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ABSTRACT

This report is intended to complement a much briefer companion volume, "A Research Agenda for Year-Round Schools: Executive Summary." Together both volumes fully describe the second phase of a national study of year-round schools (YRS) that was initially begun by the National Council of Year-Round Education in 1975. The bulk of this volume consists of (1) a history of year-round schools in the United States, (2) a comparative analysis of the 24 YRS programs studied in phase 2 (with three case studies) and a critique of program evaluations conducted in the study districts, (3) a substudy of the YRS movement in California, and (4) a description of needed YRS policy research. The appendix contains maps showing the geographic location of YRS programs in the United States and an extensive bibliography of materials relevant to the YRS movement. (Author/JG)

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YEAR-ROUND SCHOOLS
Final Report

THE IMPORTANCE OF YEAR-ROUND SCHOOLS

Volume II

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Preface

This volume represents the second phase of an investigation by DHEW's Office of the Assistant Secretary for Planning and Evaluation into Year-Round Schools (YRS). Abt Associates Inc. conducted this second phase, which involved a study of the nature of the YRS movement in the United States - its activities, its growth, its impacts, its importance - and the development of a set of recommended policy research activities for the Federal Government to conduct.

The purpose of this volume is to complement the executive summary by presenting in full the information collected and analyzed during this second phase.

It should be noted that the assistance of Dr. Keith Baker of ASPE, Mr. James Baker of Watsonville Year-Round School, and of Dr. Donald Glines of the Year-Round Schools Council and the California Department of Education has been invaluable in completing this phase.

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1.0 Introduction

1.1 Year-Round Schools Defined

The first important point in any introduction to the Year-Round School (YRS) movement is that there are almost as many YRS programs and calendar variations as there are practitioners. In view of this variety, a simple overarching definition of YRS had to be devised. Simply stated, YRS is an educational scheme in which some portion of the student body is in attendance in regular school terms during each season of the year. However, there are wide variations as to how the school calendar is developed and implemented.

In order to understand the growth and diversity of YRS programs, both an historical context and a view of currently operating programs are necessary. This context, along with a systematic analysis of YRS programs at different stages of growth, is provided in the following chapters. The historical and current data about a wide range of YRS programs were collected based on a need to answer three basic policy questions. They are:

- Why is YRS important?
- Who should be conducting YRS research?
- What types of research projects should be undertaken?

1.2 Approach

In seeking answers to the above policy questions, a series of tasks were performed, each developing logically out of the information the preceding activity provided. The four major activities were:

- A literature search and review;
- Telephone discussions with YRS operators;
- Discussions with YRS authorities;
- Informal discussions in Washington, D.C. with private and public educational researchers.

Each of these activities is described in this section.

1.2.1 Literature Search and Review

To gain familiarity with YRS, Abt Associates' staff read a variety of literature on the subject beginning with a groundbreaking paper written by the National Council on Year-Round Education.[1] This initial exploration of YRS helped to identify what kinds of YRS programs were being implemented, how they were planned, and where they were located, and to develop an understanding of YRS activities in an historical context.

Project staff contacted specific school districts identified in YRS literature and received brochures, news article reprints, reports, and evaluation studies from 24. These 24 districts, representing a variety of types of programs, communities, and planning and implementation activities, form the basis of this study. The programs in these districts were divided into three basic categories:

- successful programs in school districts which have been operating a YRS program for at least two years and have no plans to terminate,
- nonimplemented programs in school districts which conducted feasibility studies of YRS programs for their district, and
- discontinued programs in school districts which actually implemented some model of YRS.

It was felt that examining the programs in the light of these categories would provide important information on YRS activity today, what program or community characteristics seem to have positive implications for program success, and what these programs indicate in terms of direction for future useful YRS research.

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[1] Year-Round Schools: Models and Issues, National Council on Year-Round Education. May 1975.

In order to assure that throughout the study of these programs all individuals involved systematically collected and recorded the same types of data, two matrices were developed--Characteristics of Year-Round Schools and Evaluation of YRS Model.

The Characteristics of Year-Round Schools matrix was designed to provide a concise sketch of the community, statistics on the school district, description of planning and implementation activities, and an indication of program growth over the years. It also provides an explanation as to why a YRS program was discontinued or was not implemented.

The Evaluation of YRS Model matrix provides data on types of evaluations done by school districts, or organizations outside the district, once they begin a YRS program. Specifically, it provides, for each school district studied, data indicating what was evaluated, how it was evaluated, at what point in the YRS program it was evaluated, who evaluated it, and the results. Examples of these two types of matrices and explanations of the terms used on each follow this page.

Upon reading the literature sent by the 24 school districts, project staff found that important information needed for the matrices was missing. A trip to the library of the National Council of Year-Round Education, at Clarion State College in Clarion, Pennsylvania, proved to be fruitless for the purposes of this study. Although the library was said to be the central repository for YRS information, its reference material and school district reports did not include most of the specific studies and evaluations needed.

1.2.2 Telephone Discussions

After the visit to Clarion, it was decided to try to obtain the missing data for each of the school districts by contacting the administrator or program director of each YRS program by telephone. A series of telephone discussions seemed to be a

Characteristics OF YEAR ROUND SCHOOLS

Name of School District ______________________

Location ______________________ Model ______________________

	COMMUNITY PROFILE										DISTRICT PROFILE						YRS PROFILE																		
						Ethnic Makeup															Pre-Model Planning				Citizen Involvement			Pre-Model Implementation Planning							
Date of Imp	Urban	Suburban	Rural	Total Pop. of District	Occupational Characteristics	Black	Spanish Speaking	American Indian	Other White	Other	# of Schools in District	# which are YRS	# Students in District	# Attending YRS Schools	# Disadvantaged in District	% Disadvantaged in YRS Schools	Grades Affected	Mandatory	Voluntary	Motivating Issues	Feasibility Study	Surveys	Analysis/Imp Other options	Other (Specify)	All Phases	After Model Selection	None	Curriculum Revisions	Admin. Reorgan.	Teacher training	Teacher Contract Neg.	Computer Scheduling	Public Relations	Survey	Other (Specify)

Comments

Source of Information

CHARACTERISTICS OF YEAR ROUND SCHOOLS

Name of District _____ Model _____

Location _____

YRS PROFILE																													
Imp		If Not, Why?						State Support for YRS					Federal Support YRS				On-Going		If no, why not?						Anticipated Future for YRS In District			
Yes	No							$	Tech. Assis	Legislation	Other (Specify)		Title I	Title IV	Title VII	Other (Specify)	Yes	No							Status Quo	Expension	Other (Specify)	

Comments

Explanation of Terms Used on the Characteristics of Year-Round Schools Matrix

TERMS	EXPLANATIONS
COMMUNITY PROFILE	
• Urban • Suburban • Rural	Are most year-round school programs located in urban communities, rural communities, etc.?
• Total Population of the District	Number of people residing within the district.
• Occupational Characteristics	Types of jobs majority of people in community hold. Percentage of people in particular jobs, if possible. Are communities with YRS primarily professional, blue collar? Can generalizations be made?
• Ethnic Makeup	Percentage of total district population which is of a particular ethnic group. Does presence of a particular ethnic group seem to predispose a school district to consideration and/or implementation of YRS?
DISTRICT PROFILE	
• Number of schools in the district • Number which are YRS • Number of students in the district • Number which are in YRS schools	Data in these four categories should indicate the size of a YRS program by number of students and number of schools involved. Generally, do large school districts implement YRS programs? Do most programs start out small and expand through a series of implementations?

- Number of Disadvantaged in District
- Percentage Disadvantaged in YRS Schools

The definition of "disadvantaged" used in the matrix is taken from Sec. 101, Declaration of Policy, of Title I of the Elementary and Secondary Act of 1965. Disadvantaged is defined to be "children from low-income families."

Does the presence of disadvantaged children in a school district tend to promote the study and/or adoption of YRS? Do the disadvantaged tend to be in YRS schools?

- Grades Affected

Is YRS a trend primarily in elementary schools, in secondary schools? If a series of implementations occur, do school districts tend to expand their YRS program from one grade level to another or from elementary to secondary schools; do they tend to expand a program to other elementary schools within a district; to other secondary schools?

- Mandatory

A YRS program in which students are assigned specific attendance periods; students do not have the option of attending a traditional or a YRS school.

- Voluntary

A YRS program which is an option for students; students may select either a YRS or traditional school or program within a school to attend.

Does the mandatory/voluntary nature of a YRS program tend to be coupled with a particular model? Do those programs which mandate attendance appear to have a higher failure rate than those with voluntary programs?

- Motivating Issues

What are the initial reasons a school district investigates YRS? Once an investigation gets underway, do other issues tend to emerge and take precedence over the original ones? Is there any correlation between motivating issues and YRS model selected; between them and the success or failure of a YRS program?

YRS PROFILE

• Pre-Model Planning	Activities leading up to the choice of a particular YRS model for implementation.
- Feasibility Study	Study conducted by a school district to determine whether a particular YRS model or YRS in general is possible. Such a study may include: attitudinal surveys of parents, students, teachers, business/industry; a cost-analysis of expenses in a year-round program; assessment of types and degrees of changes or adjustments necessary to operationalize a YRS program. Do the successful programs typically conduct feasibility studies?
- Surveys	Do most successful programs conduct surveys to measure community attitudes in addition to those which are a part of the feasibility study or instead of them?
- Analysis/implementation of other options	Do most school systems investigate or operationalize other options (double sessions, extended year) or other YRS models before deciding upon the model ultimately implemented?
• Citizen Involvement	
- All Phases	Citizen involvement from inception of YRS concept to actual implementation of the chosen model.

- After Model Selection — Involvement of citizens only after a decision is made to implement a particular YRS model.

- None — Citizens play no active, constructive role in the YRS decision-making process.

- Pre-Model Implementation Planning

  Activities which occur in preparation for the actual implementation or start of a YRS model's operation in a school district. Such activities may include:

  - Curriculum Revision — Do most school districts implementing YRS effect some degree of curricular revision? Does curricular revision occur more frequently with one model than with another? Can a relationship between curricular revision and YRS success or failure be identified?

  - Administrative Reorganization — Does a school district's transition to YRS appear to necessitate some degree or type of administrative change? Is that change generally a procedural one, a redefinition of personnel job responsibilities, the addition of new personnel?

  - Teacher Training — Do most YRS programs provide some form of YRS orientation training for teachers?

  - Teacher Contract Negotiations — Are YRS programs typically accompanied by adjustments in teacher contracts? Does this appear to occur more frequently with one model than with another?

- Computer Scheduling	Does the switch to a YRS program appear to generate the use of a computer in the scheduling of either student entry into the school year and vacations, or course scheduling? Does computer use occur more frequently with a particular model, with a YRS program at the high school or the elementary level?
- Public Relations	Is there a relationship between the success/failure or implementation of a YRS model and the selling of that model to the community?
- Surveys	Is it typical of most school districts considering or preparing for YRS to conduct attitudinal surveys at this point? Do the successful programs tend to use surveys in both the pre-model planning and pre-model implementation planning phases to monitor public opinion?
• Implementation	If implementation does not occur, what are the reasons? Can they be related to the activities in the pre-model planning and pre-model implementation phases?
• State Support	Do most successful programs operate within state environments which are legislatively permissive and/or encouraging of YRS through availability of technical assistance and financial aid?

- Federal Support

  Can the schools which operate successful YRS programs be typified as receiving money for various activities and expenses through provision of one of the various titles of the Elementary and Secondary Educational Act of 1965?

- Ongoing

  Is the YRS program still in operation? If it has been discontinued, what are the reasons? Among the programs which have been discontinued, can the reasons be categorized, do they fall into course/result patterns?

E OF SCHOOL DISTRICT

ATION

IOD EVALUATION COVERS

EVALUATION OF YRS MODEL

RESEARCH AREAS	METHODOLOGY			FINDINGS
	WHO		HOW	
	In House	External		
EACTIONS TO YRS				
• Community				
• Students				
• Teachers				
CHIEVEMENT				
INANCE				
THER				

omments

e of Information:

Explanation of Terms Used on the Evaluation of YRS Model Matrix

RESEARCH AREAS	EXPLANATIONS
REACTIONS TO YRS • Community • Students • Teachers	How do these groups feel about the YRS program in their district? What sort of impact has YRS had on their lives, their businesses, their satisfaction with school?
ACHIEVEMENT	What effects has YRS had on student learning, on grades, on rate of failure?
FINANCE	What impact has YRS had on the school district economy?
METHODOLOGY	Who performs the evaluation; and how the evaluation is conducted?
• Who	Was the evaluation conducted by the school district or by a group or organization outside the district? Such a group or organization may include a Title III evaluation team, a consulting group, someone independently studying the program for a dissertation, etc.
• How	What specifically was studied? What techniques were used to conduct the evaluation-survey (telephone, questionnaire), cost analysis, achievement tests, etc.? Can a judgment be made regarding the sophistication of the evaluation? Survey: Who was contacted; what was the size of the sample and how many people responded; how were the people in the sample contacted; what were they asked? Achievement Tests: What test was used, standardized test, local test; what was the test designed to measure; to whom was it administered; was a control group used; to what were test results compared?

Cost Analysis:

What types of costs were measured; were statistical or accounting methods applied; what sort of comparisons were made?

FINDINGS

What were the conclusions arrived at? Were any of the results considered particularly surprising or significant to the evaluator? What form did the results take--statistics, a balance sheet, a graph, a narrative, etc.?

good way not only to acquire the specific pieces of data missing for each YRS program, but also to verify and expand upon the data already received. Overall, the documents that had been sent by the various school districts had not been totally satisfactory sources of information because:

- School district reports are frequently too vague and descriptive to yield substantive information.
- School district reports and studies typically describe the first year of operation of a year-round school program and therefore do not provide data on program expansion and development over longer periods of time.
- School districts do not generally write reports for general distribution which explain why a year-round school program is discontinued.
- Data important to an understanding of year-round schools were not always available in a school district report, or, when available, required clarification.

Therefore, using the two matrices as guides, Abt Associates' staff contacted each school district for which data were needed. Generally, relying on a combination of school records and their memories the individuals spoken to were able to provide us with relevant demographic data as well as insight into the uniqueness of their particular program, its problems, benefits, and reasons for its success or failure. These phone discussions became the most important source of data for this study.

1.2.3 Discussions with YRS Authorities

At various times during the study, staff members informally discussed YRS and ideas about it with a number of YRS authorities. They spoke with the following individuals: Paul Rice and Donald Parks of the National Council on Year-Round Education; Donald Glines, also of the National Council, and with the California State Department of Education; Bruce Campbell of the New Jersey Department of Education; and ASPE's representative, Keith Baker.

These individuals provided Abt staff with an overall understanding of YRS, guidance as to the directions the present study should take, and suggestions regarding the types of additional YRS research needed.

Donald Glines in particular was a valuable source of information regarding YRS in California. California is especially interesting because it actively promotes YRS as a matter of policy and has realized great success in its programs. Of all states, California is the leader in YRS. (See Section 3.4 for information on YRS activities there.)

1.2.4 Informal Discussions in Washington, D.C.

In order to ascertain the level of knowledge of and interest in YRS among relevant federal officials and individuals in educational organizations, project staff conducted a series of informal discussions with them in Washington, D.C., as part of this study. Staff also hoped to learn these individuals' perspectives regarding needed YRS research and the potential impacts and benefits of YRS.

Five basic types of questions were asked during the conversations:

1. What do you see as the major problems of education, especially of the disadvantaged child?

2. Are you aware of any year-round school models currently operational which are addressing themselves to financial and curricular problems?

3. Do you know of any YRS studies? (What do you think of their validity?)

4. What kind of special interest do you have in YRS? In other governmental agencies? In your agency?

5. What kind of role could your own federal agencies play in investigating the year-round education concept?

1.3 Research Products

Four major products, developed from the activities previously described, comprise the remainder of this volume. They are:

- a history of year-round schools in the United States;
- a comparative analysis of the YRS programs studied, and a critique of the quality and usefulness of their program evaluations;
- the California substudy; and,
- a description of needed YRS policy research.

History of Year-Round Schools

The history was developed through a review of extant YRS literature, primarily using "The Year-Round Education Movement" which was written by George Glinke of the Utica, Michigan school system as part of Utica's YRS feasibility study dated July, 1970.

The history is arranged chronologically, and discusses the standardization of the school year, summer school development, early YRS programs, and the activities and developments of the late 1960s and early 1970s which shaped the YRS of today. It documents the changes which occurred through the years in YRS and provides an understanding of present YRS activities and the social and educational issues underlying the YRS movement.

Comparative Analysis and Critique

These sections were developed using the data on the matrices and additional information provided by school district personnel familiar with their YRS program. They provide a summary of current YRS activity and discuss the quality and usefulness of the methodology used by school districts in evaluating their programs.

California Substudy

This substudy describes the growth of YRS in California since the early 1970s, the role of the state in YRS, and illustrates the impact a state government may have on the success and scope of YRS once it makes a legislative and economic commitment to it.

Description of Needed YRS Policy Research

This section provides a list of specific research projects which we recommend as a result of our study of current YRS activities and our discussions with YRS authorities and individuals involved in school district YRS programs. These recommended projects reflect current gaps in the understanding and knowledge of YRS, and point toward directions the federal government should move both to anticipate and respond to the immediate and long-range impacts of YRS.

2.0 History of Year-Round Schools in the United States

In order to develop a history of year-round schools in the United States, a review of all school programs that were, as the title suggests, "year-round," was conducted. This review encompassed any program which extended beyond the traditional 180-day school schedule. Many of the early programs were basically summer school programs which enabled students to catch up with or to accelerate work which principally went on during the rest of the school year. This type of program exists today. In more recent times, however, other programs came into being and assumed an important place in year-round education. These newer programs have staggered schedules, allowing entry into the system at more than one time during a given year.

2.1 Definition of the Three Types of Extended School Calendar

Since the development of the 180-day "traditional" school year, three major types of exceptions to this school calendar have emerged:

- Summer School;
- The Extended School Year;[1]
- Year-Round School.

Summer School is a program offered during part or all of the summer months to provide students, whether on a voluntary or mandatory basis, with remediation or acceleration. The full range of regular school term courses is not offered. Summer schools have existed in many forms for over a century. Some have been noted in YRS literature as one quarter of a four-quarter YRS program.

[1]The category "extended school year," as used here, should not be confused with that in some YRS literature, where the term is used synonymously with "year-round school."

Extended School Year is an effort to increase the educational offerings to children by lengthening the amount of time each year that they attend school. For instance, rather than from September to May, the school term may run from August to July. This exception to the traditional calendar has been used almost exclusively for purposes of increasing educational achievement among the students.

Year-Round School (YRS) is a system whereby some percentage of students are in attendance in regular terms during each season of the year. Their entry into a new term is staggered throughout the year. YRS is differentiated from other extended programs on the basis of staggered entry of the total student body into the educational cycle. When "YRS" is used, it refers to programs under this definition. Unlike the two categories above, these programs have been mounted in the past more from economic (increased plant utilization) than for educational reasons.

2.2 Pre-history of Year-Round Schools

American society in the 1800s was primarily agrarian and consequently most schools operated within the framework of an agrarian economy. Children were needed on the farm from planting to harvest time and therefore schools in agricultural areas were closed from spring until mid-fall.

In the urban areas of the 1800s children were not needed to help with farm work, and therefore many schools operated all year. Evidence exists that Chicago, Boston, Washington, D.C., Cleveland, Buffalo, and Detroit all maintained school sessions of 48 weeks or more.[1] The most popular school schedule of this time was known as the "12-1" plan. It divided the school year up into 12-week terms with one-week vacations between each term.

[1]Glinke, George, "The Year-Round Education Movement: Its Historical Implications on Today's Urbanized Culture," Utica, Michigan, 1970, p. 7.

A modification of this, the "12-4" plan, closed the school for four weeks in August and ran consecutive 12-week sessions the rest of the year.[1] These types of quarter plans predominated among urban, 19th century schools.

Just after the Civil War there was a trend in urban areas toward the formation of summer schools or vacation schools, an outgrowth of the social reform movement occurring at the time. The first recorded summer school was sponsored by the First Church of Boston, Massachusetts in 1865. In 1894, the Association for Improving the Conditions of the Poor established summer schools in New York City. Once these early experiments proved successful, public Boards of Education began making plans for running summer schools of their own. New York instituted a summer session in 1897. Chicago and Providence school systems began summer sessions in 1900. By the turn of the century, summer programs had begun in 20 urban areas. Whereas the purpose of early "vacation schools" was to keep children occupied, the focus later changed from the recreational to the academic and vocational. The typical vacation school of 1910 offered such courses as shoe-making, chair caning, nursing, etc.[2] According to the U.S. Bureau of Education, by 1916, 200 elementary schools provided one- to three-month summer schools.

In 1912, Newark, New Jersey began an educational program which, although frequently labeled year-round education, was actually a summer school program, since the fourth and optional quarter occurred in the summer. The purpose of Newark's summer school was to assimilate its large immigrant population by providing them with the additional schooling and English lessons they needed. Unfortunately, the goals of the program were not realized. Because the June to August quarter, while considered remediation, actually provided credit for one-third of a year's work, immigrant students actually accelerated by attending

[1] Ibid., p. 8
[2] Ibid., pp. 8-9

summer school. As a consequence of their acceleration, many of them graduated at an early age, inadequately prepared or too immature either to pursue additional education or to enter the labor market.[1]

Newark and other school districts began to experiment with their school year schedules in order to provide time for remedial or compensatory education, a goal not unlike that of the myriad Title I compensatory education programs. While these early compensatory education activities were locally initiated and generally for the immigrant student's benefit, today's federally-sponsored Title I programs in a number of states are aimed primarily at assisting the migrant child. Both programs reflect the thinking that a revised or extended school schedule may effectively respond to the needs of a particular group of students.

2.3 World War I to World War II

By World War I, the nine-month school year had become the norm. The chart below indicates how the official school year contracted in urban areas in the 75 years between 1840 and 1915.[1]

	1840	1915
Chicago	240 days	193 days
Buffalo	260 days	190 days
Cleveland	215 days	192 days
Detroit	259 days	191 days
Philadelphia	251 days	195 days

The standard nine-month calendar of the 20th century with a three-month vacation evolved as a compromise between the needs of the agrarian sector of society for children to be available for farm work and the longer school year of the urban sector. This compromise was engendered by the incorporation of urban

[1] Ibid., pp. 11-12

and rural areas into school districts. Although this standardization began to occur in the early 1900s, rural and urban areas continued to have incompatible schedules into the 1940s.[1]

After World War I, the combination of an influx of families into industrializing areas and increased birthrates caused expanding enrollments in school districts. During this period, inflating construction costs made many communities reluctant to build additional school facilities. As a result, many communities seriously considered the possibilities of rescheduling the school year.

From the available literature it is not possible to determine whether the school reschedulings which occurred at this time were indeed YRS programs or actually extended summer schools, but some sort of adjustments to the school calendar did occur. George Glinke writes that the results of the over 3,000 personal letters sent to various school districts requesting information about historical attempts at year-round education revealed nothing so much as a lack of knowledge and information about past experiments.[2] Generally they appear to have been four-quarter programs, and evidence indicates that these programs existed in a wide variety of locations throughout the United States, including Minnesota, Tennessee, Oklahoma, Iowa, and New York.[3]

With the advent of the Great Depression, problems of overcrowding ceased to be as acute and interest in YRS waned. Instead of having to make current facilities meet the needs of an expanding population, the problem became one of cutting back programs to save funds which were then in short supply. Many YRS programs were discontinued.

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[1] Year-Round Schools: Models and Issues, National Council on Year-Round Education, May, 1975.

[2] Glinke, op. cit., p. 5

[3] Ibid., p. 16

2.4 World War II to 1968

During the 1940s and early 1950s, summer school growth was steady if unspectacular. There was strong support for traditional school programs, with the school year hovering around the 180-day mark. By 1950, 80% of school districts in cities of over 100,000 population had summer programs of some form. The distribution of these programs nationwide can be identified in the following manner:

Program	Elementary	Secondary	All Schools
Playground Program	1/3	1/5	
Academic Summer Session	1/10	1/3	
Available Public School Libraries			1/2
Health Services			1/3
Guidance		1/4	
Civic Center Use			1/2

Generally, financial support for summer school was provided by state and federal sources, although some funds were provided by local school districts.[1]

In the 1950s, the revival of interest in year-round education was similar to the interest during the post-World War I period. Essentially, it was a response to another crisis. There was an acute teacher shortage and an escalating student population. Several feasibility studies were performed during this time to explore the four-quarter plan again. A study in Royal Oak, Michigan (1951), indicated that, while 70% of the families returning the questionnaire approved of a 12-month school operation, 90% wanted their children to have vacation in the summer.[2]

[1] Ibid., p. 25

[2] Ibid., p. 27

A feasibility study in San Mateo, County (1951) compared several alternatives; e.g., double sessions and other variations of staggered all-year plans. The study was performed along the following dimensions: plant utilization, cost effectiveness, and educational results. The study committee was unable to determine clearly the relative advantages of the four-quarter system vis-a-vis the double session plan. However, the study concluded that the quarter system would be most advantageous at the high school level, but only if strong community support was enlisted for the plan.[1]

A feasibility study conducted by the Los Angeles Board of Education (1954) concluded that the kinds of curricular changes necessary, combined with the upheaval which would occur in the community, outweighed the potential financial savings of a staggered program. Dr. Ellis Jarvis, Superintendent of Schools in Los Angeles, stated in that study:

> "Having had considerable experience with the complexities of setting a calendar for the school year, I am convinced that the 12-month school year can only be established on a large regional or state basis. I say this because of the many interlocking concerns; parents, community groups, institutions of higher education, and the prevailing legal framework for school support."[2]

From 1955 to 1960, approximately 17 communities mounted feasibility studies dealing not only with the four-quarter plan but with other plans as well. Fairfield, Connecticut examined the possibility of an 11-month school year with students attending four hours each day but rejected such a plan because it was felt that the social and administrative disadvantages outweighed the advantages.[3] Houston studied a trimester system and planned for its implementation at a later date. Montgomery County,

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[1] Ibid., p. 26

[2] Ibid., p. 29

[3] Encyclopedia of Education, 1971, p. 598

Alabama, and DeKalb and Fulton Counties in Georgia studied the staggered four-quarter system. The communities which conducted these studies represented a geographic cross-section of the United States as well as a representation of urban, rural, and suburban communities.

From 1962 to 1967, the Florida State University laboratory school developed a trimester plan. The pilot study consisted of three 75-day terms with students from grades 1-12. Classes were nongraded, both organizationally and educationally. The study was terminated in 1967.

In 1963, Nova High School of Ft. Lauderdale, Florida, developed a 220-day school-year plan. Classes were graded, but individual progression was encouraged. Under the Nova plan, movement from 10th grade to graduation could be accomplished in 2-1/3 years. Initially, this plan had the full support of the local community, particularly of students and parents. However, it was discontinued in 1965 because students and teachers indicated a strain caused by the lack of an extended vacation from Easter to the end of July. Students showed a psychological letdown from being in school for seven weeks longer than students in nearby schools. Family vacation schedules were inconvenienced, and the school administration had difficulties with the school budget and teacher certification.

While the trimester was not a widely studied or implemented extended school-year plan, San Jacinto High School in Houston piloted a trimester plan in 1968. Students were allowed to attend two of three terms and were allowed to pay to attend school for any additional time exceeding the 175-day tuition-free school year.[1]

In the mid-1960s, New York State carried out major studies to determine the effect of an extended school year on parents,

[1]Glinke, op. cit., p. 42

teachers, students, and school district finances. The programs included:[1]

> Commack's Continuous Progress Plan. In 1964, one Commack elementary school adopted an 11-month school year. In August, 1967, the program was considered successful enough to be expanded to four elementary schools.
>
> Cato-Meridian's Quadrimester Plan. In 1964, a modified elementary school quadrimester program was instituted in grades K to 6 of a central school. A combination of a lengthened school day plus a small extension of the school year provided the equivalent of a weighted school year of approximately 220 to 225 school days.
>
> Syosset's Modified Summer School Program for Junior High School. An experimental group of seventh grade students worked through three modified summer school programs to demonstrate the feasibility of taking first time, full-year courses in six weeks.
>
> Hornell's Modified Summer Segment for Secondary School Students. Junior and senior high school students took first time, full-year courses in seven weeks of summer activity to demonstrate the feasibility of teaching and learning in compacted time blocks.

In Commack, at the Grace Hubbs Elementary School, a "continuous progress extended school year" with 200 grade 1-4 students was attempted. The school term ran from August to July (210 days). Findings were that students scored higher on standardized achievement tests and had a high attendance rate in the summer. Parental reaction was quite positive to this program.

The Cato-Meridian Central School developed and operated a modified quadrimester between 1964-1967. The school year was 200 days, actually the equivalent of 220 regular school days since each day was approximately 49 minutes longer than a standard day. The program was strongly resisted by parents, teachers, and students. Although the school schedule was staggered,

[1] Thomas, Setting the Stage for a Lengthened School Year, Albany, 1968, p. 10

with not all students attending all 200 days of classes, most people viewed the plan as a disruption of personal schedules.

While school districts during this period began to experiment with rescheduling the school year as a means of revising the curriculum, such plans did not achieve widespread popularity or success. People continued to resist a rescheduled school year because too frequently it disrupted the vacation and life style of the family.

2.5 1968 to Present

Not until 1968, with the development and implementation of the 45-15 plan in Valley View, Illinois did YRS begin to achieve the broad-based support it has at present. In 1953, the district had 85 pupils. In 1969, the district grew to approximately 5,000 pupils and was faced with enrolling an additional 1,700 in the 1970-1971 school year. During the 1960s, the Valley View taxpayers had supported construction of seven new school buildings. However, the state directed that, by 1970, each elementary school district must provide a kindergarten program, thereby further stretching the district's resources. By 1969, the district had developed a 45-15 plan for the total school district, the first of its kind in the country, after an analysis of rescheduled school calendars of the past 70 years. In theory and practice, only 75% of the student body is in attendance at any one time in the school year. The school plant operates on a year-round basis, with students in each of four groups attending school for 45 days and being off for 15 days. Efforts are made to include children from the same family and/or neighborhood in the same attendance group. The main reason that this community sought this alternative was to avoid the additional tax burden of building new facilities to service the increasing student population, in particular the new kindergarten students.

The development of 45-15 achieved three major innovations which overcame the drawbacks of earlier YRS plans and contributed significantly to the growth and popularity of YRS today. The 45-15 plan provided:

- a summer vacation for all children;
- a rescheduled school year which does not necessarily accelerate students out of a school system at too early an age;
- a series of shorter and more frequent vacations than the traditional school schedule.

The 45-15 plan and subsequent revised school schedules had an important effect on people's attitudes toward YRS: they made YRS more acceptable. School districts began to realize that YRS had an inherent value. While most YRS programs continued to be implemented out of necessity as responses to fiscal crisis and overcrowding, YRS began to achieve legitimacy as a desirable and even preferable school schedule. Districts which did not have to revise their schedules began to do so, and those districts which were forced to implement a YRS plan began to concentrate more on the curricular potentials of such a program and found they yielded many positive benefits. Districts also began to reconsider the values of some of the earlier YRS plans tried in the 1950s and 1960s and many of these wer implemented successfully.

For example, in 1968, Atlanta instituted a four-quarter plan at the high school level aimed at greater flexibility and responsiveness to individual student needs. This plan was developed as a response to the perceived wide range of lifestyles and changing needs of the many communities and individuals within Atlanta, and continues today. Students are allowed to develop their own schedules and may combine work with school, accelerate, remediate or attend a traditional school program. Courses have been structured and students progress through the school system at their own pace. This means they may attend all four quarters or fractions of quarters, just so long as they satisfy the state's requirements regarding minimum annual or daily hours of instruction.

Atlanta was one of the first school systems to begin a YRS program because it was considered more relevant to the needs of 1970 than the traditional calendar. The cultural upheavals of the late 1960s and early 1970s caused other school districts to look toward YRS for the same reasons.

In 1969, the first national conference on year-round schools was held in Fayetteville, Arkansas. By 1974, 19 states had re-written old laws and regulations to incorporate year-round education programs into their statutes. By this time there were approximately 100 operational YRS programs in the country with an additional 96 districts either conducting feasibility studies or planning or implementing some form of YRS or extended school year program.

These figures differ from those shown in the Third Annual Survey of State Education Agencies conducted by the New Jersey Department of Education, 1975. We chose to use a more narrow definition of YRS than that used in the survey. For instance, we consider the only YRS program in Georgia to be that operating in the Atlanta Public School system. The other 61 districts in Georgia tallied as operating YRS programs in the Annual Survey organize their curricula by quarters, but attendance in the quarters is not staggered nor are the summer quarters tuition-free. Therefore, these 61 districts do not by our definition offer YRS programs.

2.6 Conclusions

Historically, communities turned to YRS when they were faced with an influx of new students (as at the end of both World Wars, or during periods of heavy immigration) or a teacher shortage, or wished to maximize existing school facilities while postponing the building of new facilities. Only in recent times (the Atlanta reorganization of the total curriculum is the major example) have school systems viewed year-round schools, by our original definition, as a means of upgrading the quality of the curriculum.

Past YRS programs were primarily independent, unconnected responses to crises, and as such were generally considered to be temporary adjustments to the school year. Not until the advent of 45-15 did the concept of YRS begin to achieve legitimacy as a permanent change in a school district calendar.

Questions have been raised as to how educationally and socially sound the traditional school schedule is in view of today's urban, industrialized society. Is the traditional calendar a social anachronism maintained into the late 20th century out of custom?

The 45-15 plan and the three innovations it achieved provided educators with the impetus to address this question by implementing a variety of YRS programs. Consequently, YRS has grown dramatically since 1968 as an increasing number of educators recognize that YRS is potentially a viable means of addressing not only the economic problems of school districts today but also the necessity for education to be relevant and responsive to the needs of individual students and their families.

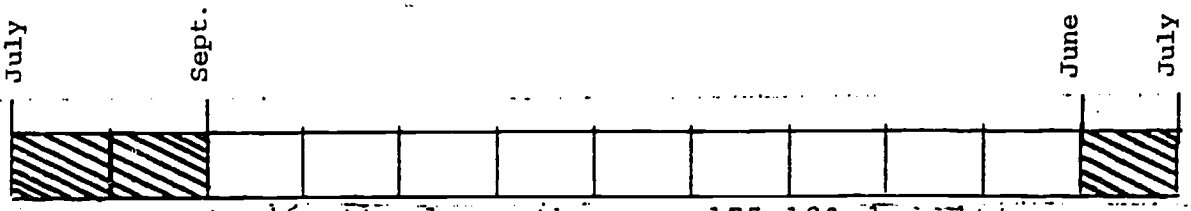
The growth of YRS is the most recent variation on a theme which has recurred throughout this history--in the development of the early summer schools and early experiments with rescheduled school years--that schools should respond to the ever-changing social and educational needs of their students.

2.7 Year-Round School Models

In completing the history of YRS, this section contains brief descriptions of YRS models currently in use. These descriptions illustrate the innovative, imaginative ways in which school districts are approaching a rescheduling of the school year. Diagrams of each of the models discussed here and a diagram of the traditional school year follow this page. In addition, a map indicates the location of all YRS programs, by model, operating in the United States in 1975. Note that the major clusters of programs are in California. A more complete discussion of geographic location with accompanying maps may be found in Appendix A of this volume.

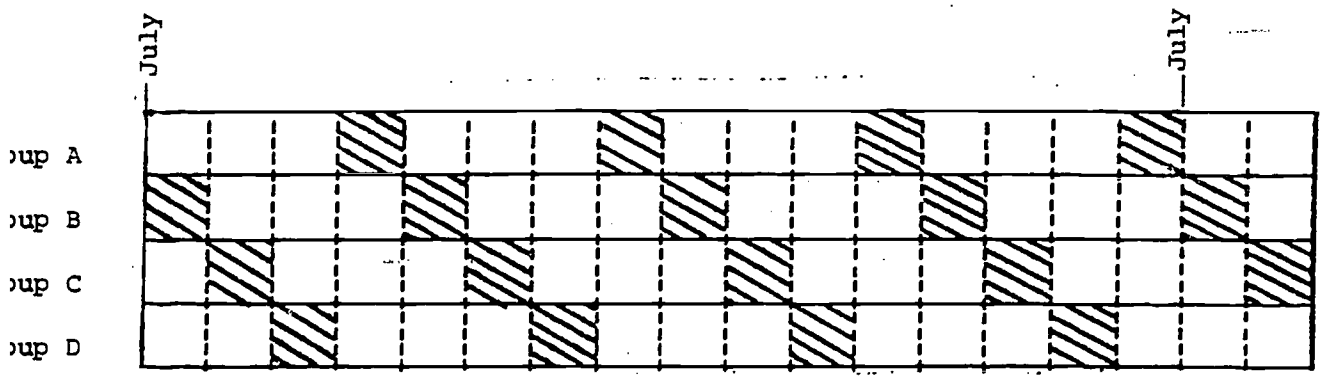
YEAR-ROUND SCHOOL MODELS
CURRENTLY IN USE

DIAGRAM 1
Traditional School Year



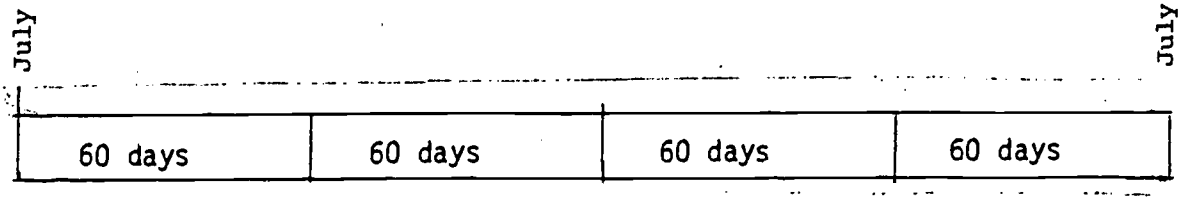
All students in attendance the same 175-180 days between September and June and all have common summer vacation between June and September.

DIAGRAM 2
"45-15" School Year

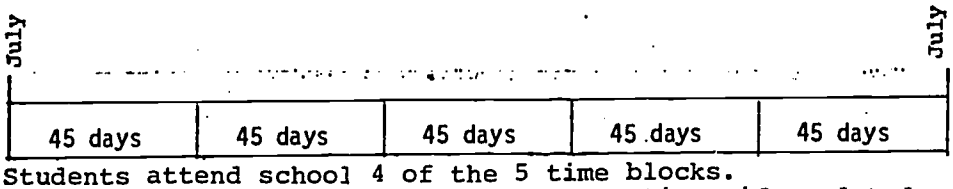


Student body equally divided into 4 groups.
Each block represents 15 days, therefore students attend school 45 days and then have a 15 day vacation.
One-fourth of students always on vacation, if mandated.

DIAGRAM 3
Four Quarter School Year

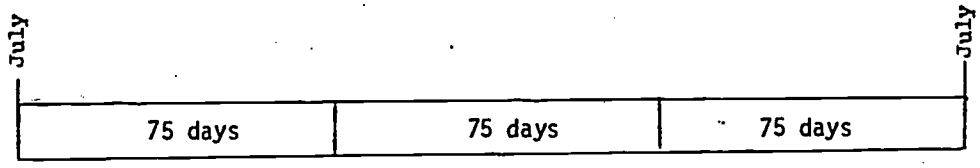


Students attend school 3 of the 4 quarters.
One-fourth of students always on vacation, if mandated.



Students attend school 4 of the 5 time blocks.
One-fifth of the students always on vacation, if mandated.

DIAGRAM 6
Trimester School Year



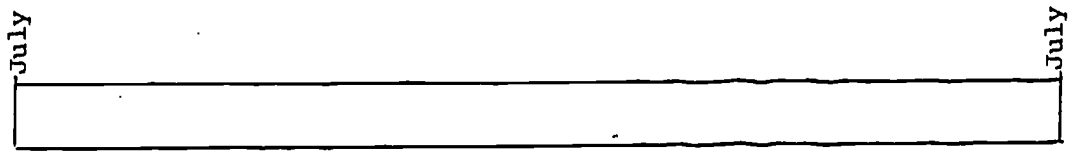
Students attend school 2 of the 3 terms.
One-third of students always on vacation, if mandated.

:forts as Leing very well planned and complete. An
:planation for the quality of the study may be that Elk
:ove's efforts were facilitated by the receipt of an ESEA
.tle III grant to be applied toward its study of YRS as well
; technical assistance from the State Department of Education.

.ements of Elk Grove's 45-15 feasibility study included:

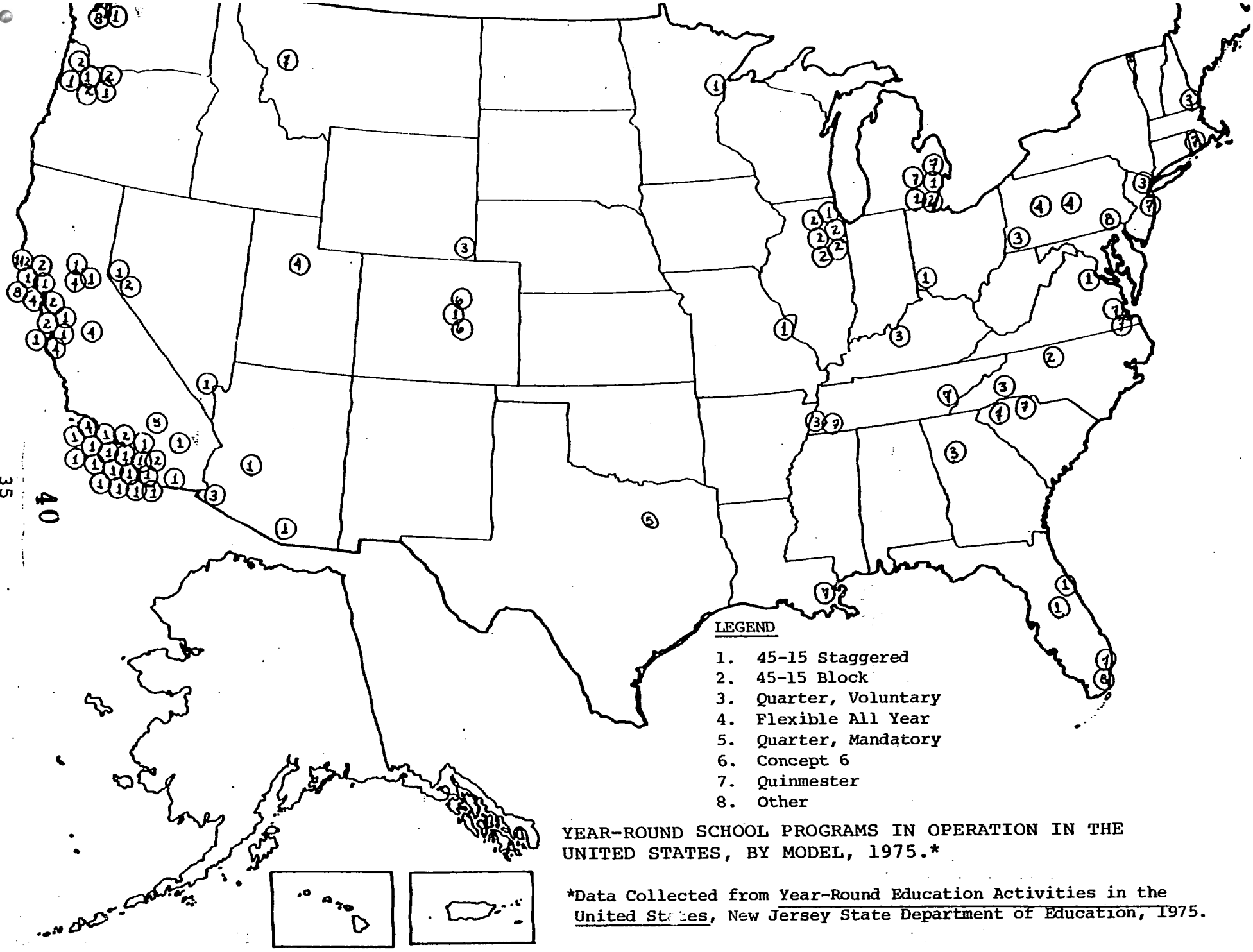
- needs assessment and goal setting
- economic feasibility study
- development of a computer program capable of

DIAGRAM 7
Flexible Year-Round



School in operation approximately 50 weeks.
Attendance patterns and vacation schedules are entirely dependent on the needs and desires of the student.

Diagrams 1-5 are part of the report Year Round Schools: Models and Issues, prepared by the National Council for Year Round Education, May 1975.



YEAR-ROUND SCHOOL PROGRAMS IN OPERATION IN THE UNITED STATES, BY MODEL, 1975.*

*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.

Various models of YRS were developed in response to what communities and school administrators recognized as faults or drawbacks in the four-quarter plan. Where new models were developed, the community typically recognized a problem, identified its own particular educational, economic, and social needs and priorities, and after consideration of available year-round education models, developed one of its own which better responded to community objectives and concerns.

These YRS programs may have either mandated or voluntary schedules. When a schedule is mandated, the school district assigns students to a particular combination of school terms and vacations. Mandated YRS programs generally occur in those districts where economy is of primary importance because by staggering the attendance of students among the school terms throughout the year, the most economical combination of students, teachers and educational resources may be maintained. If economy and space savings are not of primary importance or are not immediately critical, a YRS program may be voluntary. A voluntary program means that students are either allowed to decide what terms they will attend in a school year or whether they will attend a YRS or a traditional school in the system.

Educational innovations do not necessarily occur simply because the school year is rescheduled. Unless a new school schedule is accompanied by curricular planning and redesign, teacher training and the development of appropriate instructional materials, meaningful educational gains with the most innovative, and flexible school schedule will not follow automatically.

The 45-15 model first implemented district-wide in Valley View, Illinois is currently the most popular YRS model and is implemented primarily at the elementary level. It breaks the school year up into a series of 45-day instruction periods alternating with 15-day vacations. The 15-day vacations may

be used as optional periods for enrichment, remediation, or acceleration. If the 15 days are used strictly for vacation and students are evenly divided into groups, theoretically a 33% facilities savings can result.

This model is favored at the elementary level because it has been hypothesized that students forget less over short three-week vacations and that therefore teachers can cover more new material each new 45-day period. It is not as popular at the secondary level because the frequent opening and closings of instructional periods and the usual wide array of course options available in the high school place a great strain on its scheduling, registration, and testing processes, and probably increase costs. Also, 45-15 does not easily lend itself to a combination of work and study throughout the school year nor do the series of short vacations facilitate the high school student's finding a lucrative job during those periods.

Of the YRS models in use today, the four-quarter plan is the most familiar and oldest. Although earlier it was used primarily to alleviate overcrowding through student acceleration or as a source of remediation, it is used most frequently today at the secondary level for the purposes of curricular innovation, as is occurring in Atlanta, Georgia.

Where economy is also an important factor, attendance on the four-quarter plan is mandated and the student body is divided into four equal groups and assigned three quarters of instruction and a quarter of vacation. To achieve the greatest savings, 25% of the student body should always be on vacation. Theoretically this arrangement will yield a 25% savings in capital outlay by more fully utilizing the physical plant and reducing the required number of teachers by 25%.

The four quarter plan provides increased opportunities for work/study combinations. Those students who are assigned a vacation

quarter should find it easier to locate a job with fewer students competing at one time for employment. Those students who determine their own schedule may find it feasible to combine work with study on a daily basis if they spend less time per day in class and spread class attendance out over the four quarters. Such an arrangement has very positive implications for the disadvantaged student who must work, but who would like to go to college. Often, such students find that the economic demands in their life take precedence over education and their desire for further education or even a high school diploma are frustrated by such demands.

Concept 6 is a very new model, developed as an alternative to 45-15. As the term Concept 6 implies, the school year is divided into six terms of instruction, each consisting of approximately 45 days. The student body is divided into three equal groups, and each group must attend four of the six terms. Depending on the degree of need to economize a fifth term may also be available to students on an optional basis.

When economics are of primary importance, student attendence is staggered and each group of students goes to class for two periods of 90 days and has two 45-day vacations in between.

The advantage of Concept 6 over 45-15 is that potentially it can effect a 33% facilities savings and that it provides a more traditional vacation pattern. Because student vacations are scheduled for approximately every 90 days, all students have two seasonal vacations--one in warm weather and one in cool weather. An additional advantage of Concept 6 is that it eliminates the frequent scheduling and grade recording of 45-15. It is, therefore, a more feasible model for secondary schools and provides two opportunities for work experience in a school year.

The Quinmester Model is a variation where the school year is divided into five 45-day quins and students must attend four.

If entry time is staggered so that 1/5 of the student body is on vacation at any one time, a 25% space saving should result. Again, if economy is not the prime motivation, students are able to attend a fifth quin.

Dividing a year into a series of 45-day quins provides opportunities for developing shorter, more intense courses than are available with the traditional calendar, an option particularly attractive at the high-school level. It also provides a 45-day period of time for a combination work/vacation.

The YRS education model which seems to be the least popular is the Trimester. In it, the school year is divided into three terms of approximately 75 days apiece, with a small increase in the length of each school day so that state minimum standards are met. Students must attend two of the three terms, and their attendance pattern may be mandated and staggered or voluntary. The third term may be available to students; but, if a district wishes to achieve maximum savings, it should guarantee that 1/3 of the total student population is always on vacation. This plan has basically the same advantages and disadvantages of the four-quarter plan but is not combined as easily with a 45-15 plan or a Concept 6 if a school district so desires.

Some school districts use year-round schools to achieve ultimate flexibility in calendar and curriculum. These districts have developed models which maximize a school's responsiveness to each student even though costs may rise. They all seek to discard any notion of blocks of time within a school year; i.e., quins, quarters, 45-15 terms, etc. Some educators believe that these arbitrary assignments of time hinder continuous, individualized progress. Such a model is the Flexible Year-Round model in which the school is in operation approximately 50 weeks per year. Attendance patterns and vacation schedules are left up to the discretion of the student entirely, so long as the state minimum requirements are met. Students are actually encouraged to attend

more than the minimum number of days. The curriculum is totally restructured to facilitate continuous progress on an individualized basis.

Such a plan permits students to begin the school year at any point and to select courses, attendance patterns, and vacations as their needs dictate. Course lengths vary, and students progress at their own pace. Such an arrangement allows a student to select a traditional calendar, a shortened calendar, or an extended calendar. Options are generally available for enrichment, remediation, or acceleration experiences.

Each of the year-round school models discussed has unique advantages or disadvantages. However, certain statements can generally be made about various YRS models in general.

- The school year is at least as long as the traditional school calendar but is divided differently, so that students spend at least as much time in year-round schools as in traditional ones, though time is distributed differently;
- Transfer into a school and course work make-up due to illness or failure are all facilitated by an increase in the number of divisions in the school year provided the school is large enough to provide the same course selections in each division, or at least several times a year;
- Increased divisions in a school year provide more frequent evaluation periods for students, but concurrently require increased staff work in the areas of record-keeping, grading, testing, and scheduling;
- The more flexible and more individualized the curriculum and calendar, the greater the need for student guidance, counseling, and support at both the school and family levels;
- Start-up costs, increased maintenance and transportation costs, and air-conditioning installation may increase operational costs and cancel out the potential savings of a plan;
- Extra pay for teachers for additional days of instruction may negatively effect the potential savings of a plan;

- Extracurricular activities, sports, recreation department programs, and camp schedules may need to be revised or adjusted;
- Depending on the degree of structure within a plan, curriculum innovation and the development of new teaching materials may be necessary or remain simply an option;
- Communication with students and their parents is a problem when the students are off-track (i.e., on vacation);
- YRS responds to the criticism of voters that schools are not using their facilities and educational resources to their fullest extent.

3.0 Current State of Year-Round Schools

3.1 Approach

In developing YRS information for this study, a series of activities were conducted as described in the Introduction to this volume. The information acquired is limited in that specific data sought for the 24 school districts were not always maintained in district records, and if recorded, did not always contain the degree of detail desired, or were recorded in a way which hindered comparability among the districts. In those cases where records were not available or were inadequate sources of data, school district personnel became primary sources.

This chapter presents the YRS data developed from the 24 representative school districts studied, in addition to a substudy of YRS activity in California. The data are presented as follows:

- 3.2 Year-Round School Case Studies
- 3.3 Comparative Analysis of 24 School Districts
- 3.4 California Substudy
- 3.5 Critique of YRS Evaluations Conducted by School Districts

3.2 Year-Round School Case Studies

So that the range of year-round school programs and activities may be fully appreciated, and the meanings of the three major categories of YRS programs--successful, nonimplemented, and discontinued--clearly delineated, case studies representing each type of YRS program are presented in this section.

3.2.1 Chino, California - A District with a Successful Year-Round School Program

Chino, California is a suburban community with a population of approximately 57,000 people. Although the majority of Chino's

inhabitants are classified as "other white," a sizeable number of them are "Spanish-speaking." Chino's residents represent a wide variety of socioeconomic levels.

In the early 1970s Chino began to experience rapid growth. The land which was once largely dairy farms began to be divided up into suburban tracts when former residents of Los Angeles moved out toward the North. As many of Chino's dairy farms were subdivided, a significant number of the Mexican-American migrants who had worked these farms took jobs in industry in the area and became permanent residents of Chino.

As the district's student population expanded, school administrators recognized that more efficient use would have to be made of school facilities, especially at the elementary levels. Administrators therefore investigated the possibilities of 45-15, which had already been successfully implemented in a variety of California elementary schools. A feasibility study was conducted and the public was surveyed to determine its reactions to such a plan. In support of its preparations for YRS, Chino received both financial and technical assistance from California.

Chino decided to implement a voluntary 45-15 program in two elementary schools housing grades K-8 beginning with the 1973-1974 school year. Once this decision was made, teacher training sessions were held, curricula revised, teacher contracts and negotiations or adjustments made, a public relations effort launched, and additional surveys conducted of community attitudes toward the model. The citizens were not directly involved in Chino's planning activities, but they were told about the program through public information and PTA meetings. Initially, only 1,300 students were involved, but for the year following initial implementation, 45-15 was expanded to seven additional elementary schools and grade nine in the high school. This expansion raised the total number of students involved to 7,600.

Overall, Chino's YRS program is viewed very positively by district residents. However, a vocal minority--those people who prefer their children to attend a traditional school program--have raised objections to YRS. The children who want a traditional program are generally bused out of their neighborhoods and the busing upsets their parents.

YRS has alleviated Chino's space problem at present. If another student population boom develops, Chino plans expansion of YRS to additional schools. Teachers and students both find the new school schedule to be more stimulating and see advantages in the new curriculum.

3.2.2 Champlain Valley Union High School District - A District with a Discontinued YRS Program

The Champlain Valley Union High School District serves five suburban-rural communities in the Lake Champlain area. In the face of a rapidly growing enrollment due to the expanding and new industries in the district, an additional high school was proposed. In 1968 the voters failed to pass a bond issue for the school and the Board of Education formed an Ad Hoc Committee to look into alternative ways of handling the space problem.

This Committee, in reviewing YRS literature, came across the 45-15 plan. Attracted to it not only because it was a potential space saver, but also because it had possibilities for curriculum innovation, the Committee studied the 45-15 plan in depth. The Board stipulated that the Committee had to keep the public informed while studying and then planning for 45-15. Although 45-15 had already been implemented in several elementary districts in the U.S., it had not been implemented at the high school level. Consequently many of the problems and details unique to 45-15 at the high school level had neither been identified nor worked out at the time the Committee began its study.

The necessity for the Committee to "feel its way" through the planning of 45-15 while simultaneously informing the public of its actions and progress created a situation in which the Committee's activities and decisions were viewed by the public as being unsystematic and disorganized. The Committee, on the other hand, perceived its progress as orderly and logical in view of the new ground it was breaking in YRS.

Coupled with the public's negative interpretation of the Committee's activities was the Committee and Board's misinterpretation of the public's basic attitude toward the plan. Despite a series of public meetings and a non-binding referendum to measure opinion toward YRS, the public's unhappiness with the way in which 45-15 was being planned for did not register clearly with the Board. Consequently, when the Board announced plans to implement 45-15, the community became embroiled in heated controversy over the way the Board had handled the study of YRS, culminating the next year with the Board's rescinding its decision.

Interest in YRS continued, however, and new committees were formed to study YRS, including this time not just representatives from the administration and School Board but also representatives from the high school faculty, students, and community. Working together they determined exactly what sorts of opportunities they would like their high school to provide students and what school schedule would best fit these goals. What resulted was the development of the Multiple Access Plan which divides the year into 15 nine-week terms. Students are required to attend four of these terms in any combination they desire. A fifth term is available as an option. Such schedule flexibility and the innovative curriculum developed by the teachers allowed students within the Multiple Access Plan to attend on a traditional schedule, an accelerated schedule, or a wide variety of individualized schedules.

The Multiple Access Plan was implemented in the fall of 1972. Despite its promise as an ultimately flexible, innovative schedule, it lasted only about a year. The plan was discontinued because, although residents desired to have a non-traditional schedule available to students and although an array of outdoor activities is available throughout the year in the area, most students simply did not choose to attend school on a non-traditional schedule. In essence, the very nature of the Multiple Access Plan--an innovative, flexible, non-mandated program--worked against the most pressing goal of YRS in this district--to use the school facility most efficiently. Multiple Access made it too easy for students to continue attending school in the way they were used to, i.e., the traditional school schedule.

3.2.3 Elk Grove, California - A School District Which Studied but Did Not Implement YRS

Elk Grove, California is a community located about ten miles down the freeway from Sacramento. About a decade ago it was largely farmland but due to its proximity to an urban center, its rural nature began to disappear as developers purchased the land and built homes on it. As Elk Grove became suburban, the school-aged population swelled beyond the capacity of its schools.

This problem became especially acute in Elk Grove's single high school. District administrators, in searching out ways to handle overcrowding in the high school, decided to investigate the possibilities of YRS. In 1970, a Year-Round School Study Committee reviewed various YRS models and recommended that 45-15 be studied further. A second committee was subsequently set up to include interested citizens in the study of 45-15.

The study Elk Grove conducted of the feasibility of 45-15 at the high school level stands apart from most other districts'

efforts as being very well planned and complete. An explanation for the quality of the study may be that Elk Grove's efforts were facilitated by the receipt of an ESEA Title III grant to be applied toward its study of YRS as well as technical assistance from the State Department of Education.

Elements of Elk Grove's 45-15 feasibility study included:

- needs assessment and goal setting
- economic feasibility study
- development of a computer program capable of creating a master schedule for 45-15
- preparation and distribution of district-wide opinion survey
- curriculum revision and development of instructional aids
- development of appropriate management and accounting procedures
- staff training and orientation
- dissemination of information to public through preparation of newsletters and news releases.

Despite the breadth of activities conducted by Elk Grove in its feasibility study and its attempts to include citizens in the study and keep the general public informed, negative public opinion defeated YRS in this district.

The mismanagement of the public relations effort appears to have been the downfall of YRS. Rather than stressing the potential value of YRS as a way of making the curriculum more exciting and relevant to students and thereby portraying YRS as inherently desirable, district administrators approached the subject in much the same fashion as the administrators of YRS programs in the past. They tried to portray YRS as a temporary measure to be continued until a new high school was built. Because this approach did not clearly define for citizens the educational values of YRS, and because they were willing to pay for a new high school, citizen reaction to the study was generally that it was a waste of time and effort.

Double shifts or extended days seemed to them to be a more reasonable temporary solution.

Citizens perceived a dichotomy between what the administrators said YRS was to accomplish and the effort expended on its study, especially in view of public willingness to allow double or extended sessions until the new high school was built. They concluded that the feasibility study was in fact "window dressing" for a decision already made--to implement 45-15. Discontent grew as opponents pointed out that the mandatory nature of the proposed plan for Elk Grove's only high school precluded attendance options for students; also, with high schoolers assigned to one schedule and grade schoolers on another, traditional schedule, it was possible that families with children of both ages would not be able to take vacations together. The proponents of Elk Grove's very successful athletics program feared it would be destroyed by YRS, while the small farm community which remained in Elk Grove decried the loss of farm labor which they felt 45-15 would cause.

When a vote was taken on 45-15 in Elk Grove, the margin was 4-3 in favor of not implementing YRS. While the mechanics of planning for such a program had been well planned and executed, the sensitive and crucial area of public relations had been poorly dealt with. In the end, emotionalism based on a misunderstanding of the potential of YRS defeated it in Elk Grove.

3.3 Comparative Analysis of 24 School Districts

The aggregate data presented here for the 24 school districts studied by project staff provide a sense of the variety of YRS plans and activities comprising the YRS movement today. A list of the 24 districts with demographic and programmatic data for each is presented graphically following this page.

YRS is primarily a suburban phenomenon but it is also occurring in urban and rural districts. The people who reside in districts with YRS programs are employed in a wide range of

DEMOGRAPHIC DATA FOR SCHOOL DISTRICTS IN STUDY

		Total Population* (Most Recent Data Available)	Community Type: Urban	Community Type: Suburban	Community Type: Rural	Ethnic Breakdown: Black	Ethnic Breakdown: Spanish Speaking	Ethnic Breakdown: American Indian	Ethnic Breakdown: Other White	Ethnic Breakdown: Other	Occupational Characteristics: Professional	Occupational Characteristics: Blue Collar	Occupational Characteristics: Agricultural	Occupational Characteristics: Migrant	Occupational Characteristics: Military	Occupational Characteristics: Tourist Related	Occupational Characteristics: Broad Spectrum	# Schools in District	# Schools in Yrs at Start of Program	# Schools in Yrs after Expansion	# Students in District*	# Students Attending Yrs at Schools at Start of Program*	# Students Attending Yrs at Schools After Expansion*	# Disadvantaged in District*	% Disadvantaged in Yrs	Grades Affected at Start of Program	Grades Affected After Expansion	Motivating Issue: Economic	Motivating Issue: Educational	Motivating Issue: Other
SUCCESSFUL																													
Hesperia, CA	1	105		✓		<1%	27%	<1%	99%		✓	✓	✓					3	3	N.E.	1.0	N.E.	1.0	.17	100%	K-6	N.E.	✓	✓	
Chino, CA	2	57.0		✓		<1%	27%	<1%	68%		✓	✓	✓					17	2	9	8.8	1.3	7.6	.96	79%	K-8	K-12	✓	✓	
Corona Norco, CA	3	14.0		✓		<1%	25%		75%		✓	✓	✓					28	4	16	15.6	.8	7.3	N.A.	N.A.	K-9	K-12	✓		
Chula Vista, CA	4	110.0		✓		10%	20%		65%	5%	✓	✓	✓					76	4	7	N.A.	4.0	5.3	N.A.	N.A.	K-6	K-8	✓		
Hayward, CA	5	24.0		✓		4.5%	19.2%	<1%	74%	39%	✓	✓	✓					34	1	N.E.	13.0	.4	N.E.	0	0	K-6	K-8	✓		
La Mesa-Spring Valley, CA	6	75.0		✓		<1%	10%		90%		✓	✓	✓					22	3	4	15.0	2.0	2.7	2.3	24%	K-8	K-8	✓		
Pajaro Valley, CA	7	900		✓		<1%	50%		50%		✓	✓	✓					21	5	N.E.	13.0	2.5	N.E.	3.5	25%	K-8	N.E.	✓		
Colorado Springs, CO	8	200.0		✓		6%	9%	.3%	84%	.8%	✓	✓	✓			✓		50	2	5	35.0	2.0	5.2	5.4	0	K-8	K-8	✓		
Molalla, OR	9	NA			✓			<1%	99%	<1%	✓	✓	✓					1	1	N.E.	1.1	1.1	N.E.	.07	100%	1-8	N.E.	✓		
Mesa, MN	10	75			✓	<1%			99%	<1%	✓	✓	✓					4	1	N.E.	1.9	1.0	N.E.	.197	85%	1-6	N.E.	✓		
Frances Howell, MO	11	160			✓	<1%	<1%		99%	<1%	✓	✓	✓					8	2	4	5.0	1.9	3.1	.755	10%	1-6	1-8	✓		
Northville, MT	12	12.0				<1%			99%		✓	✓	✓					8	1	4	4.5	.2	1.3	N.A.	N.A.	K-5	K-12	✓		
Valley View, IL	13	42.0			✓	5%	7.5%		85%		✓	✓	✓					11	6	11	13.0	8.0	13.0	2.0	100%	K-8	9-12	✓	✓	
Prince William County, VA	14	160.0			✓	7%	1%		92%		✓	✓	✓					44	4	5	41.0	3.8	7.2**	0	0	1-8	K-12	✓	✓	
Atlanta, GA	15	500.	✓			88%	<1%		10%	<1%							✓	185	25	13**	138.0	13.4	U.E.**	N.A.	N.A.	8-12	U.E.**			
DadeCounty, FL	16	1,000	✓			← (57%→			35%								✓	225+	7	25	240.0	14.0	(45.7	N.A.	N.A.	7-12	K-12	✓		
Hudson, NH	17	8.0		✓		<1%			99%		✓	✓						4	1	N.E.	8.5	1.5	N.E.	0	0	9-12	N.E.	✓		
DISCONTINUED																													
Milpitas, CA	18	30.0		✓		1%	16%		77%		✓	✓	✓					16	16	N.E.	10.0	10.0	N.E.	1.0	100%	K-12	N.E.	✓		
Loudoun County, VA	19	42.0		✓		12%	<1%		85%	<1%	✓	✓	✓					24	4	N.E.	11.6	3.7	N.E.	N.A.	0	1-8	N.E.	✓		
Virginia Beach, VA	20	220.0		✓		15%			85%		✓	✓	✓					48	4	U.E.	48.0	6.0	U.E.	2.4	10%	K-7	U.E.	✓		
Champlain Valley, VT	21	10.0			✓	<1%			99%						✓			6	1	N.E.	3.3	.03	N.E.	N.A.	N.A.	9-12	N.E.	✓		
NOT IMPLEMENTED																													
Elk Grove, CA	22	40.0			✓	2%	9%		85%	3%	✓	✓	✓					18			11.0			N.A.				✓	✓	✓
Roswell, NM	23	45.0			✓	4%	31%		65%		✓	✓	✓					22			10.1			.7				✓	✓	
Pennsbury, PA	24	52.0		✓		<1%	<1%		99%		✓	✓	✓					18			14.0			0				✓	✓	

— * Numbers Given in Thousands
** Program declined in both number of schools and number of students
N.A. = Not Available N.E. = No Expansion ↓ = Overcrowding 2 = Cost Effectiveness 3 = Greater Ethnic Balance

Programmatic Data for School Districts in Study

No.	District	Model	Mandatory	Voluntary	Pre-Model Planning: Feasibility	Pre-Model Planning: Surveys	Pre-Model Planning: Analysis/Implementation	Pre-Model Planning: Other	Citizen Involvement: All Phases	Citizen Involvement: After Model Selection	Citizen Involvement: None	Pre-Model Implementation Planning: Curriculum	Administration Reorg.	Teacher Training	Contract Negot./Modif.	Computer Scheduling	Public Relations	Survey	Other	State Support for YRS: State $	Technical Asst.	Legislation	Other	Federal Support for YRS: Title I	Title IV	Title III	Other	Major Problem	Reason for Success
	SUCCESSFUL																												
1	Hesperia, CA	45-15	X		X	X	X				X			X			X					X							
2	Chino, CA	45-15		X	X	X	X				X	HS		X	X		X	X	PUBLIC INFO MEETINGS	X		X						TRACK BALANCE	INTEREST
3	Corona Norco, CA	45-15		X	X	X	X	PUBLIC MEETINGS		X		X	X	X	X		X	X	STUDENT ORIENTATION	X		X						TRACK BALANCE	INTEREST/RESPONSE
4	Chula Vista, CA	45-15	X		X	X	X				X	X	X		X		X		PUBLIC MEETINGS			X						TRACK BALANCE	
5	Hayward, CA	4 Quarter	X		X	X					X	X		X			X			X		X				X		TEACHER FATIGUE	FLEXIBILITY
6	La Mesa-Spring Valley, CA	45-15		X	X	X	X	PUBLIC MEETINGS			X	X	X		X		X	X	PARENT "COFFEES"	X		X							
7	Pajaro Valley, CA	45-15		X	X	X	X		X					X	X		X		COORD OF REC. W/45-15	X	X	X				X			
8	Colorado Springs, CO	Concept 6 / 4 Quarter	X		X		X	PUBLIC MEETINGS	X			X			X		X			X		X				X		SAME FAMILY ON DIFFERENT SCHEDULES	COMMUNITY SUPPORT
9	Molalla, OR	45-15	X					SITE VISITS			X								PUBLIC INFO MEETINGS			X						NEED MORE ADMIN & SEC. HELP	SMALL TOWN
10	Mora, MN	45-15	X				X				X				X				PUBLIC INFO MEETINGS			X		X		X		TRACK BALANCE	SMALL TOWN
11	Francis Howell, MO	45-15	X			X	X				X				X				PUBLIC MEETINGS				DANFORTH FOUNDATION GRANT					ISOLATION OF PROGRAM	WIDE SUPPORT
12	Northville, MI	45-15		X	X	X	X	PUBLIC RELATIONS	X			X		X	X		X		PUBLIC MEETINGS	X		X				X		H.S. CLASS/STUDENT SCHED – TRACK BALANCE	
13	Valley View, IL	45-15	X		X	X	X	PUBLIC MEETINGS			X				X		X		PLANNING YRE REC. ACTIVITIES			X					FED. $ FOR FEASIBILITY STUDY	TRACK BALANCE	WIDE SUPPORT
14	Prince William County, VA	45-15		X	X	X	X				X			X	X	X	X	X	PARENT MEETINGS	X	X			X				TRACK BALANCE	
15	Atlanta, GA	4-Quarter		X	X		X				X	X		X	X	X	X		PUBLIC & PTA MEETINGS									CLASH BETWEEN URBAN/RURAL LEVELS	
16	Dade County, FL	Quinmester		X	X		X				X	X	X		X	X	X			X		X							STUDENT/TEACHER ENTHUSIASM
17	Hudson, NH	4-Quarter		X	X		X		X			X	X	X	X	X	X		PUBLIC MEETINGS	X	X							COUNSELING BURDEN FOR TEACHERS	
	DISCONTINUED																												
18	Milpitas, CA	45-15	X		X	X	X	PUBLIC + PTA MEETINGS			X			X	X		X	X	PUBLIC & PTA MEETINGS	X		X						TRACK BALANCE	
19	Loudoun County, VA	45-15	X		X	X	X	SITE VISITS			X	X		X	X		X	X	PUBLIC MEETINGS	X								LACK OF ATTENDANCE OPTNS – ENTIRE DIST. NOT ON YRE	
20	Virginia Beach, VA	45-15	X		X	X	X				X	X	X	X	X		X	X	PUBLIC MEETINGS	X	X							TRACK BALANCE – CITIZEN SUPPORT – MOBILE POP.	
21	Champlain Valley, VT	Multipl. Access		X		X			X			X		X	X		X		PUBLIC MEETINGS									LACK OF PARTICIPATION	
	NOT IMPLEMENTED																												
22	Elk Grove, CA	45-15			X	X	X		X					X	X	X	X		FINANCIAL ANALYSIS							X			
23	Roswell, NM	45-15			X	X	X				X	X					X	X	PUBLIC MEETINGS	X						X			
24	Pennsbury, PA	45-15			X	X	X				X	X								X		X				X			

HS = High School

occupations. Although nearly every district studied, except the most urban, termed itself middle class, occupational data indicate that some districts are primarily blue collar working class (Valley View, Illinois) and that others are heavily professional (La Mesa-Spring Valley or Hayward, California). Several districts indicated that they have a sizeable military population (Virginia Beach, Virginia and Colorado Springs, Colorado). The populations of the rural districts generally comprise small farm owners, a scattering of professionals, and blue collar workers, and in California, migrant workers as well.

The ethnic composition of these districts is overwhelmingly white in all but the urban areas. The difficulty encountered in obtaining consistent data prevents a systematic analysis of ethnic makeup by total school district population, but it is safe to say that all of the districts except Atlanta and Dade County are predominantly white. Atlanta has a very large black population and Dade County has a very sizeable black and Spanish-speaking population. After the category "other white," "Spanish-speaking" is the category most highly represented. This can probably be ascribed to the predominance of California schools with YRS programs and the relatively high Mexican-American population in this state.

YRS, and the 45-15 plan in particular, has been hypothesized as serving a compensatory education function for disadvantaged children. Educators believe that if the school year is divided into a series of short terms separated by short vacations, the learning loss experienced during the three-month summer vacation of the traditional school year may be appreciably decreased. Such a potential decrease may have special significance for disadvantaged children who, lacking an educationally supportive home environment, typically return to school after vacation farther behind than their middle-class schoolmates. However, inability to acquire complete data on disadvantaged children in YRS programs prevented the investigation of this potential

relationship. Where data were available regarding how many disadvantaged children are in a school district and what percentage of these are in YRS programs, it appeared that the percentage of disadvantaged children in YRS programs is quite low. Excluding consideration of district-wide YRS programs, Chino, California and Mora, Minnesota, with 79% and 86%, respectively of their districts' disadvantaged in YRS programs, show the greatest percentages. The next highest percentage is a mere 25%. The lack of information on disadvantaged children among YRS programs and the low level of their participation in YRS may indicate a general lack of awareness among districts regarding the potential benefits of YRS for the disadvantaged.

Among the districts studied, YRS is most frequently implemented at the elementary level, generally using the 45-15 model. Of the 24 districts, 18 studied and/or implemented 45-15. All but four of these 18 districts began their programs at the elementary or elementary to junior high level. Milpitas, California began 45-15 district-wide, but the scheduling problems the program created at the high school level were one of the reasons it was discontinued. All three of those districts which studied but did not implement YRS were considering 45-15.

Of the 6 districts that did not choose 45-15, one elementary school implemented a four-quarter plan, another the Concept 6 plan. Dade County, which began its YRS for all grades, implemented a quinmester plan. Atlanta, Georgia, Hudson, New Hampshire, and Champlain Valley, Vermont began their YRS programs at the high school level. Atlanta and Hudson both began four-quarter plans, while Champlain Valley implemented a Multiple Access plan.

About one-half of the districts studied which actually implemented YRS expanded their programs over time. As the community grew to accept and understand YRS and as YRS demonstrated its effectiveness as a space and money saver or as a means to introduce educational innovations, YRS programs were either expanded to additional grade levels or to other schools in the district. Seven districts expanded both the grade levels and the total number of schools involved in a year-round school program. One of these seven districts expanded its program district-wide and three expanded the total number of schools involved. Eleven experienced no expansion at all; none of the discontinued programs expanded. Atlanta actually decreased the total size of its program by both number of schools and number of children because of a lack of state financial aid and the high cost of running the program.

Atlanta's YRS program has not only been drastically reduced in scope and size, but its very existence is threatened by the lack of interest and cooperation it receives from the Georgia state government. This threat to Atlanta's program points up what may be a contributing factor to the failure or the success and growth of YRS--the attitude of state governments toward YRS. If a state does not at least recognize the existence of YRS programs and make special provisions for them, the programs appear to have great difficulty in acquiring state aid and reimbursements during those times of the year when they are operating but traditional schools are not.

For example, the Francis Howell school district in Missouri has experienced great difficulty as the only YRS program in a state where no enabling legislation exists for YRS. Francis Howell implemented YRS as the most feasible answer to its severe overcrowding problems. Conversations with individuals in the district indicate that the establishment and continued operation of this program has demanded a constant struggle both to ensure that it receives the state reimbursements to which it is entitled

and to counteract the isolation it naturally feels as the only program of its type in the state.

The Molalla, Oregon program has had similar difficulties. While legislation has been passed in that state to allow schools which operate year-round their fair share of state aid, in reality such support has been almost impossible to receive. Lack of state aid has prevented Molalla from remedying its severe shortage of YRS-related administrative and clerical help.

These districts are in sharp contrast to those in California where the state government actively promotes YRS and assists districts in the implementation, operation, and evaluation of their programs. (See California substudy following this section.) Aside from the nine California districts studied here only eight other districts received financial and/or technical assistance from their states.

Six of the seventeen districts with successful YRS programs indicated they received federal money to study the feasibility of YRS through Title III of the Elementary and Secondary Education Act (ESEA) of 1965. Four successful programs indicated they applied Title I ESEA money to their year-round program. All of the districts which studied but did not implement a YRS program received Title III funding to conduct feasibility studies.

The school districts studied provided two basic reasons for studying and/or implementing YRS--overcrowding and fiscal indebtedness, and educational potential. Nearly half indicated they were motivated to study YRS by overcrowding and financial pressures. Nine districts stated that a combination of these factors and the educational benefits possible in a rescheduled school year motivated them. Only three turned to YRS for educational benefits alone. Finally, one district, Pajaro Valley, California, which has a very large Mexican-American

population, implemented YRS to handle its overcrowding problems and achieve greater ethnic balance in its schools. Evidence indicates that a YRS plan, if implemented properly, can facilitate integration by distributing racial groups of students evenly throughout the terms of the year.

In examining the types of YRS models implemented by a district and the factors which motivated their implementation, little relationship can be identified, given the present information. Rather than revealing that certain types of models are frequently selected to solve particular types of problems, their lack of relationship probably indicates that the model chosen is determined by the immediate practical concerns of "Will it work in our district?" or "Will the community, students and teachers like it?"

A greater causal relationship seems to exist between the reason YRS is implemented and whether a district allows its students to opt in or out of a YRS program. Of the districts which operate or operated YRS programs for space/economic reasons, all mandated student attendance in their programs; all those districts which implemented a YRS plan for a combination of economic and educational reasons chose to make attendance in their programs voluntary. Of the three that began YRS programs for educational reasons only, one district made its program mandatory and the other two provided for voluntary attendance. Pajaro Valley, motivated by a unique combination of factors, made its YRS program voluntary. It may be safe to assume from the relationships illustrated here that, where economy and space savings are of paramount concern, districts tend to mandate student attendance so that the maximum savings possible with a particular model are achieved. When such savings are not as immediately crucial or where educational gain is of greatest concern, districts prefer to make their YRS programs optional to students. In these cases, administrators probably feel that the advantages of YRS will become obvious and attract a satisfactory number of students to the various terms throughout the year.

School districts conduct a wide variety of activities when investigating the possibilities of YRS and planning for its actual operation. The majority of the school districts studied conducted feasibility studies to weigh the pros and cons of YRS and its various models. These feasibility studies ranged in scope and content from informal and cursory looks at what was currently being done to an analysis of projected costs and impacts on school and community.

In total, 16 of the 24 districts with YRS programs conducted surveys of the community, teachers, parents, and businesses to ascertain their views on year-round schools. Previous to this, 18 of these 24 also either implemented or seriously investigated other ways of solving their district problems or achieving educational goals, and found them unsatisfactory. Among the alternatives studied and/or implemented were double sessions, extended school days, or another form of year-round education.

Once a particular YRS model is selected, a school district begins to plan for its implementation. Of the 21 school districts which implemented a YRS program, 20 revised their school curricula in varying degrees. Eight of these districts had indicated economic and space savings to be their major goal. Their willingness to incur the initial added costs of curricular revision may indicate either that they considered such revision necessary for YRS to operate smoothly and effectively, or that they may in fact have viewed YRS as an opportunity for educational innovation as well as for economizing.

Very few of the districts studied found that YRS necessitated any sort of administrative reorganization, whether this involved the hiring of new personnel or the development of a whole new office or department to handle the needs of their year-round school programs. Also, few found a computer necessary to handle student course scheduling, entry and vacation schedules, or grade recordings. Almost half of the districts indicated that before the start of their YRS programs, their teachers were

involved in teacher training/orientation sessions to familiarize them with the operational and educational aspects of the particular plan being implemented. Some sort of teacher contract modification also occurred in the majority of school districts prior to the onset of YRS. Modifications ranged from contract renegotiation to the addition of clauses to the original contract to provide additional pay for additional days worked beyond the standard work year.

Public relations appears to have been an important activity in all of the school districts. From phone conversations with school district personnel, it seems to be generally agreed upon that, in the end, a year-round school program must be sold to the public. Among the school districts discussed here, YRS public relations activities were conducted by school administrators and other program spokesmen who talked to community groups about the program, wrote articles for the paper, and appeared on TV or over the radio. The three districts which did not conduct a public relations effort all have successful programs, however. Two are rural districts: Mora, Minnesota, and Molalla, Oregon. Administrators from both of these districts indicated that they felt that the small, rural nature of their district made it easier for residents to understand and accept year-round schools. Francis Howell is the third school district which did not conduct any sort of public relations activity. The administrator there indicated that the district lacked the money to do so and that the local newspapers and the St. Louis television stations provided sufficient publicity.

These districts also provided YRS information to the public by sponsoring informal parent "coffees" and public forums, opening up school board meetings for discussion of year-round schools, or giving presentations at PTA meetings. Through such activity, those involved in the planning and implementation of a year-round school program could respond to questions from the public, provide information, and monitor the public response to the

program. Two school districts indicated that at this point in their planning, they worked with public recreation departments in their districts to plan and coordinate their activities with the new school schedule.

The amount of active, direct citizen involvement in planning for a year-round school program is quite low among the districts with successful programs. Those with citizen involvement in all phases of planning number only four. In one case, citizen involvement was indicated by a school administrator to be basically token; in the three others, this involvement appears to have been an important aspect of the investigation and implementation of a particular model. In Colorado Springs, Colorado, citizen involvement remains an integral part of the decision-making process regarding the day-to-day operation of the program.

Of the programs which have been discontinued, all but one, Champlain Valley, lacked any direct, active citizen involvement. As indicated in the case study preceding this section, Champlain Valley had studied another model of year-round schools prior to its study and implementation of Multiple Access. The community responded very negatively to the initial study so, as an administrator there pointed out, Champlain Valley learned its lesson the hard way. In taking a second look at year-round schools, it made certain to include the citizens in the planning. Citizens played key roles in the study of YRS in all the districts where such a program was studied but never implemented. In two such cases--Elk Grove, California, and Roswell, New Mexico--community problems prevented implementation of a year-round education program. In both districts, the YRS programs were victims of a credibility gap, in that the public felt suspicious of the projects and began to mistrust what they were told regarding it. As the case study for Elk Grove indicated, district residents believed the feasibility study to be no more than a coverup for a decision already made--to implement.

Active community involvement does not in itself appear to be a guarantee of program implementation or success. Among the 24 districts studied here, the lack of correlation between program success, failure, or implementation and citizen involvement seems to indicate the need for further study of this particular program planning component. The dynamics of the community-school administration relationship, the way the public relations effort is handled, and the community's perception of YRS all may be assumed to strongly determine how a community responds to YRS and whether or not active community involvement is necessary.

3.4 California Substudy

3.4.1 Introduction

The substudy of YRS in California presented here was conducted because this state has been in the forefront of the YRS movement. The California legislature has provided permissive and supportive legislation to encourage the development of year-round school programs and the State Department of Education actively encourages districts to study YRS.

Although Texas has passed legislation requiring school districts to operate on the basis of a four-quarter system, districts are not required to actually operate their schools during the fourth quarter. Such legislation is not nearly as favorable to YRS programs as is that of California. Under the Texas legislation, if a district decides to provide a fourth quarter of study to its students, this quarter must be financed by local funds or student tuition. Such a stipulation appears to have effectively nullified the potential of this legislation to be a stimulus for YRS programs and instead seems to encourage the development of student-financed summer schools. Also this legislation does not provide the technical assistance or financial aid available to districts in California. As a result, the Texas legislation has not sparked as high a level of interest and activity in YRS

as have California's laws. In fact, only one Texas district (Fort Worth) was identified as actually operating a YRS program. On the basis of these obvious differences, California was the logical choice to illustrate the impact a state government may have on YRS activity once it makes a legislative and economic commitment to YRS.

Statistical data for this section were compiled from a variety of sources. The 1973, 1974, and 1975 surveys of year-round school activities prepared by the New Jersey Department of Education yielded much information.[1] Other sources included reports by the California State Department of Education, conversations with Donald Glines of that Department, and contacts with a representative sample of California YRS programs.

3.4.2 Findings

There are more year-round school programs in California than in any other state. Since the early 1970s, California has proven itself to be a leader not only with respect to the number of YRS activities occurring there, but also because of the permissive legislation the state government has passed and the constructive role the California Department of Education has played in promoting YRS and guiding districts in their study and implementation of such programs.

Year-round school programs are a recent phenomenon in California. Although a YRS program was first implemented in California in 1968, YRS did not receive much attention until the early 1970s. At this time, rapidly expanding school populations, bonded indebtedness, and inflation caused district administrators to look for practical and educationally sound solutions to these problems.

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[1] Year-Round Education Activities in the United States, 1973, 1974, 1975, New Jersey Department of Education.

Legislation enabling school districts to implement 45-15 plans specifically was passed in 1971, but in 1972 was amended to eliminate specific mention of 45-15 and thereby allow a broader, more flexible interpretation of year-round schools. Over the next few years additional legislation was passed as California legislators became increasingly convinced of the benefits of YRS programs. Financial aid was made available to help defray program start-up costs and to pay for the installation of air conditioning. Various provisions were mandated to insure that citizens are made aware of any YRS program for which a district is planning. Other provisions were made to guarantee that schools with YRS get their fair share of state financial aid. Recently legislation was passed mandating districts with YRS programs to conduct evaluations of their programs at the end of the first, third, and fifth years of operation. An evaluation instrument has been developed by the State Department of Education for this purpose.

The California Department of Education encourages the development of year-round school programs as an educational option in districts where local conditions make it feasible. The Department believes that YRS has shown itself to have economic and space-saving benefits and, most important, has been an effective vehicle for curriculum innovation. It feels that the complexity of today's society demands that individuals be involved in a continuous learning process which uses the total community as a learning resource and which goes beyond the "3 R's" of the traditional curriculum. In the Department's view, YRS is a means to accomplish this end.[1]

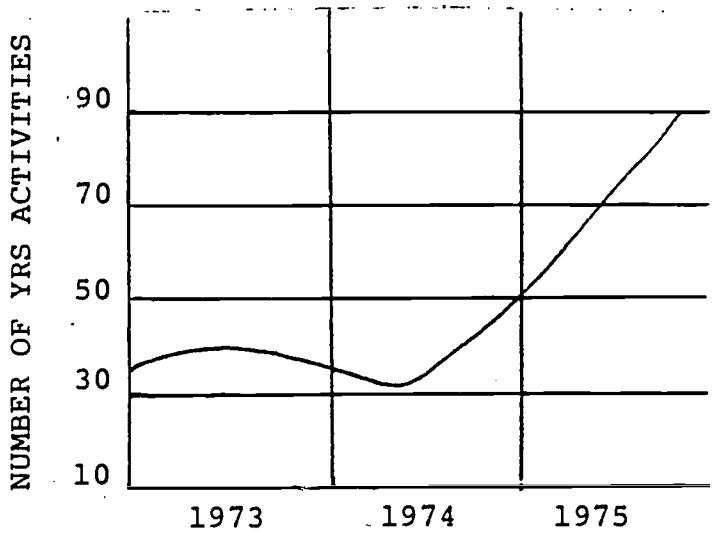
[1] Even so, due to a lack of substantive evaluation data illustrating the benefits of YRS, Governor Brown of California nearly canceled all funding for assistance to YRS programs.

As an advocate of YRS, the Department of Education sees its responsibilities towards YRS to be the following:

- to assist school districts in the exploration of YRS plans
- to help interested districts plan for and implement YRS
- to assist districts in evaluating their YRS programs
- to help teachers understand the concept of YRS and to assist them in adjusting to a new school schedule
- to work for legislation favorable to YRS
- to disseminate information about YRS.

It may be said that the level of YRS activity in California over the last few years has increased dramatically. This increase is presented graphically below.

Interest Level in Year-Round Schools in California, 1973-75



This sharp growth can be attributed to the active participation of the state in district YRS activities and its continued belief that YRS should be an educational option for all students.

The 1975 New Jersey Survey shows that approximately 37 year-round school programs are operating in California. These programs encompass a total of about 78,460 students in grades K-12. Most of these YRS programs operate at the elementary levels only and use the 45-15 plan, but two districts operate district-wide programs and two other districts have implemented YRS on the secondary level exclusively. Of these programs, two operate flexible year-round plans, one a quinmester, and one a four-quarter plan.

The 1975 survey also shows 64 districts to be studying the feasibility of year-round schools. Conversations with administrators in 15 of these districts revealed that three districts conducted feasibility studies because of school overcrowding and the desire to provide their students with a more innovative, relevant curriculum. The majority of these districts began their feasibility studies at the instigation of local school boards who felt they should keep abreast of interesting and promising educational innovations and who were willing to fund such studies. When beginning their feasibility studies, each of the districts surveyed all types of YRS plans and generally favored the 45-15 plan, although a few were intrigued by the possibilities of a quinmester program.

These fifteen districts indicated varied reactions to the feasibility studies they conducted. Three districts found their community and teachers to be favorable to YRS. Other districts noted that community opinions were split and teacher acceptance of the possibility of YRS was hampered by their lack of knowledge about YRS and concern over how YRS would effect their salaries.

Of the districts surveyed, 85% indicated that during the time needed to conduct their feasibility studies the space problem in their districts appeared to ease considerably. Therefore, these districts decided <u>not</u> to implement YRS unless the space

situation worsened. The final decisions of the other 15% regarding YRS hinge on the votes of their school committees.

Conversations with California educators and a review of literature developed by the state reveal several trends pointing toward future directions YRS may take in California. For instance, more districts are expressing an interest in YRS programs which are less structured and more individualized than 45-15. Such programs include the Flexible All-Year Plan, Personalized Continuous Year Plan, and the Living/Learning Plan which uses the community as a living/learning laboratory. At the same time, districts satisfied that YRS can work in the elementary grades are beginning to examine its possibilities for their high schools.

Now that the mechanics of running a YRS program are fairly well established, the state is concentrating greater attention on the planning and construction of non-traditional school buildings which better reflect what the Department of Education hopes will become the long-term goals of YRS--to make the schools a focus of the community so as to provide continuous lifelong learning and thus improve the quality of life. The Bureau of School Facilities is currently providing assistance to those districts which want to plan and develop creative school facilities.

The recent California legislation mandating YRS program evaluations is a step toward developing substantive data which can be used in the planning and development of increasingly innovative and effective education programs. California is encouraging its districts to expand their YRS student testing beyond achievement, and to begin to study the effect of YRS on other important areas of learning--the psychomotor and affective domains, human relations, and environmental awareness.

The development of increasingly innovative and individualized YRS plans, the planning of creative, non-traditional school buildings, the development of appropriate YRS evaluation methods--these are the directions in which California is moving. As YRS continues to evolve, educators in the California State Department of Education hope districts will begin to resemble the schools President Lyndon B. Johnson described in a February 16, 1966 statement:

> "Tomorrow's school will be a school without walls..... a school built of doors open to the entire community... it will reach out to the places that enrich the human spirit - to museums, the theaters, the art galleries, the parks, the rivers, the mountains.....it will ally itself with the city streets, the factories, and laboratories.....it will be the center of community life - a shopping center of human services.....it will provide formal education for all.....it will not close its doors any more at three o'clock. It will employ its buildings round the clock, and its teachers round the year." [1]

3.5 Critique of YRS Evaluations

3.5.1 Introduction

In gathering and analyzing information to answer the question "What types of research projects should be conducted?" extant YRS evaluations were seen as the major source. The logic was quite simple: if it could be shown that YRS programs had gathered sufficient data and if these data could be compared across programs, then a national YRS study could be conducted inexpensively.

The extant YRS evaluations tended to contain data about three major substantive areas:

- Reactions to YRS (students, teachers, the community)
- Student achievement
- Finance

[1] Quoted in A Summary of Year-Round Education in California as of November, 1974, Office of Program Planning and Development, California State Department of Education, p. 9.

In order to systematically analyze what information was available about these three major YRS concerns, evaluation data for the districts in the study were compiled using the evaluation matrices described in the Introduction to this volume. The descriptions of district evaluations which follow result from an analysis of these individual district evaluation matrices. A chart summarizing the results of district financial and achievement evaluations is located at the end of this chapter. (See pages 81-86.)

3.5.2 YRS Evaluation Findings

As noted by the National Council on Year-Round Education in its assessment of selected district YRS evaluations, most school districts with YRS programs evaluate the attitudes of community, teachers, and students toward YRS and measure the level of student achievement in YRS. Fewer districts study the amount of financial/space savings a YRS program achieves despite the fact that financial and space savings are most frequently cited as the reasons for implementing a YRS program. Some districts do not evaluate their YRS programs at all.[1]

YRS evaluations tend to fall far short of what is needed to truly determine the impacts and importance of YRS both in terms of their methodology and scope. A report made by Elaine M. Boyce at the 1974 Western Association of Year-Round Schools Convention accurately summarized the state of assessment in year-round schools:

> "Over the past several years there has been a substantial increase in the amount of materials available regarding the study, planning, implementation, and evaluation of year-round school programs. Few reports, however, appear to be largely the product of objective inquiry, analysis, and evaluation. On the contrary, many of the reports appear to be subjective in viewpoint and give the indication that findings are perhaps,

[1] A Bibliography and Review of Selected Evaluation Reports and Studies on Year-Round Education, National Council on Year-Round Education, May 1, 1975, p. 132.

> in some cases, offered as a means to justify actions taken toward solving some immediate and crucial problems, i.e., to provide additional needed classrooms. It is, therefore, difficult to separate fact from non-fact regarding many aspects of year-round schools."[1]

Evaluations have barely scratched the surface of YRS. Not only have they not conclusively answered whether YRS is cost-effective or whether it boosts student achievement, but they have not yet begun to research areas of impact such as:

- YRS and its effect on non-cognitive/affective development in children;
- YRS and its effect on the services and programs of recreation departments, boys clubs, YWCAs, police departments, and the like;
- YRS and its effect on the achievement of the disadvantaged child and the low achiever;
- YRS and its effect on the overall quality of community and family life.

Reactions to YRS

School districts tend to measure the attitudes of the community, teachers and students towards YRS some time after the first year of program operation. While some districts, like Francis Howell, Missouri, continue to measure general attitudes toward YRS in each year of program operation, many districts, once satisfied that the majority of those contacted feel at least neutral about the year-round schedule as compared to the traditional school calendar, tend not to study attitudes again.

The majority of the districts for which evaluation data were analyzed indicated that they developed questionnaires to measure attitudes. These questionnaires are usually quite straightforward in content; they seek to elicit very general opinions on how well a year-round school program is liked, how well the

[1] Ibid., pp. 132-133.

vacation schedule is liked, whether the students miss the friends they had on the traditional school schedule, whether they like the new curricula, and so forth.

All districts, in determining opinions toward YRS, assess the attitudes of parents. As previously stated, most districts survey opinions by using questionnaires. However, Hesperia, California indicated it measured parental support for YRS by comparing the level of parent involvement in school activities during the YRS school year to past school years. Chula Vista conducted telephone interviews of those parents with children in YRS; and Hayward school counselors personally interviewed the parents of the 6th graders in YRS in addition to distributing questionnaires.

Parent response to YRS tended to be mixed, although positive opinions predominated. Most parents felt that their children enjoyed school more on a YRS schedule and many indicated they enjoyed taking family vacations during those times of the year when the majority of other families were not vacationing. In the case of those districts which discontinued their YRS programs, apathetic parental support for the programs frequently coupled with teacher dissatisfaction were primary reasons for their discontinuation.

In Francis Howell, Missouri, mixed parental opinion ultimately resulted in a major revision to the district's YRS program. A 1974 questionnaire designed to survey parent opinions toward Francis Howell's 45-15 program showed that while most parents felt YRS was helping their children learn more than a traditional schedule did, those parents with children in the secondary grades did not always share such perceptions. Twenty-two percent of the parents of ninth-grade students in YRS felt the program actually hindered learning. The same trend in opinion existed with respect to parent support for the YRS vacation schedule. Parents of secondary level students tended to be more opposed to the

vacation schedule of 45-15 than those with younger children. In response to the unpopularity of 45-15 at the secondary level and its perceived negative effects on student employment and extracurricular activities, Francis Howell subsequently removed grades 9-12 from 45-15 and allowed them to return to a traditional schedule.[1]

Parents involved in the Hayward, California four-quarter program are overwhelmingly supportive of YRS--69% rated the program as either outstanding or excellent and 26% rated it as good. They did not feel their vacation planning had been adversely affected, and 87% felt there had been less of a learning loss among students without the traditional summer vacation. The greatest divergence of opinion among parents appeared to occur in regard to freedom versus discipline in Hayward's YRS program.[2]

Teacher and student attitudes toward YRS tended to be measured in terms of how much they said they liked YRS and in a few cases by comparing absentee and unexcused absence records for teachers and/or students in YRS to these same records in a traditional program. Teachers seem generally favorable to YRS, finding it more stimulating to them and their students. They cite the advantages of being able to use the community and all four seasons of the year for purposes of teaching and feel that students like school on a YRS schedule better.

In Colorado Springs, Colorado, surveys were made of teacher attitudes toward the district's Concept 6 program for 1974 and 1975. The surveys found a high level of support and acceptance of YRS

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[1] Francis Howell Year-Round School Opinionnaire Summary - November, 1974, pp. 1-2.

[2] Third Evaluation Report, Park Elementary School, Hayward Unified School District, March, 1974, Part II, p. 5a.

among involved teachers. They highly rated the attitudes of fellow teachers, parents and students in YRS. A majority felt the quality of instruction in YRS to be excellent and that YRS facilitated curriculum development. Also, a majority of teachers felt students forget less over vacation periods in Concept 6 than during traditional vacation periods; that YRS had made the community more aware of educational innovations; and that YRS demanded more of their time during the evenings and on weekends. They recommended, based on their positive experiences with YRS, that the program be expanded to other schools.[1]

In Loudoun County, Virginia, where traditional teaching methods and classroom situations persisted under the new 45-15 schedule, teacher reactions to the revised schedule were in sharp contrast to the generally positive responses of the Colorado Springs teachers. Ned S. Hubbell and Associates, Inc. conducted a survey of attitudes toward YRS in Loudoun County. They found teachers in YRS to be quite divided about the program. Nearly 70% of the teachers said they were "generally satisfied with working in the year-round program," but if given a choice between the district's 45-15 program and a traditional schedule, teachers were evenly divided as to which they would favor. Teachers were also nearly evenly divided in their opinions as to how effective a learning tool YRS is, how much more interesting YRS makes learning for students, whether YRS positively affects students' class behavior or attendance, whether YRS has increased their workload, and whether they are more enthusiastic about teaching in a YRS program.[2] Divergent teacher opinions coupled with general apathy about YRS ultimately resulted in its demise. It may be hypothesized that apathy toward YRS was a result of the fact that while the school year was restructured, no substantive educational changes were

[1] Second Operational Year Report of Concept 6 Year-Round School, Colorado Springs School District Eleven, July, 1975, pp. 28-30.

[2] Attitudes Toward Year-Round School in Loudoun County, Virginia, Ned S. Hubbell and Associates, April, 1975, pp. 27-29.

made, and that education in Loudoun County under 45-15 was not viewed positively because it was not implemented creatively.

In Prince William County, Virginia, 75% of the grade school students and 81% of the middle school students surveyed said they liked YRS better than a traditional schedule or liked it about the same.[1] LaMesa-Spring Valley, California, which operates a 45-15 program similar to Prince William's, found the new vacation schedule to be the most popular aspect of YRS among its students. Students in LaMesa's program also felt they did not tire of school as quickly, that they learned more and faster, and that teachers seemed to like teaching better. When asked to suggest ways in which YRS could be improved, students requested that a greater variety of courses be offered during the inter-sessions between terms; that the communications system be improved so that when they were out of school they would be informed of school-related events; and that more after-school activities be provided.[2]

Four districts sent questionnaires to school principals and other administrators to learn how they felt about YRS and how it had affected their workloads, and to obtain suggestions regarding how the district's YRS program could be improved. Principals and administrators who replied generally indicated that YRS had increased their workloads, that they needed more clerical help, and that the balance of students among the various YRS tracks was a major problem for them. However, they were supportive of YRS and in the case of Hayward, recommended YRS be expanded to additional schools, which subsequently occurred.

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[1] Excerpts from Evaluation Reports of the Prince William County Year Round School Program During the First Year of Operation, Prince William County Schools, Manassas, Virginia.

[2] An Assessment of Attitudes Toward the LaMesa-Spring Valley School District Year Round School, 1971-1972, LaMesa-Spring Valley School District, LaMesa, California, pp. 6-7.

A few districts indicated they surveyed local business and industry to determine their opinions about YRS and its effect on their businesses. Among these, Dade County found business and industry to be favorable to or neutral about YRS, aside from those which traditionally shut down in the summer for vacations or have seasonal peaks in the winter.[1]

The attitudinal evaluations conducted by the school districts studied were overall rather basic, unprobing surveys of individuals' opinions, and provide no more than general impressions of the effect of YRS on individuals' lives. They do not provide data which explain the reasons behind specific responses nor do they ever manage to get beyond immediate emotional reactions to YRS.

Achievement

Achievement evaluation data for fifteen of the school districts studied were obtained. Most of these districts measured their students' achievement in YRS some time after the first year of program operation using a standardized achievement test like the California Test of Basic Skills, the Stanford Achievement Test, or the Iowa Test of Basic Skills. Generally, the test scores of YRS students were compared to the scores of similar groups of students in the district who attended non-YRS programs.

Most districts recorded mixed or inconclusive results from their testing programs. Colorado Springs noted that after two years of operation, those students in YRS grades 1-3 showed higher scores overall than those in the traditional grades 1-3. Grades 4-6 showed no significant differences.[2] Northville, Michigan,

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[1] Rationale - Structure and Direction of the Quinmester Program, Dade County Public Schools, Division of Instruction, February, 1972, p. 13.

[2] Second Operational Year Report of Concept 6 Year Round School, Colorado Springs School District Eleven, July, 1975, pp. 16-20.

found that after the second year of operation, YRS students scored much higher than non-YRS students on both reading and math. They found this to be true for both low, medium, and high achievers.[1]

Although Loudoun County discontinued its YRS program, it nevertheless found that YRS student achievement in grades 1-6 at the end of the first and second years of program operation was slightly higher than that of comparable non-YRS students.[2]

Because of the relatively brief duration of these and other YRS programs, districts felt overall that no conclusions could be drawn from test results thus far in terms of the gains or losses of students in YRS programs.

However, Hayward, California, which began its program in 1968, has tested its students yearly and as of the May, 1973 testing found certain trends to be developing. Hayward found that:

- Scores of YRS students in grades 1-3 were below the district and comparison group achievement levels. Teachers of children in these grades ascribe the low scores to the fact that YRS in Hayward put greater emphasis on the "affective domain" in the early grades and less emphasis on basic skills as compared to the traditional school program. YRS teachers stress the human relation skills of communication and sensitivity to others during these early years. Teachers and administrators in YRS have not yet found a valid method of measuring the non-cognitive gains of YRS students.
- As YRS students progress through grades 4 to 8, they show major gains in reading, mathematics and language skills. Overall they tend to achieve higher scores on tests than do comparable groups of non-YRS students.

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[1] A Study of Achievement and Absenteeism in the 45-15 Year Round School Plan and Traditional Calendar Plan in the Northville Public Schools, Northville, Michigan, pp. 31-32.

[2] Conversation with Dr. Arthur Welch, Director of Planning, Loudoun County Public Schools, Manassas, Virginia.

- The achievement evidence in Hayward indicates that the longer a child attends the YRS program, the higher the child's achievement scores will be.[1]

In their most recent evaluation study, Hayward administrators commented not only on the difficulty of measuring the non-cognitive effects of their YRS program but also the difficulty in obtaining a valid measurement of the quantitative educational effects of the additional twenty days' instruction time per year provided by YRS. They also stated that they had not yet determined a valid way of measuring the effect of YRS on "learning loss." "Do pupils lose skill and concept mastery as a result of the three-month vacation period in the summer? If so, how much, and in what subject areas and under what conditions?" They recommend that the California Department of Education provide them with research monies and consultant assistance to try to design a research model which deals with the evaluation and assessment problems they detail.

These comments by Hayward point out the inadequacies of trying to validly measure the achievements of students in those YRS programs which have sought to restructure their curricula and provide innovative learning experiences. The standardized achievement tests used by most school districts were developed to measure student learning in traditional programs which emphasize the basic skills of reading, mathematics, and language arts.

As Hayward indicates, such tests were not developed to measure achievement in affective and non-cognitive areas, nor do they indicate what difference extra days of instruction make to student achievement. Therefore, while these tests may be useful to provide some sense of YRS student achievement in the area

[1] Third Evaluation Report, Park Elementary School, Hayward Unified School District, Hayward, California, pp. III-1-14.

of basic skills, they do not begin to measure the effect YRS has on student learning in a broader sense. They do not measure whether YRS is truly developing non-cognitive skills in students or whether it is equipping children to lead more productive, rewarding lives in today's complex society. Therefore, the fact that student achievement in YRS has thus far not provided overall dramatic gains cannot be interpreted as an indictment of YRS. New evaluation tools which adequately measure the hypothesized educational benefits of YRS and which measure the overall difference YRS makes in students' lives must be developed before realistic conclusions may be drawn about YRS.

Financial Impacts

Of the 21 districts with successful or discontinued YRS programs, 11 provided financial evaluation data. Of the remaining 10 districts, 5 indicated they had not conducted financial evaluations of their YRS programs, despite the fact that economic savings had been at least a partial reason for their implementation of YRS.

Most districts conduct their own financial evaluations. Those districts for which financial data are available generally studied the per pupil or operational cost of YRS as compared either to costs incurred by the school prior to YRS or to those incurred by a comparable school in the district operating on a traditional schedule.

District results varied but most found that while operational costs tended to increase with YRS, the overall savings which resulted from not having to build a new school or to add rooms onto a school made YRS a money-saver in the long run. For instance, Hesperia, California found that after the first year of operation its costs increased by $16,949. This increase was ascribed to paying teachers for 12 months of work and providing them with increased benefits, as well as to increased bus utilization. However, when Hesperia compared the operational cost

increase to the projected $192,000 it would have cost to provide additional space, YRS was seen as providing a considerable savings.[1] Chula Vista found that its per pupil costs were the same in both YRS and traditional programs, but estimated that YRS was saving $2 million in capital building costs in the long run.[2]

Education Turnkey Systems, Inc. conducted Prince William County's financial evaluation. They estimated the long-run equilibrium costs of school operation with 45-15 as opposed to a traditional schedule, considering the costs of staff, supplies, and plant maintenance, by developing two cost models for comparison. They found that overall 45-15 lowered per pupil costs by providing 4.9% more intensive use of labor and 4.7% more intensive use of school facilities than would be possible by operating on a traditional schedule.[3]

Prince William County also conducted a separate energy consumption study comparing amount of energy consumed in a traditional school year to that consumed on 45-15. The total kilowatt-hours consumed per student day for schools on 45-15 and on a traditional schedule were calculated. It was found that the total amount of energy consumed in a year was greater for the YRS schools, but on a per student-day basis energy consumption was the same.[4]

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[1] Evaluation of the Year Round School, Hesperia School District, Hesperia, California.

[2] Year Round Schools: An Assessment of the Program's Initial Year in Four Chula Vista Elementary Schools, Chula Vista City School District, November 1, 1972.

[3] 45-15 and the Cost of Education, Prepared for: Prince William County Public Schools, Prince William County, Virginia, Education Turnkey Systems, Inc., Washington, D.C., Executive Summary.

[4] Energy Consumption Comparison, In House Study, Ernest H. Mueller, 1973.

Virginia Beach, Virginia also determined that by operating on a YRS schedule it was saving, in terms of capital and operating costs, $8 per student as compared to operating on a traditional schedule.[1]

3.5.3 Conclusions

As a whole, YRS evaluations do not reveal much about the importance of YRS and are not useful planning tools. They generally evaluate only the most obvious elements of a YRS program, and have not conclusively answered the three basic questions districts pose when initially studying YRS: Will it be favorably received? Will it affect students' learning? Will it save money?

District evaluations have fairly unambitious goals. Most frequently they are conducted to provide a general perspective on the attitudes of community, teachers and students toward YRS and to indicate how high YRS students score on standardized achievement tests. Most such evaluations are conducted systematically but unscientifically. For example, districts frequently distribute YRS parent questionnaires to their children rather than mailing out the questionnaires. Often those who are surveyed are not selected by drawing a random or stratified random sample. Survey results are often analyzed without attention being paid to response rates or to the various socioeconomic levels from which responses are elicited.

When achievement testing is conducted, the same test is not always used in both the pre-YRS and post-YRS testing periods, nor are the same tests administered to all grade levels in YRS: comparisons of test results are therefore limited. Also, as specifically noted by Hayward, California, the standardized achievement tests available to measure student learning were

[1] A Research Design for Year-Round Education, Virginia Beach Public Schools, Virginia Beach, Virginia, April, 1973.

not developed to capture levels of student growth in the affective non-cognitive domains. It is this area of growth which has been hypothesized to yield the most significant results in those programs where innovation has been most critical; yet at present this hypothesis is unmeasurable.

Finally, cost data from financial evaluations are unsatisfactory sources of information about YRS. The accounting systems used by districts to record YRS costs vary greatly and a consistent cost allocation or attribution method could not be discerned from reported district evaluation data. Lack of comparability prevents a determination of whether YRS is a cost-effective method of operating, and if so, under what conditions.

Quite apart from the limited value of the findings in the evaluations studied here, school districts have not even attempted to investigate a wide range of possible YRS impacts, a number of which were listed in Section 3.5.2. These unexplored areas are important not only to the school district and community but also to the federal government, since district YRS activities may be affecting the outcomes or intersecting the activities of various federal programs. It is these areas of unexplored impact which may reveal most about the educational and social benefits of YRS.

For instance, as mentioned in the History of YRS, Title I compensatory education programs oriented toward the migrant child may parallel YRS programs which provide the migrant child with the opportunity to have a normal, continuous education despite a nomadic lifestyle. Similarly, military families also lead mobile lives which often disrupt the education of their children who must enter or leave a particular school in the middle of a term. YRS, by providing a series of staggered entries throughout the entire year, could overcome the traditionally fragmented nature of the military child's education.

Relatively few secondary level YRS programs exist and those which do have hardly been studied. Little if any attention has been paid to the effect of YRS on drop-out rates and student motivation or the success a school district like Atlanta has had in facilitating work/study at the high school level. The YRS program in Atlanta may in effect be accomplishing the goals of the federal government's career education program; or it may be an ideal situation in which a federally-funded career education program could be implemented.

Another area where the effects of YRS and the goals of a federal government program may be intersecting is in the hypothesized beneficial effects YRS may have on the disadvantaged child and the goals of federal compensatory education programs. (Section 3.3 contains a more detailed explanation of this possibility.)

Other areas where YRS and the activities and/or goals of federal programs intersect include:

- conservation of natural resources through decreased school building in those cases where capital building savings are a goal;
- more efficient use of recreational facilities, such as those of the National Park Service;
- improved ethnic balance within an entire school system or within a particular school;
- more comprehensive town recreation or community group programs with the spreading of demands for activities and services throughout the seasons rather than primarily in summer. Such programs could be effectively coordinated with schools' physical education and arts and craft programs;
- decrease in juvenile delinquency because children would no longer be "on the streets" for the three-month summer vacation. (Where studied, vandalism and juvenile delinquency rates have declined in districts with a YRS program.)

At present all of these relationships are hypothesized but unexplored.

School districts cannot be indicted for not identifying these potential relationships or for not investigating them. They are not in a position to have an overview of YRS sufficiently broad to suggest many of these evaluation studies. Nor do they for the most part have the financial capacity or "know-how" to conduct the studies suggested above or even evaluations of the three major substantive areas identified in Section 3.5.1.

SUMMARY OF SCHOOL DISTRICT EDUCATIONAL AND FINANCIAL EVALUATIONS

SCHOOL AND SOURCES	EDUCATIONAL IMPACTS	FINANCIAL IMPACTS
SUCCESSFUL PROGRAMS 1. HESPERIA, CALIFORNIA Phone conversation with school district administrator.	1. Standardized tests after first year of YRE (1972)--not considered conclusive--test results mixed	1. Costs increased after first year--($16,949)--due to 12 month salaries; increased benefits; additional bus mileage Above figure low compared to $192,000 building costs for additional space needed
2. CHINO, CALIFORNIA Phone conversation with John E. McMurty, Assistant Superintendent for Instruction	2. Not Available	2. Not Available
3. CORONA NORCO, CALIFORNIA "Evaluation of Corona Norco Unified School District, Year-Round Plan, School Year 1972-73." Phone conversation with Dr. Mason, school district administrator	3. After first year--California Test of Basic Skills was used for 6th and 8th graders, and teacher-made English and social studies tests. "Overall there was a slight benefit shown by the year-round school students." (p. 7) Nothing conclusive.	3. Not Conducted
4. CHULA VISTA, CALIFORNIA Chula Vista City School District. Year-Round Schools: An Assessment of the Program's Initial Year in Four Chula Vista Elementary Schools. Chula Vista. 1972. Phone conversation with Douglas Gillis, administrator	4. 2nd and 3rd grades were measured for reading skills after first year of YRS. 2nd grade showed greater achievement in the traditional program--no difference in 3rd grade	4. Per pupil costs were same in YRS and traditional--$2 million building costs saved

5. HAYWARD, CALIFORNIA Sorenson, Wayne L. Evaluation Report, A Feasibility Study: An Organizational an Curriculum Plan for a 4-Quarter Elementary School. Hayward Unified School District: Hayward. 1970. Third Evaluation Report: Park Elementary School--Four Quarter Extended Year Program, Hayward Unified School District: Hayward. 1974. Phone conversation with Wayne Sorenson, Administrative Director of Research and Federal Projects	5. Pupils in grades 2-6 given Science Research Associates' Modern Math Understanding Tests" and Stanford Achievement Test in reading--administered one month after start of YRS, 9/68, and 1 year after, 9/69. YRS scores compared with non-YRS school (reading test also given in 5/69). Reading results: 1st test in each grade except 6th showed higher scores in comparison school than in YRE. By May, average scores indicate that YRE students had made greater gains in half of the areas. By 9/69, two schools had practically the same scores. 10/72 tests and 1973 tests (grades 4,5,6) showed consistent gains in achievement of Park students over non-Park students, but the results seem to equal the one month more per year that Park students are in school. Grades 1,2,3--5/73 testing--Park pupils were below comparison school and district scores in reading--also at Park, 5/73 Grade 3 was somewhat lower than previous years. Other scores compared favorably.	5. Increase of 9.9%--increases in salaries of administrators, faculty and staff. Total cost of education per pupil per day: traditional -- $4.41 Park -- 4.41 but Park attends 19 additional instruction days.
6. LA MESA - SPRING VALLEY, CALIFORNIA La Mesa-Spring Valley School District. "Evaluation of Scholastic Achievement in the Year-Round School 1972-73." La Mesa. 1974. Phone conversation with Mr. Radenheimer, program administrator	6. Standard Achievement Tests used at various intervals to test YRS and traditional schools: no significant differences.	6. Not Conducted

7. PAJARO VALLEY, CALIFORNIA Pajaro Valley Unified School District. YRS Evaluation: First Year Report. 1974. Phone conversations with James Baker, Zone Administrator	7. California Test of Basic Skills (reading and math) and standardized tests showed no dramatic differences after first year. End of third and fourth years--comparable scores.	7. Operationally: 1.5% increase in YRS schools Building: 30.6% gain--saved in 5 years schools
8. COLORADO SPRINGS, COLORADO Colorado Springs School District #11. Second Operational Year Report of Concept 6 Year-Round School. Colorado Springs. 1975. Phone conversation with Dr. Roslyn Grady, Director of Department of Research and Special Studies	8. After first 2 years, Iowa Test of Basic Skills and Metropolitan Primary Tests and District's Standard French and Spanish Tests. Grades 1-3 scored higher on all tests. Math scores ranged 2-3 months above norm, while others ranged 7 months - 1 year. Grades 4,5,6 showed no significant differences.	8. Not Conducted
9. MOLALLA, OREGON Phone conversation with William Jordan, School Superintendent	9. Not Conducted	9. Not Conducted
10. MORA, MINNESOTA Phone conversation with Richard Smith, Project Director	10. Effects of YRS on learning, motivation and achievement tested by University of Minn. for first year (71-72) results not available.	10. Not Available
11. FRANCIS HOWELL, MISSOURI Francis Howell School District. "Francis Howell Year-Round School Plan." St. Charles County. 1972. Phone conversation with Alan M. O'Dell, Project Director	11. Not Conducted	11. Report published from grant study: "The results were not conclusive." (p.12)

12. NORTHVILLE, MICHIGAN Moortgat, R. A Study of Achievement and Absenteeism in the 45-15 Year-Round School Plan in the Northville Public Schools. Wayne State University. 1975. Phone conversation with Florence Pannatoni, Assistant Superintendent	12. SESAT (K-1) and Stanford Achievement Tests (Math and Reading). Students tested first month of each school year in 72-73, 73-74, and 74-75. First year there is no significant difference. Second year, YRS students score much higher than traditional school students--held true for low, medium and high achievers. (pp. 5-22).	12. Not Conducted
13. VALLEY VIEW, ILLINOIS Internal Evaluation Study Phone conversation with J. Patrick Page, Administrative Assistant	13. No significant differences on periodically administered standardized tests.	13. Not Available
14. PRINCE WILLIAM COUNTY, VIRGINIA "An Educational Choice." Brochure (1974). Education Turnkey Systems, Inc. 45-15 and the Cost of Education, Summary. Phone conversation with a district administrator	14. (1972) No conclusive evidence (differences are more classroom than structure related) --study was conducted by the Bureau of Educational Research at University of Virginia.	14. (71-72) Cost analysis of 45-15 in middle school--considers costs of supplies, staff, plant maintenance. YRS showed 9.6% lower costs than traditional, 4.9% more intensive labor use, 4.7% more intensive plant use (4.2% of this was the result of housing 1/3 more students)
15. ATLANTA, GEORGIA Evaluation of Fourth Quarter, 1974, Research and Evaluation Report, Vol VIII No. 3, 12/74, Atlanta Public Schools, Atlanta. Phone conversation with Dr. E. Curtis Hensen, assistant superintendent	15. Not Available	15. Fourth quarter voluntary--no summer costs, even if the quarter is part of a student's 180 days, are funded by state. Therefore, entire cost of summer quarter, approximately $2 million, must be borne by local taxes.

16. DADE COUNTY, FLORIDA Dade County Public Schools, Division of Finance Planning. Cost Analysis of the Quinmester Program. Miami. 1972. Dade County Public Schools, Division of Instruction. Status-Activities and Direction of the Quinmester Program. Miami. 1972 Phone conversation with district administrators	16. Stanford Achievement Tests and failure rates in 5 subject areas used to determine student achievement in YRE. Quinmester schools compared grade by grade with schools with their own geographic area and with county as a whole and also compared scores from 1971 pre-quinmester tests to scores from post-quinmester tests in 1972. Mean and median scores compared. Reading and math scores for 1972 lower than those for 1971 at approximately 50% of the grade levels in the given schools (comparison with county schools indicate that they too dropped in some areas, but suffered even greater drops) Quinmester scores did not score higher than county schools in 1971. Quinmester failure rates remain below county rates as in 1971.	16. Direct costs per student in ADA comparison of first and fifth quinmesters at 19 quinmester schools--5th quinmester direct costs were higher (could be reduced to comparable level by increasing 5th quinmester attendance from 10-28,000) ADA direct cost comparison between 5th quinmester and (71) previous summer school offering--5th quinmester costs were lower ADA direct cost comparison between 1st 4 quinmesters and regular 9-month school--costs comparable (1971-72)
17. HUDSON, NEW HAMPSHIRE Phone conversation with Robert Bettencourt, Principal, Alvirne	17. No significant gains or losses (165 day school year)	17. Comparison of operational costs (e.g., air conditioning, teachers' salaries, heat)--YRS operating budget 3-4% higher than operating costs when school was on traditional calendar (notes do not indicate if data were weighted for inflation).

DISCONTINUED PROGRAMS		
1. MILPITAS, CALIFORNIA Phone conversation with school administrator	1. Not Available	1. Not Available
2. LOUDOUN COUNTY, VIRGINIA Loudoun County Schools Planning Department, 45-15 Program Status Report. Leesburg, Virginia. 1974. Phone conversation with Dr. Arthur Welch, Director of Planning	2. Metropolitan Achievement Tests (1-3) and SRA Achievement (4-6) given at end of 1st and 2nd years with Virginia Standardized Achievement Tests--YRS students scored slightly higher*.	2. Cost comparison of YRS with traditional school--results not in
3. VIRGINIA BEACH, VIRGINIA Virginia Beach Public Schools. A Research Design for Year-Round Education. Virginia Beach. 1973	3. After 1st two years of program, 1st, 2nd, and 4th grades studied in regard to reading--4th grade also tested for math achievement. Linear systems analysis of 4 participating elementary YRS schools with 2 traditional program. The results not available.	3. Comparison in terms of capital and operating costs--cost savings in YRE $8 per student.
4. CHAMPLAIN VALLEY, VERMONT Phone conversation on with Mr. Lambert, administrator	4. Not Available	4. Not Available

*In comparison between Spring '73 (9 month) and Spring '74 (45-15) in grade 2, YRS higher for spelling and math; in 1st grade YRS was lower in word analysis; in 3rd grade no differences showed up. (p. 12) There is some tangible evidence that improvements may have occurred in 45-15, but this is a highly tentative conclusion.

4.0 Conclusions and Recommendations

4.1 Introduction

The foregoing chapters documented why YRS is important. The remaining question (What types of YRS research projects should be undertaken?) is answered here. The information previously collected and analyzed provided the foundation upon which the recommended research agenda is based. However, discussions held with federal and private education policy researchers also served as a major source and guide to the research agenda provided in Section 4.5.

4.2 Current Interest and Knowledge in Washington, D.C.

Several discussions were held in July, August, and September, 1975, with federal and private policy researchers in Washington, D.C. The major purpose was to determine the level of knowledge and interest about YRS.

Of the federal officials contacted, although all were acquainted with the concept of year-round schools, none had more than a limited knowledge of specific YRS programs currently in operation nor a clear idea of the potential of YRS. Officials at the Office of Education and the National Institute of Education were aware that YRS is frequently implemented as a solution to school district fiscal and overcrowding problems but all were skeptical of its success in these areas. In the area of curricular innovation, they indicated ignorance of exactly what YRS can accomplish by citing the drawbacks they perceived in implementing YRS. Specifically, they believed that YRS automatically accelerates students through school and thereby creates a whole series of social problems--15 and 16 year old high school graduates, strains on the job market, and implications for the retirement age.

When the disadvantaged child and YRS were discussed, these federal officials could see no greater role for the government and their particular educational agencies than to act as a national repository of research, evaluation and documentation data in the area of YRS and the disadvantaged child. The potential implications YRS has for the disadvantaged child and for various federal compensatory education programs had not been discerned by these federal officials, and consequently they saw only a very tangential relationship between YRS and the responsibilities of their offices.

The representative of the Council of Chief State Officers was only minimally acquainted with even the concept of YRS. However, he warned against the dangers of increased truancy and vandalism in YRS (district YRS data indicate just the opposite) and the demands YRS would make on day care and community recreation providers. He did touch on one acknowledged important aspect of any educational innovation--good community relations.

At the National Association of Secondary School Principals (NASSP) the individual we spoke to was generally unimpressed with the potentials of YRS. He maintained that YRS did not save money because:

- Capital costs are a small percentage of the total budget of a school, especially as a long-term expenditure (6-10%);
- Operational costs rise ("anybody who thinks that schools aren't used all year just doesn't know what they're talking about");
- Already there is tremendous wear-and-tear on facilities--there are many more people per square foot in elementary and secondary school buildings than in even the poorest college and in most office buildings.

Additionally, he could see no benefits to the disadvantaged child in YRS.

The individual we spoke to at the National Education Association was probably, of all the people spoken to, the most informed about YRS since she had written an information packet on YRS for NEA a year ago. She believed that YRS had not proven itself to be a money saver and that interest in YRS was waning. While she felt that YRS potentially held some benefits for teachers--extra pay and increased status as professionals with a longer teaching year--she was also concerned with the possible problems YRS would create for teachers. She cited a reduction in the number of teachers employed, time/pay abuses, contract/tenure changes and dangers to long-term benefit accrual as among these possible problems.

These discussions have led us to the conclusion that for the most part policy makers in Washington are not well-informed about YRS. Their opinions on it are based on misinformation and lack of research into the topic and consequently they have formulated generally unenthusiastic and frequently negative judgments of YRS. The overall impression these discussions left us with was that federal officials and individuals in educational organizations are not interested in YRS.

In sharp contrast to this lack of interest is the increasing interest in YRS shown by local and state educators. One individual active in YRS states that weekly he receives dozens of telephone and mail inquiries about his district's program. Interest has become so great that he has set aside an afternoon each week to take interested administrators, teachers, and parents on a prearranged tour of the program. A consultant to the California Department of Education who provides technical assistance to schools planning YRS programs indicates that interest in California is such that he assists several new schools with their planning each month.

With the exception of ASPE's interest in YRS, there is no concerted effort or level of effort proposed to explore the strengths and weaknesses of this burgeoning educational innovation. Thus, the research agenda outlined below has been developed with an eye toward its implementation by ASPE--the only part of the Washington, D.C. research community with the interest and knowledge.

4.3 YRS Compared to Other Educational Innovations

In order to develop a needed research agenda, another question must be asked: how different is YRS from other innovative programs? The principal answer is that a majority if not all of the other educational innovations developed over the past two decades assume a 180-day school calendar. Conversely, a number, most notably Head Start, used the summer as the time in which to assist educationally deprived and economically poor children prepare for the traditional calendar. However most of the Title I projects, Educational Vouchers, Performance Contracting, and Follow Through were designed with the traditional school calendar as the basis for their schedule. The 180-day school calendar and a three-month vacation is the first of the major differences between YRS and other educational innovations.

The second major difference is in the source of funding. While there have been some federal monies invested in YRS, YRS has neither been generally funded nor supported in any major way by the federal government. Contrarily, most of the major educational innovations of the past few decades have been both--and federally initiated as well.

Another major difference between YRS and other innovations is in its buttressing philosophy, if not ideology. Specifically, most innovations were developed with a single goal in mind: to help the disadvantaged child. Although these

programs may have had varying goals (cognitive, affective, or psycho-motor development, or combinations of these) they were child-centered innovations. The theory said that if additional educational assistance could be given at an earlier age, if parents had a choice, if teacher/child ratios increased, or if the most advanced technology could be applied, then the various goals would be reached. YRS, on the other hand, seemed to be based on a community need--saving taxpayers' dollars--and secondarily concerned about accelerating achievement or social growth. YRS--as we have seen it evolve--has not primarily been aimed at accelerating growth or achievement; rather it was to achieve a community goal. In recent times data have indicated that YRS may be an intervention strategy which does indeed have an educational impact. Instead of cost savings alone, more and more YRS adherents are turning to the potential and sometimes documented effect of their programs on students.

4.4 YRS and Federal R&D

An overview of how the federal government spends its policy research monies can be viewed initially along two dimensions: size of program, and locus of control. In order to place YRS' current status vis-a-vis the federal educational R&D program, the following is provided. While there is some question about the number of students enrolled in YRS programs, even the restricted definition we have used allows us to estimate that the number is approaching two million. Of the 30 recent exemplary educational R&D projects studied, only six have more students than YRS (some notable examples are IPU-Math, Science--A Process, Sullivan Reading Program, Sesame Street and IGE)[1]. Applying our size of program and locus of control overlay in the context of other R&D educational

[1] National Institute of Education Draft Data Book.

projects not as large, we have the following two-way classification:

		LOCUS OF CONTROL	
		Within LEA	Outside LEA
SIZE OF PROGRAM	Small	I	II
	Large	III	IV

Small projects controlled by LEAs (Cell I) are those funded by Title I and III of the ESEA. The LEA devises a small innovation and then receives a little grant-in-aid money for it. However, systematic evaluations are usually performed by states (most of them are systematic monitoring efforts or part of large-scale evaluation studies under Title I and III.) While no one can, at this stage, fault the lack of documentation or evaluation of such programs, they are ad hoc evaluative designs which often do not involve LEAs to any substantial extent. They are evaluations which are to be used by federal policy-makers and legislators and only secondarily by LEAs.

Most university projects would be found in Cell II. They are devised by academic researchers for purposes of improving pedagogical techniques or the state-of-the-art in methodology. There is usually adequate evaluation performed, because of the university base; but once again, LEAs do not look to these programs for much help in trying to change their systems. Cell II projects also depend upon outside funding--usually foundations, and sometimes the federal government. The major difference between Cells I and II is that in Cell I the LEA usually controls or devises the innovation; this is not true of Cell II. However, they are similar in that assessments of each are performed, usually in a systematic manner, by someone not involved in the day-to-day operations. In short, Cells I and

II usually are well-documented. There is empirical evidence which reflects what happened.

Cell IV shares with those programs found in I and II the presence of an evaluation component. Typical programs would be Educational Vouchers, Performance Contracting, and Experimental Schools. They are large programs devised by other than LEAs and are systematically evaluated.

Within this classification scheme, Cell III is the most unique: evaluations and program research here are usually done willy-nilly, at best; thus, their importance is transmitted without the benefit of systematic and objective information. YRS is one of the best examples of programs in this category. YRS programs are large-scale and have been initiated and controlled by LEAs. As previously noted, their assessment is left to either an anecdotal process or to small studies of individual programs which are not comparable or not evaluated.

While the federal government has expressed and operationalized its interest in YRS (in this and a previous project), the major conclusion reached--as a result of exploring YRS and its relationship to other projects and programs in the federal R&D context--is that DHEW needs to expand its current role. Certainly, a rational R&D policy would not miss the opportunity to systematically examine a local-initiated innovation as widespread as YRS. Further, given ASPE's mandate to examine projects and programs concerned with the educationally and economically disadvantaged, a YRS research agenda needs to be further explored.

Finally, there is evidence which suggests that YRS should be tested and assessed with respect to its potential in solving a wide range of current social problems (i.e., busing and integration). Also, as will be discussed below, there are a series of methodological issues and implications inherent in the range of proposed YRS research projects.

4.5 A YRS Research Agenda

4.5.1 Overview

Given the documented importance of YRS and the dearth of systematic empirical research about YRS, the conclusion reached here is that an ambitious research agenda needs to be pursued. Added to the above reasons, there is substantial evidence to strongly suggest that ASPE continue to pursue YRS research. This conclusion is based on two obvious points: first of all no one is either interested in or is currently developing YRS research; and secondly, there is increasing information to suggest that YRS may have importance in assisting disadvantaged children.

The research agenda which is outlined below has four major rubrics: methodology; social intervention; operational projects; and longterm policy research. An agenda which has been divided into these major categories can assist policy researchers in their decision-making process in the following ways. Depending upon their particular R&D approach, a series of related or disparate research topics can be chosen. Also, given the usual scarcity of funds, the agenda can be implemented in stages or as a complete package. Finally, a tie-in to other ongoing educational research has been suggested.

4.5.2 Methodology

One of the most important reasons that ASPE should actively pursue a set of YRS research projects is because it is an extremely cost-effective research arena. Methodologically, any of the specific YRS projects suggested below fall into a natural study category which means that the federal government does not have to pay for the operation of the program: it merely pays for the design, data gathering, and analysis. Also there is a sufficient number of YRS projects currently operating

to fulfill the needs of almost any design for sampling variables needed to answer questions about a wide range of concerns. That is, YRS programs are spread throughout the U.S. and operating in a sufficient variety of demographic settings so as to make a quasi-experimental design implementable. Also given that YRS programs are at different stages of development, receive different types of assistance, and operate on a wide spectrum of calendars, it offers a research arena in which hypotheses can be tested across programs, school districts, and even at the school and classroom levels.

Methodologically, it would also seem feasible to tie in a YRS research project--especially the student achievement portion--to one of the ongoing Follow-Through, Headstart or Title I evaluations. This could possibly even occur so that YRS schools and classrooms could be tested as control groups for these other programs and the same data used for an experimental group of the YRS study. Thus, one series of measurements would serve two purposes.

At another level a YRS research agenda might be of major assistance to states and local school districts in their attempts at answering questions of both effectiveness and costs. For example, a federal study might assist a state in providing its policy makers with empirically derived answers so as to avoid an event which occurred in California--the incoming Governor wanted to cancel the YRS projects because he had no information.

Given that some YRS programs have sensed the need for evaluation, ASPE could buttress this impulse by funding a national study which had sufficient monies to give technical assistance to SEAs and LEAs about evaluation design methodologies. The assistance could take several forms and at the top of the list would be an attempt to implement a cost-accounting system which would allow schools to accurately determine whether YRS

did in fact represent a savings in the short term and over time. There are a variety of such cost-allocation systems around and each RFP issued from a federal policy shop seems to have its own special system; however, this would be a pertinent research arena to vary cost-allocation systems or to fully test one in a variety of settings.

Finally, the last major YRS methodological advantage is that it naturally encompasses hypotheses about the effects of an innovative educational program on students, the school system, the community, and indeed for our entire society. For example, will YRS facilitate or accelerate growth among the range of students and especially educationally disadvantaged or economically poor ones as well as those who have special needs because of mental or physical disabilities? At the same time hypotheses about the interactive effects of school changes on a community (Will it increase or decrease delinquency? Will recreational facilities be more crowded? Will industries be adversely affected?) can be explored as can those on the larger society (Will migrant children stay in school longer? Will YRS tend to produce 16 year olds who have graduated high school and add to our labor market problems?).

4.5.3 Social Intervention Strategy

YRS is important because it is generally a locally initiated program. Therefore a research agenda which includes an opportunity to explore the hows, whys, and effects of such a widespread phenomenon is indeed a rich opportunity. Along these lines, educational researchers usually are concerned with why certain programs seem to flourish in some settings and not in others. Therefore a study which looked at the range of programs with a view of understanding what facilitated and/or hindered the growth of an experiment would be extremely useful. For example, the current information would tend to

indicate that much more attention needs to be paid to state level planning and technical assistance if innovations are to reach fruition.

The next major set of questions which could be asked under this category of studies is concerned with assisting to solve major and pressing social problems. For example, a federal judge recently took over a South Boston school because, allegedly, it had been resistant to the court's desegregation orders. YRS has been touted in some areas as a method to achieve racial balance. The scenario seems to be that YRS could be offered as an option in one school of a district currently under desegregation orders. With the advent of YRS in one of its schools, parents and students would be given a new option, curriculum reform accomplished and teachers retrained. Implementation of a YRS program offers the opportunity to make educational changes, reassign teachers, and account for parental and student preference under the flag of innovation rather than a legal mandate. Experience has demonstrated that a YRS option will tend to integrate a school within a district, and yet no one seems to know why.

Along with the larger methodological and societal issues, there are at least two specific types of research projects, one set of which could be of immediate assistance to currently operating YRS projects and the other of which is aimed primarily at answering suggested federal policy questions. The following agenda assumes that LEAs will continue to implement YRS programs and that the larger national policy issues raised above are and will be operative--that they are part of a rational federal R&D policy. The two broad areas are:

- projects to assist in the planning and development of YRS programs
- projects to provide answers to long term policy questions.

Based on our experience in examining the YRS movement, a hierarchy of projects has been proffered. The categories represent our best estimate as to their importance both from the perspective of operating programs and that of the dearth of rational data on the effectiveness of YRS and associated costs. However, the division is somewhat artificial in that all of the operational projects suggested would assist, to some extent, in developing a national longitudinal data base.

The following projects have been designed with the idea that their inclusion would represent a major change in federal R&D policy: instead of evaluating programs designed to respond to a social crisis (Evaluation of Title I for example) the following set of projects offer an opportunity to rationally guide the development of what could become a major change in our society. The following agenda has been designed in the light of YRS's documented importance, the dearth of extant relevant studies, and the absence of present concern; and as a continuation of ASPE's present concern.

4.5.4 Operational Projects

- A nationwide survey to provide concrete, accurate data on the size of YRS--number of students, programs, number of districts considering YRS--and the characteristics of each program.
- Policy analysis of barriers/facilitators in Federal program regulations. Consequences of different nation-wide levels of YRS on Federal programs.
- Analysis of existing state education legislation to identify barriers to YRS in present legislation, describe nature and scope of needed enabling legislation.
- Collect census, demographic and attitudinal data, interview school officials and community people to determine why some school districts start YRS, why some drop out, why entire states do not have YRS. Are there social/cultural, geographic conditions which predispose a district to consider or not

consider YRS? Pinpoint types of communities ripe for YRS. Possible that data from this research would also provide information which could be incorporated into "how-to" handbook.

- Development of a planning handbook for school districts considering a calendar change. Compilation of data from school districts on what to do, and what not to do. This would include guides for dealing with the community at large, teachers unions, and local officials.

- Development of model for determining economic consequences of YRS. Could be used as a "how-to" type handbook. A number of cost-benefit studies exist which could be synthesized and distilled to help develop model and handbook.

- Identification of active and potentially interested business and lobby groups who have a stake in promoting or discouraging YRS.

- Study YRS as a vehicle for curriculum reform. Could be done in conjunction with several other of the suggested studies.

4.5.5 Long Range Policy Studies

In devising the projects to be included under the above rubric, one major assumption was made, viz., the federal policy research issues are and will be focused on the difference educational innovations (YRS in this instance) make in the lives of children, especially those children with special needs. The YRS literature, which now spans several decades, continues to emit a single question: Does YRS, in some form, assist students to develop at a faster rate? There was the belief among a number of educators in urban areas more than five decades ago that YRS did help European immigrant children. They believed with a year-round effort their acculturation could be increased, they could learn English faster, and retain what they learned longer; in the minds of a few reformers was the thought that these children could be kept out of the labor market. This was indeed an ambitious agenda for such a seemingly minor modification of a social institution.

The YRS calendar seems to have originally developed as a means to accelerate learning; it later became a method for keeping building costs down. However, despite the original goals and the more recent modifications, we still do not have a satisfactory answer to either major question. The following projects have been devised to meet the historic as well as present perceived policy needs.

- Study to compile evidence for a decrease in learning loss in YRS programs. Is there a differential effect on disadvantaged children? Establishment of testing program to measure this. If a learning loss decrease exists what implications does this have for Federal compensatory education programs?

- Study of Watsonville, California either separately or as part of larger study with emphasis on YRS as an approach to migrant education.
  - family interviews
  - migrant employer interviews
  - testing a comparison school
  - coordination with OPBE migrant evaluation.

- A Handicapped Special Study would be in order if the ideas and data from the Urbain H. Plavar School of Fountain Valley School are apt indicators of YRS and handicapped children's success. They hypothesized that frequent vacations (45-15 plan) would provide mental and physical relief. Their data indicate that, on this non-traditional calendar, their students seem to be more highly motivated to learn. A national study should be explored to determine if these effects can be found in other settings and under different YRS programs.

- Study to determine effect of YRS in the total cognitive, affective, psycho-motor areas. Reading and math are typically only areas evaluated yet school districts have in some cases revised their curriculum to stress human relations, ecology, the environment, activities out of doors. This will probably require the development of new learning evaluation tools.

- Study of YRS at the secondary level to evaluate its impact on students in school and their success after graduation. Several secondary level YRS programs have been in operation long enough to have had students who attended all of high school on YRS and have now graduated. Interviews with graduates, current students, parents, teachers, etc.; study of school records.

- Determine whether YRS has an effect on racial balance in a school district and how this occurs. Select sample of school districts which have YRS, a sizeable minority population, and either are actively trying to improve their schools' racial balance or which have poorly integrated schools and are not taking action to remedy this. Compare level of school integration before and after YRS; if level improved or decreases identify process by which this occurred and whether YRS appeared to be a contributing factor. There is evidence to indicate that YRS has helped and hindered integration. A predominantly black California high school began innovative YRS program which involved great deal of curricular revision. Whites in increasing numbers are voluntarily attending this high school because the YRS program is so attractive. The distribution of students among the staggered teams could be used as a tool for or against integration.

- Public opinion survey of public and business for level of knowledge about YRS, interest in, reservation and attitudes toward it.

- Analytical paper on anticipated social consequences of large-scale YRS in the nation.

- Study of effect of YRS on pattern of use of recreational facilities such as the National Park Service's and identification of what impact change in use patterns has on the administration and activities of these facilities.

- Comprehensive survey in area of attitudes and lifestyles which goes beyond emotional responses to YRS. Would measure how many people in a variety of communities would personally benefit from a rescheduled school year and would approach it as more in tune with their lifestyle (loggers, moving van drivers, farmers, summer resort operators, other people who work in industries subject to seasonal ups and downs, people who like hunting,

fishing, skiing, etc). Also, measure the number of people willing to have YRS in their school district as an option if it does not necessarily have to affect them. This last aspect has potential for vastly increasing the number of communities who can offer YRS since its presentation as an option would do away with the usual "majority must want it for themselves or we can't have it" approach to YRS.

- Studies of beginnning programs--pre and post observation of:
  - planning and implementation activities
  - community dynamics
  - curricular changes or impact of maintaining a traditional education program within a revamped school schedule
  - effects on students
  - effects on school administration
  - effects on parents
  - effects on community
  - economic/cost effects

- Research on voter attitudes toward new school construction once YRS is operating in a district. Comparison of results pre and post YRS building referendums, opinion survey of voters. Do voters show greater degree of support for new construction if they feel present structures are being economically used? Potential implications for federal, state and local tax structures.

- Identification and analysis of impact of YRS on community agencies and services, including YMCA, YWCA, boys' and girls' clubs, recreation departments and police departments. Determine whether YRS has forced these agencies to change the scope and quality of their activities and services, what these changes have been and what impact they have had on community life.

- Selection of sites serving military bases to examine reduction in schooling disruption from re-assignment of military personnel (like the migrant problem). Joint effort with Department of Defense. They should be interested in YRS schools on military bases or in school districts near military bases (Virginia Beach, Virginia, Colorado Springs, Colorado, Chino, California).

- Ascertain the extent to which YRS has had longterm serendipitious effects on curriculum reform and whether it uses reform ideas of previous projects (e.g., team teaching, talking typewriters, modularized instruction) and if so, how the transfer of technology and ideas was accomplished.

4.6 Summary of Findings

The process of examining the importance of the YRS movement produced a variety of general and specific policy-relevant findings. Among the general findings are four statements which seem to accurately characterize YRS at this juncture:

- YRS is a rapidly growing, locally initiated movement in education;
- YRS shows potential for providing districts with economic and space savings and educational gains;
- YRS is having or could have a significant effect on various federal programs and policies; and on American society in general;
- District evaluations of YRS are of inconsistent quality and provide inconclusive results regarding impacts.

Specifically, with respect to the current federal involvement in an education R&D program it was found that:

- Only the federal government has sufficient resources to carry out the needed research agenda for YRS.
- Only ASPE (not OPBE or NIE) seems interested in and has the requisite knowledge for developing a necessary YRS research agenda.
- A new philosophical underpinning will be needed if ASPE is to proceed with YRS research.
- In order for ASPE to continue its research into YRS a larger study and therefore more resources will be needed.

- YRS research is probably more potentially relevant to disadvantaged children and/or children with special needs (migrant, handicapped, juvenile delinquents) than might have been hypothesized prior to this study.

The first set of findings have been previously discussed. At this point what is important to emphasize is that among observers, researchers, and chroniclers, few educational innovations and reforms seem to receive less coverage and interest than YRS, yet few are as large. There is indeed a serious gap in our current educational research establishment's knowledge of widespread and growing movements. The gap exists in Washington among federal agencies charged with developing and implementing a federal R&D policy; it exists among private research organizations and among some members of the national press who normally report on education.

The specific findings which are pertinent to the continuation of YRS research and which may have an impact on educational innovation, the federal government's role, and indeed on the growth of YRS itself need more explication.

In our corporate and individual experiences which span a decade, only the federal government has had the mandated role, technical expertise, and resources to implement what we believe is a necessary YRS research agenda. However, we are aware that something of a philosophical change will have to occur if this is to reach fruition. The question in considering whether the federal government should undertake the next step in this process is: should the federal government study any promising innovations, even if the funding source is not the federal government? The answer provided here is: unequivocably "YES."

First of all a true educational R&D system would include any and all interesting innovations even though they might not be federally funded nor apparently relevant to existing

federal policy. Secondly, it seems as though it has been demonstrated here that YRS is a promising innovation. A few statements about the second criterion, relevance to existing policy, may be appropriate here. We believe YRS "fits." That is, given that only the federal government has the resources and that ASPE has shown it is the only group with both interest and ability to develop the necessary resources and technical skills for a large-scale study, it should continue YRS research. However, the findings here that YRS programs may be assisting children with special needs, makes our conclusions even more pertinent. ASPE has the responsibility for suggesting innovative approaches to educational problems of the poor (derived from receiving funds under Section 232 of the OEO legislation) and YRS has been effective in assisting migrant and handicapped children; it has also been hypothesized as assisting in solving some of the problems of juvenile delinquency. Thus, only ASPE has a sufficiently broad mission and interest to conduct some of the projects suggested above.

Finally, while the YRS research agenda suggested here calls for both philosophical changes on the part of the federal government, and possibly for a fairly radical change in resource allocation, the payoffs seem enormous. To date the present federal educational R&D program seems to be slightly defective. It seems to be a large-scale monitoring and evaluation system which does not pursue non-federally funded innovations. The opposite should be true: instead of responding to last year's or this year's federal policy, some amount of resources should be expended to exploring educational innovations without respect to their current status in the current administration.

If all or part of the suggested YRS research agenda can be implemented, the R&D system can begin to lead, to apply

innovations which have been developed at the local level on a national scale, to anticipate future crises, and finally to assist millions of Americans struggling with the enormous task of how to teach their children how to read and write.

APPENDIX A - GEOGRAPHIC LOCATION OF YRE SCHOOL DISTRICTS

The following maps represent the growth and location of year-round education programs across the country:

Map 1: Year-Round Education Programs in Operation in the United States, 1973

Map 2: Year-Round Education Programs in Operation in the United States, 1975

Map 3: Year-Round Education Programs in Operation in the United States, by Model, 1975

Map 4: Year-Round Education Feasibility Studies, Planning, or Pre-Implementation Activities, 1975

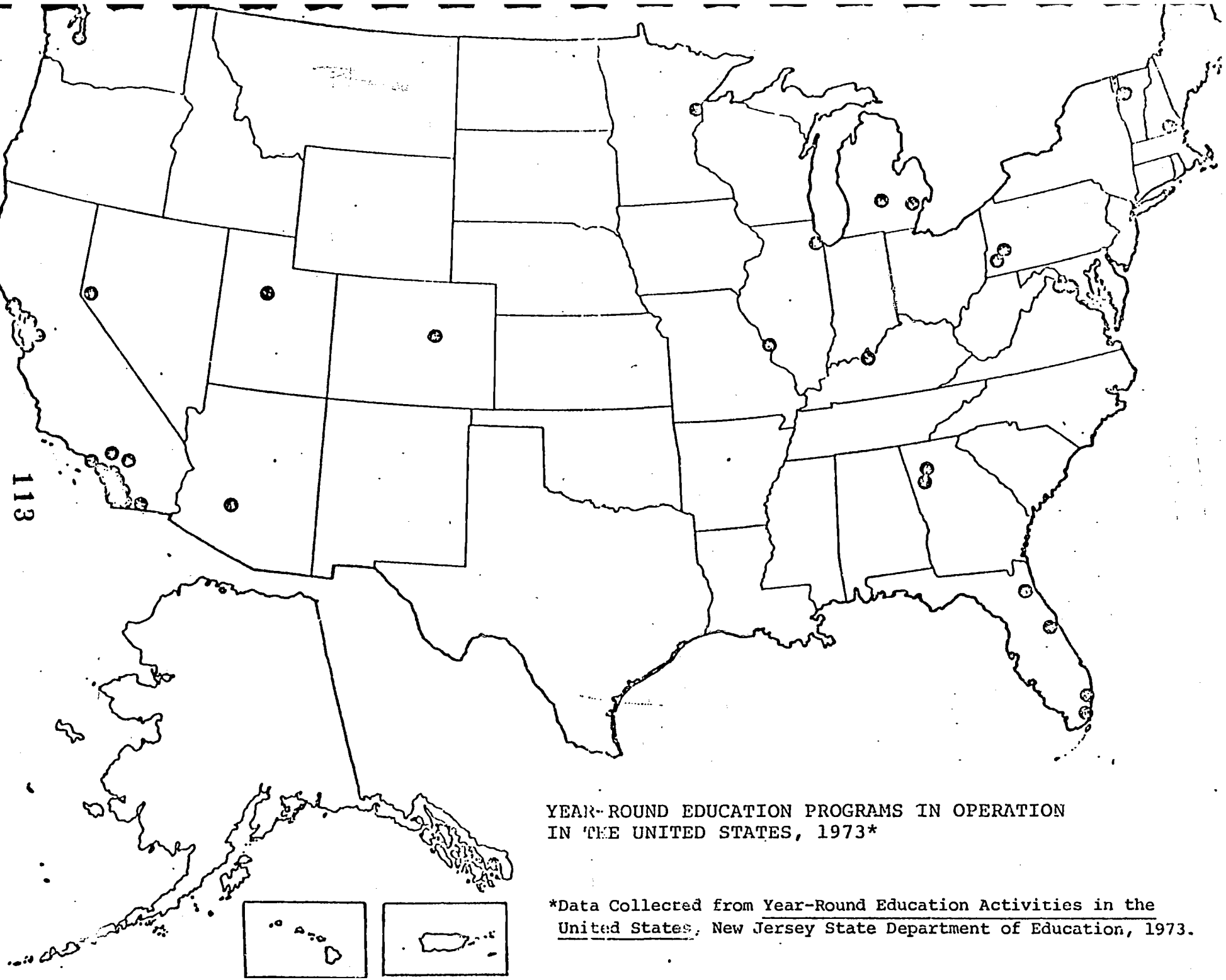
Map 5: California Year-Round Education Programs in Operation, 1975

Map 6: California Year-Round Education Programs in Operation, by Model, 1975

Map 7: California Year-Round Education Feasibility Studies, Planning, or Pre-Implementation Activities, 1975.

The data for information found on Map 1 were taken from Year-Round Education in the United States (Bruce Campbell, Director, Trenton: New Jersey State Department of Education, Division of Research Planning and Evaluation, April, 1973 [ERIC ED 077 133]). The data appearing in maps 2-7 were collected from Year-Round Education Activities in the United States (Bruce Campbell, Director, Trenton: New Jersey Department of Education, April, 1975), which covers the period from July 1, 1974 to February 1, 1975.

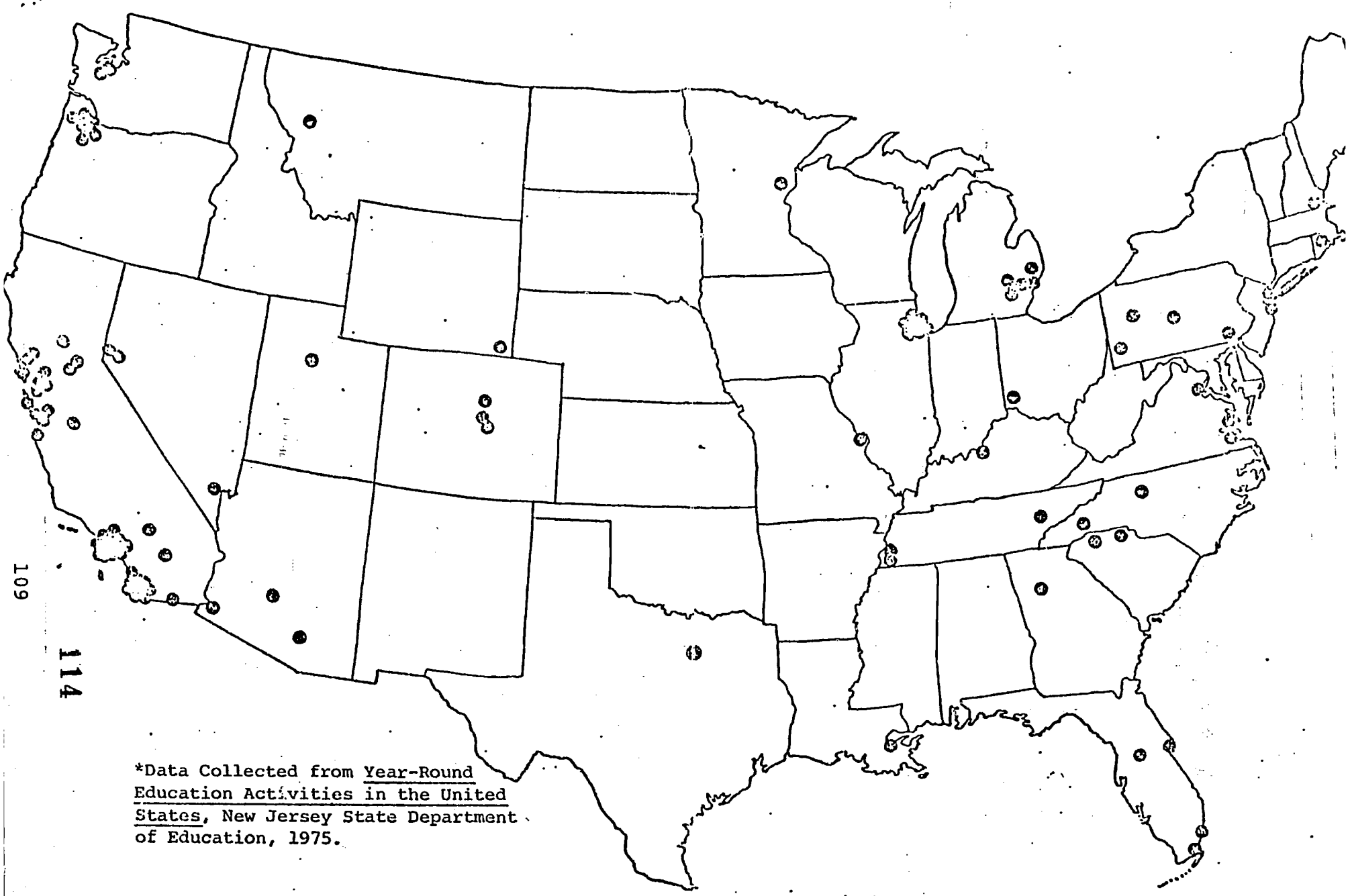
Due to our slightly more restricted definition of a year-round education program, there are a few omissions on the maps which are listed in the Activities (e.g., Fairview School District, Pa., an operational plan listed as "summer semester voluntary"; and Millcreek Township School District, Pa., in the pre-implementation stages of "two terms plus summer").



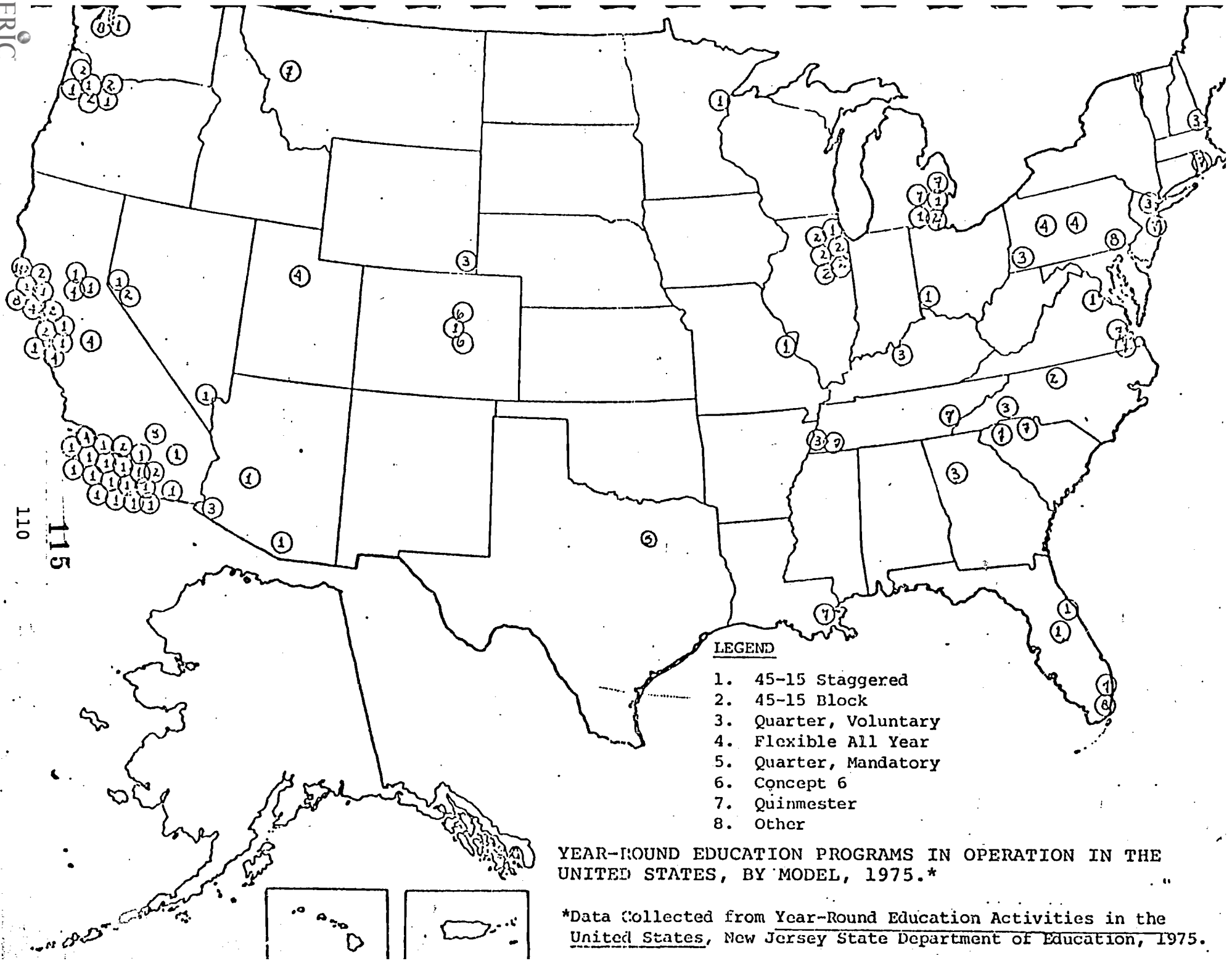
YEAR-ROUND EDUCATION PROGRAMS IN OPERATION IN THE UNITED STATES, 1973*

*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1973.

YEAR-ROUND EDUCATION PROGRAMS IN OPERATION IN THE UNITED STATES, 1975*

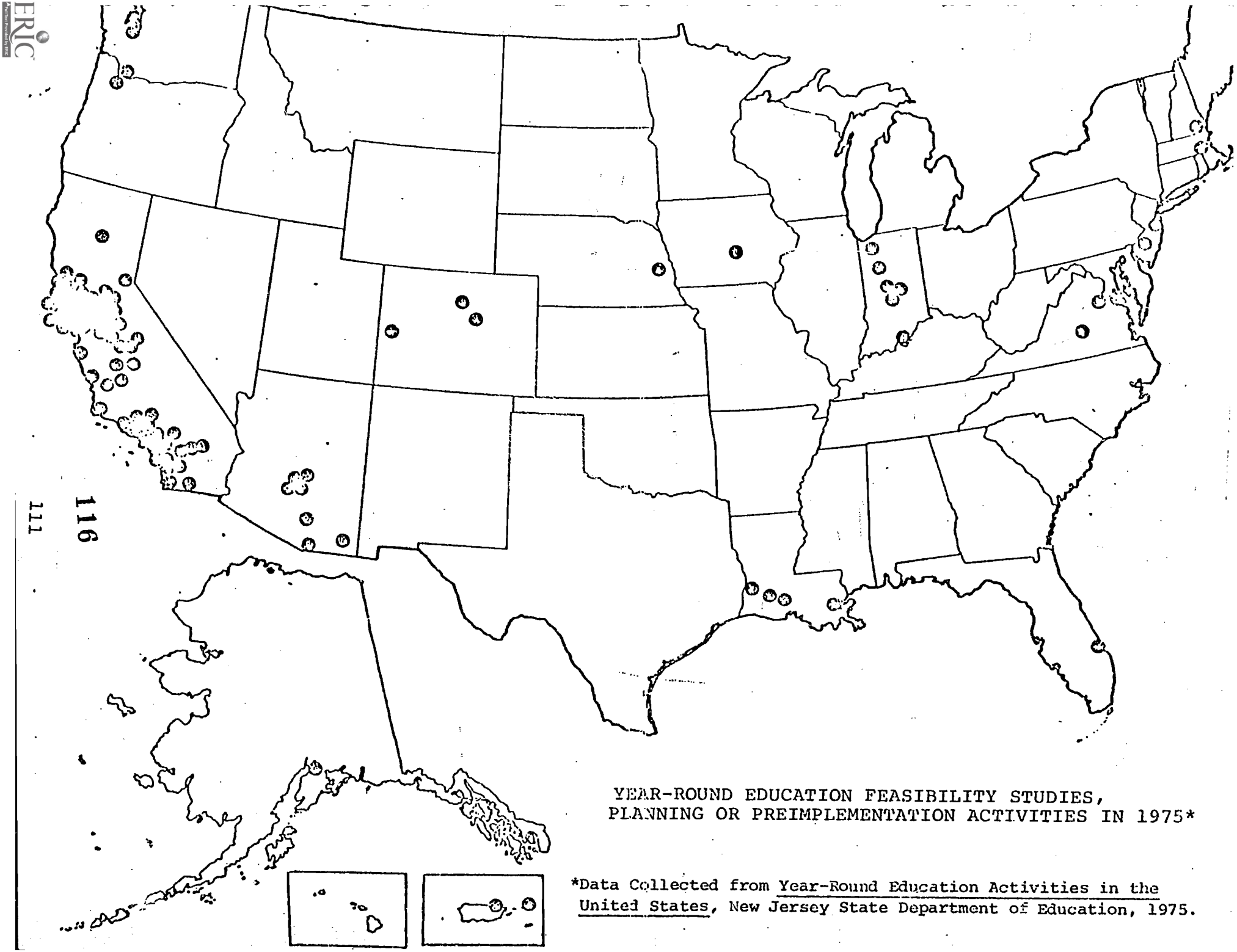


*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.



YEAR-ROUND EDUCATION PROGRAMS IN OPERATION IN THE UNITED STATES, BY MODEL, 1975.*

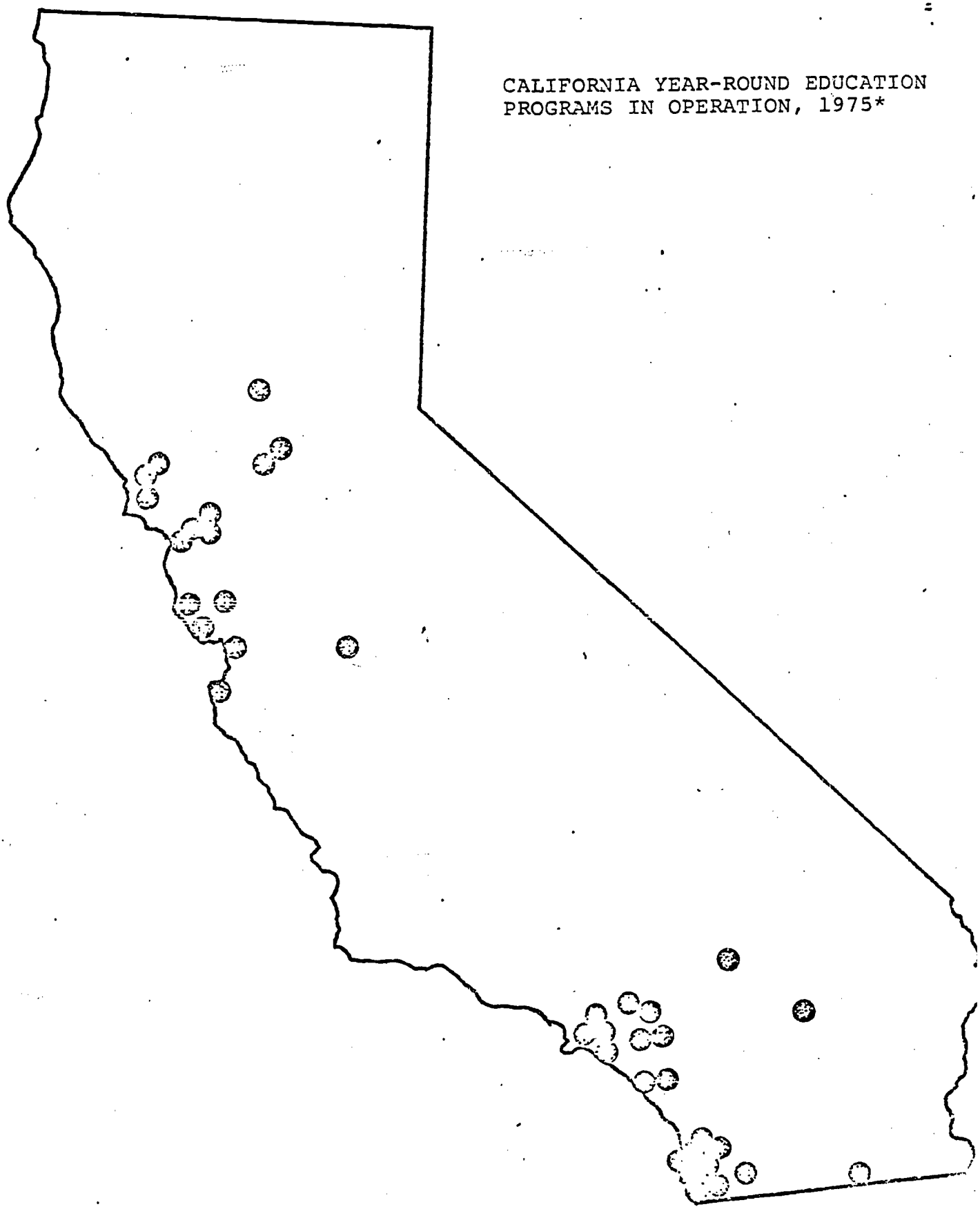
*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.



YEAR-ROUND EDUCATION FEASIBILITY STUDIES,
PLANNING OR PREIMPLEMENTATION ACTIVITIES IN 1975*

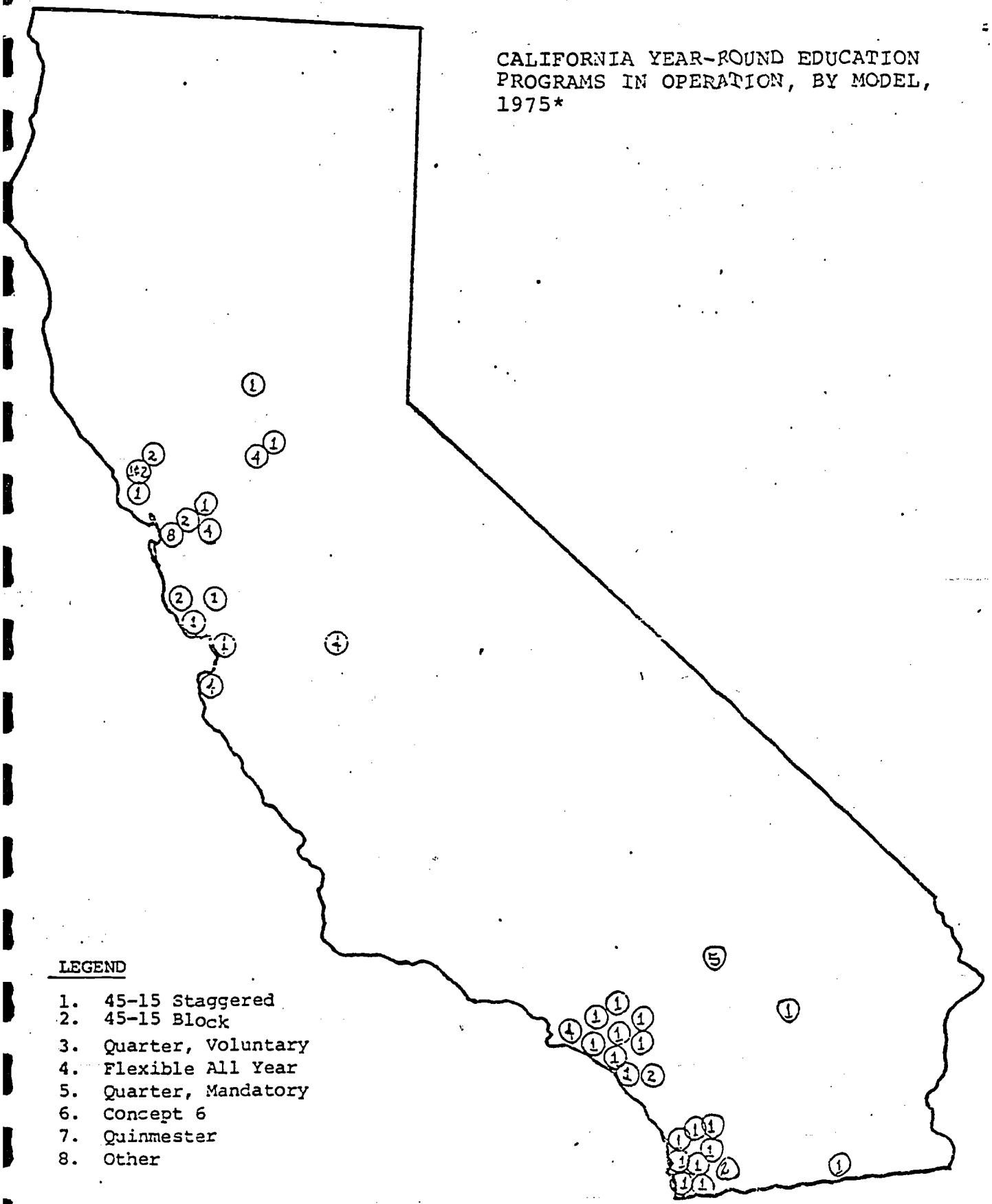
*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.

CALIFORNIA YEAR-ROUND EDUCATION PROGRAMS IN OPERATION, 1975*



*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.

CALIFORNIA YEAR-ROUND EDUCATION PROGRAMS IN OPERATION, BY MODEL, 1975*

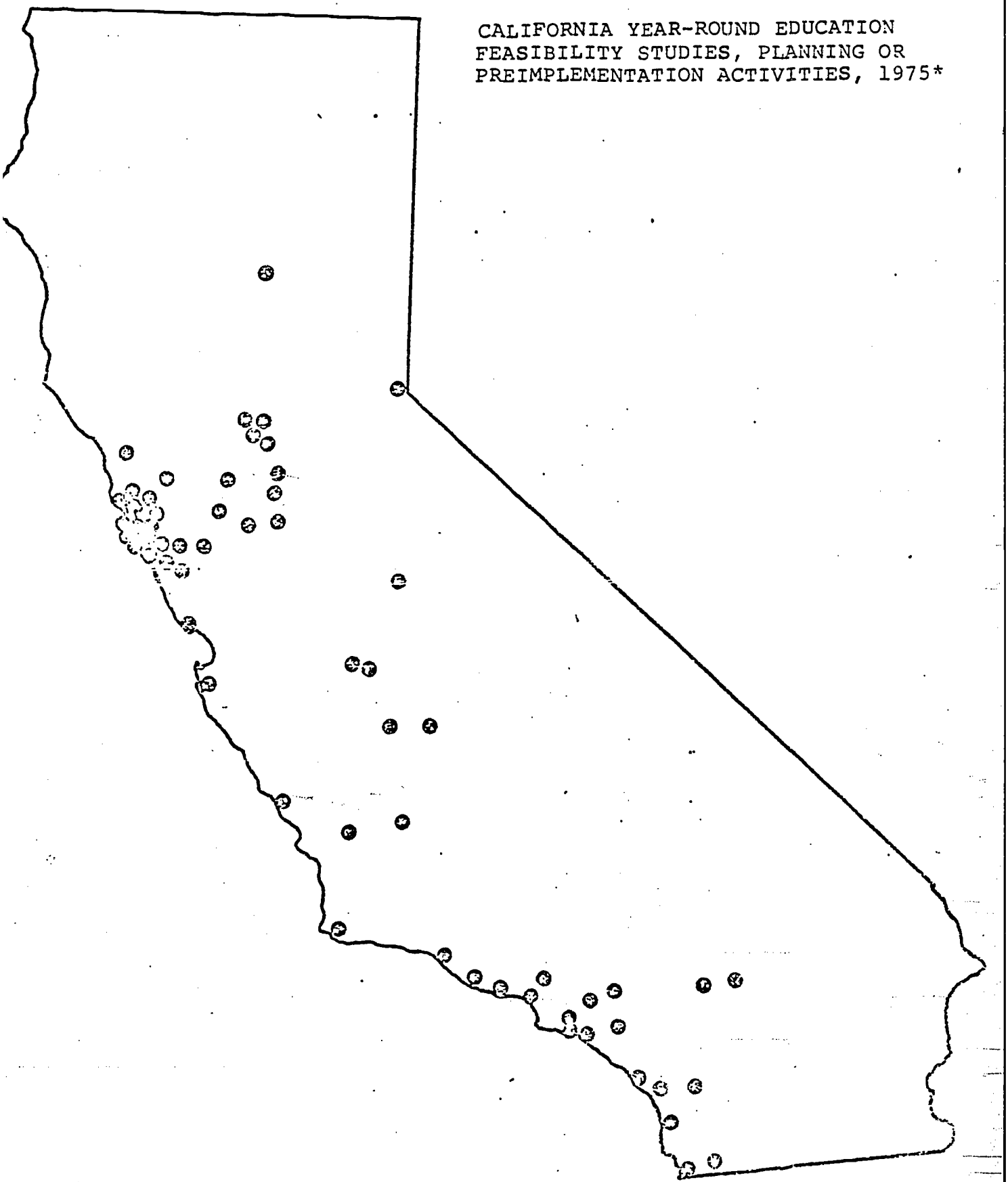


LEGEND

1. 45-15 Staggered
2. 45-15 Block
3. Quarter, Voluntary
4. Flexible All Year
5. Quarter, Mandatory
6. Concept 6
7. Quinmester
8. Other

*Data Collected from Year-Round Education Activities in the United States, New Jersey State Department of Education, 1975.

CALIFORNIA YEAR-ROUND EDUCATION FEASIBILITY STUDIES, PLANNING OR PREIMPLEMENTATION ACTIVITIES, 1975*



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