The current literature on year-round education is replete with feasibility studies; reports on operational programs; and thoughtful consideration of the potential effects of year-round education on the community, school, family, and child. Lay boards of education are frequently asked to make decisions on whether to implement year-round programs on these rather superficial data. More hard data of the type being gathered in Prince William County, Virginia, are needed if boards, school divisions, and communities are to make intelligent choices. An effort is being made to stimulate the development of a body of knowledge on year-round education to meet the information needs of the public, school boards, businesses, public agencies, and school personnel. (Author)
NEEDED RESEARCH IN YEAR-ROUND EDUCATION

by

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American Educational Research Association
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as part of the
Multidisciplinary Symposium on the Possible
Effects of Year-Round Education on
Community, School, Family, and Child
This paper provides a framework for identifying areas needing systematic study in year-round education (YRE). It contains a definition of year-round education, a short history of YRE in America, a list of factors generating interest in YRE today, and a discussion of the major potential effects of YRE on educational, family, economic, religious, and political institutions.

DEFINITION OF YRE

The basic concept of year-round education is extension of school activities beyond the traditional nine-month, September to June, operation. This extension occurs either by rescheduling or extending the minimum number of required attendance days.

In the rescheduled year, attendance days are divided into quarters, thirds, fifths, or some other fraction and separated by vacation periods. An example of this pattern is 45-15. The 180 required attendance days in this pattern are divided into segments of 45 days separated by 15-day vacation periods. Excluding holidays, this school calendar is 225 days long. By entering one-quarter of the students every fifteen days, only three-quarters of the students are in school at any one time. The calendar for Mills Godwin Middle School, Prince William County, Virginia, in Figure 1 illustrates the typical 45-15 calendar in use throughout the country.

In the extended year, the minimum number of required attendance days for each pupil is increased. The best known extended calendar is that of Park Elementary School, Hayward, California. In 1968, this calendar contained 197 days of mandatory attendance for each child. A copy of this calendar appears in Figure 2.
**FIGURE 1**
45-15 YEAR-ROUND SCHOOL CALENDAR--1972/73
Mill: Godwin Middle School
Prince William County, Virginia

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- In School
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# PARK SCHOOL FOUR-QUARTER PLAN CALENDAR

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**Total Days:** 197
The concept of extending the school calendar beyond nine months is not new. YRE programs have existed twice in the history of American education. Prior to 1840, cities such as Buffalo, Baltimore, Cincinnati, New York, and Chicago had schools operating year-round to accommodate numerous non-English speaking immigrants. During the period from 1904-1950, fourteen year-round programs were implemented to solve pressing financial and space problems. The height of the period was 1925 when thirteen programs were operational. The majority of these programs were discontinued during the Depression when financial resources were scarce and it was realized that the economic objectives of YRE were not realistic. Other programs were discontinued when space was no longer a problem.

Activity in year-round schools from 1950-1964 was slight. Approximately eight school districts projected possible utilization of YRE, but no operational programs materialized. The early sixties, however, saw a revived interest in year-round education, and by 1968, approximately fourteen programs were reported as operating year-round.

THE NEED FOR RESEARCH ON YRE

This symposium is addressing itself to research needs in year-round education for several reasons. First, there has been rapid growth of interest in year-round education. This interest is manifested in several ways:

- The increasing number of operational programs; approximately forty.
- The large number of publications which have appeared; approximately 200 during the past five years.
- The large number of school districts (over 600) which indicated an interest in YRE on a survey conducted by NEA in 1971.

The establishment of a National Council on Year-round Education to coordinate the efforts of interested year-round educators and to sponsor national seminars.

The allocation of state and local funds to support study of YRE; approximately 200 feasibility studies to date.

Second, year-round education is purported to achieve a number of objectives. There is little evidence that YRE will achieve any of these. Before educators, boards, and the public can make decisions regarding YRE programs, data must be collected in support of such widely acclaimed objectives as:

- To increase space and thereby reduce overcrowded conditions.
- To provide time for curriculum revision and in-service training of teachers.
- To provide optional attendance patterns to students, parents, and educators.
- To serve as a catalyst for initiating change in aspects of a school program that might not otherwise be permissible.
- To fully utilize equipment, textbooks, and library materials which are owned by the school district.
- To provide time to teach an increasing body of knowledge.
- To provide enrichment or remedial courses that students are unable to take during the regular school year.

Third, educators look to the cyclical history of year-round programs for implications for present situations. The usefulness of these data is restricted for several reasons:

- School districts did not consistently document and evaluate their year-round programs.
- Sophisticated research designs were not available to adequately evaluate all dimensions of the programs.
- Different societal considerations dominated American life in the mid 1800's and the mid 1900's.
- Educational psychology had not begun to develop to the point where some accurate assessment could be made of how children learn.
- The student scheduling pattern most used in the past was the staggered four-quarter while the most used pattern today is 45-15.
Fourth, many of the potential spillovers to economic, religious, family, and political institutions are unknown. The National Council on Year-Round Education has recognized these side-effects, and its Fifth Annual Seminar in May, 1973, at Virginia Beach will address these.

A MODEL FOR IDENTIFYING RESEARCH NEEDS IN YRE.

The current demand for information, the inadequacy of previous research, and the possible spillovers to the community highlight the need for research on YRE. To facilitate this research, a model of the potential effects of YRE is presented. The model serves two major purposes. First, it identifies the areas which warrant research on year-round education. These areas are identified by viewing society as a system which includes five basic institutions: education, family, economic, religious, and political. Under the assumption that a major change in one institution necessitates changes in the others, the potential effects of year-round education on society become apparent. These potential effects are the essence of the model. Second, the model reinforces the position that research in year-round education must be approached from a multidisciplinary perspective.

The model is organized around relationships among three types of variables—causal, intervening, and end-result. Causal variables initiate effects. Intervening variables reflect effects which are immediately felt. End-result variables describe the long-range effects which may be expected. When a causal variable is initiated, effects are felt in intervening and end-result variables. Graphically, this relationship is depicted as follows:
Four basic assumptions underlie the model:

1. The effects which are identified are potential effects. Sufficient data are not available to support the existence of all included effects.

2. Everything which occurs in an educational system serves to enhance the growth and development of students.

3. Changes in curriculum, instructors, and organizational patterns must occur if any substantial effects on the child are to be produced.

4. There is a set of constraints, such as intelligence, socio-economic status, etc. influencing all hypothesized relationships.

The model is an initial effort which serves mainly as a vehicle for identifying specific research needs in year-round education. Ideas are sought at this symposium for further clarification and elaboration of the model.
A RESEARCH NEEDS IDENTIFICATION MODEL FOR YEAR-ROUND EDUCATION

Causal Variables

Year
Round
Education

Intervening Variables

Organization Patterns Curriculum Instruction Family

Child Personnel Costs Patrons


Economic Institutions Religious Institutions Political Institutions

End-Result Variables


Support Citizen Part

Profits

Income

Social Control

Support
MODEL ELABORATION

This section of the paper elaborates the model by giving specific examples of variables appearing in each major area and suggesting potential relationships among the variables.

The Effects of YRE on the Educational Institution

The effects of year-round education on the educational institution may be divided into two major categories: (1) effects upon curriculum and instruction and (2) effects upon organizational patterns of the institution. Changes in these two areas result in additional effects upon (1) the child, (2) educational personnel, (3) the costs of education, and (4) patrons of education.

The primary consideration within the education section of this model is the effect of YRE upon the child. It is a basic assumption of this position that implementation of YRE initiates revisions within the area of curriculum and instruction and in organizational patterns. These revisions facilitate the provision of experiences which emphasize the individuality of learning styles, needs, and interests of children. Proponents of YRE suggest that children in a year-round program feel better about school, learning, teachers, and other children. The school becomes more attractive to children, a place associated with enjoyable learning experiences. It is further argued that these positive feelings about school and the people in the school enhance the achievement of the school’s purposes.

As an example of these relationships, hypothesize that a school decides to implement a four-quarter schedule in which a student must select any three of the four quarters (causal variable). If the student selects the winter, spring, and summer quarters, he is free in the fall quarter for vacation or work experiences (intervening variable) which enhance his overall growth.
If work is preferred, opportunities during this period are greater because all students are not competing in the labor market during the same time. In addition to the money earned, the student has gained valuable work experience which may assist him in making more appropriate career-relevant program choices in school and which may provide him with a set of salable skills (end-result variable).

The second consideration is the effect of YRE on curriculum and instruction. Most YRE programs include the provision for major curricular and instructional revision. Proponents of YRE argue that the benefits of such a program result primarily from such changes. The immediate effects on curriculum occur in the selection of objectives (usually worded in behavioral terms), content, methods, resources, and evaluation procedures which reflect the educational values prevalent in the current social order. The values in vogue today are often referred to as the "humanizing movement" and include greater freedom of choice for the individual student, continuous progress, and greater concern for individual learning styles, interests, and needs.

A third consideration is the effect of YRE on the organizational pattern of the school. This pattern consists of the way resources--time, space, and personnel--are integrated to achieve objectives. As with curriculum, the organizational pattern is frequently changed when YRE is implemented. Time changes occur as a result of calendar revisions. Space utilization alters with changes in curriculum, instruction, and number of students in attendance. In addition, the staff frequently goes through a process of self-assessment and in-service designed to improve communication, interaction and influence patterns; decision-making; goal and policy-setting processes; leadership; and control mechanisms. This process, currently labeled organizational development, would appear to affect the loyalty, morale, and job satisfaction of the school's staff. These latter factors would then affect the staff's performance, absenteeism, and turnover.
A fourth consideration is the effect of YRE on educational personnel. Variables describing intervening effects include feelings about the job, school, peers, superiors, subordinates, children, and the self. These variables frequently are grouped into morale and job satisfaction measures. Changes in these variables occur because of changes in the content and/or context of one's job and are related to the quality and quantity of his performance, his attendance at work, and his propensity to transfer or leave the position.

As an example of these relationships, hypothesize that a school implements a four quarter schedule which permits teachers to choose the number of quarters they work, the objectives they will achieve, the methods and materials they will use, and the people with whom they will work. These choice factors relate primarily to the content of the job and are considered by Herzberg as those factors most closely related to job satisfaction. The resulting job satisfaction should produce better teacher planning, closer attention to relevant activities and procedures, and continuous self-evaluation. Because the teacher likes what he is doing, he may also take fewer sick days and be less likely to transfer or leave the position.

A fifth consideration is the effect of YRE on the costs of operating the school. Some literature can be found which indicates savings in construction, maintenance, and operational costs. Under most rescheduled school calendars, fewer classrooms and supportive facilities, fewer teachers, and less transportation are required. The amount of decrease depends upon the exact provisions of the calendar. These decreased requirements lead to decreased overall and per pupil costs. These savings can be viewed as decreased tax requirements which could lead to more positive feelings and greater moral support for the school by taxpayers. This moral support may well lead to the necessary financial support for bond issues or budgets at a later date.
A sixth consideration is the effect of YRE on patrons of schools. The patron are those who provide the financial and moral support for the school's programs. Included are parents, taxpayers, and businessmen. The implementation of a YRE program may affect the way patrons feel about the school and their participation in school programs and activities. These feelings and participation may, in turn, affect the willingness of patrons to provide financial support for the school's programs.

As an example, consider the school which implements a 45/15 program which places children from the same family on separate calendars such that there is no time during the year when all family members are out of school at the same time. Such a calendar may create negative feelings toward the school which may well be expressed in defeat of bond issues, annual budgets, or as opposition to a needed tax increase.

The Effects of Year-Round Education on the Family

When a school district initiates a year-round calendar, effects are immediately felt in the area of family life. Those areas most affected include vacations, day care for children out of school, student employment opportunities, and family cohesiveness. In the long run, YRE offers potential for increased income and opportunities for social control within the family unit.

For example, suppose a school district implements a student scheduling pattern which provides a continuing cycle of 45 days in and 15 days out of school. First, the family immediately has access to four three-week periods during the year when a vacation may be scheduled. Second, instead of a working mother being required to hire a full-time sitter three months of the year, senior students may be hired on a less costly basis for the 15 day periods.
Third, students could cooperatively make arrangements to supply industry with labor year round instead of competing with each other for limited employment opportunities which are available only in the summer. A student would be able to attain financial independence more readily. Fourth, the regular appearance of the 15 day "free" periods make it possible for the family to more easily plan vacation and recreational activities together. As the cohesiveness of the family increases, it is anticipated that family members will be less likely to turn to external sources, such as unlawful activities, for a sense of belonging and accomplishment.

The Effects of Year-Round Education on Economic Institutions

The implementation of a year-round calendar has the immediate effect of requiring business, industry and the professions to reschedule their services to meet a more even distribution of demand throughout the year. This redistribution of demand levels business peaks and valleys and permits the hiring of a full staff of employees year round. Some industries also experience increased demand for services, particularly recreational businesses, due to the availability of people with leisure time throughout the year. This demand creates new positions which can be filled by students who are out of school.

Personnel practices of economic institutions are also affected. Depending upon the schedule selected, employees are available to work at varying times during the year. Induction of personnel becomes a continuous process. Vacations may be scattered throughout the year and plant or business shut-downs may become unnecessary.
A further consideration for some institutions is the leveling of income throughout the year. Many seasonal service industries may remain open year-round and, thereby, increase their total potential income and its distribution throughout the year. Recreational and related businesses, such as motel and hotel facilities, are the best examples here. Many may remain open all year through diversification of activities.

Effects of Year-Round Education on Religious Institutions

The initiation of a year-round education program in a community has a direct effect on religious institutions in terms of (1) the number of services demanded by clientele, (2) the distribution of services during the year and (3) the distribution of volunteers available to support the program. These effects may be reflected in performance, the extent of moral and social control, and the financial support received from parental clientele.

For example, hypothesize that a school district implemented a student scheduling pattern which provided a continuing cycle of 45 days in and 15 days out of school. The effects of such a pattern become evident. First, children would be available continually during the year to engage in various activities. Additional staff would be required to accommodate this need. Second, because teachers may elect to participate in the same cycling pattern as students, a pool of potential volunteers would be accessible continually. Because the institution would have more opportunity for continual contact with its clientele, more moral and social control would be possible. Children could participate in the services of the institution rather than spending time in ways perceived as being detrimental to themselves or others.
The Effects of Year-Round Education on Political Institutions

One of the major purposes of politics is the acquisition of adequate resources for performing a given activity. Institutions may more readily acquire adequate resources by demonstrating efficient utilization of those resources previously allocated. Proponents of YRE suggest that a year-round calendar demonstrates efficient utilization of human and physical resources and results in increased moral and financial support.

Proponents of YRE also suggest that calendars which reschedule, and do not extend the school year, result in increased citizen participation. School personnel are available, depending upon their contractual status, to participate in various activities. A sampling of school personnel who would usually be available only during the summer months are released continually during the year for such activities as jury duty, governmental committee membership, lobbying for or against specific legislation, campaigning for political candidates, and serving in various voluntary capacities.