely studied, copied and adapted by other elementary systems. And even the federal government is looking at it closely. Following are the findings of a recent PREP (Putting Research into Educational Practice) Report on the Valley View plan:

"While posttest and evaluative data are not yet available on the Valley View 45-15 plan, the baseline information appears to warrant these conclusions:

- One-third more classroom space can be made available immediately through the 45-15 plan.
- Immediate savings (up to 5% per pupil) can be gained if enrollment is rising rapidly, and debt retirement is high per pupil.
- Educational benefits immediately accrue if overcrowding or double shifting is prevented.
- The community can be won over to the support of short vacations at four different times during the year as they learn how to use the time. Those people most strongly objecting are generally critical of the school system.
- Student scheduling is the toughest administrative problem to solve. However, if a systems approach is used and a good organizer is responsible, scheduling can be done in two or three months and on a budget of about \$1 per pupil. Two factors that can ease the problem considerably are the use of individualized instruction and schools with large enrollments. Student scheduling is easier with nongraded programs because students can come and go if the instruction is truly individualized. Also, larger enrollments tend to reduce chance imbalances.
- Basic research objectives can be more easily reached if incorporated into "formative" evaluation. This means that the people involved must see "pay-off" from evaluation activities.
- Teachers are willing generally to try a year-round operation, especially if given the option on the length of their contract. However, they are quite skeptical of most claims made for year-round education prior to any experience with it.
- The move to a year-round operation wins strong support from economy-minded taxpayers and watch-dog groups. However, a majority of parents are more concerned about the educational outcomes of the program.
- Any school system can move to a year-round operation if it anticipates and plans for: winning community acceptance; involving professional staff with all the specific ramifications of the operation, especially student scheduling; and developing a model or design that does not penalize, in the eyes of the community, certain families.

Case Study #4—Lake Oswego, Ore.

An expanded summer school program to strengthen the education of students by broadening or reinforcing their learning experiences was the aim of Lake Oswego, Ore. Although summer programs of varying dimensions had been available to Lake Oswego students for many years, an examination of programs offered since 1961 shows wide variation in the methods of financing, numbers and types of course offerings, and the degree of participation. In 1961 and 1967, for example, there were no summer sessions; in 1962, 1963 and 1964 the summer program was supported by patrons; in 1965 the district totally financed the program; and in 1966 the district partially financed it. Enrollment also failed to follow any pattern—in 1963 there were 52 pupils; in 1965, 884; and 1966, 651.

The inconsistent performance of the summer program concerned many people --the school administration, the Citizens' Advisory Committee on Curriculum and the Board of Directors of the Lake Oswego School District. After careful consideration, those concerned developed these purposes for the program:

- Offer opportunities for enrichment and exploration beyond what is available during the regular school year.
- Provide opportunities to make up credit deficiencies.
- Give remedial assistance in reading and math as a part of the regular school program and intensive remedial help to some children with extreme learning problems.
- Give high school students greater program flexibility by offering certain required courses during the summer.
- Assist in district curriculum improvement through experimental programs.
- Expand teacher inservice training opportunities.

Once the purposes of the program had been decided and plans for the summer program formulated, the local board proposed a 12-month contract for interested teachers. With the passage of the district's budget in 1968, the plan was put into operation. Registration for the summer program was overwhelming, even with nominal tuition fees of \$2.50 for a week-long sports clinic to \$15.00 for a full-credit course. A total of 1,838 elementary and secondary students signed up for the summer program.

An Expanded Summer School Pays Off

The courses offered in both the elementary and secondary summer schools encouraged students to respond. In addition to the traditional summer recreation courses, such as arts and crafts and rhythms and games, the school board added literature and creative writing, remedial reading and math fundamentals. (See figure 7 for a complete list of summer offerings for the elementary school summer program.) On the secondary level, the offerings were even broader. Programs lasted from one to nine weeks. (See figure 8 for secondary course listings.)

While the purposes of the summer school are more closely identified with instructional programs, they do include opportunities for curriculum improvement. The 12-month contract for teachers allowed them to experiment with both content and process and to discuss innovation, problems and theory. Going

even further in putting together the plan, Lake Oswego officials, with the help of the 12-month contract for teachers, were able to be far more flexible in developing the instructional program of the summer session. Eighty-six teachers (49 secondary and 37 elementary) signed year-round contracts and were assigned according to their training and to where they were needed. Some high school teachers were assigned to elementary level classes, and vice versa. For example, a high school English teacher taught creative writing to intermediate grade youngsters. Two secondary school industrial arts teachers instructed children in grades 3-6 in elementary woodshop.

There were some staff problems, however. A number of teachers who had signed 12-month contracts requested releases and some of them left the district. Yet, there were some teachers who had not signed up, but who changed their minds.

The Citizens Advisory Committee on Curriculum and the Lake Oswego school board consider the program an outstanding success. Since an important part of the program was to determine the attitudes of teachers toward the 12-month contract, the question posed to the staff at the end of the first year's experiment was: "Do you plan to be on a 12-month contract next year?" Of 84 teachers who responded to the question 47 said yes; 13, no; and 24, undecided. Yet, 72 of the 84 teachers signed up for 12-month contracts for the 1969-70 school year. The 12 who didn't sign either left the district, returned to school, or took vacations.

Figure 7: ELEMENTARY SUMMER SCHOOL ENROLLMENT

Course	1st Session	2nd Session	Total
Arts & Crafts	193	147	340
Elementary Band	24	12	36
Creative Dramatics	110	80	190
Literature & Creative Writing	37	19	56
Math Explorations	40	20	60
Math Fundamentals	147	113	260
Vocal Music	27	10	37
Reading	149	85	234
Remedial Reading	136	83	219
Rhythms & Games	12		12
Explorations in Science	110	65	175
Tumbling	215	119	334
Woodshop	97	67	164
	1,297	820	2,117

Figure 8: SECONDARY SUMMER SCHOOL PARTICIPATION

Course	No. of Weeks	No. of Students Participating			Total
		Grades 7-9	Grades 10-12	Other	
Shakespeare	3	3	6		9
Regular English	6		32	7	39
Modern Literature	3		2		2
Composition Workshop	3		6		6
English Review	3	19			19
Developmental Reading	3	41			41
Study Skills	3		11		11
Fundamentals of Math	3	39			39
Fundamentals of Math	6	16			16
Algebra I	8	14	4		18
Independent Study—Math	4-8	3	17	1	21
Computer Science	6	13	5		18
Photography	3	14	5		19
Chemistry	8	2	9		11
Biology	8	7	2		9
U.S. History	8		34		34
Modern Problems	8		5		5
Painting	3	4	4	1	9
Jewelry	6	1	3	2	6
Ceramics	6	15	20	4	39
Drawing	3	14	11	1	26
Arts & Crafts	3	20			20
Leathercraft	3	9			9
Woodworking	6	12			12
Sewing	3	49	17	1	67
Typing I	6	51	18		69
Summer Stock	6	6	21	5	32
Advanced Band	6	9			9
Vocal Music	3	12			12
Stage Band	6	8	5		13
Small Ensembles	6	2	1		3
Driver Training (classroom)	3	12	22		34
Practice Driving		71	72	1	144
Weight Training	9	90	58		148
		556	371	23	950

Case Study #5—Chula Vista, Calif.

After hearing about the year-round school concept for some 20 years, and after taking a look at the Valley View, Ill., 45-15 plan, Burton C. Tiffany, superintendent of the Chula Vista Elementary School District, decided it was the best possible answer to his district's problems. He made his decision in December 1970. Three months later, after intensive study, the Chula Vista Board of Education agreed with Tiffany and made a decision to experiment with the year-round school concept in four schools.

Why? "Our school population was and still is growing faster than our ability to build new schools. Right now we have 17,000 students in 26 schools. In the past two years, we've opened three new schools. We have very few alternatives. We had reached the maximum property tax assessment in the community, so the only things we could have done were to get more portable classrooms, go to double sessions or find some better way to use the facilities we had. After our studies, we felt the only way was to make better use of what we had, and, after looking at the Valley View Plan, we felt it would be adaptable here."

The Chula Vista experiment takes in four schools in an area called Otay Mesa. It involves approximately 4,000 students in grades K-6 and slightly more than 100 teachers. It works very much the same way as the Valley View Plan: The children are split into four groups, with each group attending school for 45 days and then taking a 15-day vacation. Starting times for the groups are staggered, so that no more than three groups are in attendance at any one time. "All we've done is simply eliminated the three-month summer recess," Tiffany says.

Tiffany was faced with a different kind of problem than those in other areas. Many parents in his district are of Mexican-American descent and in many homes parents do not speak English. When the program was approved by the school board, a question and answer form was sent out to all parents in the Otay Mesa area. To solve the language problem, the form was printed in English on one side and in Spanish on the other.

Some of the questions and answers on the form explain the approach the Chula Vista administration took in solving some of the peripheral problems:

Question: What is the problem?

Answer: There are approximately 4,000 children living in the Otay Mesa area enrolled in kindergarten through grade six. For this area we have four schools: Finney, Silver Wing, Juarez-Lincoln and the new Los Altos School. The available classroom space under our present program can handle about 3,200 children. Thus, we will be short space for 800 children. There are two alternatives: double sessions or year-round schools. We feel that double sessions are a poor solution. Children would attend school for a shorter period each day and this would result in an appreciable loss of educational opportunities for students. The 45-15 year-round plan would allow children to go to school for a full day, and the shorter vacation times between school periods would reduce the learning loss that occurs during long-term vacations.

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- Question: Since children will be off school for 15-day periods at varying times of the year, what kinds of activities will be available?
Answer: It is our plan to provide summer session-type activities for these children. Also, we plan to work with the San Diego Department of Parks and Recreation to provide programs the year round.
- Question: Would class sizes be larger under this plan?
Answer: No. We plan to maintain the present pupil-teacher ratio of 30 to 1.
- Question: Do teachers approve of this plan?
Answer: Yes. A large majority of teachers presently working in the Otay Mesa area have indicated their interest in participating in the program. In addition, more than 80 teachers in other district schools have indicated some interest in working in this program.
- Question: Would all the children in my family be affected by this plan?
Answer: All children in your family who would be enrolled in grades kindergarten through six would be affected by the plan. They would go to school and be on vacation at the same time.
- Question: If your plan works, will you stop building new schools in the future?
Answer: No. As new areas develop we would need to construct more schools. However, if this plan works, we may be able to build one-fourth fewer schools at a potential savings of millions of dollars.
- Question: Will special programs continue to be offered? For example: programs for gifted children, special education, instrumental music?
Answer: Yes. Programs offered in all other district schools will be available in the year-round program.
- Question: What about vacation plans when you have one child in high school and one in this program?
Answer: This program provides a three-week vacation during the summer for all children. In addition there would be three other three-week vacations during the rest of the school year. For those parents who have unusual problems, such as trips booked in advance, we would plan to work out a flexible schedule wherever possible.
- Question: Will this program be more expensive to the taxpayers?
Answer: No. It will be less expensive. Since we will be able to work with more children within our existing operation, the cost on a per-child basis will be lower.
- Question: Will the concepts of open space schools and team teaching that we now have be possible in this program?
Answer: Yes. These programs would be continued and there would be an opportunity to develop other changes in the instructional program as well. There may have to be changes made in the order of teaching certain things because of their timeliness. But libraries would be open for the full school year. Children would be less likely to unlearn what they have covered during a three-week vacation than during a three-month vacation.

- Question:** Can my children be bused to another school if I so desire?
Answer: In some cases, family problems will keep a student from joining the year-round program. If a family cannot work out its personal problems, such as baby sitters for working parents, then those children can go to a school not on the 12-month plan.
- Question:** What were the feelings of parents toward the plan?
Answer: Seventy per cent of the parents involved indicated they favored the program. Approximately 15% more said they will send their children to a year-round school if the program is approved.
- Question:** Will there be any additional teaching staff hired?
Answer: Since the four school buildings in the experimental program will be utilized to serve the equivalent of five school populations, enough staff will be hired to serve five schools. In other words, there will be no more staff hired than would normally serve five schools.
- Question:** What effect will the year-round program have on the junior and senior high schools?
Answer: Since we are not part of the high school district, we are not in a position to state what effect the year-round program will have. However, there is an indication that the high school district is moving toward an extended year plan. The regular summer session will run seven weeks, and an additional 17-day summer session is being planned. This is a step toward the 12-month school.
- Question:** Will the entire district eventually go on the year-round plan if this experiment works out?
Answer: At this time it is a difficult question to answer. It would first be necessary to evaluate the worth of the current plan. However, it is conceivable that because of the savings in building costs and the opportunities this plan offers for a quality school program that it could eventually spread throughout the district.
- Question:** How would a 12-month student be affected if he transferred to another area in Chula Vista with only a 10-month program?
Answer: The child would be affected in much the same way as if he were to transfer out of the district. That is, if he had started in July, the youngster would be much ahead of the boys and girls in the regular classroom. It is also possible, just as it is presently, that a parent may request an intradistrict transfer and have his child remain at the school for the remainder of the year.
- Question:** Since classrooms would presumably be filled with normal classes, where would the proposed summer school classes be held in the year-round program?
Answer: The summer school classes will be held in two classrooms made available as a result of the year-round school. Again, because of the year-round plan, the number of classrooms available will be more because the number of students using them at any one time will be less.

Chula Vista Begins the 45-15 Plan

As with any year-round school program there is the ever-present problem of getting either state approval or a change in the state aid-to-education formula. The California State Legislature changed the school laws to permit the operation of the 45-15 plan. And, an emergency clause in the law provided Chula Vista with operating funds early in July. Previously, state appropriations were not available until late August. On July 6, 1971, the Chula Vista 45-15 plan began operations.

Although Tiffany isn't sure about the final outcome of the 45-15 year-round school program in Chula Vista, two nearby districts were convinced enough to make plans to move into year-round schooling. The La Mesa/Spring Valley (Calif.) School District decided that three schools would experiment with the year-round school plan in an effort to solve student housing conditions. Two elementary schools, K-6, and a junior high school, grades 7 and 8, are involved in the program, which began in July 1971.

And the Lakeside Union School District is readying a plan to begin the year-round school program in July 1972. Lakeside--made up of 3,600 students and seven schools--six elementary schools, K-6, and one junior high school, grades 7 and 8--will use the plan on a districtwide basis. It is not being considered as an experimental program, but instead as an educational concept for the district.

Case Study #6—Jefferson County (Louisville), Ky.

The Jefferson County school system is planning to take on a new look during 1972-73 as part of its year-round school program.

Why? Because Jefferson County school officials have decided that they cannot afford to allow expensive plant facilities to sit idle for three months in the summer. Also, the officials decided to make important changes in the instructional program to make it more relevant, interesting and individualized.

Jefferson County school officials had been considering the idea of year-round schools for more than 10 years. But it wasn't until 1968 that all the pieces came together. With school enrollments climbing rapidly, and new and expensive buildings in sight, Supt. Richard VanHoose felt it was time to take a real hard look at the year-round school idea. "We felt we had to do something, we had to respond creatively to the demands of a new era. We had to find some medium that would let us set up a flexible, imaginative approach to education. And, we felt the year-round school was a logical way to revise the school year to give us what we felt we needed."

A study committee consisting of school staff and citizens was formed, and it received favorable response to the year-round school concept from teachers, administrators and the public. Then the big question arose. What kind of year-round program would best suit the needs of Jefferson County schools? The committee took a look at many different plans--the quadrisemester, trimester, multiple trials, modified summer school and the continuing four quarter plans. For each plan they posed these five questions:

- Can the plan improve curriculum and instruction?
- Can the plan be made operational without undue disruption to community life?
- Does the plan have the capacity to improve the status of teachers?
- Will the plan put existing buildings into use year-round?
- Does the plan point to eventual economy?

The committee reported the following after studying the plans: "In our judgment, the continuing four quarter plan ranks high in each of these categories. Consequently, we recommend the four quarter plan as the plan most feasible for implementation in the Jefferson County School System. The continuing four quarter plan has some unique advantages that should be listed:

1. It provides flexibility in course offerings. Subjects in each discipline are prepared for 60-day sessions and are, for the most part, nonsequential; therefore, students have a greater selection of courses.
2. It reduces the number of failures and dropouts. It is believed that the curriculum will be kept up to date with the inclusion of new materials, and thereby maintain student interest throughout the 60-day session.
3. It provides students more entry and withdrawal dates each year. Instead of one starting date, there will be four. There will also be a corresponding number of termination dates. Consequently, a sick or injured child would not have the added fear of falling so far behind in his class that he could not catch up.
4. It offers students the opportunity to accelerate their progress through school. Students could choose to attend school for 240 days per year for the purpose of acceleration, enrichment or remediation.
5. It allows better utilization of professional personnel. The division of the school calendar into four equal 60-day segments allows greater flexibility in the use of teachers. Teachers could choose to teach all four quarters, or they could choose to teach a lesser number of quarters.
6. It makes use of existing school buildings 240 days per year. This would answer the demand of getting greater use of existing facilities.
7. It allows students and teachers the option of voluntary participation during the fourth (summer) quarter. In addition, students and teachers would eventually be allowed to choose any quarter for vacation purposes.
8. It provides for economy. By utilizing school buildings the year round and allowing pupils to accelerate their progress through school, some eventual economy can be effected, while at the same time improving the quality of education offered.

"For these reasons we recommend that the continuing four quarter plan be adopted and that all pupils in the system have the opportunity to attend the fourth quarter on a voluntary basis," said the committee. With these recommendations in hand, Supt. VanHoose went before the school board and got approval for the year-round school plan in May 1970.

How Will the Jefferson County Plan Work?

The school year is divided into four equal, 60-day quarters--September-November, December-February, March-May and June-August. The first three quarters make up the school year in the traditional sense. The fourth, or summer, quarter would be available on a voluntary basis. At present the school system has approximately 90,000 students enrolled. If 15,000 were to enroll in the fourth quarter, that would mean approximately 5,000 less in each of the other three quarters. This, school officials say, would result in an immediate savings of 200 classroom units.

What Are the Advantages?

One of the biggest benefits of the program, school officials say, was the opportunity to revise and rewrite the curriculum. It was a big job, but rewarding to those who participated. One American history teacher said that he seldom got beyond the Civil War during the school year. "In my judgment, American history would lend itself to being divided into a number of 60-day courses. Students could then choose courses concerning the dead past, the immediate past or the current scene."

Providing education for the exceptional child is another side benefit from the continuing four quarter plan. O. L. Shields, assistant superintendent of Jefferson County Schools, said: "Flexible scheduling would be especially beneficial to the students whose style of learning requires individualization because he would have the option of attending most of the school year. Educable mentally retarded and trainable children tend to regress after long vacations because their habits need to be constantly reinforced."

"When it is realized that perhaps one-fourth of our pupils have some type of departure from normal approaches to learning and when it is further realized that these diverse deviations from normal require a variety of interventions, it becomes apparent that the more flexible type of scheduling under an extended school year plan is an absolute necessity."

"Yet another advantage of an extended school year is the availability of work space for volunteer tutors. Many of these volunteers have difficulty finding space to carry on their one-to-one corrective training during the normal nine-month term. Several thousand pupils will benefit maximally from this help with trained paraprofessionals."

Reactions to the plan from parents, other members of the community, business and professional men and the press have been extremely favorable. The Kentucky Chamber of Commerce and a number of social organizations throughout Jefferson County praised the program both for its attempt to deal with a growing economic problem and its interest in providing quality education.

But, there were some questions, too. Many people were concerned about the types of recreation available for students taking vacations at times other than during the summer. Others were concerned about the economy of the plan. And others were interested in knowing if busing patterns would change and whether or not schools would be air-conditioned for use during the summer.

To answer those and other questions, the school board put together the following list of the most asked questions and their answers.

Question: What will children do for recreation if they are on vacation during a quarter other than summer?
Answer: This is an area that will require close study and coordination with local agencies that provide recreational programs. Presently there are not sufficient programs available on a year-round basis.

Question: What kinds of savings can you point to with the continuing four quarter plan?
Answer: Economy would result immediately by putting existing buildings to use year round. For example, if 15,000 pupils were to choose to attend school during the summer quarter and they select vacation time during the fall, winter or spring quarters, 200 classrooms would be saved. At today's prices, the cost of building 200 classrooms can be roughly figured at \$50,000 per classroom, or \$10 million.

Question: How will children be able to go to school during the summer? If we have to air-condition buildings, won't that eat up some of the savings?
Answer: At the present time there are 21 air-conditioned schools in the district--12 elementary schools and nine high schools. These 21 schools have the capacity to house 27,050 pupils. The schools are evenly distributed in each of the five educational districts. Consequently, any student desiring to attend the fourth (summer) quarter can be assured of attending an air-conditioned school.

Question: Would busing patterns change?
Answer: Not really. During the summer quarter it might be necessary to transport some children to an air-conditioned school.

What are the problems? Some problems are administrative and educational and can be worked out by the local school administration and staff. These include rewriting the curriculum and arranging scheduling. The curriculum reorganization is in the hands of the staff and is under way. The scheduling may be somewhat more difficult to solve. In order to equalize the enrollment loads over the voluntary vacation quarter, some very effective counseling of both students and parents will be required.

But the most serious problem, and one that is really out of the hands of the local school district, is financing. A change would be necessary in the foundation program law (state education aid formula) in order to distribute funds for a year-round program. Until this is resolved, the Jefferson County program will not get under way as originally planned. It may have to be implemented gradually. Yet, like the Atlanta program, Jefferson County officials are not considering this plan as an experiment. It is a commitment to a new style of schooling. "In the final analysis," VanHoose concludes, "the feasibility of a continuous learning program is determined by the degree of commitment to the idea by the professional staff and the degree of commitment by the community in providing the best educational apparatus for the children of the community."

Where Do We Go from Here?

The number of school systems that are looking or have looked into the year-round school program is growing rapidly. Yet, there is still only a handful that have either fully committed themselves to year-round education or are trying it out on a pilot basis. The big question is why. Admittedly, there are savings in the utilization of buildings on a year-round basis, but economy hasn't been the main reason that most schools have pursued a year-round program. The more successful the year-round program, the greater the commitment to quality education.

While it is true that there are many different kinds of plans available, it is also true that there is a need for more research into the successes and failures of these plans. But, it also appears evident not all plans will solve all needs within a district. No matter which plan a district picks, it will have to adapt it for its own school system. No matter how much research is done on year-round schooling, each individual district will have to decide for itself which type of basic plan will best suit its needs.

And money is a big problem. Getting state legislatures to revise existing laws to permit year-round schools and to provide new state aid formulas can be extremely difficult. But there are changes being made. Texas, Illinois and California have all passed legislation that not only permits year-round school operation but also provides emergency funds for districts during periods when regular state aid isn't available. And there are indications that other state governments are supporting the movement toward year-round education. The growth of the Education Commission of the States is an important movement toward improving the relationship between educators and legislators--a relationship that could lead to governmental acceptance of many educational experiments, including year-round schools.

Will the year-round school develop into the trend that everyone has predicted for it? "It probably will," say informed observers. As more school budgets and bond issues are rejected by taxpayers, more school boards will continue to look at year-round schools as the most viable alternative. Parents are quick to oppose double sessions and oversized classes for their children. Educators will press for more opportunities to individualize instruction and revise curricula. Taxpayers will probably continue to resist costly building programs.

The next question is: Should the year-round school be in operation in every school district? The answer, according to those who have studied the issue most carefully, is "no." Some districts probably can't afford it. If the school district enrollment is too small, certain kinds of programs might not be feasible at all. Yet, with the continuing pressures for more and better learning for children and the constant demands from taxpayers to at least hold the line on educational costs, the year-round school concept is expected to get more and more attention. One thing is clear: The year-round school isn't coming any longer--it is here.

[From "Dimensions of Educational Need," Volume 1 of the "National Educational Finance Project"]

THE EXTENDED SCHOOL YEAR

(By Roe L. Johns)

Programs for the extended school year, the year-round school and the rescheduled school year all involve the provision of organized learning experiences for children and youth during the summer months. These terms are frequently used interchangeably by writers on this subject. In fact, each one of these terms can be used to include all of the concepts included under the other terms. Therefore, the term "extended school year", as used in this chapter, includes any plan under which a board of education provides organized learning experiences for children and youth during the summer months following the traditional nine months school year.

We have already explored in this monograph the parameters of educational need in broad program areas, and have attempted to identify factors which may lead to increases or decreases in need and public demand for those services by 1980. This is necessary in order to do long range planning for the financing of public education. At the present time, most children and youth in the nation either do not have available any organized public school program extended beyond the traditional nine months school year or the programs available to them are very limited in scope. However, a number of boards of education are beginning to develop plans to provide more extensive educational programs during the summer months. For many years, a number of educational, business and professional leaders have questioned the rationale behind the common practice of using school personnel and the school plant for only nine months of the year. Why, it has been asked over and over, do we continue to operate schools for only nine months? Apparently it is because at one time the labor of children was needed on the farm, but now less than 6 percent of our work force is engaged in farming! At the present time the average length of school term in 51 representative countries of the world is 210 days.¹ Since it is quite possible that the school year will be extended substantially during the next decade, it is appropriate that we examine the extent of the additional financial requirements for the possible extension of the school year.

Extended school year plans have been under consideration since the beginning of the 20th century. Hundreds of articles and monographs and a number of books and dissertations have been written on this subject. It is impossible in this chapter to review this extensive literature, or to examine in detail all of the many plans that have been proposed for extending the school year. Many of these plans are very similar in nature and the differences have no significance for financing. Therefore, in this chapter we will examine only a significant number of these plans to indicate the types of extended school year plans that will increase or decrease school costs.

There are many types of extended school year plans and many of these plans vary in purpose. Following is a list of some of these purposes:

1. To save money by reducing the amount of school plant facilities needed.
2. To save money by accelerating the progress of pupils and thereby reducing enrollment.
3. To save money by reducing the number of pupils who are required to repeat a grade thereby reducing enrollment.
4. To make better utilization of costly school plant facilities which at the present time are largely unused during three months of the year.
5. To make better utilization of the time of pupils during the summer months.
6. To provide enriched learning opportunities for pupils.
7. To give students who fail during the regular year the opportunity to make up during the summer months the work in which they are behind.
8. To give teachers employment for a full calendar year.
9. To increase the annual income of teachers.
10. To assist in meeting the teacher shortage by reducing the total number of teachers needed.
11. To meet a temporary building shortage.

¹ See: *Economy and Increased Educational Opportunity Through Extended School Year Programs* published by the University of the State of New York, The State Department of Education, Albany, N.Y.: August, 1965, p. 15.

Some extended school year plans developed primarily to accomplish certain of these purposes will result in increased school costs, while other plans might either decrease school costs or hold them constant. From the standpoint of financial policy, an extended school year plan that increases school costs is sound if it increases the quantity and/or the quality of educational opportunity proportionately or more than proportionately and it is unsound if it either does not increase or it decreases the quantity and/or quality of educational opportunity provided. Conversely, adoption of an extended school year plan that decreases school costs is sound fiscal policy if it either does not decrease or it increases the quantity and/or quality of educational opportunity provided and it is unsound if it decreases the quantity and/or quality of educational opportunity proportionately or more than proportionately.

In projecting educational costs for the future, it is assumed that most boards of education will adopt extended school year plans that are sound both educationally and fiscally. It is likely that some such plans will increase school costs and that other plans will not increase school costs. In the remainder of this chapter, evidence will be presented on a sufficient number of these plans to indicate the parameters of this problem.

THE FLORIDA STUDIES

Various proposals have been made for extending the school program over most of the calendar year. How much would it increase school costs to operate schools substantially year-round? The costs of alternative plans will vary considerably. Unfortunately, very few studies are available which utilize operations research methods in analyzing the cost of alternative methods. However, a study was made in 1966 by the Florida Educational Research and Development Council in which operations research methods were used to analyze the relative costs of seven different types of extended school term and all year plans of school operation.² The study was conducted in a school system with an enrollment of approximately 50,000 pupils. These pupils were taught by 1,763 teachers. The pupils were housed in 59 elementary centers ranging from 115 to 1,112 in enrollment and in 29 junior and senior high school centers ranging from approximately 100 to 1,900 in enrollment. Polk County is a county unit school system serving a population which is located largely in small towns and cities, the largest of which had a total population of approximately 30,000. Therefore, Polk County represents a cross section of urban and rural territory, and estimates of the additional costs of year-round schools and extended school terms for Polk County should be fairly representative for the nation except, perhaps, for large city school systems.

The Board of Education of Polk County requested the research staff to estimate the additional costs which would be involved in operating the various types of plans for year-round schools and extended school terms that had been experimented with or had been suggested. The Board also requested that in estimating the additional costs, the staff assume that the quality and quantity of the educational program provided under each plan be at least equivalent to that provided under the school system's present program. This was difficult to do for some plans. However, the research staff assumed that, insofar as quantity was concerned, a student should be entitled to as many days and hours of school time in grades one through twelve as was provided under the present plan. Under the present plan of operations, schools are operated for 180 days and a student receives 2,160 days of schooling if he progresses normally from grade 1 through grade 12.

In order to hold quality constant, the staff assumed that each student in high school should have the opportunity to take at least as many types of courses under the different plans under consideration as he would under the present plan, and that the same level of supporting instructional services would be available. In making the analysis of the elementary schools, it was assumed that quality would be held constant if no teacher were required to teach more grades in the same classroom than she was teaching under the present plan. That is, if a school under the present plan of operation is so organized as to have one teacher per grade, the costs of the proposed new types of plans were computed on the basis of providing a teacher per grade in that school and the same types of supporting instructional services as are now provided.

²J. B. White, R. L. Johns, Ralph B. Kimbrough and Robert B. Myers, *Year-Round Schools for Polk County, Florida*, Gainesville, Florida: Florida Educational Research and Development Council, College of Education, University of Florida, 1966.

At the time of the study, schools were operated for 180 days in Polk County, but teachers were paid for ten months, which provided for an additional sixteen days of preschool and postschool planning. The additional costs for each plan considered were computed first in dollars and then in terms of percentage of increase for each plan. School systems paying teachers for less than ten months would have a slightly different percentage increase for the different types of plans. However, the percentage differential among the different types of plans should remain approximately the same.

Each plan of operation considered is described below and the additional costs for each different type of plan are reported. No attempt will be made in this paper to set forth the details of the computations for each plan. These computations are set forth in detail in the publication previously referred to. In order that the summary presented below will correspond with the publication by the Florida Educational Research and Development Council, the plans are numbered the same.

PLAN I. THE PRESENT PROGRAM

The present program in Polk County provides for only a limited summer term beyond the regular 180-day term. State appropriations provide only for paying the salaries of approximately 12 per cent of the teachers for the extended school term. Summer sessions are operated for approximately six weeks in a number of communities. Attendance in the summer session is voluntary. Students may take enrichment courses in science, art, music, drama and physical education for the purpose of broadening their background. No fees are charged for these courses. A limited number of academic subjects are offered. These courses, as well as make-up courses, are offered on a tuition basis. All estimates of costs for the different extended year plans are based upon the increased costs they would entail in comparison with the present program.

PLAN II. THE PRESENT PROGRAM PLUS A SUMMER PROGRAM OPERATED WITHOUT COST TO PARENTS—VOLUNTARY ATTENDANCE

This program is the same as Plan I with a regular school year of 180 days and 16 planning days for the faculty. The difference is that the summer program would be operated for 30 days with the entire cost being paid for by the School Board. The summer program would be available to all pupils for the following purposes:

1. To make up a subject or subjects that had been failed during the academic year.
2. To take a new subject or subjects for the purpose of graduating earlier.
3. To take courses for enrichment purposes such as art, science, math, music, drama, and the like.

The program for elementary students would be organized around special needs, such as reading, mathematics, science, and the like. This would make it possible for many students who had failed during the year to alleviate their deficiencies so that promotion could be earned at the end of the summer session. Attendance at this program would be voluntary, but many students would have the opportunity to earn promotion or reduce the time required for graduation. There will be some immediate increase in the cost under this plan; but over a period of years, the increased cost will be offset, at least in part, by savings in the cost of re-teaching students who had not been promoted.

It is extremely difficult to make an accurate estimate of the increased costs of this plan. If 50 per cent of the total student body were to attend this six-weeks extended summer school program and 50 per cent of the teaching staff were to be employed, it is estimated that costs would be increased by approximately 6 per cent. However, this plan would provide some increase in quality because of the extended opportunities for enrichment.

PLAN III. THE PRESENT PROGRAM PLUS A SUMMER PROGRAM OPERATED WITHOUT COST TO PARENTS BUT WITH COMPULSORY ATTENDANCE FOR STUDENTS WHO ARE NOT PROMOTED AND VOLUNTARY ATTENDANCE FOR OTHERS.

Plan III is different from Plan II in only one respect. The Board of Public Instruction would require all students who failed to earn promotion during the regular school year to attend the summer session. It is estimated that the additional cost of this plan would be approximately the same as Plan II.

**PLAN IV. A STAGGERED FOUR-QUARTER SYSTEM REQUIRING ONE-FOURTH OF THE PUPILS
TO BE ON VACATION EACH QUARTER**

The calendar year would be divided into four quarters of 12 weeks each. Students would be expected to attend school three quarters during each calendar year. This means that the school authorities would have to assign the students so that 25 percent of the students would be on vacation during each quarter and 75 percent would be in school. This plan has been promoted by various business groups (especially the Chamber of Commerce) from time to time.

The advocates of this plan have argued, without making a cost analysis, that this plan would save money. As a matter of fact, this is the most expensive plan that has yet been proposed, assuming that the quality and quantity of the education program are not lowered. Under the present plan, 910½ elementary teachers are employed. However, if no teacher is to be required to teach more grades than she is teaching under the present plan, the Board would need to employ 1,079 elementary teachers for twelve months as compared with employing 910½ elementary teachers for ten months under the present plan.

The four-quarter plan, with one fourth of the pupils on vacation at all times and three fourths in school, actually requires that each school be divided into four schools. For example, let us assume that an elementary school, grades 1-6, has 720 pupils. If it were divided into four schools it would have four schools of 180 pupils each with one teacher per grade, assuming thirty pupils enrolled per teacher. Any elementary school with less than 720 pupils could not be divided into four schools without increasing the number of teachers or lowering the pupil-teacher ratio, which would increase school costs.

In high schools the number of teachers employed would have to be increased from 853 to 918. Thus, under Plan IV it would require 1,977 teachers to staff the schools now being staffed by 1,704. This is an increase of 12½ per cent in the number of teachers employed. These teachers would also be paid 20 per cent more than the ten-months' salary they now receive because they would all be teaching for twelve months.

Therefore, it is estimated that Plan IV probably would increase school costs by more than 25 per cent without increasing school quality. As a matter of fact, school quality might even be damaged under this plan. Furthermore, wherever this plan has been tried, parents have objected strenuously.

PLAN V. FOUR QUARTERS OF CONTINUOUS STUDY MAKES POSSIBLE GRADUATION FROM ELEMENTARY SCHOOL ONE YEAR EARLIER AND GRADUATION FROM SECONDARY SCHOOL ONE YEAR EARLIER

Under this plan the school year would be divided into four quarters of 11 weeks each and all students would be required to attend all four quarters. Students would be in school for 44 weeks each year with a two-week Christmas vacation and a six-week summer vacation. Thus, an elementary school pupil would attend school 1,100 days during five years compared with the 1,080 days he attends now during six years. This would mean that the six grades could be completed in five years, which would result in a saving of approximately 16 percent in the spaces required for elementary school buildings. The annual operational cost would be approximately the same as under the present plan because teachers and other service personnel would have to be on duty 11 months of each year.

Similarly, secondary school students could complete the junior and senior high school programs in five years rather than six. This would also result in a saving of approximately 16 percent in high school building costs.

Such a plan could reduce the number of calendar years required to complete the public school program from 12 to 10. This would result in students entering college or the labor market two years earlier than they do at present. However, to offset this early graduation, it would be possible to change the age of entering school from six to seven, in which case the students would graduate from secondary school only one year younger than at present.

No plan of year-round school operation examined by the research staff was found to reduce school costs unless the plan operated to reduce school enrollment. It was found that school enrollment theoretically could be reduced 16½ percent under Plan V but the school would operate longer. However, it is possible that the quality of the school program might be damaged by accelerating students as much as two years.

This plan would require an immediate annual increase in expenditure of approximately 14.7 percent. However, this percentage would decline to less than

half that amount after five years and after ten years there should be a reduction of approximately 4.23 percent in net expenditures.

A modification of this plan is to operate schools for four quarters but to permit pupils either to attend school all four quarters or to attend school for any three quarters they select. It is likely that such a plan would increase school costs if the quantity and the quality of the educational program were not reduced.

PLAN VI. THE TRIMESTER PLAN—TWO-THIRDS OF THE STUDENTS IN SCHOOL AND ONE-THIRD ON VACATION EACH TRIMESTER

This plan calls for the school year to be divided into three trimesters of 75 days each. All students would attend schools for two trimesters each year and be on vacation for one trimester. To compensate for the shortened number of days, the school day would have to be $7\frac{1}{2}$ hours in length. It is possible that this plan might lower school quality. Insofar as the researchers could determine, no school system in the United States has as yet attempted to operate under this plan.

This plan would also be more expensive than the present plan. It is estimated that Plan VI would increase school costs about 9 percent and at the same time probably reduce the quality of the educational program.

PLAN VII. THREE TRIMESTERS OF CONTINUOUS STUDY PROVIDING FOR STUDENTS TO GRADUATE ONE YEAR EARLY IN ELEMENTARY SCHOOL AND ONE YEAR EARLY IN SECONDARY SCHOOL

Under this plan, the school year would be divided into three trimesters of 15 weeks or 75 days each. This plan would keep the pupils in school for a total of 45 weeks each year with a two-week Christmas vacation and a five-week summer vacation. This program is similar to the four quarters of continuous study in that an elementary pupil could complete the six grades in five calendar years. The secondary pupils could complete the junior and senior high school in five calendar years.

The cost of operating Plan VII would be practically identical with Plan V. Therefore, it is estimated that eventually net school expenditures could be reduced approximately 4.23 per cent per year. It would require an increase in school funds of approximately 14.7 per cent to inaugurate Plan VII. This increase would gradually be reduced, and after ten years the anticipated reduction of 4.23 per cent in net expenditures should be realized.

PLAN VIII. OPERATE ALL SCHOOLS FOR 210 DAYS PROVIDING CONTINUOUS STUDY FOR ALL PUPILS, PROVIDE ONE ADDITIONAL YEAR OF ENRICHING STUDY IN THE ELEMENTARY SCHOOL AND GRADUATE ONE YEAR EARLY IN SECONDARY SCHOOL

The primary purpose of Plan VIII is not to reduce school expenditures but to increase the quality level and to obtain a greater return from the funds now being expended.

Under Plan VIII pupils would have one year of enrichment and one year of acceleration. The additional cost of initiating this plan would be approximately 11 percent, but after eleven years of operation this plan would reduce school costs by an estimated .72 per cent. Attention is directed to the fact that Plan VIII would provide almost one year of enrichment and one year of acceleration for slightly less money than the cost of the present school program. Therefore, of all the plans considered, the 210 day continuous progress school program gives the greatest return per dollar expended when both quantity and quality of the program are taken into consideration.

THE NEW YORK STUDIES

The New York State Department of Education has made more extensive studies of extended school year designs than any other agency.³ The New York Department of Education has given primary emphasis to the development of extended school year designs that potentially reduce school costs without reducing, and hopefully increasing, the quantity and/or quality of educational services pro-

³ See: *Economy and Increased Educational Opportunity through Extended School Year Programs*, published in 1965; *Extended School Year Desks*, published in 1966; and *Setting the Stage for Lengthened School Year Programs*, published in 1968. The University of the State of New York, The State Education Department, Albany, New York.

vided, and to designs that do not increase school costs but potentially increase the quantity and/or quality of services provided.

Thomas,⁴ Consultant in Educational Research for the New York State Department of Education, stated the following about the potential savings through extended school year plans: "School Systems can expect to save money with the adoption of an extended school year program through the reduction of the number of teaching positions and the release of classrooms brought about by the decrease in total school enrollment." This conclusion was based on the assumption that pupils would be accelerated one year in six, assuming a school year of from 210 to 215 days. However, the New York State Education Department recommended that not more than one year of acceleration be provided for in extended school year plans.⁵ This recommendation corresponded with the recommendation of the Florida Educational Research and Development Council.

In 1968, the New York State Education Department recommended that consideration be given to the "multiple trials plan" for extending the school term.⁶ Some variations of this plan do not rely upon pupil acceleration to obtain economy or educational goals. The financial implications of the extended school year designs studied by the New York State Department of Education are summarized briefly below.

The Staggered Four Quarter Plan.—This is the same as Plan IV studied by the Florida Educational Research and Development Council. The Department recommended against the adoption of this plan primarily because of public opposition to it and the difficulty of its administration in school districts maintaining small schools.⁷

The Trimester Design For Secondary Schools.—Trimester designs considered were based upon the division of a lengthened school year into three 68 to 72 day trimester segments. All pupils would be required to attend all three semesters each year. This plan is similar to Plan VII studied by the Florida Education Research and Development Council with the exception that it was planned to apply to secondary schools only varying in length from four to six years. This plan provides for one year of acceleration in high school without reducing the quantity of educational services provided for pupils. For example, the lengthened school year would make it possible, after a transition period, to reduce the enrollment of a six year high school from 1800 pupils to 1500 by eliminating one year and giving the pupils the same number of days of schooling in five years that they had been receiving in six years. No estimate was given of the percentage of reduction in the budget which could be anticipated. However, the conclusion was drawn that there would be an immediate increase in costs during the transition period and later a reduction.⁸

The Multiple Trials Extended School Year Plan For Secondary Schools.—This plan is designed to be inaugurated by boards of education in four stages. Stage I is designed primarily to provide additional classroom space immediately in overcrowded schools. It provides for a reduction in the number of classes taken each day by a student but extends the school year sufficiently (for example to 210 days) so that the student receives the same amount of class time that he would receive under the traditional 180 day term. Stage II provides for pupil acceleration; Stage III provides for enrichment, especially for slow progress pupils; and Stage IV for continuous progress with or without acceleration.⁹ The Department stated that "the potential economic advantages inherent in this plan exceed those of any other known extended school year plan"¹⁰ but went on to state that it has yet to be tested in actual practice.

The Quadrimester Plan.—This plan is based upon dividing the lengthened school year into four 52-53 day quadrimesters, and requiring all students to attend all four quarters. It is similar to Plan V studied by the Florida Educational Research and Development Council except that acceleration is limited to

⁴ George L. Thomas, *Extended School Year Designs*, Albany, New York: The University of the State of New York, The State Education Department, 1968, n. 7.

⁵ The State Education Department, *Setting the Stage for Enlightened School Year Programs*, Albany, N.Y.: The University of the State of New York, the State Education Department, 1968, p. 111.

⁶ Ibid., p. 87.

⁷ Ibid., pp. 51-52.

⁸ Ibid., p. 54.

⁹ Ibid., p. 59.

¹⁰ Ibid., p. 87.

one year under the New York Plan. The potential savings under the quadrimester plan are similar to those under the trimester plan.¹¹

The Extended K to 12 Plan.—This plan is a lengthened school year of 210 days based on continuous progress. It provides for one year of enrichment and one year of acceleration during grades K-12.¹² It is similar to Plan VIII recommended by the Florida Educational Research and Development Council. Woolhadt¹³ estimated that the increased cost of initiating this plan would be approximately 10 percent. This compares with the estimate of an 11 percent increase made by the Florida Educational Research and Development Council. The New York State Department of Education estimated that after the transition period "the resulting savings in operating expenses alone will provide more than is needed to make the longer school year self-sustaining."¹⁴ This conclusion also corresponds with the findings of the Florida Educational Research and Development Council.

SUMMARY

The Research Division of the National Education Association in 1968 summarized the research on the rescheduled school year or the extended school year which had been completed up to that time.¹⁵ In general, that research summary corroborated the findings of the Florida and the New York studies and did not produce any additional findings of financial significance.

A review of the research on the financial implications of extended school year plans was undertaken in order to determine whether the initiation of extended school year plans would increase or decrease school costs, or whether any such plans might provide increased educational benefits received from a given amount of dollars invested in education. The financial research in this area is limited—especially research involving cost benefit studies. However, sufficient evidence is available to indicate the following:

1. Several extended school year plans are available which, when initially installed will increase school costs a maximum of 10 to 11 percent, but after the transition period will result in no increase or even a small reduction in costs while providing a greater quantity or better quality of educational services.
2. Extended school year plans which provide for enrichment only with no pupil acceleration and with voluntary pupil participation may result in an increase in school costs of up to five or six percent.
3. Some extended school year designs developed primarily to save classroom space may actually increase operating costs more than the building costs that may be saved. Such plans usually have a short life and are not likely to be of much consequence in the future.
4. There will be a substantial increase in the number of school districts providing for extended school terms in the next ten years. However, this will not be a major factor affecting school expenditures.

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¹¹ Ibid., p. 72.

¹² Ibid., pp. 73-76.

¹³ *School Management*, "The All-Year School: Time for a New Look", February 1966, p. 154.

¹⁴ Thomas, op. cit., p. 8.

¹⁵ Research Division, National Education Association, *The Rescheduled School Year*. Washington, D.C.: National Education Association, 1968.

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YEAR-ROUND SCHOOLS THE 45-15 PLAN

No. 27 in the Series of PREP Reports

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE/Office of Education
National Center for Educational Communication**

YEAR-ROUND SCHOOLS—THE 45-15 PLAN

In 1969 and 1970 Valley View School District #96, Lockport, Ill., laid plans to revise its school year calendar so that its school buildings would be able to serve more pupils. The new calendar, called the 45-15 Continuous School Year Plan, has schools open all year long. The plan is educationally sound, financially desirable, and legally possible. Through this plan, the school district anticipates a savings in building construction costs, a longer working year for some certified and noncertified employees (with corresponding increases in income), and quality education for the students.

The 45-15 Plan calls for each student to attend school 45 schooldays and then have a 15-schoolday vacation. By staggering the entrance dates for about one-fourth of the students every 15 schooldays, the first group to enter completes its 45 days of learning and starts its vacation the day the fourth group enrolls. Fifteen schooldays later, when the first group returns, the second group commences its vacation—and so on throughout the year. Thus only three-fourths of the entire student body is in school while the other one-fourth is on vacation.

Through this plan the number of classrooms available is automatically increased by 33 percent without any additional construction. This allows the district to educate up to one-third more students without double or split shifts, overcrowded classrooms, or the many other undesirable arrangements schools which have outgrown their capacity have been forced to use. The schools are in continuous operation except for Saturdays and Sundays, all Illinois legal holidays, a week at Christmas and Easter, and about 2 weeks in June-July for major maintenance and attendance adjustments in preparation for the succeeding year's calendar.

All District #96 students (about 6,000 in kindergarten through grade eight) are placed in one of four groups (A, B, C, or D), according to the neighborhood in which they live. Unless the parents request differently, all children in the same family are placed on the same attendance schedule, even though the children may be at

different grade levels or at different buildings. In a calendar year each group attends classes 180 days—four sessions of 45 days per session. The four groups always stay in the same order of rotation. Before each group begins school under the new plan, the teachers and staff members attend a 4-day Teacher Institute.

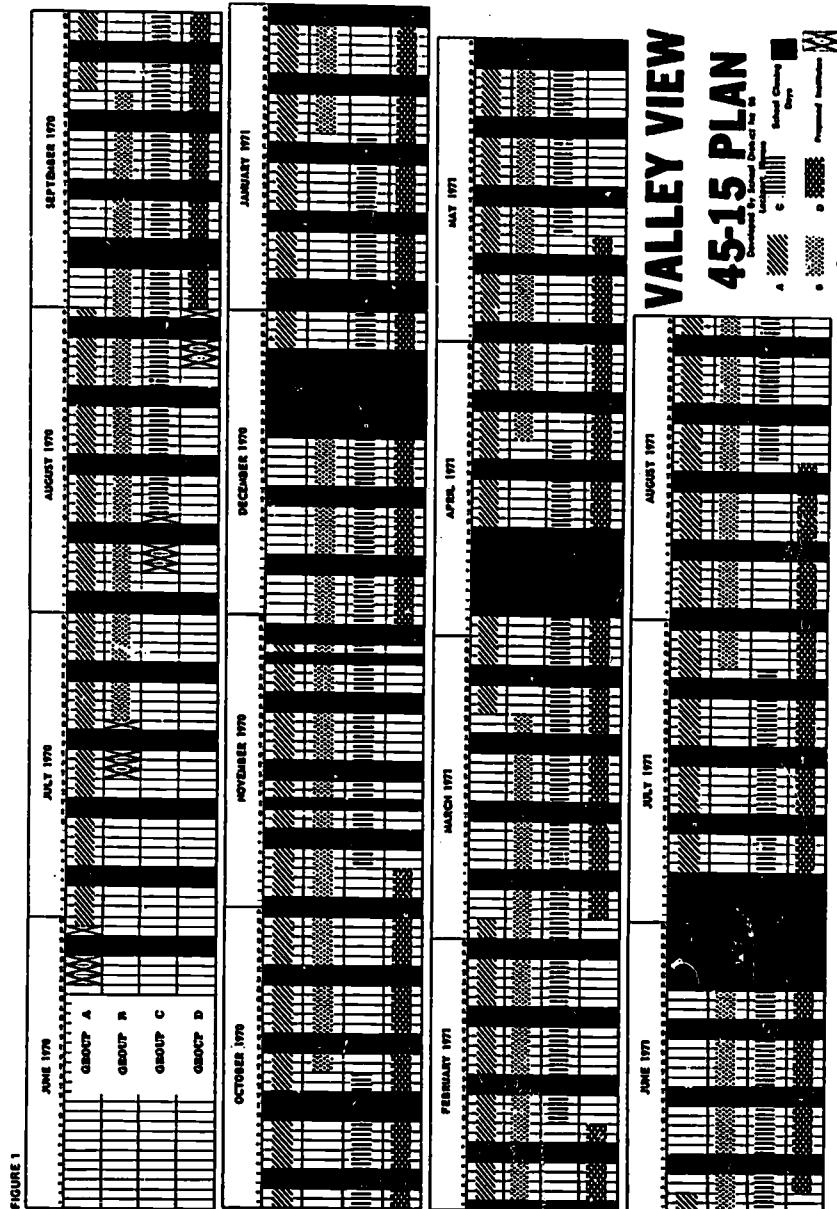
Figure 1 shows the startup plan with time scheduled for the four Teacher Institutes. Figure 2 shows the continuation of the plan through August 1972.

Classrooms, building administrators, library and resource center staff members, cafeteria and custodial employees, and buses have been scheduled on a year-round basis. Because of the size of the pupil population, class schedules, and the school calendar, electronic data processing facilities are necessary to the scheduling procedures. The schedule provides for special education pupils, pupils who transfer into District #96, and pupils who may be retained or advanced. Kindergarten classes are provided on a two-shift-per-day schedule. Provision has also been made for emergency school closing days.

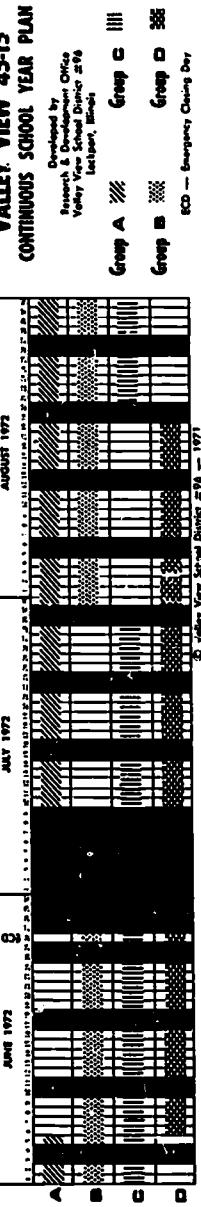
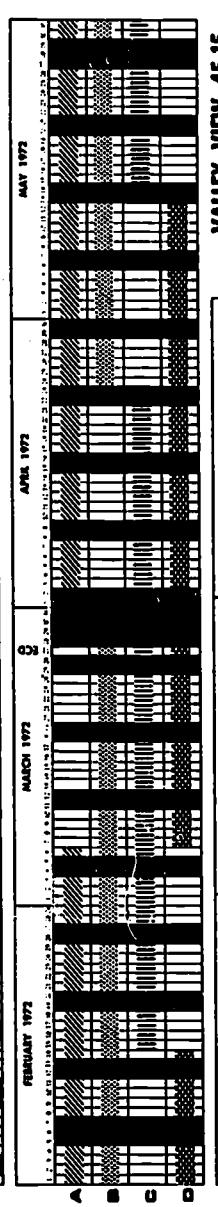
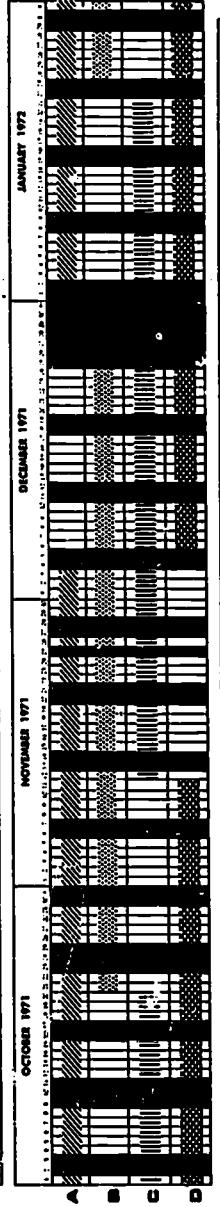
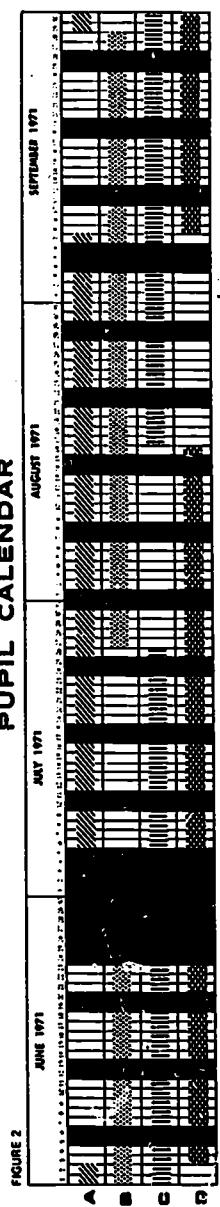
Pupil Scheduling

Naming the students and families to be in each group was done by taking small geographical areas and putting all families in the area in one attendance group. Each area was called a *census unit*. Prior to experimenting with various possible census units, a house-to-house canvass was taken by volunteer groups to get the most

Note.— This PREP report was adapted from materials written by the following persons who were involved in the development, implementation, and evaluation of the Valley View 45-15 Continuous School Year Plan: James R. Gove, Assistant Superintendent, and J. Patrick Page, Research Director, Valley View School District #96; William M. Rogge, Director, Valley View 45-15 Evaluation Project; Robert M. Beckwith, Manager, Education Department, Illinois State Chamber of Commerce; and James D. Bingle, President, Board of Education. Permission was kindly granted for the use of copyrighted materials on the plan included in this report.



PUPIL CALENDAR



Developed by
Research & Development Office
Valley View School District #90
Letters, Blanks
Group A // /
Group B / / / /
Group C |||||
Group D ■■■■■
EDD - Emergency Closing Day

accurate count possible of school-aged and pre-school-aged children. A modest fee was paid to the canvassers. Actual schedules were then worked out to see what kind of balances were achieved among classes and attendance groups. Possible difficulties can be better seen through an illustration.

Assume that there are 60 pupils at the second-grade level at each of three schools, for a total of 180 pupils. Under the traditional schedule, each school would have two second-grade classes. Under the 45-15 plan, only 45 of these students would enroll on the first day of school, unless some other arrangements were made. At least three possible alternatives exist: (1) Enroll 30 in the first and third groups, and 60 in the second and fourth. (Note that, if 45 students are at one school under the traditional plan, two small classes must be formed or 15 of the students must be bussed to another school.) This solution requires a study on the effect of the other grades, because all children from one family must be kept in one attendance group. (2) Expand or contract age or mental range within a class, thereby shifting some students by grade level. (3) Combine two groups, with the teacher starting with 15 pupils for 15 days, and then joined by 15 additional students from the next attendance group.

The illustration was deliberately chosen as a difficult problem to solve. The actual solution to this type of problem was to adjust census units (in effect, school boundary lines) until a suitable balance was reached.

Once the student scheduling had been accomplished, most other problems could be solved readily.

Teacher Scheduling

Teachers could be employed for just 184 days (180 schooldays plus 4 days of inservice training), or could be given longer contracts—up to 244 days which would mean that the teacher would be employed through all of the days of the year during which pupils attend. Actually, the teachers were given as much choice about length of contracts as possible. As a result contracts varied from 184 days to 274 days for the

first fiscal year. Contracts for the first year could go from June 30, 1970, through August 1971. Over half of the women teachers took the minimum contract of 184 days while about 43 percent of the men teachers accepted 274-day contracts. A higher number of the short contracts were issued for teachers in grades one to three, with 61 percent working 184 days.

One innovation created by the teachers made some scheduling problems simpler for pupils and teachers. Three teachers would go together to form a "cooperative," assuming responsibility for 120 pupils but with only 90 in attendance at any one time. About half of the teachers, kindergarten through grade six, adapted this team approach during the first year.

Nonteaching Professionals and Other Personnel

As the administrators were already on 11-month contracts, they were, in effect, given a different kind of responsibility for 2 months. Previously, during the summer months, they used their time away from daily school operations. Now since the school operates through the summer months they kept busy with school duties. Librarians, counselors, special teachers, maintenance personnel, bus drivers, and others were also given longer contracts or were employed for more days each year.

Phasing In

The district had to decide whether to move gradually into the 45-15 Plan or to start three groups at once. They chose a gradual phasing in that extended from June 30 to August 11, 1970, when the third attendance group enrolled. The first group, starting in June, gave up its traditional summer vacation and instead received four 3-week vacations (15 schooldays), one during each season of the year. The last group entered on September 1, 1970. This group not only received the traditional summer vacation but also the four 3-week vacations throughout the year. However, the year's academic work would not be completed until the end of August

1971. The phasing-in procedure, as used by Valley View, is the only feature that clearly treated different attendance groups in different ways, but only for the first year. In contrast, the Becky David School, St. Charles County, Missouri, began three of the four groups at once in order to get in all of the required schooldays. This must be contrasted to the "staggered quarter" plan in which one-fourth of the families receive "unfair" treatment by being assigned to winter vacations. In addition, if Valley View had wanted to solve the extra problems of starting three groups at once, then even that differential treatment would have been removed. However, the principals unanimously reported that the gradual phasing-in made the opening day of classes the easiest that they had ever experienced. They had about a fourth of the opening day enrollment of the previous year.

Classroom Scheduling

Each principal and his staff were faced with a choice of three or more options in the assignment of classrooms to teachers and pupils. Under the "cooperative" plan three teachers would have three classrooms to use as they wished for 120 pupils, 90 in attendance at any one time. If a teacher had a 184-day contract, then she and her pupils would go on vacation at the same time, but come back to a new classroom because the classroom they vacated would be taken up by the next attendance group that returned when they went on vacation. If a teacher had a 244-day contract and was not part of a cooperative team, then she could remain in one room but would receive a new group of students for each quarter. Another possibility would be for her to be assigned other duties, such as substituting during the 15 days her pupils were on vacation. All of these alternatives actually were used, plus some others.

Other Considerations

- Many other decisions had to be made to complete the scheduling of pupils and staff, such as:
- All children from a family were to be in the same attendance group.

- A census unit should respect the sociological dimensions of a neighborhood.
- Pupils within walking distance of a school should attend that school.
- Pupils should remain at one school for a year.
- Class size should vary no more than in previous years.
- Elective courses at the junior high school should be equally available to all attendance groups.
- The transportation policy would remain basically the same for the first year of operation.

Legal Dimensions

Two bills were passed by the Illinois legislature that made the 45-15 Plan legally possible and practical.

House Bill 1525 provided a means for the district to receive State aid for operation during the summer months.

Senate Bill 1438 made it possible for a school district to operate for 12 months, with necessary adjustments in pupil attendance and teacher contracts. Following is a copy of a communication from the State Superintendent of Public Instruction clarifying the Illinois legislation that directly applies to the 45-15 Plan.

Method of Distributing General State Aid to Districts on an Approved Twelve-Month Calendar

House Bill 1525 was passed by the Seventy-Sixth General Assembly and was signed into law by the Governor on August 18, 1969. The law authorizes the Superintendent of Public Instruction to determine the General State Aid apportionment to districts that operate on an approved twelve-month calendar in accordance with Section 18.B of The School Code of Illinois as near as may be applicable. The following procedure will follow in a school district which operates

on an approved twelve-month calendar during 1970-71.

- I. General State Aid payments in 1970-1971 will be computed on the following basis:
 1. The best six months' average daily attendance for the 1969-1970 school year
 2. The 1968 assessed valuation of the school district
- II. For the 1970-1971 school year, attendance shall be maintained for each tract. In order to compute the average daily attendance for a month, the total days of attendance shall be divided by the number of days school was in session for that month. The average daily attendance for the best six months of the fiscal year will be the initial basis for the 1970-1971 State Aid Computation. Inasmuch as approximately seventy-five percent of the pupils are enrolled at any time, the best six months' average daily attendance will be multiplied by four and divided by three to determine the district's weighted best six months of average daily attendance. The average daily attendance for pupils in grades 9-12 will be multiplied by 1.25 in the State Aid calculation.
- III. General State Aid will be distributed to approved school districts in the following manner:
 1. The first General State Aid payment may be vouchered to the State Auditor immediately following the final approval of the Common School Fund appropriation in an amount equal to approximately

one-sixth of the district's General State Aid Claim entitlement for 1970-1971

2. Beginning September 1970, payments will be made to approved districts in the same manner as General State Aid payments are made to all districts in the State of Illinois; these payments shall reflect any prior reimbursement.

A bill was introduced on April 22, 1970, into the Illinois State Senate by Senator Bilbert to amend Chapter 122, Paragraphs 10-19.1 and 10-20.12 of the school code to allow for a full school year for one or more schools in a district. It was signed into law by Governor Ogilvie on June 29, 1970, the day before the school began the 45-15 Plan. The legislation read:

Any school district may, by resolution of its board, operate one or more schools within the district on a full year school plan approved by the Superintendent of Public Instruction. Any board which operates under this Section shall devise a plan so that a student's required attendance in school shall be for a minimum term of 180 days of actual attendance, including not more than four institute days, during a twelve-month period, but shall not exceed 185 days. Under such plan, no teacher shall be required to teach more than 185 days. A calendar of 180 days may be established with the approval of the Superintendent of Public Instruction.

RESEARCH ON USE OF YEAR-ROUND SCHOOL PLANS

Many descriptions are available about early programs such as those put into operation by Bluffton, Indiana¹ (1904-15), Newark, New Jersey² (1912-31), Nashville, Tennessee³ (1927-32), Aliquippa, Pennsylvania⁴ (1928-38), and Ambridge, Pennsylvania⁵. In each of these, the regular curriculum was extended into the summer months, with some measure of compulsory attendance. In contrast is the far greater number of school systems that have moved into summer programs with voluntary attendance and with remedial and enrichment objectives. Generally, these programs have only employed part of the faculty and used only part of the physical facilities. They added to overall school costs and have been justified in terms of improving the equality of educational services. Actual use of the year-round school calendar occurred on July 1, 1969, in a single school, the Becky David School of the Francis Howell Public School District in St. Charles County, Missouri.⁶ Valley View School District, however, is the first to use it systemwide. The importance of the "equal" treatment for all families seems evident when reviewing the history of many other year-round operations that have ceased. Schoenfeld and Schmitz⁷ concluded in their review that one of the major deterrents has been the unfairness felt by the community when one-fourth of the families must take winter vacations as required in the staggered quarter system, the most used pattern for year-round operations by public schools until many efforts to extend the school year to 200 or more regular schooldays. Ralph Kimbrough,⁸ in a recent conference on the extended school year, completely dismissed the staggered quarter plan with this remark, "With the multitude of year-round plans available today, the traditional four-quarter plan is one of the most unworkable plans proposed. I no longer consider it a feasible plan."

Since all earlier experiments in year-round school operations, other than voluntary attendance summer programs, have gone out of existence, it seems optimistic to hope that those

beginning now—such as the program at Atlanta, Georgia, or in Nova High School, Fort Lauderdale, Florida—are assured of permanence unless left on a voluntary basis.

It is difficult to draw many firm conclusions about these efforts that would be good guidelines for school districts today. Many of the conclusions drawn by others are obviously laden with prior points of view and not on good evidence collected about the programs. Yet the various accounts can be gleaned for some tentative conclusions:

1. Since compulsory attendance, year-round programs have not become institutionalized, the few earlier experiments must be judged as idiosyncratic illustrations. Some special or unique features contributed to the creation of each program. Once these disappeared, the programs ended. It is not even clear from the historical accounts what these features might have been. Thus, though needs for classroom space and shortage of funds are often cited as the chief causes of the Aliquippa and Ambridge programs, other districts faced similar shortages but did not move to a year-round operation. More than financial stress was involved.
2. With the possible exception of the Newark program, rigorous evaluation designs were not applied to the earlier year-round programs. One critical review⁹ summed up the literature as reporting "... very little factual data" and providing "little evidence to condone or condemn year-round school operation." However, more useful information is being collected now, such as on the program in Missouri.¹⁰
3. The concepts and terminology are mixed and confusing. Some writers view a year-round operation as a broad, even fundamental concept, worthy enough to serve as a central, organizing theme. Other writers see all of the ideas as minor extensions of other well-established concepts and practices. A year-round operation, to them, is an application of good management practices, a view expressed in the U.S. Office of Education publication

¹See "References" on page 23.

*Extended Use of School Facilities.*¹¹ Whatever the terminology, five specific variables or criteria are involved that will define most of the unique features of the various plans so far created:

- a. Is attendance mandatory during the whole school year except when a pupil is scheduled for vacation?
- b. Is the established curriculum available during all periods of the school year?
- c. Can students accelerate their attendance so that they will graduate in less time?
- d. Does each family have the same vacation pattern?
- e. Is the year divided into two, three, or four parts or periods?

Other variables are also involved, such as whether teachers are on a full-year contract or not. However, the other variables seem less related to the terminology problems than the first five. The five variables make possible at least 32 different combinations. This probably is the prime explanation for the confusion in terminology.

4. Many different reasons are given by the people associated with the various programs for establishing, maintaining, and ending the programs. The reasons given seem to reflect both the biases of the reporters and some of the true events. Stated explanations vary from strictly financial pressures (which in turn, may explain little, for these pressures flow from many other causes) to concerns for quality improvements in education.
5. More than in almost any other educational innovation introduced into the public schools during this century, the community is a powerful factor in year-round operations. Other innovations do not so clearly affect the family. Many families can be unaware of modern mathematics, addition of school counselors, or the addition of new courses. Many families can be aware of but be little affected by school consolidation or the building of school libraries. However, change in school vacation patterns is both highly visible and demanding of family adjustments, sometimes even if the family has no children in school.

PREPARATION FOR THE 45-15 PLAN

Birth of an Idea

The Valley View School District #96 grew out of consolidation of five small, rural districts in 1953, with an initial enrollment of 89 pupils. Since that time the district has grown phenomenally with continual school enrollment crises. These crises plus the drop in the assessed valuation per pupil from \$71,083 in 1960 to \$23,472 in 1968 prompted the school board in August 1969 to study the problem of crowded classrooms.

There were several courses of action open to the district:

- Allow class sizes to continue to increase
- Lease space in area churches
- Adapt a double shift or split-shift program
- Apply to the Illinois School Building Commission for special assistance
- Use the existing schools in the summer
- Combinations of these

Allowing class sizes to increase was not considered. Double-shift operation was considered an undesirable and temporary measure, not appropriate to a long-term problem.

Application was made to the Illinois School Building Commission for an emergency construction program. (The Commission had been created in 1957 to assist school districts in situations such as Valley View found itself.) However, a backlog of applications from around the State would over-expend the legislative appropriations allocated for the Commission's use.

At the suggestion of the superintendent, the topic of a year-round operation was opened. The board moved quickly, passing a resolution that a full study be made of a staggered plan that would allow just three-fourths of the students to be enrolled at one time. The result was the development and eventual adoption of the 45-15 Plan starting June 30, 1970.

Informing the Community

How was the community to be won over to the idea? Community resistance had clearly doomed all earlier plans eventually.

The district, in informing the public of its intentions, took the position that the 45-15 Plan was "born of necessity." That necessity involved several factors:

- The State of Illinois limited the indebtedness of the district to 5 percent of its assessed valuation.
- Industrial and commercial development in the district had not kept pace with the population growth. Per-pupil assessed valuation had declined sharply and the district had exhausted its legal bonding power.
- In addition to its rapid pupil growth in grades 1 through 8, the State of Illinois required all elementary districts to offer a half-day kindergarten program starting in 1970-71.
- By the end of the 1969-70 school year, the district would already be operating its schools beyond desirable capacities without kindergarten.

The problem of informing the community about the adopted 45-15 Plan was tackled much like a political campaign, with meetings, coffee hours, spot radio announcements, printed materials, slides and tape presentations, and dozens of similar ideas.

Questions on the plan were anticipated and answers provided in a special booklet distributed by the Education Department of the Illinois State Chamber of Commerce. Some of these questions and their responses provide additional information on the plan:

Will learning opportunities improve?

One of the beneficial aspects of the 45-15 Plan is the opportunity for improving the student's educational program. In the 45-15 Plan the child is evaluated every 45 schooldays, or about the same span of time schools presently issue report cards. If it is found desirable to have the student repeat his schoolwork, the school, in consultation with the parents, will enroll the child in the next scheduled 45-day school period which covers the same learning experience. As a result the child does not lose a whole year in his

academic and social development. This same procedure can be utilized in reverse by the fast learner to advance at a pace more appropriate with his abilities.

The 45-15 Plan also offers greater flexibility in curriculum planning. Some subjects are currently "stretched out" or "squeezed into" the present two semesters which in most school districts customarily constitutes a 9-month period. The 45-day learning period provides a more practical time sequence for teaching subjects that fit better into a shorter or longer time span. Specialized subjects might be taught whose content cannot be justified in terms of the present time blocks.

Under the traditional 3-month vacation children have considerable time to forget what they learned. When school commences in September, the teacher must spend several weeks or more reestablishing good study habits and reviewing the work of the previous year. This nonproductive time is considerably reduced with shorter but more frequent vacation periods. By the end of the 3 weeks most children are sufficiently "rested" and mothers sufficiently "frustrated" so as to welcome a return to school.

How will vacation and recreational opportunities increase?

Although many citizens take vacations throughout the year, most families "hit the highway" during the summer. Because of crowded highway and vacation facilities some families remain home to avoid this summer congestion. Now there is encouragement to plan vacations for Florida in the winter, Vermont at maple syrup time, or hiking up the Smokey Mountains in the fall. All seasons of the year become vacation seasons. A redistribution of time for outdoor recreational and camping opportunities can provide a more efficient utilization of park facilities without overtaxing their use during the summer.

Community recreation agencies can carry out a program of activities appropriate for every season and employ full-time, professionally trained personnel to conduct them. Swimming pools, ball diamonds, basketball courts, football

fields, ice skating ponds, etc. will be less crowded during the day, thus affording those on vacation more enjoyment and use of these facilities. Private summer camps can become almost year-round camps with an emphasis on outdoor winter sports.

Won't the cold of winter or the heat of summer interfere with vacations or the learning process?

Not necessarily. Heat waves occur in spring and fall and a cold wave in the summer has more than once spoiled a vacation. No conclusive evidence has been produced to show that a child's ability to learn is significantly impaired because of hot or cold weather. If heat were really an obstacle, summer school would not be enjoying increased popularity. Under the 45-15 arrangement no single group of children attends school an entire season during which hot or cold periods are most prevalent. Further, more and more new schools are being constructed with air conditioning.

Will school vandalism be reduced?

A child's maturing process sometimes gets him into mischief. Too often innocent mischief turns into destructive vandalism to schools as they stand vacant during the summer months when all children are on the streets. However, with the presence of many students and teachers at school to see "who dunit," students on vacation will be less inclined to hang around school without a valid purpose. If school window breakage alone could be cut by 50 percent, it would save millions of tax dollars across the Nation—dollars which could be put to work for educational improvement.

How is the working mother to care for her school child who will be home several 3-week periods?

For that matter, how is the child cared for during the traditional summer vacation? If the mother employs someone to care for the child

nothing has changed, except that she employs someone for shorter but more frequent periods. If she takes a leave from her job during the summer she can now arrange to take only 3 weeks at a time, four times a year. Obviously, her employer's cooperation is necessary to work out this new schedule. It's a matter of exchanging one set of habits for another. Even the high school girl who babysat during the summer can work during the 3-week periods when she, too, is on her vacation.

Is summer employment gone?

Traditionally many youths depend upon summer employment to help provide for their personal and school expenses through the year. Yet it becomes increasingly difficult for high school students to obtain summer jobs in the face of their swelling numbers along with hundreds of thousands of college students who return home looking for summer work.

During the summer of 1970, the United States Bureau of Labor Statistics estimated 2.7 million students between the ages of 16 and 21 were seeking summer jobs, 650,000 of which were unsuccessful. Under the 45-15 Plan students and employers can arrange a sequential employment schedule which would provide year-round employment with a different group of students being employed every 3 weeks and then returning after the next 9-week school interval. While this is an obvious simplification and numerous details must be worked out, it is a definite possibility.

Won't there be an increased workload in keeping school records?

On the surface it would appear more paper work is required with more frequent enrollments, etc. But at each enrollment period only one-fourth of the records are handled at one time. By spreading the workload, the clerical and teaching staffs are not swamped with the entire chore in the fall and again in the spring.

The student is considered as continuously enrolled regardless of whether he is in school or

out on vacation. This helps reduce repetitious recordkeeping. Only the enrollment of those who graduate or move out of the district would be dropped.

No longer is valuable educational time lost while teachers and pupils "pack up shop" for the summer or "open shop" in the fall. Even physicians and dentists can appreciate the spread of students' health examinations throughout the year.

Are teachers required to teach year-round?

In Valley View the teacher is provided with several employment options. Throughout the year he can teach 45 class days followed by a 15 schoolday vacation. Or the teacher can teach successive 45-day sessions in various combinations with 15-day vacation periods. The maximum term of employment possible under this arrangement is 11 1/2 months. Compensation is increased correspondingly and gone is the need to hunt for summer employment.

Those teaching 11 1/2 months (244 days) in the Valley View district earn one-third more than under the traditional 9-month (184 days) salary schedule.

Meanwhile, the teacher interested in college work for an advanced degree can make arrangements for a leave of absence during the period of time most consistent with the college term and return to the district at the start of the next 45-schoolday session. It is no longer necessary to wait until the following September to return to the classroom.

According to Valley View officials, the rate of teacher turnover is down from previous years. Of the 240 teachers employed, 98 percent of the men chose to work longer than the traditional school year as did 45 percent of the women teachers.

When can school maintenance be conducted?

Time for school maintenance must be considered by any district embarking upon a year-round plan. With careful forethought and advance planning, most major maintenance projects, disruptive to class sessions, can be cared for

during times all the four groups are not in school. Valley View has three such periods—Christmas vacation, spring vacation, and mid summer when almost 2 weeks are available as the district adjusts its schedule to fit into the calendar of the coming year.

Will there be a loss in State aid money?

State aid will not be lost as it applies to school districts in Illinois. *The School Code of Illinois* now authorizes the State Superintendent of Public Instruction to determine the General State Aid apportionment to districts that operate on an approved 12-month calendar. The average daily attendance for the best 6 months of the fiscal year will be the initial basis for the 1970-71 State aid computation. Inasmuch as approximately 75 percent of the pupils are enrolled at any time, the best 6 months' average daily attendance will be multiplied by four and divided by three to determine the district's weighted best 6 months average daily attendance.

The Office of Public Instruction provided outstanding assistance and cooperation to the Valley View district to effect a smooth financial transition onto the 45-15 Plan. The district received one-sixth of its general State aid entitlement for 1970-71 immediately following the final approval of the Common School Fund Appropriation. This advance payment resolved any financial problems during the initial startup.

Does a year-round plan lower school taxes?

Here is a question for real argument and one most often used to build support for or against year-round operation. The Valley View school board was straightforward with its citizens. It pointed out that the need still existed for additional construction to accommodate enrollment growth. And with inflation school taxes could not be lowered. Rather, a slower rate of tax increase than otherwise necessary would allow the district to maintain and perhaps improve the quality of the present program since the money is spent more efficiently.

In all probability, it will take several years for any real economies to be realized. The most immediate effect is to gain one additional class room for every three now in existence. The need for additional construction is reduced as well as the cost of debt service, building operation and maintenance, depreciation, etc.

Other economies or efficiencies of operations readily can be realized by reflecting on preceding aspects of the Valley View 45-15 Continuous School Year Plan. With continued inflation school costs throughout the Nation will increase. With the efficient utilization of personnel, space, and equipment, the rate of increase can be reduced.

Could operating schools year-round cost more?

Perhaps the major determinant of whether there are economies to be realized is the objective of year-round school operation. As mentioned earlier, various types of plans have been developed. The objective of some plans is primarily to provide educational enrichment with the opportunity to offer a greater variety of courses. As curriculum expands so does overall cost.

Other plans are intended to promote student acceleration by a reduction of the formal education time from the traditional 12 years or encourage attendance during the summer on a voluntary basis—similar to summer school—but allow the student to take a vacation at another time of the year, or reduce his course load. Still other objectives are possible. School districts with over-crowded classrooms can operate year-round to reduce class size. Antiquated schools built at the turn of the century—now dangerously outdated and saddled with high maintenance costs—can be retired through redistribution of students to adjacent schools.

Depending upon the major objectives, other than efficient utilization of classroom space, it can be very easy for the detractors of year-round school operation to insist costs will be greater. The local school board and its staff must define the scope of the educational program a community wants and is willing to support.

To put the total costs (capital and operational) into proper perspective, they must be compared on a per-pupil basis against the total costs had the district remained on a 9-month year with no change in the quality and breadth of education program.

Some will point out that any saving on capital expenditures is, on a percentage basis, a relatively small item in the school budget and not worth getting "worked up about." Yet even a small percent can mean many dollars-hard-to-get-dollars which, if needed, would be more productive applied toward the education program rather than building more classrooms.

Will the Valley View 45-15 Continuous School Year Plan work in any community?

To be workable, any plan must be tailored to the educational needs and aspirations of each

community. The 45-15 Plan, as presently structured, would probably not work in those school districts with small enrollments at each school. Ideally, there should be a sufficient number of students to justify at least one class for every grade level during each 45-day class period.

The 45-15 Plan was tailor-made by and for Valley View—an elementary district, kindergarten through grade eight. It was designed with the major objective of acquiring additional classrooms without resorting to split or double shifts.

The Lockport West High School, to which most of the Valley View students graduate, is now on double shifts. There already is a growing interest to convert the high school to some type of 45-15 Plan. A high school of sufficient student enrollment could adopt many of the basic approaches to the plan but would have additional problems to work out.

FINANCIAL COSTS

The Valley View School District #96 adopted the 45-15 Plan because the district had exhausted its legal limits (5 percent of assessed evaluation) in raising taxes for the construction of new buildings. It is not possible to say what would be the ultimate limits the taxpayers would have imposed upon themselves, but because the legal limit had been reached, the district was forced to consider other alternatives. Double shifts had been tried on a small scale but were disliked by pupils, educators, and parents alike. Some space was gained temporarily by large class sizes, another alternative not acceptable to anyone. Hence, some form of an extended school year became more and more attractive. Initially, at least, saving money was not a prime motive for adopting the 45-15 Plan. Only later did the full implications of possible savings in tax dollars become evident.

Writers on year-round operations have voiced opinions varying from claims of great savings to statements that the intention was to spend more money. W. Scott Bauman¹² made a case for a total savings of almost 12 percent. In contrast, the Fulton County (Georgia) Board of Education issued a document¹³ saying that the objective of their plan "...is not to save money..." but to expand curriculum offerings throughout four quarters, one quarter being in the summer.

Bauman's projections on the staggered quarter plan must be considered optimistic, even unrealistic. His figures showed the biggest savings in salaries of the instructional staff. He assumed that teachers would move from 180 days of instruction to 240 with a salary increase of only 20 percent. It seems highly unlikely that organized teacher groups will settle for anything less than a full 33 1/3 percent. Not unless almost all of public education were to move to year-round operations does it seem likely that the instructional cost per student per day might be reduced by year-long contracts.

Terminology itself may have helped delude writers into thinking that year-round contracts would cost less money per child, when they used the terms "9-month" and "11-month" contracts. Those two numbers are misleading. Most compulsory year-round plans, especially the

quarter-based models, actually add *one-third more days of work*. Teachers will expect to be paid accordingly.

Another factor almost never discussed in financial projections is the effect that year-round plans will have on the supply and demand for teachers. Each school system adopting some form of a year-round operation and offering year-long contracts reduce the need for teachers by one-fourth. Unless a district were expanding very rapidly as Valley View is, the teaching force would tend to be made up of older teachers higher on the salary schedule. Again, a long-range trend might counter this because a smaller teaching force might increase the supply and thereby reduce salary schedules. However, it seems that organized teachers will no more let this happen than allow 12-month people to work for less per month than 9-month people.

Bauman's other major projected savings were through reduced capital outlay (4.2 percent), plant operation (14 percent), and interest on debt (1.2 percent). These appear to be realistic expectations. Of course, exact projections would depend on depreciation schedules, building costs, interest rates, and other variables.

He assumed minor savings on textbooks and supplies (0.3 percent), insurance and other fixed costs (0.1 percent), and transportation (0.1 percent). He assumed none for administration, plant maintenance, health and food services, and other programs.

Unfortunately, good cost accounting procedures were not used in earlier year-round programs though good figures should be available soon on existing programs. Most early writing shows only subjective conclusions or conclusions without support evidence.

Finally, consideration must be given to another subtle but significant possibility. Taxpayers and legislators want action on their demands for more accountability. Even if the savings on compulsory attendance year-round operations amount to no more than 5 percent attitudes may vastly improve. For example, the voters of the Valley View District approved three referenda in August 1970, by a margin c 2 to 1. In contrast, a large majority of referenda

in the Chicago Metropolitan area are presently failing. Perhaps educators can win better voter support by demonstrating through year-round operations that they understand and are responsive to taxpayer demands.

Special Considerations for Valley View

The single major saving for the Valley View School District is the postponement of new construction until the expanding enrollment is absorbed into the classroom space gained by moving to the 45-15 Plan.

On June 26, 1970, the last day of classes under the traditional school year, there were 5,500 pupils enrolled. The district had a stated capacity of 5,290 so there already existed overcrowding. On June 30, 1970, the 45-15 Plan began. The next July 1, 1970, Illinois State law required public schools to offer kindergarten to all families who wanted it for their 5 year-olds (as of December 1 of the school year involved).

This immediately raised potential enrollment by 660, counting each pupil as a half-time equivalent, since kindergarten pupils attend half-day sessions. In addition, the projected increase for grades one through eight was another 600 per year.

In summary, the 45-15 Plan increased classroom capacity from 5,290 to 7,053, or by 1,763 spaces. Total enrollment is expected to be equal to the 7,053 figure by September 1971. This means, in effect, that the 45-15 Plan allowed the school district just a little more than a year in postponed construction, so great is the enrollment growth. Fortunately, the 45-15 Plan will continue to add one-third to the capacity of new classroom space when building must resume. The next school is expected to be open by January 1972. When the actual costs of construction are known, then it will be possible to give a firm estimate on the savings to the school district provided by the 45-15 Plan. Lacking those figures, the following assumptions have been made about possible savings.

Working with the Illinois School Building Commission, Valley View School District is planning a new building with a capacity of 1,125 or the equivalent of 35 classrooms, costing

\$31,800 each. Adding sitework (\$33,390) and movable equipment (\$35,000) makes a total of \$1,181,390. Assuming interest would raise the total cost (\$180 to get \$1.00) to \$2,126,502 over a 20-year period, the average cost would be \$101,632 per year.

Without the 45-15 Plan, this building would have been needed for the 1970-71 academic year. This would have meant an extra cost of nearly \$81 per pupil for the 1,200-pupil enrollment increase. With the 45-15 Plan, this cost of construction was saved. If the savings are parcelled out over the total school system (6,700), it amounts to about \$16 per pupil, or about 2 percent of the total budget.

Avid supporters of various year-round operations may be disappointed by such a small percentage figure of savings. However, several additional costs, if managed well, might raise savings to 4 percent or 5 percent.

First, building costs may continue to accelerate. Even if interest rates should drop some in the near future, they will certainly be more than offset by construction cost increases. Hence, reduced construction might save more than 2 percent.

Second, equipment maintenance and replacement can be reduced through careful control. For example, if eight buses were needed during a 9-month year, then six probably would suffice on a year-round schedule. Maintenance would be for more months of the year, but on only six instead of eight vehicles. Of course, the savings on purchasing only six instead of eight buses might not be realized until the need arose. A district with stable enrollment might have to wait until existing equipment wore out.

Third, many school districts pay administrative and maintenance personnel through the year. It is unlikely that districts would proportionately increase administrative costs if they increased the number of pupils served without increasing the number of school buildings used.

Fourth, some savings would be realized in reduced need for textbooks and other instructional materials. Instructional materials would be used one-third more each year and thus face more intense wear and tear. However, replacement is also determined by the outdating of materials.

Valley View School District anticipates some savings in all four of these areas, but only experience will show the actual amount. It is less clear about the direction of two other costs.

Heating in the winter is expensive in northern Illinois. The fuel bill for the schools during 1969-70 totaled \$40,291.67, or an average of \$6,715.27 per school. In contrast, air conditioning will cost considerably less to operate, but capital outlay is required.

While equipment generally will be less costly, the 45-15 Plan has two characteristics that may raise pupil transportation costs. First, the fourth of the students on vacation are not all located in one locality of the school district. Rather, each neighborhood served by one school has its own pocket of pupils on vacation. Hence, the total distance traveled by the buses is not reduced by one-fourth when the enrollment is dropped by one-fourth. Second, the enrollment for each school is increased by one-third. In effect, this expands the size of the neighborhood served by the school. That third would tend to come from further out and thus be more likely eligible for busing. However, this factor may be less important in Valley View because busing is already used a lot to achieve class size balance.

All of the above conjectures have been summed up in table 1. On the left side are the actual detailed costs for one pupil under a 9-month year. On the right hand side are the projected costs in Valley View when the enrollment has gone up by one-third. It should be noted that an established district with relatively stable enrollment might realize no savings whatsoever by moving to year-round operation and maintaining the existing quality of instruction until 1 or more years had passed. However, if it were to expand the quality of its education, especially by offering more days of instruction, then the projected savings could be immediately realized.

One pleasant aspect remains, however, for supporters of extended-year programs. If a school district is growing in enrollment, and if the debt retirement is great, then a greater savings per pupil will be realized as demonstrated in the table. Thus, for the 1969-70 academic year, the district paid out almost \$88 per pupil for debt retirement. Spreading that debt retirement

over a third more students would reduce the per-pupil cost to about \$66 for debt retirement. In summary, the estimated savings on net current expenditures per pupil would be \$10.39 and on other costs, \$22.59, for a total of \$32.98. The percentages would be 1.6, 16.0, and 4.1, respectively.

Development and Start Up Costs

Converting a school district calendar from the traditional year to an all-year operation obviously requires a great deal of planning and development activity. Valley View, as the first district in the State to attempt such a task, carried a greater burden of time and cost than would be expected in other districts. The major portion of the planning effort, however, was borne by the regular administrative staff to the exclusion of other planning projects which might have normally occupied their time and energies.

There is no way to quantify the amount of administrative cost which should be charged to 45-15 planning. One assistant superintendent spent the major portion of his time supervising the development project. An instructional supervisor, designated as director of research, spent virtually full time in various development activities. Another supervisory-level staff member worked with teachers on teacher contract details for the better part of 8 months.

The development task must, however, be viewed as a total team effort which occupied the primary attention of the superintendent and his staff for about 2 years. Virtually every administrative decision made during that period was weighed against the coming of the 45-15 Plan. Virtually all planning and "bull" sessions on and off the job had the 45-15 Plan as a topic.

Whether this concentration interfered with or enhanced the normal administrative activities in the district is debatable. Evidence seems to favor the latter position.

Identifiable costs that can be directly attributed to the 45-15 Plan development are these:

1. **Air conditioning** - All of the district schools were air conditioned when constructed except for the original (1954) 31-room Valley View School and a 24-room section of

Table 1.—Cost per pupil on two bases of comparison
 [Figures rounded to \$100]

	<u>Valley View 1969-70</u> <u>(Enrollment 5,580)</u>		<u>Valley View Under</u> <u>45-15 Plan (7,440 enrollment)</u> ¹	
	<u>Total</u>	<u>Per</u> <u>pupil</u>	<u>Total</u>	<u>Per</u> <u>pupil</u>
Administration	\$ 208,000	\$ 37.27	\$ 238,000 ²	\$ 31.98
Instruction	2,859,300	512.42	3,800,000 ³	510.75
Health	34,200	6.13	45,600	6.13
Operation	389,900	69.87	500,000 ⁴	67.20
Maintenance	34,100	6.11	40,000 ⁵	5.38
Fixed charges	163,200	29.25	217,600	29.25
Other (except food)	<u>45,100</u>	<u>8.08</u>	<u>60,000</u>	<u>8.06</u>
Net current	<u>\$3,733,800</u>	<u>\$ 669.14</u>	<u>\$4,901,200</u>	<u>\$ 658.75</u>
Transportation	296,400	53.12	390,000 ⁶	52.42
Debt service	488,400	87.53	488,400 ⁷	65.65
Capital outlay	<u>(766,000)</u>	<u>(137.27)</u>	<u>(766,000)⁸</u>	<u>(102.96)</u>
	<u>\$ 784,800</u>	<u>\$ 140.65</u>	<u>\$ 878,400</u>	<u>\$ 118.06</u>
TOTAL	\$4,518,600	\$ 809.78	\$5,779,600	\$ 776.82

- ¹ Assumes enrollment expanded one-third and no inflation.
- ² Assumes two additional administrators, one to help with scheduling.
- ³ Assumes some savings in small equipment and materials.
- ⁴ Assumes janitors work fewer hours during vacation periods.
- ⁵ Assumes some increase in repairs but not proportionately.
- ⁶ Assumes some savings in equipment but this may be optimistic because extended routes may wipe out this difference.
- ⁷ Actually interest would drop a bit each year as principal is paid off.
- ⁸ An expenditure but not chargeable because it is reflected already through debt retirement.

Park View School. The district had sufficient funds to air condition both schools but decided instead to completely replace the heating system at Valley View with an all-year system of heating and cooling. The cost of that system was \$200,000.

The 24-room section of Park View was air conditioned by the summer of 1971 at a cost of approximately \$80,000.

Air conditioning is also being provided in several auxiliary areas of the other schools at a cost of about \$47,000.

2. Professional staff committee - When the district had developed a definitive course of action, a work group was formed from the professional staff. Members of this group were paid \$5 per hour and served over a period of 7 months. The total outlay for this effort was \$3,000.

3. Consultant expenses - The district was greatly concerned about the variety of administrative details that would require attention in the development and implementation of the 45-15 Plan. An outside consultant was commissioned to supervise the scheduling tasks and perform other administrative duties during 1969 and 1970. The total cost of the consultant contract was \$17,900 over the 2-year period.

4. Funded activities - Several projects relating to the development of the 45-15 Plan were initiated as a result of outside funding. These included:

- a. A feasibility study supported by the U.S. Office of Education through the small grant program administered by the Regional Office of the U.S. Department of Health, Education, and Welfare. The grant was \$10,000.
- b. Several small receipts from the State of Illinois to assist in the preparation of information materials. These totaled approximately \$1,500.
- c. The research grant from the U.S. Office of Education which supported the design of further research and evaluation to be conducted in the district and the preparation of this report. That grant amounted to \$43,800.

d. A demonstration project conducted under title III of the Elementary and Secondary Education Act to handle visitors to the district. Support of this project through June 1971 amounts to \$38,000.

e. Further evaluation activities, beginning November 1, 1970, conducted under support from the Office of the Superintendent of Public Instruction in the amount of \$16,000 through June 30, 1971.

In all cases of funded projects, of course, additional time is required by the district staff in supervision and participation.

In addition to the development costs mentioned above, there were other costs less easily quantified which were one-time or start-up expenditures.

Teacher Salary Cash Flow

Many districts, Valley View included, follow the practice of issuing teacher paychecks over 12 months rather than just during the regular school year. The total annual salary is, of course, the same, but the teacher is receiving salary on a regular basis and the district has use of a portion of the salary money into the summer.

Since the 45-15 Plan began its operation in June rather than September of the 1970-71 school year, the new year payroll for some teachers began in July 1970. This represented no actual increase in salary outlays, but the accelerated cash flow should be viewed as costing the district something in interest on short-term debt (tax anticipation warrants). The actual case, however, was that the State of Illinois agreed to advance State aid payments to help finance this cash flow lag.

First Summer Staff Assignments

The plan chosen by the district to phase in the four pupil groups caused some inefficiencies in staff assignments during the first 30 days of school. From June 30 to July 20 only one-fourth of the pupils (one-third of the new

service level) were in school. A corresponding number of classroom teachers returned to work with these pupils, but in certain cases teaching specialists and supervisory staff were under-utilized in terms of pupil-teacher ratio. Of course, the buildings were open and operating as if all pupils were present. Between July 21 and August 10, the pupil load was at two-thirds of the new operating level, and on August 11 the third group of pupils arrived to bring the pupil load to capacity.

Although costs can be attributed to the under-utilization of staff in this first summer, the district believes that the adjustment period was valuable, not only to the smooth operation of the 45-15 Plan, but also to the educational program in general. Principals reported that they had an opportunity to work with their teachers more effectively than ever was possible under a traditional September school opening. Preparation for the new school year was considered unusually satisfactory.

Opening an Enlarged School System

If a school district enlarges its physical capacity by any means, there will always be an immediate per pupil cost increase. The 45-15 Plan, in effect, provided the district with two new 30-room school buildings. This new space was provided because it was badly needed, and the district chose to staff and utilize the new space as soon as it became available.

Obviously, when the 1969-70 school year closed on June 8 without that space in use, per-pupil costs were less than the 1970-71 year cost level which reflects the additional space utilization. In this respect, the 45-15 Plan is not different from, say, opening the equivalent new buildings. The school district determines to what extent the new facilities will be immediately utilized.

Had the extra space actually been provided by two new buildings, of course, certain costs would have been far greater. Two new principals, two office staffs, and two custodial crews would have been hired. The new buildings would have required core facilities to serve the classrooms.

It is important to financial analysis of the 45-15 Plan to compare this method of enlarging the school system capacity against other methods of accomplishing the same end effect rather than to compare the 45-15 system against the smaller capacity system it replaces.

On the other hand, it must be noted that these differences are of a short-term nature. The two new principals that were "not hired" at the outset of the 45-15 Plan's operation may appear in the district's administrative organization as instructional supervisors or district office professional staff within a short period of time. It can be expected that the resulting staff organization will be more effective and valuable.

In summary, what initial costs must be borne to develop and implement the 45-15 Plan? These fall into three categories:

1. The cost of people to be devoted to the planning effort: administrators, faculty groups, and outside consultants. In Valley View this total cost was probably some \$50,000-\$60,000 over a 2-year period or about \$10 per pupil. Other districts, certainly within Illinois, can now expect an easier and less expensive job.
2. During the implementation period, costs of preparation and phasing-in. These ranged, under the Valley View approach, from extra custodial time during June to extra teacher costs before pupil loads reached capacity. These costs can be viewed in several ways but did not exceed \$50,000. (Actually under Valley View's implementation method, one-fourth of the pupils receive 15 days less instruction and one-fourth receive 30 days less instruction during the first year than under the traditional calendar. This defers some \$150,000 in staff cost indefinitely.)
3. Capital outlay modifications to existing facilities—chiefly air conditioning. The building that required air conditioning in the district was difficult to modify. Surveys of costs for air conditioning existing facilities offer varied estimates. From these surveys and Valley View's experience, it would seem that \$3,500 per classroom

would be a maximum figure. Less satisfactory installations (window units, for example) could bring that figure to below \$1,000.

Valley View did not choose to make other modifications to their existing classroom facilities. If consideration is given to building modifications, it then will be to enhance certain program changes that grew out of all-year operation not as a direct result of the 45-15 Plan.

What, besides initial costs or changes in the instructional program, are new costs due to 45-15 operation? Pupil transportation is a unique example. Even through careful scheduling the cost per transported pupil will increase depending on route efficiencies. Further, if new buildings had been built, presumably the pupil transportation load would have been reduced because of the new schools' locations. So, in this case, having fewer schools costs more than having more schools.

Other costs—such as building operation, maintenance, cafeteria, etc.—when compared to their level had new buildings been constructed, are certainly not higher and apparently are somewhat lower than the traditional year allows. In any case, these cost differences are insignificant in the Valley View District and completely subject to the discretion exercised by operating supervisors.

The one possible exception worth further study is the cost of operating air conditioning. The first summer of 45-15 operation did not produce any measurable standards. It is expected that the increased cost of utilities in Valley View during the current year will be between \$45,000 and \$50,000, although twice that was budgeted. This cost is higher than the cost that would be incurred to heat and light the equivalent additional space during the winter. During the second summer's operation, the district will attempt to monitor these costs and develop standards for continued operation.

CONCLUSIONS AND RECOMMENDATIONS

While posttest and evaluative data are not yet available on the Valley View 45-15 Plan, the baseline information appears to warrant these conclusions:

1. One-third more classroom space can be made available immediately through the 45-15 Plan.
2. Immediate savings (up to 5 percent per pupil) can be gained under these conditions.
 - Enrollment is rising rapidly
 - Debt retirement is high per pupil
3. Educational benefits immediately accrue if overcrowding or double-shifting is prevented.
4. The community can be won over to the support of short vacations at four different times during the year as they learn how to use the time. Those people most strongly objecting are generally critical of the school system.
5. Student scheduling is the toughest administrative problem to solve. However, if a systems approach is used and a good organizer is responsible, it can be done in 2 or 3 months and on a budget of about \$1 per pupil. Two factors can ease the problem considerably:
 - Use of individualized instruction
 - Schools with large enrollments
 Student scheduling is made easier with non-graded programs because students can come and go if the instruction is truly individualized. Also, larger enrollments tend to reduce chance imbalances.
6. Most teachers will take a year-long contract if given the opportunity to do so.
7. Basic research objectives can be more easily reached if incorporated into "formative" evaluation. This means that the people involved must see "pay-off" from the evaluation activities.
8. Teachers are willing generally to try a year-round operation, especially if given the option on the length of their contract. However, they are quite skeptical of most of the claims made for year-round programs prior to any actual experience with it.
9. The move to a year-round operation wins strong support from economy-minded taxpayers and watch-dog groups. However, a majority of parents are more concerned

about the educational outcomes of the program.

10. Any school system can move to a year-round school operation if these three problems are anticipated and planned for:
 - Winning community acceptance.
 - Involving professional staff with all of the specific ramifications of the operation, especially student scheduling.
 - Developing a model or design that does not penalize, in the eyes of the community, certain families.

Districts contemplating some version of the staggered, split-vacation plan will find the following checklist helpful as a guide to planning. The checklist is a series of decisions and questions on a decision that must be resolved before moving on to the next decision.

Decision 1: Should the school board approve a staggered, split-vacation calendar?

- What relief to overcrowding will a one-third increase in space allow?
- What reactions will the community have to the use of double shifts instead of a staggered, split-vacation, year-round operation?
- What legal obstacles exist to a proposed plan?
- What curriculum adjustments must be made if course work is broken into quarters rather than semesters?
- Will teachers accept 12-month contracts if offered on a voluntary basis?

Decision 2: How much planning time must be given to the staff? What date is to be set for implementation?

- Can a full-time person be assigned to the planning?
- How long will it take to explain to the community the implications of the plan?
- Can teachers be given regular inservice training?

Decision 3: Are all grade levels and schools to be involved?

- How will transportation patterns be changed if enrollment sizes are varied among schools?

- What will be the consequences if boundary lines are changed among schools?
- Are some schools, staff, and neighborhoods more receptive to year-round operations?

Decision 4: How is the program to be implemented?

- How are students to be assigned to attendance tracks?
- How are bus schedules to be adjusted every 3 or 4 weeks?
- How are teacher task forces to be formed to make necessary curriculum adjustments?
- What kind of contracts will be used for all personnel?

The following recommendations are made for districts contemplating installation of a staggered, split-vacation, year-round school operation:

1. Allow at least 1 year for planning.
2. Establish a position of a planning director, give him at least 1 year to do planning, and provide a budget of \$3.5 per pupil.
3. Prepare a calendar early and have the school board adopt it early.
4. Involve the community in answering *just one* question: "What would you do or what would you recommend for us to do to increase classroom space by one-third?" Let the community think it is their idea. Go to the public with alternatives, which are usually (a) costly building programs, if you have the bonding power, (b) double sessions, (c) 50 or more children in a classroom, or (d) some form of year-round schools. You will be surprised how rapidly the community will agree that year-round schools may be the best solution.
5. Discover the questions by different local groups that cannot be easily answered and establish an evaluation program which will answer them within practical limits.
6. Seek out the person with the strongest objections, listen to him, answer his questions sincerely and honestly, but proceed with the planning according to the temper of the most positive people.
7. Answer all questions by all people carefully and patiently, over, and over, and over.
8. Involve your teachers. Year-round school will be a big change in their lives and yet it promises to be of great financial benefit to them. Let teachers participate in the planning and scheduling; in fact, insist on it. Give teachers as much freedom as possible in selecting the length of their contracts.
9. Give each principal freedom to build any type of staff schedule he desires in his building.
10. Encourage use of nongraded or individualized instruction as a means to solve student scheduling problems and to advance the cause of better education.
11. Be prepared to do most of the hard work of planning but give all of the recognition to the teachers and principals when the program starts because they will do the hard work from then on.
12. Keep the public informed. Once you decide to adopt a year-round school system, don't stop communicating. Let everyone know as each step down the road is taken towards that first day of school. It is of vital importance to retain the confidence of the public.

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CURRENT ERIC ENTRIES ON YEAR-ROUND SCHOOL

The following entries are divided into two categories: those appearing in *Research in Education* (RIE) and those in the *Current Index to Journals in Education* (CIJE). Copies of the RIE documents are available in microfiche and hard copy, at the prices cited, from the ERIC Document Reproduction Service, P.O. Drawer O, Bethesda, Maryland 20014. Articles cited in CIJE are available only from the periodicals in which they originally appeared; however, abstracts of the articles, identifiable through the EJ number included in each entry, appear in CIJE.

Entries from Research in Education

Feasibility of Rescheduled School Year Plans for Delaware Public Elementary and Secondary Schools. ED 036 886. 48 pp. MF · 65c; HC · \$3.29.

The Impact of a Rescheduled School Year: A Special Report Prepared for the Governor and the Legislature of the State of New York. ED 040 234. 164 pp. MF · 65c; HC · \$6.58.

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BALTIMORE CITY PUBLIC SCHOOLS,
Baltimore, Md., June 6, 1972.

Mr. ROMAN C. PUCINSKI,
*Chairman, General Subcommittee on Education, Congress of the United States,
House of Representatives, Rayburn House Office Building, Washington, D.C.*

DEAR MR. PUCINSKI: Thank you for your letter of May 24th inquiring about our year-round school operation. I am enclosing materials which will describe the year-round school concept as developed by our staff. Four of our secondary schools, all new, began the four-quarter implementation phase in September, 1971. Severe budgetary problems forced the cancellation of the summer quarter as planned, although we shall attempt to offer some of its features through a modified effort. For the summer we are offering every student the option of taking two quarter courses for credit. (See enclosure.)

Beginning in September, 1972, we shall operate a trimester arrangement for three quarters and leave the summer quarter open for adjustments as needed. We shall retain many features of the program such as student selection of courses, immediate failure remediation, varied entry points, etc. We are hopeful of re-expanding the program as our financial picture improves as we are impressed with the learning potential of the concept.

If you desire further information, let us know.

Yours sincerely,

ROLAND N. PATTERSON, Superintendent.

Enclosures.

BALTIMORE CITY PUBLIC SCHOOLS

(For Inter-office or Inter-school Correspondence)

MARCH 1, 1971.

To : Mr. Sterling S. Keyes.
From : Wilmer V. Bell.

Subject : Year-Round School (Four-Quarter Year).

Attached is a draft copy of a proposal by which the full-year school program can be initiated beginning 1 September 1971.

Following a comprehensive study of various possibilities, including staff visits to school districts operating such programs, a *four-quarter plan* is recommended as providing optimum flexibility in the use of the year.

Curricular and logistical staff members of the Baltimore City Public Schools have reviewed the proposal and deem it feasible as well as desirable.

State Department of Education officials who have been studying such plans have endorsed the proposal and expressed the intent to assist as need may arise.

Since the fundamental objective is to improve program offerings to Baltimore youth, rather than primarily to utilize the calendar more fully, it is suggested that the proposal may be called *Expanded School Program*, or some similar term, rather than Year-Round School or Four Quarter Year.

Subject to approval, a pilot plan as proposed will be inaugurated in the four new air-conditioned secondary school buildings, eg.

Lake Clifton Senior High School #40.
Northern Parkway Junior High School #93.
Walbrook Senior High School #411.
Southwestern Junior-Senior High School #412.

The principals-designate of these four schools have comprised our study committee.

The proposal has been discussed in general terms with representative parents, staff members, students, and community leaders. Subsequent to approval, an active public information program will be undertaken. It is expected that the attached materials will form a major component of a public information brochure.

Subject to experience in these pilot schools, the proposed plan, as may be modified, may be extended to other schools as public interest and plant facilities warrant.

DRAFT OUTLINE PROPOSAL

BACKGROUND

The Superintendent, on November 20, 1970, charged the principals of the four new secondary schools opening in September 1971 with the responsibility of de-

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veloping a plan for a year-round program. The following represents a composite draft model of the suggested program as a result of individual reading and study, group deliberation and analysis, and visits to operating year-round schools.

OBJECTIVES

1. To improve the potential for education by offering continuous course opportunities for students.
2. To recognize the increasing complexity of demands upon schools, and the need for concomitant flexibility in school programs.
3. To increase the degree of student involvement in decisions regarding course selection, acceleration and remediation.
4. To provide a vehicle for curriculum revision encompassing new content and new approaches.
5. To seek varied and more efficient ways to utilize staff competence and plant facilities.

SUGGESTED PROGRAM MODEL

1. Beginning in September 1971, each of the new secondary schools will operate on a twelve-month school year, divided into four equivalent quarters of eleven weeks each (See Attachment 1).
2. Initially, all students enrolled in these schools will attend the first three quarters, which will approximately parallel the normal school year from September '71 to June '72.
3. The summer quarter of 1972, constituting the fourth quarter of the school year and carrying the full complement of course offerings available during the other quarters, will be optional for students.
4. Thereafter, students may, each year, elect any three quarters of a school year or continue through four quarters.

COURSE ORGANIZATION AND SCHEDULING

1. Each quarter is programmatically independent.
2. All courses currently planned for these pilot junior and senior high schools, and those to be added, will be organized under the direction of subject supervisors as quarter courses—structured and designed for the quarter system. Special courses may be established for specific quarters.
3. Students, with the assistance of parents, counselors, and teachers, will make their own course selections. A plan for three full quarters will be made initially and at appropriate intervals thereafter.
4. Subject to counseling and parental approval, students may take a higher than normal load year-round to permit continual part-time employment, or greater emphasis on each course.
5. Catalogs giving details of available and required courses will be prepared and distributed to students.
6. Registration for courses will be held on a day set aside for this purpose between quarters, implementing decisions regarding course offerings, space, and staff made earlier through procedures established in each school.
7. Students not successfully completing a quarter course may choose to retake the same course during the following quarter, or, in some cases, may substitute another quarter course in its place.

PREPARATION AND IMPLEMENTATION CONSIDERATIONS

1. During the initial year of operation, the beginning of the first quarter will correspond with the regular school calendar for 1971-1972.
2. Within their areas of responsibility, Area Directors, Departmental Supervisors, Curriculum Bureau Personnel, Department Heads of the respective schools, and others as selected, will
 - a. Prepare quarter courses and comprehensive flow charts. (See Attachment No. 2)
 - b. Develop a flexible credit system.
 - c. Conduct teacher orientation sessions for incoming staff.
 - d. Effect procedures for continuous program development.
 - e. Hold orientation sessions with parents of prospective students.
 - f. Establish contact with affected community agencies and businesses, explaining program, soliciting input and assistance.

- g. Organize scheduling procedures with Data Center.
- h. Develop strategies for devising attendance options.
- i. Establish maintenance functions and operations schedule with Business Division.
- j. Explore with community, special kinds of courses, programs, and activities which might be included.
- 3. Variations in detailed programming and implementation will depend upon the school community.

SOME ADVANTAGES ARE.

- 1. More varied curricular offerings, enrichment, exploration.
- 2. The immediate remediation of failure and the avoidance of being locked into an unproductive classroom situation, may decrease pupil grade failure.
- 3. Earlier graduation.
- 4. Improved work-study opportunities.
- 5. Additional time for slower students within the four high school years.
- 6. Easier accommodation for mobile students.
- 7. More year-round opportunity for counseling.
- 8. Reduction of dropouts by providing for more flexible and enriched learning opportunities.
- 9. Diminished numbers of "vacationing" youth at any one time.
- 10. Increased ratio of job availability for "vacationing" students at any one time.
- 11. Improved economic opportunities for teachers.
- 12. Provision for the involvement of teachers and the community in the planning and preparation of the extended school year program.
- 13. Gradual transition from the traditional school year into an extended school year for the Baltimore City Public Schools, if warranted.
- 14. Provision for more efficient and complete use of the school plant and equipment.

ATTACHMENT 2—FEBRUARY, 1971

(Sample Course Outline¹)

MATHEMATICS

Course Name: Elem. Algebra (Course A).
Course Number: Mathematics 221.

STUDENT CHARACTERISTICS

Any student who has made a score of 8.5 or above on a standardized achievement test given in the year prior to entering high school or, who has satisfactorily completed three quarters of Fundamentals of Mathematics (Courses A, B, C) (Mathematics 111, 112, 113), or, whose course selection is approved by his mathematics teacher of the previous quarter.

COURSE DESCRIPTION

This course is primarily concerned with the foundation of Algebra.

ADMINISTRATIVE REQUIREMENTS

One period per day, five days per week or, the equivalent of five hours per week: (Elementary Algebra (Course A) Mathematics 221).

CONTENT

- (1) Symbols and Sets. a. Numbers and Their Relationships. b. Grouping Numbers in Sets and Subsets. c. Using Numbers in One or More Operations.
- (2) Variables & Open Sentences. a. Analyzing Algebraic Statements. b. Problems Solved with Variables.
- (3) Axioms, Equations, and Problem Solving. a. Identifying and Using Number Axioms. b. Transforming Equations With Equality Properties.

¹ Adapted from Atlanta public schools.

(4) The Negative Numbers. a. Extending the Number Line. b. Operating with Directed Numbers.

(5) Equations, Inequalities, and Problem Solving. a. Open Sentences in the Set of Directed Numbers. b. The Analysis of Problems.

(6) Polynomials. a. Addition and Subtraction. b. Multiplication and Division.

(7) Special Products and Factoring. a. The Distributive Property in Factoring. b. Quadratic Trinomials. c. Extension of Factoring.

Where a computer terminal is available, problems may be programmed and computed. Where a terminal is not available, problems may be programmed.¹

COURSE OBJECTIVES

(1) To communicate and perform operations in set terminology.

(2) To find the solution set in sentences of equality and inequality in one variable by applying the axioms.

(3) To prove algebraic statements from other given algebraic facts.

(4) To solve problems involving more than one operation.

(5) To solve and show the graph of equations and inequalities in one variable on the number line, to analyze and solve linear verbal problems in one variable.

(6) To add, subtract, multiply, and divide polynomials.

(7) To multiply and factor polynomials.

SUGGESTED PROCEDURES

(1) Review sets, their terminology and properties. (Limit time spent on item one of content, as this has been studied in previous courses.)

(2) Develop clearly the meaning and the use of a variable in an open sentence, emphasizing related terms, such as: domain, replacement set, values, constant, etc. Be sure at this time that the student can solve a linear equation in one variable and related verbal problems.

(3) Stress the axioms of equality, properties of the real number system, and their application in finding equivalent simplified equations.

(4) Extend the number line to include all the negative real numbers. First develop, then stress the laws of signs for the four fundamental operations. Use distance on the number line to develop initially the concept of absolute value.

(5) Give repeated application to the axioms and properties of equalities and inequalities in equations and inequalities. Students may be given outlines, sketches and useful models to determine what is given and what is to be found when solving verbal problems.

(6) In adding and subtracting polynomials, be sure that the students understand and can apply the axioms and properties used to combine similar terms. In multiplication and division students should obtain a workable knowledge of factors, exponents, prime numbers, and the use of the distributive property.

(7) It is essential that the student can perform the following types of special products and factoring:

(1) $a(x+y)=ax+ay$ and $ax+ay=a(x+y)$

(2) $(a+b)(a-b)=a^2-b^2$ and $a^2-b^2=(a+b)(a-b)$

(3) $(a+b)^2=a^2+b^2$ and $a^2+2ab+b^2=(a+b)^2$

(4) $(ax+b)(cx+d)=acx^2+(ad+bc)x+bd$ and $acx^2+(ad+bc)x+bd=(ax+b)(cx+d)$

Emphasize that factoring is a necessary device in sequential work in algebra.

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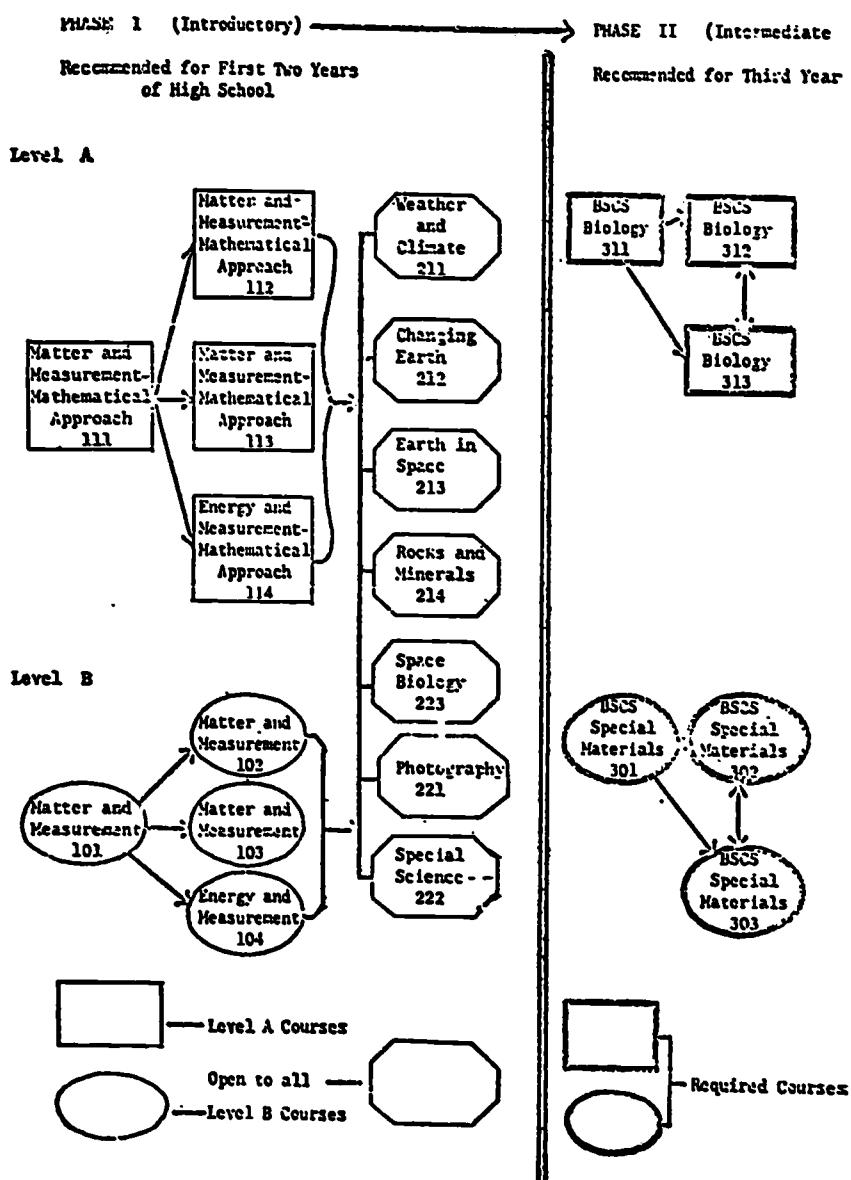
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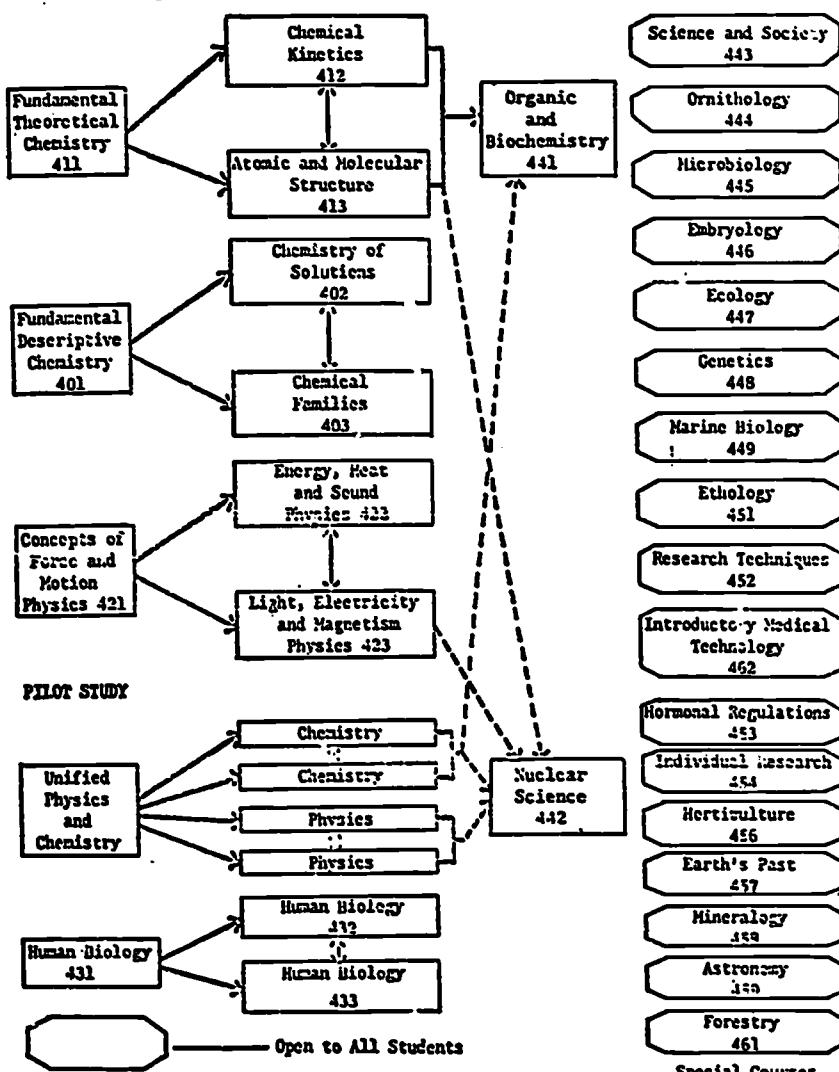
¹This section may be completed in Course B.

Chalkboard and colored chalk, Overhead projector, Straight edge ,and See audio-visual catalogue for films and filmstrip.



→ PHASE III (Advanced)

Recommended upon Completion of Biology



The sample Course Outline and Flow Chart were taken from the booklet "Four-Quarter School Year", printed by the Atlanta Board of Education, Publication, January 1970.

COMMITTEE

Dr. Joel Carrington, Walbrook Senior High School.
 Mr. John Feathers, Southwestern Junior-Senior High School.
 Mr. Paul Gorman, Northern Parkway Junior High School.
 Mr. John Ward, Lake Clifton Senior High School.

BALTIMORE CITY PUBLIC SCHOOLS

(For Inter-office or Inter-school Correspondence)

MARCH 2, 1972.

To : Dr. Roland N. Patterson.
 From : Joel A. Curington.
 Subject : Summer School Opportunities for Year-Round Students.

In an attempt to implement special educational opportunities for students in the four-quarter schools, the following options will be available: Enrichment, Remediation, Skill Building, and Acceleration.

Although specific details will be developed by educational staff members, the following guidelines are recommended:

A. DESCRIPTION OF OPTIONS

1. Enrichment: Students choosing or recommended for intensive and broad study in specialized areas may apply for the regular summer enrichment program at Western High School.
2. Remediation: a. Students needing remediation are :
 - (1) Those who were unsuccessful in a quarter course and began the process of recycling (re-sequencing through a given subject area).
 - (2) Those who were unsuccessful in a quarter course and did not enter the recycling procedure (mainly true of non-sequential subjects).
 b. Remediation students may attend any summer school center containing review programs.
- c. Students may take a maximum of two remediation courses.
3. Skill Building: Skill building classes will be organized for students displaying specific weaknesses. A student may be assigned to such a class as part of the remediation process. Skill building classes will be offered at designated schools.
4. Acceleration: a. Students completing 18 quarter hours of credit for the previous three quarters may take up to two advanced quarter courses for credit.
- b. All advanced quarter courses will be offered at Walbrook High School.
- c. Students selecting the acceleration option will be required to take two courses, one of which must be in the field of English.

B. NATURE OF COURSES

1. All courses will be six weeks in length and meet for 100 minutes daily.
2. All courses will be constructed behaviorially, i.e. listing measurable objectives denoting performance.

C. TEACHERS

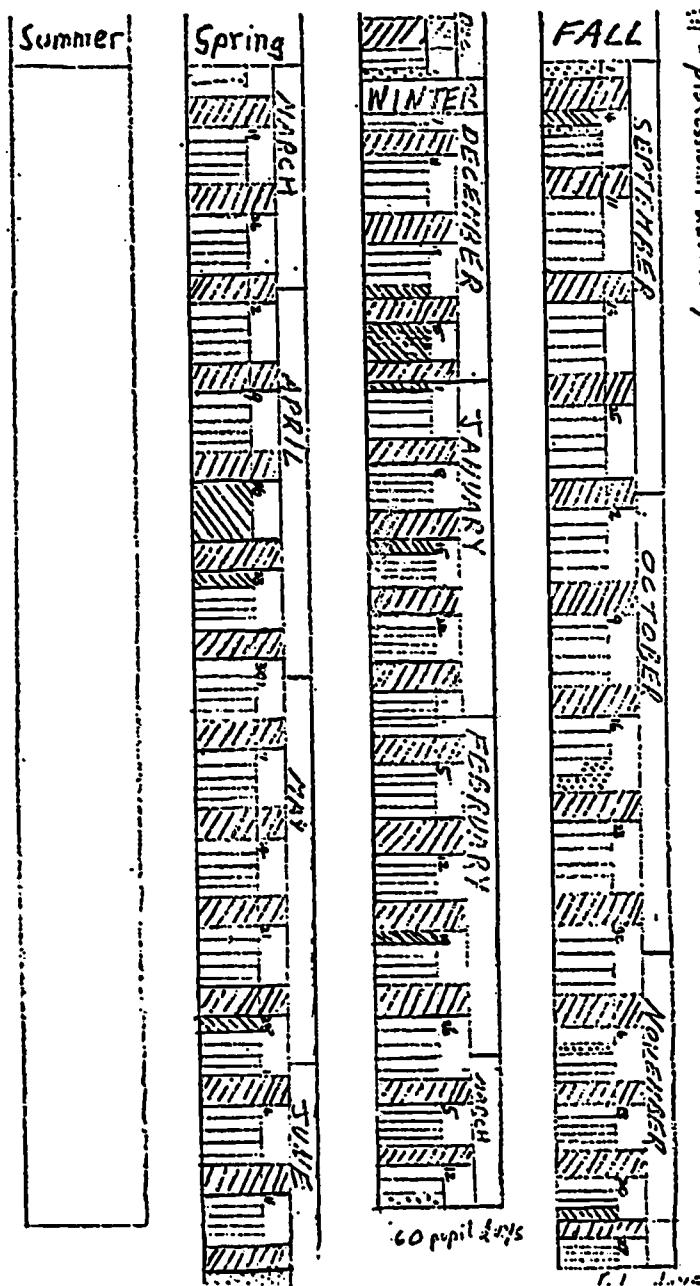
1. Teachers will be required to teach two to three courses daily.
2. Teachers must meet criteria for selection.
3. Year-Round principals may enlist departmental assistance in suggesting teachers for summer school programs.

D. IMMEDIATE RESPONSIBILITIES OF FOUR-QUARTER SCHOOLS

1. Up-date Course Catalog and make available for students.
2. Make a survey of students in year-round schools who are planning to attend summer school (attendance is optional).
3. Identify type of option desired.
4. Identify specific course title and field desired.

= weekend PROPOSED
 = holiday
 = professional activity
 YEAR-ROUND SCHOOLS

School Calendar 1972-1973



**ROCHESTER AREA SCHOOL DISTRICT,
Rochester, Pa., June 5, 1972.**

Representative ROMAN C. PUCINSKI,
Chairman, General Subcommittee on Education, Congress of the United States,
Rayburn House Office Building, Washington, D.C.

DEAR SIR: Thank you for your letters in which you requested information concerning the year-round school concept as employed in the Rochester Area School District, Rochester, Pennsylvania. We are enclosing a booklet, THE "THREE PLUS" SYSTEM, which describes the optional fourth quarter plan that we have instituted.

Our "first" fourth quarter will be held this summer, and it will be on a very modified scale since all students were required to attend the first three quarters of this past school year. The fourth quarter is optional and we have taken the position that any student who attends school after his required 180 days may attend any or all of a fourth quarter.

For the fourth quarter going into effect on June 19, we will have approximately 600 of the 2,500 students of the district participating. Most of these students are in the Primary and Intermediate levels, and we will offer programs for them in reading, mathematics, and swimming; while at the Secondary level, one course per major academic area will be offered.

Our school complex is located geographically in the center of the district, which is heavily populated within four square miles; and because of this location, the complex has become a community center as well. Our year-round operations, therefore, will encompass not only studies in the academic areas but recreation activities also.

We have received notification that our plan should receive favorable funding under ESEA Title III and this should permit us to further implement the program for the year 1972-73. At this time, we will not say that year-round education will cost us more because we feel that there are more things than dollars and cents that must be measured relative to cost, and of course, that is the reason why we have sought federal funding at this time to permit us to study and implement various plans to determine if properly organized, just what the additional cost of year-round education would be, if any.

As far as our public is concerned, from the number of students who will be attending this quarter, we have had favorable acceptance. When we approached the public several years ago about this, naturally alarm was expressed that we were going to interfere with their vacation plans, etc. Since our plan is optional, the public is beginning to realize that actually a flexible school program could permit families to have more flexible opportunities for vacations, travels, and trips. We have a large contingency of steel workers in our population. These workers are entitled to thirteen weeks of vacation that are scheduled on the basis of seniority. The unfortunate steel worker who receives a thirteen-week holiday beginning in March has a problem if he has 4 or 5 children enrolled in school. We were gratified to have two requests to see if we would permit the children to be out of school to go on an extended trip and then have the children make up the time during the summer months. Two might not be a significant number, but we think it is because if we can permit just two families to deviate from their normal routine, I am quite sure we will get more. Then the whole effort of twelve months' schooling would be justified.

Our main goal is to permit educational services, program, and facility of the school district to be available at all times to the children and citizens of the Rochester Area.

I trust this information above, plus the enclosed booklet, will help you understand our program. I am sorry I have not answered your communication sooner.
 Sincerely yours,

MATTHEW HOSIE, Superintendent.

THE "THREE PLUS" SYSTEM

The Rochester Area School District is located along the Ohio River approximately twenty-five miles below Pittsburgh, Pennsylvania. It is in the heart of the industrial valley stretching from Pittsburgh to East Liverpool, Ohio. Because of its location in Beaver County, the Rochester Area has been referred to as the "hub." Main highway and rail routes cross the river at or near Rochester.

The population of the school district numbers approximately 11,000 residents, and many ethnic groups are represented in this figure. The population growth of the area has been holding fairly constant over the past few years. A decline of the population has occurred in the Borough of Rochester, the oldest community in the school district, but this decline has been offset by a gain in neighboring Rochester Township. The other municipality, East Rochester Borough, has experienced no great change in population figures.

Geographically, the school district covers approximately five square miles. The terrain is hilly with few flat surface areas. Industrial and commercial ventures are located near the shore of the Ohio and Beaver rivers and, as one would proceed away from the rivers, residential areas are predominant. The greater the distance away from the rivers, the greater the decrease in density of population. The outer edges of the Rochester Area School District are approximately two miles from the river.

In 1960, the Rochester Borough received funding through the Urban Renewal program and, as a result, launched a massive effort to revitalize the commercial importance of the community. Large retail shopping centers and a highway network were located and this served to challenge the community to do "great and better" things.

Accordingly, the school district set forth to restructure its educational program to meet the challenges of the times. Even though school authorities were hampered by limited, antiquated, and overcrowded facilities, meaningful and significant changes did occur. The high school abandoned the "academic, commercial, general" track programs and instituted, instead, programs leaning to nongradedness. Modular scheduling was also introduced. Most important, however, an awareness and interest to change educational opportunities were aroused in the school and community.

In 1966, this interest received a boost when the federal government announced the ESEA Title III Project to fund innovative and challenging programs in education. Accordingly, the district filed for, and received, approval for its project, and this grant launched the district into a study to restructure its entire curriculum K-12 and to plan for new facilities which were needed to accommodate the emerging educational program.

With the willingness of the communities and the school district to respond to the challenge of improvement, coupled with the knowledge and information of new national educational trends and methods supplied through the efforts of ESEA Title III, the school district, from 1966 to the present date, has restructured its entire curriculum, K-12, and has built a new "education complex" designed to house the new programs. Its decision to expand operations "all year round" came only after the restructuring of the curriculum and the construction of a new modern facility made it virtually impossible to take any other course. The educational program, its services, and the facilities were now flexible enough to accommodate any change in the organization of the school year and, as a result, the school district in September, 1971, in order to gain more flexibility in time, instituted the four-quarter plan of operations to replace a traditional two-semester system.

The traditional school year for children in Rochester called for 180 days of required attendance. This is an agreement with state regulations. These regulations were made more flexible a few years ago when Pennsylvania relaxed the requirement of 180 days of instruction and substituted in its place a minimum of 990 hours of instruction for secondary students and 900 hours for elementary from July 1 to June 30.

Prior to September, 1971, all children were required to attend school for 180 days; the school year was divided into two semesters with the first semester beginning approximately September 1 and ending late in January. The second semester and the school year usually ended the first week of June. Scattered throughout the school year were the traditional holidays for Veterans Day, Thanksgiving, Christmas, Easter, and usually one or two inservice days.

Recognizing that parents were concerned about any change in the school calendar that would affect their normal and routine yearly patterns—holidays, vacations, work schedules, etc.—the district adopted a 240-day school calendar that basically held to the traditional operations yet permitted greater flexibility at the school level. "Feedback" to the school from the community several years ago indicated that any change in the calendar must be gradual and must show the community that this flexible school year program also permitted greater

flexibility for parents to break away from their routine schedules as well. The decision to implement the 60-day quarter concept also was based on the fact that attendance records for the district as outlined by the state were kept on 60-day blocks of time; a credit of work at the high school level was usually based on 120 clock hours of instruction, and this number could be divided into three equal smaller units. Experience also had shown that more could be accomplished in shorter blocks of time than in the longer.

Accordingly, the following school calendar was adopted for the 1971-72 year:

First Quarter—August 30 to November 23.

Second Quarter—November 24 to March 2.

Third Quarter—March 7 to June 1.

Fourth Quarter—June 5 to August 25.

Normal holidays were maintained, and an additional "break" was provided between the second and third quarters.

All students were required to attend the first three quarters for the 1971-72 school year, and the fourth quarter was optional. Beginning in 1972-73, however, students must attend any three quarters. This was done to permit the district to move slowly into extended-year operations. For this reason, the district has named its extended school year the "three plus" plan. Students must attend any three quarters, and they may also elect to attend any portion, or all, of an additional quarter.

The major objective of the extended operations is to permit and encourage greater learning experiences for all children of the district. As mentioned, in 1966, the Rochester Area School District was awarded an ESEA Title III grant that made it possible for the district to study and implement new content and procedures in its educational program. Prior to that time, the high school program was, to a degree, nongraded and was offering semester-length courses in the academic areas of English and science. With the assistance of the federal grant under Title III, the district undertook a complete revision of its educational program K-12 and instituted in the Primary (K-4) and Intermediate (5-8) divisions a "continuous learning" approach that was based on the use of performance objectives. Adopting the philosophy of providing an educational program for the child rather than fitting a child into the program, it soon became evident that if a child progressed according to his own abilities and achievements—his learning being a continuous thing—then the significance of "covering so much" in a certain period of time diminished. Wherever a child stopped in his learning continuum, whether it be at Christmas or during the summer, at that point he again would continue to proceed. Individualizing the program of instruction at the Primary and Intermediate levels provided a clue for extending the educational program for twelve months without the traditional concern for the number of hours a subject would be taught per day, days per week, materials to be covered, etc. A nongraded approach based on performance objectives concerns itself not with what is taught, but rather, with what is learned. When learning is the objective, time is not an important factor.

Individualizing the educational program has taken a different approach at the Secondary level. A complete elective program was provided with students selecting, using proper guidance and approvals, the courses they wished to follow. The courses normally taught for 180- or 90-day blocks of time were restructured for scheduling within a quarter system. By going to the quarter system, the district is now offering 187 courses for all Secondary students. Ninety-two were offered previously. All courses were planned utilizing faculty and student suggestions. A listing of all courses available for 1971-72 to the 900 Secondary students is attached.

New techniques in teaching were also studied and implemented. Teacher team planning, large-group instruction, small-group instruction, use of paraprofessionals, television and audio learning systems, independent study, flexible and modular scheduling are all concepts and practices that have been in operation in the Rochester Schools since 1966. Again, if these practices can, and are encouraged to, operate during a traditional two-semester school year of 180 days, why cannot these same practices be employed during a four-quarter year? The door was again opening for establishing the mechanics under which an extended school year program could operate at the Secondary level.

Probably one factor that played an important role in the district's decision to operate on an extended schedule was the construction of a new educational complex housing all children in the district, K-12. Prior to September, 1971, the school

district had three primary schools, an intermediate school and a junior-senior high school. A parochial school that formerly had 400 students, 1-8, enrolled, closed operations in 1970, and the school district leased that facility for the school year 1970-71. All of the buildings, excluding the junior-senior high school, were obsolete and in need of major renovation. The junior-senior high school, occupied in 1961, was designed to accommodate 900 students, but a school enrollment of 1,100, plus increased curriculum offerings, necessitated additional construction.

Since the junior-senior high school was located in the geographic and population center of the district, the decision was made to construct an educational complex on the 23-acre site. This complex would house all children K-12 and would be designed to accommodate the educational program described previously. The "open space" concept was employed to permit greater flexibility in building use and in the operation of the educational program. Realizing that the new facility would serve the citizens of the Rochester Area for many years to come, the district installed air conditioning throughout most areas of the complex. Zone controls were provided so that only portions or all of the complex would require heating or cooling, and this would be at the demands of the educational program. The district occupied the new facility in September, 1971, and retired all operations at other buildings.

The new complex serves as a community center as well. Rochester, being an old river community, lacks proper recreational spaces for all segments of the population. Along with the instructional spaces provided in the new complex, the site also contains a stadium with track, four tennis courts, a baseball field, two softball fields, and two basketball courts. In addition, the swimming pool has been constructed to permit twelve-month use. The opportunity exists for a dovetailing of educational and recreational activities on a year-round basis and thus make "school" more attractive.

One can see, then, that the development of the Rochester "three plus" system was an outgrowth of a restructure of the educational program and the construction of a new modern facility designed to accommodate this program. It is not a program that merely adds to a 180-day school year. It is a new concept in the school year itself.

Financing the new program naturally presents a problem! Since the Commonwealth of Pennsylvania reimburses local districts for instructional expenses incurred during a 180-day year only, any costs beyond that must be borne by the local district. There is pending legislation recently introduced into the state legislature to increase support beyond the 180 days. The Rochester Area is not considered a wealthy area. The tax base is solid, however, and it is expected that this base will continue to grow. The district fully intends to be extremely cautious in its undertaking of extended-year operations.

The major part of any additional expenses would involve instructional costs. Because of the location of the new complex within the boundaries of the district, transportation is not a major problem. At present, there is little reason to be concerned about increased maintenance costs. Operational costs would increase some but this would primarily be for lighting and air conditioning equipment. Since these operations have been zoned to operate as the educational program dictates, these expenses should fluctuate according to the demand of the program.

Relative to instructional costs, the district has entered into a contract with its teachers to reimburse them for any services performed beyond the 180-day school year. The contract stipulates that additional work will be paid according to the "daily rate" in effect for each employee. The "daily rate" is the salary per year as provided in the contract divided by 180 days. All teachers, librarians, nurses, and guidance counselors who are employed will be paid 100% of their daily rate if they work seven hours per day with an assigned schedule; 75% of their daily rate if they work six hours per day without an assigned schedule; and their earnings will be prorated according to the daily rate if they work less than the required hours. Payments for inservice sessions are determined separately.

Only those personnel who have met full certification requirements for the district and Commonwealth will be given an opportunity to work more than, or less than, the required three quarters. Staff will be hired according to the demands of the educational program. Since the district intends to move into extended operations slowly, the ability of the district to finance extended operations will also determine the extent these operations will be carried out.

As far as problems relative to extracurricular activities are concerned, the district believes these are insufficient to serve as a deterrent for extended operations. Since attendance at any one quarter is optional, it becomes a problem for the family to decide if "Johnny" misses athletics. With the restructuring of the educational program, especially at the Secondary level, interest clubs (photography, astronomy) have now become part of the curriculum and are offered as quarter courses. Since all recreational facilities are located on one site, intramurals should be scheduled with little difficulty.

No doubt, as the district has more experience with the "three plus" system, there will be other problems that will have to be resolved. The mechanics for operation have been established, however, and the district believes once it can secure appropriate state and federal financing, the extended school year operations in Rochester will have been through the "shakedown cruise" and, as a result, the educational program will be geared to provide increased learning opportunities to the citizens of the Rochester Area.

STUDENT COURSE ELECTIONS 1971-72

Business education

Typing I	Business Law
Typing II	Office Machines
General Business	Data Processing
Shorthand I	Keypunch
Shorthand II and Transcription	Business English and Communication
Secretarial Office Practice & Work Exp.	Personal Typing
Clerical Office Practice	ABO Shorthand
Bookkeeping I	Consumer Economic Problems
Bookkeeping II	

Communications

Ninth Year English	Contemporary Drama
Classical Grammar	Contemporary Poetry
Composition	Seminar in Literature
Basic Grammar	Religious Literature of the West
Advanced Grammar	Creative Writing
Remedial Reading	Research Paper
Modern Media	Paragraph and Letter Writing
Science Fiction	Journalism I
Mystery and Suspense	Journalism II
Mythology, Folklore and Legend	Speed Reading
Reading and Listening for Pleasure	Spanish I
Short Story I	Spanish II
Short Story II	Spanish III
The Novel I	Spanish IV
The Novel II	Conversational Spanish
Oral Communications	French I
Speech Lab	French II
Debate and Reasoning	French III
World Literature I	French IV
World Literature II	German I
Minority Literature	German II
English Literature I	German III
English Literature II	German IV
American Literature I	Latin I
American Literature II	Latin II
Contemporary Literature	

Distributive education

D.E. I Business Organization & Merchandising	Marketing Research & Merchandise Info.
D.E. II Marketing, Advertising & Display	Materials Handling, Traffic & Transportation
Retail Training	

STUDENT COURSE ELECTIONS 1971-72—continued

Fine arts

Ninth Year Chorus
 Girls Chorus
 A Cappella Choir
 Chorale
 Correlated Fine Arts
 Music Theory
 Vocal Techniques
 Music History
 Secondary Band
 Jazz Techniques

Mathematics

Algebra I
 Basic Algebra I
 Algebra II
 Geometry
 Trigonometry and Advanced Math
 Analytic Geometry and Calculus
 General Math I
 General Math II
 Shop Math
 Computer Programming I

Physical education and safety education

Swimming—Male
 Adapted Physical Education—Male
 Physical Education—Male
 Physical Education—Female
 Swimming—Female

Practical arts

Industrial Arts Metal Shop—9
 Industrial Arts Metal Shop—10-12
 Welding
 Automotive Repair
 Industrial Arts Wood Shop—9
 Industrial Arts Wood Shop—10-12
 Carpentry
 Home Repairs for Girls
 Basic Foods
 Basic Sewing
 Foods for Family and Friends
 Advanced Sewing

Science

Earth and Space Science
 Science I.P.S.
 Biology Lecture
 Biology Lab
 BSCS Biology Lecture
 BSCS Biology Lab
 Chemistry
 Physics
 Advanced Science Seminar
 Survey Course in Botany

Secondary Orchestra
 String Techniques
 Acting
 Costuming and Make-up
 Set Design and Lighting
 Art I
 Advanced Art
 Art Exploration and Specialization
 Film-making and Film Appreciation
 Secondary Band Camp

Computer Programming II
 Laboratory Math
 Consumer Mathematics
 Modern Math
 Business Math
 Foundations of Advanced Mathematics
 The Mathematics of Matrices
 Introductory Statistics and Probability
 Basic Algebra I-A

Adapted Physical Education—Female
 Health—Male
 Health—Female
 Safety Education
 Driver Training

Foods Around the World and at Home
 Tailoring
 Marriage and Family Living
 Child Care and Nursery School
 Consumer Research and Buying Decision

Home Decorating
 Sewing for Pleasure
 Food Specialties for Entertaining
 Creative Handicrafts
 Bachelor Home Economics

Human Biology
 Heredity and Genetics
 Nutrition
 Physical Science
 Weather and Climate
 Advanced Space Science
 Astronomy
 Survey Course in Vertebrate Zoology
 Survey Course in Invertebrate Zoology

STUDENT COURSE ELECTIONS 1971-72—continued

Social studies

United States History to 1865	Urban Problems
United States History 1865 to Present	Contemporary U.S. Military History
World Cultures	Conservation and Outdoor Education
World Geography	Anthropology
Social Psychology	Totalitarianism vs. Democracy
Civil War and Reconstruction	U.S. Involvement in Southeastern Asia
The Great Depression	African History
Minority History	Latin American History
Criminology	

Technical

Fundamentals of Drafting	Exploratory Electronics
Machine Design	Basic Electronics
Architectural Drafting	Solid State Electronics
Architectural Construction	

STATEMENT OF CHARLES BLASCHKE, PRESIDENT, BLAIR CURRY, AND JOHN SWEENEY,
EDUCATION TURNKEY SYSTEMS, INC., WASHINGTON, D.C.

RESOURCE CONSUMPTION IN THE YEAR-ROUND SCHOOL

Financing our public schools has become the greatest educational concern of the American populace. This contention is fully supported by the results of the 1971 Gallup public opinion poll on American education. Bond issues are failing at record rates and many districts are colliding with their bonded indebtedness ceilings. The inadequacy of the local property tax to support the educational needs of our children becomes more and more apparent as voters increasingly reject requests for higher tax rates. Moreover, this crisis in school finance has resulted in, and may perhaps be accelerated by, court decisions such as *Serrano vs. Priest* in California which held that it is unconstitutional for the quality (as measured by the dollars expended) of education available to a child to be dependent on the wealth of his parents or neighbors.

Certain areas of the country are feeling this financial pinch in extremely graphic ways, especially those areas which have witnessed rapid growth in their school age population. In these areas, it is painfully apparent that the limited dollars available for education can produce only a limited amount of educational facilities, and rapid growth in the student population results in overcrowding of these facilities. Further, this growth may be so rapid that even unlimited educational resources could not possibly produce classrooms fast enough to meet these enormous demands. Thus, the issue of facility utilization is thrust to the forefront of discussions on educational economics.

This new dimension in educational economics has generated great interest in the concept of year-round education. This interest has been inspired by force of necessity. The American public has ceased to unquestioningly ratify bond referenda and millage increases. It has demanded that educators show that they are using their resources in the best possible way. Accountability has become the word of the day.

This interest in year-round schooling has manifested itself in a number of implemented year-round programs, most of which fall into one of two categories: 1) those whose purpose is to provide students with a broad range of educational opportunities without prime concern for the expense involved and 2) those whose purpose is to get better utilization from expensive facilities and thereby save school construction money.

Programs that fall in the first category are generally a logical extension of "summer school" as it has existed for many years. These new year-round pro-

grams, however, are intended to do more than merely allow slower students to catch up. They permit schools to offer wider ranges of course options and they permit faster students to pick up advanced work. Programs such as these may have a variety of exotic schedules. Fulton County, Georgia (including Atlanta) permits students to attend any three of the calendar's four academic quarters with the option of also attending the fourth, if the student so desires. At Champlain Valley Union High School in Hinesburg, Vermont, students are permitted to attend any four staggered nine-week "quarters" during the year. Optional programs of this nature are designed to provide enrichment and acceleration for their students. Although these programs may yield somewhat more uniform annual facility utilization than traditional calendars, it is unlikely that the "capital account savings" derived from this increased utilization will be sufficient to outweigh the increased operating costs inherent in such programs. Overall, programs of this type are likely to result in a higher per-pupil educational cost.

Year-round programs which fall in the second category, better facility utilization, are usually conceived as a means of saving construction and interest costs for school buildings, rather than to provide enrichment to students' academic schedules. This is not at all meant to imply that school systems which "go year-round" for the second reason, economy, are any less concerned about quality education than are those which do so for the first reason, enrichment. Indeed, the district which can save money without damaging the quality of education has freed resources to spend in other areas which might substantially improve educational quality. Although implementation of programs such as these is necessarily accompanied by some curriculum reform the intent is simply to make uniform the monthly utilization of capital facilities. The 45-15 plan, originally developed at Valley View School District 96 in Lockport, Illinois, is the plan which Prince William County, Virginia has modified and adapted for its own use and which will be the subject of this brief discussion. This plan calls for each of four student groups to spend nine weeks (45 days) in school, four times a year, with three-week (15 days) vacations between in-school sessions. This means that, at any one time, only three of the four student groups are in school. Consequently, only three-fourths of the building space which would be necessary to house the entire population under a traditional calendar is necessary to house the same number of students under the 45-15 calendar. Year-round operation of school facilities in this manner is attractive for number of reasons:

Rapidly growing districts may relieve immediate problems of overcrowding, for each school building can comfortably serve one-third more pupils than it was originally designed to hold.

When it becomes necessary to build new schools under year-round operations, only three schools need be built for every four traditional term schools that would have been necessary.

School districts which are fairly stable in size may replace four outmoded facilities with three modern ones if they operate year round.

Further, year-round education will have impact on many of the costs in the operating budget as well. Teacher salaries, maintenance schedules, transportation activities, and administrative salaries are only few of the other areas where the impact of year-round school might be felt.

A myth which has surrounded the concept of year-round schools and the 45-15 plan, in particular, is the conviction that only very rapidly growing districts, like Prince William County, can realize construction savings from the plan. Regardless of the district's growth rate, building three schools instead of four for the same number of students is going to cost less money. There are two primary reasons, however, why rapidly growing school systems are more apt to participate in year-round schooling:

(1) Large growth rates are usually associated with young families with many children. Therefore, since the student population is growing faster than the taxpaying population, revenues and bonding power simply cannot keep pace with the requirement for educational services. These systems, which cannot legally build enough schools, are forced to devise ways by which existing facilities can be used to house a greater number of students.

(2) Rapidly growing school districts are better able to adjust to the transition between traditional and year-round calendars. A stable-enrollment district which goes year round has the burden of divesting itself of 25% of its facilities. A rapidly growing system may not face this trauma since in only a few years it will probably "grow into" the excess facilities created by the changeover.

Nevertheless, year-round school construction economies are available to educational systems of any growth rate that have the initiative to search for them.

Most studies which have been made on the effect of year-round schools have suffered the weakness of not comprehensively considering all costs. Further, these studies have had difficulty relating savings in future construction costs (which taxpayers cannot see or feel at this moment in time) to any anticipated increases in operating expenses which may result from year-round operations (which can be felt immediately by the taxpayers). This difficulty is due in large part to the traditional budget reporting found nearly universally in American school systems. Under the traditional system for reporting district costs, the dollar figures most frequently quoted are the net current operating expenses. In nearly every school district this figure does not include any estimate of the cost of classroom and other building facilities. The dollars in "Instruction" accounts generally exclude any indications of the dollars allocated for the classroom area. When savings accrue in accounts not frequently quoted to the public, such as Debt Service, but increased costs appear in the familiar operating accounts, the result is taxpayer backlash over what appears to be increased expense for a program touted to be a money saver.

COST ANALYSIS OF THE 45-15 PLAN

Education Turnkey Systems, Inc. is currently performing a detailed analysis of the economic impact that the 45-15 year-round calendar will have on the Prince William County, Virginia school system. The final report of this cost analysis will be available in late summer along with reports from studies on student performance and community attitudes on year-round schools. Some preliminary results have emerged from this ongoing study relative to the potential savings offered by the 45-15 calendar in Prince William County:

In the middle school instructional program studied, the per-pupil cost of the educational resources consumed annually under the pilot 45-15 plan is approximately \$1,052. If this same school were to operate a similar instructional program under a traditional (September to June) term basis, the per-pupil cost of the resources consumed annually would be approximately \$1,169. The pilot 45-15 plan results in a net per-pupil savings of \$117 annually or 10% in comparison with traditional term operation.

Of this annual savings of \$117 per pupil for the pilot 45-15 plan, \$35 (or 3.0%) is due to reduced teacher and aide costs. Under the 45-15 plan the teachers increase their work year from 193 days to 241 days and the aides from 184 days to 241 days (with proportional increases in salaries of 25% and 31% respectively). However, these teachers and aides serve 33% more students under the 45-15 plan. Because these instructional personnel are not receiving added salary in the same proportion as their additional student load, these savings may not be found in future operations of the 45-15 plan in Prince William County. Therefore, such savings are not generally applicable to other school systems.

Another \$21 (or 1.8%) of the annual per-pupil savings of \$117 for the 45-15 plan is due to the fact that the middle school studied could be served by the same number of principals, librarians, counselors, and secretaries under both 45-15 and traditional term operation. The total salary increase necessary to provide these staff members on a year-round basis is less than proportional to the increase in the number of students served under 45-15 operation.

The remaining \$61 (or 5.2%) of the annual per-pupil savings is due to increased utilization of the school buildings and furnishings required for the operation of the instructional program. This \$61 represents a total of \$48 (4.1%) saved in annual per-pupil costs associated with the purchase, operation, maintenance, and debt service for the building itself plus \$13 (1.1%) savings associated with the purchase, maintenance, and debt service for the required furnishings. Along with the personnel savings listed above, the operation and maintenance savings for both building and furnishings will result in lower per-pupil costs in the district's operating budget. The savings in the purchase and debt service for buildings and equipment will result in lower per-pupil costs in the capital outlay and debt service portions of the district's budget.

The facility savings of 5.2% plus the schoolwide staff savings of 1.8% are more likely to be observed in the long run than are the per-pupil savings in instructional salary costs. It is quite possible that adoption of the 45-15 program district wide could result in a 6-9% reduction in total per-pupil costs.