# AN ASSESSMENT OF SECONDARY SCHOOL STUDENTS' ATTITUDES TOWARD THE 45-15 YEAR-ROUND SCHOOL CALENDAR/

Ву

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#### Chapter 1

#### INTRODUCTION

The concept of year-round education is not new.

Mossie J. Richmond, Jr. found that schools were open from
two months to nearly the full calendar year during the 1600s.¹

After declining in popularity during the first half of this
century,² year-round education again became popular in the
1960s due to the pressing needs of schools. Year-round programs increased from one in 1964,³ to 539 in 1976.⁴ Of
these 539 year-round schools, 321 were elementary, 114 were
junior high, and 104 were senior high schools, serving
approximately 346,294 students.⁵

<sup>&</sup>lt;sup>1</sup>Mossie J. Richmond, Jr., "Current Applications, Implementations, Implications, and Effects of the Extended School Year Concept." (Unpublished Doctoral dissertation, Ball State University, Muncie, Indiana, 1973), pp. 33-34.

<sup>&</sup>lt;sup>2</sup>Port Huron Area School District, "The Four-Quarter Plan and Its Feasibility for the Port Huron Area School District," (Port Huron, Michigan: Port Huron Area School District, January, 1970), p. 154.

<sup>&</sup>lt;sup>3</sup>David J. Parks and Linda G. Leffel, "Needed Research in Year-Round Education," (Paper read at the 1973 Annual Meeting of the American Educational Research Association, February 25—March 1, 1973, Chicago, Illinois), p. 4. (Mimeographed.)

National Council on Year-Round Education (Comp.),
National Reference Directory of Year-Round Education,
(Clarion, Pennsylvania: National Council on Year-Round
Education, January, 1976), p. 1.

<sup>&</sup>lt;sup>5</sup>National Council on Year-Round Education (Comp.), p. 1.

Year-round schools are being implemented in an increasing number of school districts because of over-crowded schools resulting from population transfer patterns, rising inflation, spiraling construction costs, and an increased concern for quality education. As a consequence of these pressures, year-round schools may well continue to increase in order to support the educational demands of the people.

Districts intending to implement a year-round program should generally approach the issue with careful and adequate preparation. Many school districts have examined the concept by reviewing the literature and conducting feasibility studies. Some feasibility studies have led to the identification of numerous variables which affect the implementation of year-round programs. One of these variables is attitude.

Literature has shown that attitudes definitely have a role in the success or failure of the implementation and continuation of year-round schools. The attitudes of students on the 45-15 calendar are being explored in this study because of the importance of students' attitudes and self-concepts in education and because the

<sup>&</sup>lt;sup>1</sup>Elk Grove Unified School District, "Process Evaluation of the Elk Grove Year-Round School Project," (Elk Grove, California: Elk Grove Unified School District, February, 1974), p. 150.

45-15 year-round school calendar is utilized more than other year-round school calendars. Careful consideration should be given to students' attitudes in order to develop a truly feasible year-round program¹ because, according to Hunt,² the attitudes of students play an important role in determining whether or not a district will implement a year-round program.

The main body of knowledge on students' attitudes is contained in feasibility studies which have limitations. The literature reflects this researcher's concern that little empirical research has been conducted to assess how specific personal and school calendar characteristics are related to students' attitudes toward the 45-15 year-round school calendar. In order to provide more systematic information, it is imperative that school districts find or develop and use effective instruments to determine

<sup>1</sup> Oz Johnson, "Strategies for Year-Round Education in Jefferson County, Kentucky," Mt. Sequoya National Seminar on Year-Round Education, (Fayetteville, Arkansas: Arkansas School Study Council, 1969), p. 18.

<sup>&</sup>lt;sup>2</sup>Walter J. Hunt, "Characteristics of School Districts Related to Implementation of Year-Round Schools," (Unpublished Doctor's dissertation, Virginia Polytechnic Institute and State University, 1973), p. 73.

<sup>&</sup>lt;sup>3</sup>David J. Parks, "The Measurement of Attitude Toward Year-Round Education (YRE)," (Proposal for research grant, College of Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, February, 1975), pp. 1-2. (Mimeographed.)

the attitudes of their students toward year-round programs. 
This would enable school districts to improve their program
by identifying and planning for changes in areas of concern.

The preceding discussion should not be interpreted to mean that students' attitudes take precedence over all other school board objectives. Financial, geographic, and other limitations placed on many school districts mean that the desires of students will conflict with some school board objectives. As a result, students' desires occasionally will have to be tempered or traded off for other objectives. Regardless, the attitudes of students remain an important area of investigation.

#### Statement of the Problem

Year-round education is thought by many to be a panacea for educational problems. This concept has been credited with: (1) the alleviation of financial problems, (2) saving the taxpayer money, (3) reducing overcrowded schools, and (4) improving the instructional program. Consequently, school districts are implementing year-round programs as an answer to their dilemmas.

Notwithstanding the reasons school districts may have for investigating the year-round concept, one determining

<sup>&</sup>lt;sup>1</sup>Ken M. Young, "Catalyst for Educational Change or Varnish for the Status Quo?" <u>Virginia Journal of Education</u>, LXVI (April, 1973), p. 15.

factor for implementing a year-round school program, according to Hunt, is the attitude of students toward the concept. Indeed, studies have shown that negative attitudes of students have contributed to the rejection of 45-15 year-round plans<sup>2</sup>, while positive attitudes of students have contributed to the continuation of 45-15 plans.

Since attitude has been identified as a pivotal variable in determining whether or not a year-round program will be implemented, some research and investigation have focused on this variable. However, the overwhelming majority of attitudinal studies, whether they be feasibility studies of proposed plans or evaluations of operational programs, contain inventories which are not systematized, are limited in scope, and were developed in accordance with local human and financial resources. Such inventories do not lend themselves to in-depth analysis or offer valid bases for

<sup>&</sup>lt;sup>1</sup>Hunt, p. 73.

<sup>&</sup>lt;sup>2</sup>Sarasota County School District, "A Feasibility Study of the Year-Round Utilization of School Buildings in Sarasota County," (Sarasota, Florida: Sarasota Division of Personnel and Program Development, October, 1973), pp. 98-99.

<sup>&</sup>lt;sup>3</sup>Joy Tregallas, "Extended School Year Feasibility Study Program," (Williamstown, New Jersey: Monroe Township Public Schools, May, 1973), pp. 67, 68, 81.

<sup>&</sup>quot;Ned S. Hubbell and Associates, "Attitudes Toward Year-Round School in Prince William County, Virginia," (Port Huron, Michigan: Ned S. Hubbell and Associates, Inc., September, 1972), p. 1.

eliciting implications for other school districts. Parks contended that such attitude assessment instruments are limited in the following ways:

- 1. The items are not selected systematically.
- The items are unclear, the instruments are poorly constructed, and the results are difficult to interpret.
- Cross district comparisons are often restricted since instrument format, content, and scoring are inconsistent.
- 4. The instruments have not been tested for validity or reliability.<sup>2</sup>

Because of the importance ascribed to students' attitudes, the aforementioned limitations must be eradicated as much as possible in order to develop a viable attitudinal assessment instrument. The evaluation of students' attitudes with such an instrument is the first step toward providing insight into those variables which are associated with favorable and unfavorable attitudes toward year-round education.

<sup>&</sup>lt;sup>1</sup>Elaine M. Boyce, "Report to the Western Association of Year-Round Schools," (Berkeley, California: Field Service Center, Department of Education, University of California, November, 1974), p. 69. (Mimeographed.)

<sup>&</sup>lt;sup>2</sup>David J. Parks, "The Measurement of Attitude Toward Year-Round Education (YRE)," pp. 1-2.

The weaknesses in previously developed instruments and the importance of students' attitudes in the success or failure of year-round programs formed the basis for a two-pronged approach to this study. First, an attitudinal inventory was constructed to evaluate students' attitudes toward the 45-15 year-round school calendar and second, an identification was made of those personal and school calendar characteristics presumed to influence students' attitudes toward that calendar. The personal and school calendar characteristics of interest in this study are listed below.

#### Personal Characteristics

- 1. Sex
- 2. Experience in year-round school
- 3. Scholastic achievement

#### School Calendar Characteristics

- 1. Employment option
- 2. Vacation option
- Parental attitude
- 4. Sibling attendance patterns
- 5. Attendance patterns of friends
- 6. Calendar option

#### Evidence Related to the Problem

In reviewing the literature related to students' attitudes toward year-round school, two aspects were considered: (1) what the literature says about the relationship

between type of calendar and students' attitudes toward school; and (2) what indication is offered by the literature as to what personal and school calendar characteristics affect students' attitudes toward the 45-15 year-round school calendar.

Relationship between type of calendar and students' attitudes toward school. Before reviewing the literature to determine how the aforementioned personal and school calendar characteristics are related to students' attitudes toward the 45-15 year-round school calendar, it was deemed essential to examine the literature with respect to the relationship between type of calendar and students' attitudes toward school.

In reviewing the literature as it related to type of calendar and students' attitudes toward school, it was found that all calendar comparisons were at the elementary level with the exception of Prince William County of Virginia, which offered a calendar comparison of students' attitudes at the secondary level. It should be noted that in Prince William County both the 45-15 and traditional school calendars were housed in the same facility. Because of a dearth of research relating type of calendar to secondary students' attitudes toward school, inferential statements were derived from elementary school comparisons. In addition, a further inference was made

from a parental survey conducted by the Frances Howell School District of Missouri.

In a survey of high school students, conducted by the Prince William County Planning and Analysis Office, a 12 percent random sampling was picked from the 45-15 year-round students (n = 63). The grade level, calendar, and sex distribution of the sample was the same as in the year-round population. A stratified random sample of equal size was picked from the traditional calendar students. This group was stratified so as to obtain the same percentage distribution of grade level and sex as was in the year-round school sample. A comparison of the results of these two surveys revealed that no differences in student attitude toward school existed at the .05 level of significance. 1

In a survey conducted in 1972 by the Chula Vista City School District of California, it was found that the changes in attitudes toward self and school during the school year were not significantly different for second grade boys and girls or fifth grade boys in traditional and year-round schools. However, differences for fifth grade girls, whose change in attitude favored year-round school, were significant beyond the .05 level. The results of the

<sup>&</sup>lt;sup>1</sup>Prince William County Schools, "Report of Survey of Students at Gar-Field High School." (Prince William County, Virginia: Educational Planning and Analysis Office, December, 1974), pp. 1-3.

above comparative survey induced the Chula Vista City
School District to conclude that "YRS pupils' attitudes
about self and school were as good as traditional school
pupils' attitudes."1

Similarly, in a study by the Escondido Union School District of California, 2 a comparison of students' attitudes toward school was conducted between three 45-15 year-round elementary schools and three nine-month elementary schools. The results revealed no significant difference. Students at all six schools showed improved attitudes.

During September of 1972, the Frances Howell School
District of Missouri designed a questionnaire to survey
parental attitude toward year-round school. The questionnaire
was sent to all homes which had students attending BeckyDavid Primary and Intermediate, Central Elementary, and C.
Fred Hollenbeck Jr. High School. The parents were asked to
compare the school attitudes of their children who were then
in the 45-15 year-round school with their former attitudes
as students in a traditional school. The result was that

Henriette M. Lahaderne, "Year-Round Schools: An Assessment of the Program's Initial Year in Four Chula Vista Elementary Schools," (Chula Vista, California: Chula Vista City Elementary School District, November 27, 1972), pp. 30-34.

<sup>&</sup>lt;sup>2</sup>Wilhelmine Neilson, "First Report—Year-Round Schools," (Escondido, California: Escondido Union School District, 1973), p. 1.

year-round school had not changed their children's attitudes toward school significantly.

Finally, Gove of the Valley View School District, stated that students who liked school prior to the 45-15 plan still liked school, and those who disliked school prior to the 45-15 plan still disliked school. In summation, according to Gove, it can be said that students' attitudes toward the 45-15 school calendar appear to be related to students' attitudes toward school generally.

To clearly determine if there is any difference in students' attitudes between school calendars, an exhaustive review of the literature was conducted on specific variables believed to reflect students' attitudes. The variables examined were juvenile delinquency, vandalism, attrition rate (drop-out rate), interest in school, attendance, health and physical development, and family life style. Each of these variables was examined to determine how it related to the traditional and 45-15 year-round school calendars.

<sup>&</sup>lt;sup>1</sup>Francis Howell School District, "Year-Round School Questionnaire," (St. Charles, Missouri: Francis Howell School District, December, 1972), pp. 1-2.

<sup>&</sup>lt;sup>2</sup> James R. Gove, "Testimony Presented to General Subcommittee on Education," (Washington, D.C.: Government Printing Office, April 24, 1972), p. 23.

<sup>&</sup>lt;sup>3</sup>Pasco County School Board, "The 45-15 Year-Round School Plan," (Pasco County, Florida: The Pasco County School Board, 1971), p. 25.

As a result of this review, in relation to the variables of juvenile delinquency, 1, 2 vandalism, 3, 4, 5 attrition rate, 6 interest in school, 7 attendance, 8, 9, 10

<sup>&</sup>lt;sup>1</sup>Mossie J. Richmond, "Design and Delimits Determine Effects of ESY Programs," (Jonesborro, Arkansas: Arkansas State University, 1974), pp. 8, 12-13.

<sup>&</sup>lt;sup>2</sup>The Washington Post, (Washington, D.C.), June 22, 1975, Section B, p. 2, Columns 1-4.

<sup>&</sup>lt;sup>3</sup>Richmond, "Design and Delimits," p. 13.

<sup>&</sup>quot;La Mesa-Spring Valley School District, "The Second Annual Year-Round School Attitudinal Survey," (La Mesa, California: La Mesa Spring Valley School District, November, 1973), p. 20.

<sup>&</sup>lt;sup>5</sup>Statement by Robert Boyton, Telephone Interview, July 2, 1975.

<sup>&</sup>lt;sup>6</sup>Richmond, Design and Delimits," pp. 14-16.

<sup>&</sup>lt;sup>7</sup>La Mesa-Spring Valley School District, "The Second Annual Year-Round School Attitudinal Survey," pp. 30, 34, 37.

<sup>&</sup>lt;sup>8</sup>Richmond, "Design and Delimits," pp. 14-16.

<sup>&</sup>lt;sup>9</sup>Clark County School District, "Interim Report on Year-Round School," (Clark County, Nevada: Department of Research and Development, August, 1973), p. 9.

<sup>10</sup> Myra G. Campbell, "Year-Round Schools: Perceptions of Parents, Students, and Staff from Six San Diego Pilot Project Elementary Schools," (San Diego, California: San Diego City Schools, February, 1973), pp. 39-41.

health and physical development, 1, 2, 3, 4, 5 and family life style, 6, 7 it can be concluded that the 45-15 year-round calendar has not been responsible for any negative effect on any of the aforementioned variables. Indeed, the research showed conclusively that the type of calendar had little or no effect on the variables or showed some improvement under the 45-15 calendar. Since each of the stated variables is related to students' attitudes to a degree and since these same variables have been shown not to be related significantly to type of calendar, this is additional support for the absence of difference in attitudes of students in the 45-15 and traditional programs. In the

<sup>&</sup>lt;sup>1</sup>Richmond, "Design and Delimits," p. 16.

<sup>&</sup>lt;sup>2</sup>Polk County School System, "The Extended School Year," (Des Moines, Iowa: Polk County School System, April, 1970), p. 3.

<sup>&</sup>lt;sup>3</sup>Edwin H. Vause, "The Year-Round School Bag: Some Cool for Up-Tight Educators," (Fayetteville, Arkansas: Arkansas School Study Council, 1969), p. 4.

<sup>&</sup>quot;Jean Probinsky, "The Implications of the 45-15 Calendar for Changing Family Life Patterns," (Paper presented at the Second Annual Meeting of the Mid-South Educational Research Association, November 14-17, 1973, Memphis, Tennessee), p. 16.

<sup>&</sup>lt;sup>5</sup>George I. Thomas, "It's Time to Reschedule the School Year," (Paper presented at the Twenty-Ninth Annual Meeting of the National School Boards Association, April 12, 15, 1969, Miami Beach, Florida), p. 16.

<sup>&</sup>lt;sup>6</sup>Probinsky, p. 16.

<sup>&</sup>lt;sup>7</sup>Washoe County School District, "An Analysis of the Year-Round School Program," (Reno, Nevada: Department of Research and Development, June, 1973), p. 11.

absence of differences, attention can be focused upon variations in attitudes of secondary school students in the 45-15 program.

In this section, it was shown that there is evidence which indicates that there is no relationship between students' attitudes and type of calendar. Furthermore, additional research conducted on seven variables revealed that these variables were not related significantly to type of calendar or that they showed some improvement when related to the 45-15 calendar. The ensuing section will explain what the literature says in relation to the selected personal and school calendar characteristics and how they relate to students' attitudes toward the 45-15 calendar.

Personal and school calendar characteristics
affecting students' attitudes toward year-round school.

Because serious research on the evaluation of year-round schools has commenced only recently, the literature indicates that some areas have not received due consideration.

One such area, in which a paucity of research has been conducted, is personal and school calendar characteristics and how they relate to students' attitudes toward the 45-15 year-round school calendar. This section indicates how these personal and school calendar characteristics may be related to students' attitudes toward the 45-15 year-round school calendar. The personal and school

calendar characteristics of interest in this study were as follows:

#### Personal characteristics

- 1. Sex
- Experience in year-round school
- 3. Scholastic achievement

Sex. In a study conducted by the Washoe County
School District, located in Nevada, certain differences in
responses by sex were identified. They were as follows:

#### Girls

- Liked the short breaks over a long vacation better than boys did.
- 2. Liked going to school for nine weeks and then having a vacation better than boys did.
- Felt their classes worked better together...than boys did.
- 4. More girls than boys indicated they were involved in fewer out-of-school activities.<sup>1</sup>

### Boys

 Consistently reported liking the idea of changing rooms less than girls.

<sup>1</sup>Washoe County School District, p. 15.

- 2. Felt more than girls that their parents talked about school more this year.
- More boys than girls reported they liked school less well this year.
- 4. More boys than girls indicated they were involved in more out-of-school activities this year.<sup>1</sup>

In a study conducted in the Chula Vista School District, California, Lahaderne found that, to both sexes, the most attractive feature of the 45-15 year-round school calendar was the vacation schedule. The second most attractive feature to the males was the intersession. The males believed that the vacations were too short while the females mentioned social aspects; namely, that the vacation schedules of friends and parents were disrupted and this led to a disruption of social schedules. In this same study, Lahaderne found that although the changes in attitudes toward self and school for traditional and year-round school pupils during the year were not significant for fifth grade boys, they were significant, beyond the .05 level, for girls in regard to their attitude toward school. Furthermore, while the attitude of girls enrolled in a traditional school became less favorable during the year, the attitude of those girls enrolled in a year-round program increased slightly. 2

<sup>&</sup>lt;sup>1</sup>Washoe County School District, p. 15.

<sup>&</sup>lt;sup>2</sup>Lahaderne, p. 35.

In Prince William County, Virginia, it was detected that of the seventh grade year-round male students, 69 percent favored the 45-15 plan as compared to 65 percent of the females. Of the fourth grade year-round female students, 64 percent favored the 45-15 plan as compared to 56 percent of the males. Of the countywide traditional students surveyed, there was very little difference of opinion between the sexes. The percentage of seventh grade males and females opposed to the 45-15 plan was 61 and 59 percent, respectively. In the fourth grade, it was found that 50 percent of the males and 52 percent of the females were opposed to the 45-15 plan. These findings support the contention of Likert and Murphy that sex differences, in relation to their effect on attitude, are altogether negligible.

Experience in year-round school. "...theorists who agree on little else are in complete accord on the extreme and undemonstrated notion that all attitudes are developed through experience." A review of the literature indicates

<sup>&</sup>lt;sup>1</sup>Hubbell and Associates, p. 25.

<sup>&</sup>lt;sup>2</sup>Hubbell and Associates, p. 87.

<sup>&</sup>lt;sup>3</sup>Rensis Likert and Gardner Murphy, <u>Public Opinion and the Individual</u>, (New York: Harper and Brothers, 1938), p. 87.

<sup>4</sup>M. Brewster Smith, "Attitude Change," Attitudes, eds. Marie Jahoda and Neil Warren, (Middlesex, England: Penguin Books, Ltd., 1966), p. 42.

that attitude becomes more positive the longer one is on the 45-15 year-round school calendar. In a study done by the Pajaro Valley Unified School District, California, it was detected that the response to all questions was more favorable after five months of year-round school than before implementation of the concept. Finally, in a report for the Northern Valley Regional High School District, New Jersey, Glowski discovered that students' attitudes were more favorable toward year-round schools in those districts with mandatory programs in operation for a year or more.

The preceding discussion suggests that students placed on a year-round school calendar will have improved attitudes toward the year-round school calendar the longer they attend. Whether or not former year-round students placed in a traditional school calendar will have improved attitudes toward that calendar was not addressed in this study.

Scholastic achievement. In relation to this variable, it was found that most people find it logically

David J. Parks, "Research on Year-Round Education," (Paper read at the American Educational Research Association Convention, April, 1974, Chicago, Illinois), p. 11.

<sup>&</sup>lt;sup>2</sup>Pajaro Valley Unified School District, "Year-Round School Evaluation, First Year Report," (Watsonville, California: Pajaro Valley Unified School District, January, 1974), p. 15.

<sup>&</sup>lt;sup>3</sup>Mathew Glowski, "Report on Extended School Year Programs," (New Jersey: Northern Valley Regional High School District, January, 1974), p. 1.

compelling to associate achievement with positive attitudes toward school. However, this logically anticipated relationship is difficult to demonstrate empirically. Statistical studies conducted by Diedrich, Tenenbaum, Jackson and Getzels, Tschechtelin and others, and Malpass reject this "common sense" expectation. These studies concluded that there is no significant relationship between student attitude toward school and scholastic achievement.

Realizing that there is no statistical evidence to support the commonly held perception that achievement is associated with positive attitudes toward school, it was speculated that students who achieve well in school will not be any more favorable to the concept of a year-round school than students who do not achieve well in school.

#### School calendar characteristics

- 1. Employment option
- 2. Vacation option
- Parental attitude
- 4. Sibling attendance patterns

<sup>&</sup>lt;sup>1</sup>Philip W. Jackson, <u>Life in Classrooms</u>, (New York: Holt, Rinehart, and Winston, <u>Inc.</u>, 1968), p. 75.

<sup>&</sup>lt;sup>2</sup>Jackson, p. 77.

<sup>&</sup>lt;sup>3</sup>Jackson, p. 77.

<sup>&</sup>lt;sup>4</sup>Jackson, p. 78.

<sup>&</sup>lt;sup>5</sup>Jackson, p. 78.

- 5. Attendance patterns of friends
- 6. Calendar options

Employment option. There is a dearth of information on this variable in that only two sources were found which were pertinent to the employment option. In Prince William County, Virginia, it was found that 11 percent of the seventh graders work or babysit on their vacation. In another study conducted by the same county, of the 64 percent of the students on the 45-15 year-round school calendar who wanted or needed jobs, 44 percent were successful. On the traditional calendar, of the 64 percent who wanted or needed jobs, 44 percent were successful.

In relation to this variable, it was speculated that students desiring employment will be more favorable to the concept of year-round school than students who do not desire employment because they will have greater work options, due to more vacations, under the 45-15 calendar plan. Also, students should find more work opportunities, because students will not be dumped simultaneously on the labor market, thus creating a more equal distribution of the student labor force throughout the year. By being able to work during all seasons and by competing with only one-fourth of the total high school population, the students' likelihood of finding

<sup>&</sup>lt;sup>1</sup>Hubbell and Associates, p. l.

<sup>&</sup>lt;sup>2</sup>Prince William County Schools, p. 4.

employment should improve considerably. If the student wants to work and his chances of finding work under the 45-15 calendar plan are improved, it can be concluded reasonably that his attitude toward the 45-15 calendar plan will be improved.

Vacation option. No information was found on this variable as it relates to students' attitudes toward year-round school. However, it was speculated that if a student has a vacation option, his attitude toward year-round school will be favorable since he will be able to select the option which he most prefers. Conversely, if he has no vacation option, then the vacation schedule on which he is placed may not suit him and, therefore, his attitude toward year-round school, to say the least, will not be positive.

Parental attitude. No information was found on this variable as it relates to students' attitudes toward year-round school. However, since parents' attitudes are usually correlated positively with their children's attitudes, 2, 3 it was speculated that students having one or both parents who are in favor of the year-round calendar

<sup>&</sup>lt;sup>1</sup>Pasco County School Board, p. 24.

<sup>&</sup>lt;sup>2</sup> Parks, "Research on Year-Round Education," Table 2.

<sup>&</sup>lt;sup>3</sup>Clifford T. Morgan, <u>Introduction to Psychology</u>, (2nd ed., New York: McGraw-Hill Book Company, Inc., 1961), pp. 532-533.

will be more favorable to the concept of year-round school than students whose parents are not in favor of the year-round calendar.

Sibling attendance patterns. No information was found that related this variable to students' attitudes toward year-round school. However, it was speculated that students who have all of their brothers and sisters on the same attendance calendar will be more favorable to the concept of year-round school than students who do not have all their brothers and sisters on the same attendance calendar. This speculation was based on the belief that different attendance calendars lead to adjustments in family life style, creating problems related to vacations, student employment opportunities, and family cohesiveness. These problems may affect negatively a student's attitude toward year-round school.

Attendance pattern of friends. No information was found that related this variable to students' attitudes toward year-round school. However, it was speculated that students who have their close friends on the same attendance calendar will be more favorable to the concept of year-round school than students who do not have their close friends on the same attendance calendar.

Calendar option. No information was found on this variable as it relates to students' attitudes toward year-round school. However, it was speculated that students who can elect a September to June calendar or school will be more favorable to the concept of year-round school than students who cannot elect a September to June calendar because of their freedom to choose.

Summary. Included in this section was a review of the literature concerned with the relationship between type of calendar and students' attitudes toward school, and those personal and school calendar characteristics related to students' attitudes toward the 45-15 year-round school calendar. This review of the literature showed that little or no relationship exists between type of calendar and students' attitudes toward school. In addition, a dearth of information was found relating personal and school calendar characteristics to students' attitudes toward the 45-15 year-round school calendar.

### Hypotheses

- 1. Female students are more favorable to the concept of year-round school than male students.
- 2. Students with more experience in year-round school are more favorable to the concept of year-round school than those students with less experience in year-round school.

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- 3. Students perceiving themselves as achieving well in school are as favorable to the concept of year-round school as students perceiving themselves as not achieving well in school.
- 4. Students desiring employment are more favorable to the concept of year-round school than students who do not desire employment.
- 5. Students who determine their own vacation schedule are more favorable to the concept of year-round school than students whose vacation schedule is determined by others.
- 6. Students with one or both parents who are in favor of the year-round calendar are more favorable to the concept of year-round school than students whose parents are not in favor of the year-round calendar.
- 7. Students who have their brothers and sisters on the same attendance calendar are more favorable to the concept of year-round school than students who do not have their brothers and sisters on the same attendance calendar.
- 8. Students who have close friends on the same attendance calendar are more favorable to the concept of year-round school than students who do not have close friends on the same attendance calendar.
- 9. Students who can elect a September to June calendar or school are more favorable to the concept of

year-round school than students who cannot elect a September to June calendar or school.

#### Definitions

Definitions of terms utilized throughout this study were as follows:

Attitudes. An attitude, as defined by Guilford, is "A personal disposition common to individuals, but possessed to different degrees, which impels them to react to objects, situations, or propositions in ways that can be called favorable or unfavorable." In this study, students' attitudes were measured using the "Student Attitude Inventory on Year-Round Education." (See Appendix A.)

45-15 Year-round school calendar. A plan by which four groups of pupils attend school on alternating schedules. Each schedule consists of about forty-five consecutive class days followed by about fifteen days of vacation. The schedule constantly repeats and the four groups of pupils rotate their attendance. At any given period, three groups of pupils are in school and the fourth group is on vacation.

<sup>&</sup>lt;sup>1</sup>J. P. Guilford, <u>Psychometric Methods</u>, (New York: McGraw-Hill Book Company, <u>Inc.</u>, 1954), p. 457.

Year-round school. A year-round school, as used in this study, was any secondary school, grades nine through twelve, which provided a year-round education program utilizing the 45-15 calendar plan as indicated by The 1976

National Reference Directory of Year-Round Education. 1

Students. The individuals attending a selected social studies class in each of the twelve 45-15 year-round secondary schools identified in this study.

Sex. The sex of the respondent was defined as:

- (1) Male
- (2) Female

Experience in year-round school. Number of years the respondent had attended a year-round school, including 1976-1977, were categorized as follows:

- (1) 1 or less
- (2) 2
- (3) 3
- (4) 4
- (5) 5 or more

Scholastic achievement. Referred to how well, academically, a student perceived himself to be doing in school. The degree of achievement was classified into the following categories:

<sup>&</sup>lt;sup>1</sup>The National Council on Year-Round Education (Comp.), pp. 1-29.

- (1) A Student (90-100)
- (2) B Student (80-89)
- (3) C Student (70-79)
- (4) D Student (60-69)
- (5) E Student (Below 60)

Employment option. Referred to whether or not the respondents desired to work in addition to attending school. The categories were defined as follows:

- (1) Yes
- (2) No

<u>Vacation option</u>. Referred to whether students had a choice as to when they would take their vacation during the school year. The vacation option was classified into the following dichotomy:

- (1) Yes
- (2) No

Parental attitude. Referred to whether a student's mother and/or father were in favor of the 45-15 year-round school calendar. The categories were defined as follows:

Mother favors year-round school: (1) Yes (2) No Father favors year-round school: (1) Yes (2) No

Sibling attendance patterns. Referred to whether all the brothers and sisters of a student were on the same attendance calendar. The classification of categories to be used was as follows:

- (1) Yes
- (2) No

Friends' attendance patterns. Referred to whether close friends of a student were on the same attendance calendar. The classification of categories to be used was as follows:

- (1) Yes
- (2) No

Calendar option. In this study, calendar option was defined as whether a student could elect a September to June calendar or school. The calendar option was classified as follows:

- (1) Yes
- (2) No

#### Significance of the Study

Year-round education has come into vogue during the last decade. Consequently, many school districts have implemented year-round programs in an attempt to solve their problems. However, as with many innovative concepts, post-implementation evaluations of students' attitudes toward these year-round programs have been limited or have never been executed.

According to Blanton and Harris, students' attitudes and self-concepts may well be the most important components

of education. 1 Supportingly, G.W. Allport 2 and Robyn M. Dawes 3 believed attitude to be important and indispensible to a technologically advanced society. Finally, Hunt concluded:

That attitudes of people rather than any concrete evidence of effects upon the education of students (which is contradictory and not conclusive for year-round programs at this time) will determine the direction a school district will take concerning year-round programs. 4

To further demonstrate the importance of attitudes, the following examples illustrate that attitudes affect significantly the decision-making process in relation to the initiation and retention of year-round programs. In feasibility studies conducted in Sarasota, Florida, 5 and Williamstown, New Jersey, 6 it was shown that negative attitudes of students in these two districts contributed to

<sup>&</sup>lt;sup>1</sup>William E. Blanton and Phillip Harris, "A Summary of the Interim Evaluation for the Jefferson County Board of Education Elective Quarter Plan," (Indiana University, November, 1973), p. 1.

<sup>&</sup>lt;sup>2</sup>G.W. Allport, "Attitudes," <u>Handbook of Social</u>
Psychology, ed. Carl Murchison, (Worcester, Massachusetts:
Clark University Press, 1935), p. 798.

<sup>&</sup>lt;sup>3</sup>Robyn M. Dawes. <u>Fundamentals of Attitude Measurement</u>, (New York: John Wiley and Sons, Inc., 1972), p. vii.

<sup>&</sup>lt;sup>4</sup>Hunt, p. 73.

<sup>&</sup>lt;sup>5</sup>Sarasota County School District, pp. 98-99.

<sup>&</sup>lt;sup>6</sup>Tregallas, pp. 67, 68, 81.

the rejection of their 45-15 plans. In both cases, negative attitudes resulted from the students' dislike for attending school during the summer. Conversely, positive attitudes of students contributed to the continuation of the 45-15 plan in Prince William County, Virginia. The preceding attitude surveys indicate that when students' attitudes toward year-round school are positive, the probability of retaining the program is higher than when they are negative.

The above discussion indicates that it is of utmost importance that research be conducted to determine those personal and school calendar characteristics which affect students' attitudes toward year-round programs. Such information can be used to generate future research which might better explain changes in students' attitudes toward year-round schools.

In a speech at the Sixth National Seminar on Year-Round Education, Melvin Heller stated:

At this time, conclusive evidence concerning the validity of the Extended School Year Concept does not exist. For the present, advocates as well as critics of the concept will have to rely upon professional judgment and emotional biases to promote their cause. Assuming that there is no problem of incompetence on the leadership level, the key concern is attitude.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Hubbell and Associates, p. 1.

<sup>&</sup>lt;sup>2</sup>Melvin P. Heller, "The Extended School Year-Evaluation and Pitfalls," Proceedings of the Sixth National Seminar on Year-Round Education Convention, Chicago, Illinois, April 30—May 3, 1974. (Springfield, Illinois: State Department of Education), p. 20.

The significance of Heller's comments supports the need for this study which was conducted to develop an attitudinal inventory to evaluate students' attitudes toward the 45-15 year-round school calendar and to identify those personal and school calendar characteristics related to students attitudes toward the 45-15 year-round school calendar. It is believed that the identification and discussion of these characteristics will enable school districts to improve their year-round programs.

## Delimitations

This study was limited to:

- (1) Secondary schools in the United States operating on a 45-15 year-round plan implemented no later than January 1, 1976.
  - (2) Specific personal and school calendar characteristics.

No attempt was made to evaluate the concept of year-round education. The study dealt only with those characteristics present in a year-round program that might affect the attitudes of students toward the 45-15 year-round plan.

## Overview of the Dissertation

Chapter 1 included the background of the study, the problem, evidence related to the problem, statement of hypotheses, definition of terms, the need for the study, and the delimitations of the study.

Chapter 2 includes the methodology used in the study, population and sample description, the development of the instrument, procedure for data collection, and the methods to be used in treatment and analysis of data.

Chapter 3 includes description of findings pertinent to each hypothesis and other findings.

Chapter 4 includes the summary, conclusions, and implications of the study.

## Chapter 2

#### METHODOLOGY

The population, the sample, the development of the instrument, the procedure for data collection, and the methods to be used in treatment and analysis of data are presented in this chapter.

# Population and Sample Description

The population for this study was public school students in senior high schools (grades 9-12) attending operational year-round schools in the United States using the 45-15 calendar plan. The population, derived from twelve schools in six states, was identified by <a href="https://doi.org/10.1608/jhear-round-color: ">The 1976 Reference</a>
Directory of Year-Round Education. (See Appendix B.)

A sample of 330 students from the identified schools was selected for participation in this study. This sample resulted from selecting clusters of students, grouped in social studies classes. Social studies classes were selected because social studies classes generally are not grouped according to ability, thereby creating optimum chances for a heterogeneous sample. One social studies class per school, arbitrarily selected by the department chairperson, comprised the total sample.

National Council on Year-Round Education (Comp.), National Reference Directory of Year-Round Education, (Clarion, Pennsylvania: National Council on Year-Round Education, January, 1976), pp. 1-29.

## Instrument

A single self-reporting questionnaire was designed for use with the sample of this study (See Appendix A.)

The questionnaire was comprised of two sections. The first section was developed to measure the ten personal and school calendar characteristics presumed to be related to the respondents' attitudes toward the 45-15 year-round school calendar. The second section was designed to determine the respondents' opinions toward the 45-15 year-round school calendar.

Construction. A review of the literature was used to identify those personal and school calendar characteristics considered to be related to students' attitudes toward year-round school. Discussions with graduate students and faculty members at Virginia Polytechnic Institute and State University who were knowledgeable about year-round education confirmed or added to the list of characteristics. This process resulted in the ten personal and school calendar characteristics used in section one of the questionnaire.

Section two of the questionnaire measured students' attitudes toward the 45-15 year-round calendar and was developed by (1) compiling statements which reflected students' opinions; (2) evaluating those statements using criteria suggested by Oppenheim; (3) categorizing the statements

<sup>&</sup>lt;sup>1</sup>A.N. Oppenheim, Questionnaire Design and Attitude Measurement, (New York: Basic Books, Inc., 1966), pp. 49-80.

as to their degree of favorableness toward the 45-15 year-round calendar; (4) identifying the final opinion statements; and (5) determining the validity, reliability, and method of scoring the questionnaire. Procedural details follow.

An initial set of 139 opinion statements was collected from randomly selected social studies students on the 45-15 year-round calendar attending Gar-Field High School in Prince William County, Virginia. The chairperson of the social studies department selected classes with mixed grade levels, nine through twelve, to obtain their opinion statements. These 139 statements were examined and similar or irrelevant statements were either combined or eliminated. The remaining sixty-seven statements were evaluated by criteria suggested by Oppenheim.<sup>1</sup>

The criteria suggested by Oppenheim<sup>2</sup> were derived from categories of problems used to examine and improve opinion statements. These categories included: (1) statement content and purpose, which involved making the statements as precise as possible, thereby making it easier to avoid ambiguity in statement wording; (2) leading statements and loaded words, which involved identifying statements or words which suggested a feeling of approval or disapproval, thereby affecting the neutrality of the statements; (3) prestige

<sup>&</sup>lt;sup>1</sup>Oppenheim, pp. 49-80.

<sup>&</sup>lt;sup>2</sup>Oppenheim, pp. 49-80.

bias, which involved wording statements so as to minimize any exaggerated claims which the subject might make;

(4) instructions, which involved wording the procedural directions so as to make them clear and understandable;

(5) validity, which involved examining statements to determine if they measured what was supposed to be measured; and

(6) reliability, which involved examining statements to determine if repeated administrations would yield similar results. Reliability was achieved by using some of the above categories to purify the statements.

Application of these criteria reduced the number of opinion statements to fifty. These statements were given to 105 ninth and tenth grade students who were asked to sort them into eleven piles according to degrees of favorableness. These piles represented an evenly graduated series of attitudes ranging from one, representing a most favorable attitude toward the 45-15 year-round calendar, to eleven, representing a most unfavorable attitude toward the 45-15 year-round calendar. It should be noted that the students were instructed not to express their own opinions, but to merely sort the fifty statements into eleven piles based upon the degree of favorableness or unfavorableness toward the 45-15 year-round calendar as expressed by each item.

Since 105 students participated in the sorting, the performance of this task was expected to be accompanied by errors and misunderstandings as exemplified by the following:

(1) performance of the task in a perfunctory or careless

manner; (2) failure to understand directions; and (3) failure to understand the nature of the questionnaire. It was desirable to eliminate the responses of those students committing such actions from the tabulations. Accordingly, any student who placed ten or more of the fifty statements in any one of the eleven piles was excluded. This was not to be construed as an infallible criterion, but it aided in eliminating students whose judgments were careless or who misunderstood the directions or nature of the questionnaire. Of the 105 students who participated in the judging of the fifty statements, forty-four were eliminated from the final tabulations by this criterion.

The following process was used to identify the final attitude statements found in section two of the questionnaire. The first phase of this process consisted of tabulating the attitude statements according to frequency, percentage, and cumulative percentage for each of the fifty items. This resulted in fifty cumulative frequency charts. The data from these charts were transformed into fifty cumulative frequency graphs from which the median and semi-interquartile range were "read off." Using the above information, a total of nine scales with intervals ranging from 0.3 to 1.0 were constructed. For all scales, those items deviating from

<sup>&</sup>lt;sup>1</sup>Thurstone and Chave, <u>The Measurement of Attitude</u>, (Chicago, Illinois: The University of Chicago Press, 1929), p. 32.

the exact placement by more than one-tenth of a point were not utilized. The semi-interquartile range, the average Q-value, was then calculated for each of the nine scales to obtain an average measure of ambiguity. The scale having the lowest average Q-value represented the scale with the least ambiguity. The scale was the 0.4 scale consisting of fourteen statements. Throughout this process, items with high Q-values were not used. It should be noted that ambiguity, as used in the above discussion, is synonymous with unreliability.

Validity. "Validity tells us whether the question or item really measures what it is supposed to measure."

The type of validity pertinent to the construction of this instrument is content validity. "Content validity is the representativeness or sampling adequacy of the content—the substance, the matter, the topics—of a measuring instrument."

The process of asking students on the 45-15 year-round school calendar to give opinion statements on that calendar, facilitated the content validity of the instrument, but did not quarantee it.

Reliability. To obtain a measure of reliability, or internal consistency, nine different scales were developed

<sup>&</sup>lt;sup>1</sup>Oppenheim, pp. 69-70.

<sup>&</sup>lt;sup>2</sup>Fred H. Kerlinger, Foundations of Behavioral Research, (New York: Holt, Rinehart, and Winston, Inc., 1964), p. 445.

out of the fifty items. The scale showing the lowest average semi-interquartile range, the Q-value, was selected as the most reliable. This scale was the 0.4 scale which consisted of fourteen items and had an average semi-interquartile range of 0.896. The semi-interquartile range, or Q-value, is a measure of spread and the wider the spread, the more ambiguous the item.

Scoring. Under the first section of the instrument, scoring involved the categorization of responses which reflected the respondents' personal and school calendar characteristics. Under section two, the respondents were asked to circle the number of those statements with which they agreed. Each statement was assigned a numerical value, the median, and the average of these values constituted the respondent's score. The range of scores was defined as the high score minus the low score plus one. In this study, the range of scores was 10.4, with limits of 0.5 and 9.9. Responses were tabulated manually and transferred to data processing cards.

# Procedure for Data Collection

A letter to introduce the study was sent to each of the principals asking for support of the study and describing the procedures involved. The principals involved were then asked to supply the name of the chairperson of the social studies department. A letter of explanation was

N.M. Downie and R.N. Heath, <u>Basic Statistical</u> Methods, (4th ed., New York: Harper and Row, 1974), p. 51.

mailed to the chairperson, accompanied with the necessary number of questionnaires. The chairperson was asked to disseminate and collect the completed questionnaires. A stamped, self-addressed envelope was provided to each chairperson for returning the questionnaires. To ensure as high a rate of return as possible, a follow-up letter was mailed to those chairpersons failing to respond within two weeks. Additional follow-up letters were sent to chairpersons failing to reply. Finally, to get an acceptable percentage of returns, phone calls were made where necessary.

## Analysis of Data

The data obtained from the returned and completed questionnaires were then analyzed using the SPSS subprograms Condescriptive<sup>1</sup> and Student's t.<sup>2</sup> One-tailed tests were used to test the nine directional hypotheses at the .05 level of significance.

#### Summary

The procedures described in this chapter were utilized to determine what personal and school calendar
characteristics were related to students' attitudes toward
the 45-15 year-round school calendar. A research instrument
was designed to identify the personal and school calendar
characteristics of the respondents and to obtain their

Norman H. Nie, and others, Statistical Package for the Social Sciences, (2nd ed.; New York, McGraw-Hill Book Co., 1975), pp. 181-202.

<sup>&</sup>lt;sup>2</sup>Nie, pp. 249-275.

opinions on statements relating to the 45-15 year-round school calendar. The population was selected from students in grades nine through twelve attending operational public schools in the United States employing the 45-15 year-round school calendar. Data were collected through chairpersons. Upon completion and return of the questionnaires, the data were collated and analyzed using SPSS subprobrams Condescriptive and Student's t<sup>2</sup> to determine how the previously selected personal and school calendar characteristics related to students' attitudes toward the 45-15 year-round calendar.

<sup>&</sup>lt;sup>1</sup>Nie, pp. 181-202.

 $<sup>^{2}</sup>$ Nie, pp. 249-275.

#### Chapter 3

#### RESULTS AND DISCUSSION OF DATA

The description of findings pertinent to each hypothesis and other findings is presented in this chapter.

# Analysis of Personal and School Calendar Characteristics Related to Students' Attitudes Toward Year-Round School

The nine directional hypotheses in this study were tested at the .05 level of significance by using the Student's t. 1 The population used in this study was n = 330 which represented a sample of selected students attending the twelve secondary schools operating on the 45-15 calendar plan in the United States. Of these twelve schools, five were located in Florida, two each in Virginia and Illinois, and one each in Arizona, California, and Michigan. (See Appendix B.)

To facilitate and aid in the understanding of the following tables, it should be noted that the lower the mean score, the more favorable the student's attitudes toward year-round school. Also, if the two-tail probability was > .05, pooled variance was used, but if the two-tailed probability was < .05, then separate variance was used.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Norman H. Nie and others, <u>Statistical Package for the Social Sciences</u>, (2nd ed.; New York: McGraw-Hill Book Company, 1975), pp. 249-275.

 $<sup>^{2}</sup>$ Nie, p. 270.

# Hypothesis #1

Female students are more favorable to the concept of year-round school than male students.

The mean attitude scores and t-value for females (Group 1) and males (Group 2) on the Student Attitude Inventory on Year-Round Education (SAYR) are reported in Table 1. The mean scores of Groups 1 and 2 were 4.73 and 5.12, respectively. There were 177 cases in Group 1 and 153 cases in Group 2. The standard deviations for Groups 1 and 2 were 2.40 and 2.51, respectively.

The Student's t test with pooled variance was used to test the null hypothesis that the two samples came from populations with equal means  $(H_0: \mu_1 = \mu_2)$ . The t-value obtained was -1.46 indicating no significance at the .05 level and the retention of the null hypothesis. Female students are no more favorable to the concept of year-round school than male students.

# Hypothesis #2

Students with more experience in a year-round school are more favorable to the concept of year-round school than those students with less experience in year-round school.

The mean attitude scores and t-value for students having under three years experience in a year-round school (Group 1) and for those having three years or more experience in a year-round school (Group 2) on the SAYR are reported in Table 2. The mean scores for Groups 1 and 2 were 4.85 and 4.95, respectively. There were 117 cases in Group 1 and

d on t-Value Probability		-1.46	
Standard Deviation	2.40		2.51
Mean Attitude Score	4.73		5.12
Group	<pre>l. Females N = 177</pre>		2. Males N = 153

		45	
Three Years ee or More	Probability	.36	
dents Having Under Students Having Thr	t-Value	-0.36	
and t-Value for Students Having Under Three Years ound School and for Students Having Three or More Year-Round School	Standard Deviation	2.50	2.44
Mean Attitude Scores and t-Value for Students Having Under Three Experience in Year-Round School and for Students Having Three or Years Experience in Year-Round School	Mean Attitude Score	4.85	re ience 4.95
TABLE 2: Mean Exj Exj Year	Group	<pre>1. Under Three Years Expe- rience N = 117</pre>	2. Three or More Years Experience N = 211

211 cases in Group 2. The standard deviation for Groups 1 and 2 were 2.50 and 2.44, respectively.

The Student's t test with pooled variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was -0.36 indicating no significance at the .05 level and the retention of the null hypothesis. Students with more experience in a year-round school are no more favorable to the concept of year-round school than students with less experience in a year-round school.

# Hypothesis #3

Students perceiving themselves as achieving well in school are as favorable to the concept of year-round school as students perceiving themselves as not achieving well in school.

The mean attitude scores and t-value for students who achieve well in school (Group 1) and for students not achieving well in school (Group 2) on the SAYR are reported in Table 3. The mean scores for Groups 1 and 2 were 4.53 and 5.57, respectively. There were 211 cases in Group 1 and 118 cases in Group 2. The standard deviations for Groups 1 and 2 were 2.27 and 2.64, respectively.

The Student's t test with pooled variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ) The t-value obtained was -3.75, indicating significance at the .05 level and the rejection of the null hypothesis. Students perceiving themselves to be A or B students had more favorable

Mean Attitude Scores and t-Value for Students Perceiving Themselves as Being A or B Students and for Students Perceiving Themselves as Being C, D, or TABLE 3:

	Probability		00.		
	t-Value		-3.75		
	Standard Deviation	2.27		2.64	
E Students	Mean Attitude Score	4.53		5.57	
E Stu	Group	1. A or B Students N = 211		2. C, D, or E Students N = 118	

attitudes toward year-round school than students perceiving themselves to be C, D, or E students.

# Hypothesis #4

Students desiring employment are more favorable to the concept of year-round school than students who do not desire employment.

The mean attitude scores and t-value for students who do not desire employment (Group 1) and for students who do (Group 2) on the SAYR are reported in Table 4. The mean scores of Groups 1 and 2 were 4.77 and 4.98, respectively. There were 97 cases in Group 1 and 232 cases in Group 2. The standard deviations for Groups 1 and 2 were 2.44 and 2.46, respectively.

The Student's t test with pooled variance was used to test the null hypothesis  $(H_0: \mu_1 = \mu_2)$ . The t-value was -0.70, indicating no significance at the .05 level and the retention of the null hypothesis. Students desiring employment are no more favorable to the concept of year-round school than students who do not desire employment.

## Hypothesis #5

Students who determine their own vacation schedule are more favorable to the concept of year-round school than students whose vacation schedule is determined by others.

The mean attitude scores and t-value for students whose vacation schedule is determined by others (Group 1) and for students who determine their own vacation schedule (Group 2)

and for	lity		44		
Employment	Probability		. 24		
Not Desiring	t-Value		-0.70		
r Students					
d t-Value fo yment	Standard Deviation	2.44		2.46	
Mean Attitude Scores and t-Value for Students Not Desiring Employment and for Students Desiring Employment	Mean Attitude Score	4.77		4.98	
TABLE 4: Mear Stud	Group	<pre>1. Students Not     Desiring Em-     ployment     N = 97</pre>		2. Students Desiring Employment N = 232	

on the SAYR are reported in Table 5. The mean scores of Groups 1 and 2 were 5.12 and 3.67, respectively. There were 285 cases in Group 1 and 42 cases in Group 2. The standard deviation for Groups 1 and 2 were 2.45 and 2.13, respectively.

The Student's t test with pooled variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was 3.63, indicating significance at the .05 level and the rejection of the null hypothesis. Students who determine their own vacation schedule are more favorable to the concept of year-round school than students whose vacation schedule is determined by others.

# Hypothesis #6

Students with one or both parents who are in favor of the year-round calendar are more favorable to the concept of year-round school than students whose parents are not in favor of the year-round calendar.

The independent variable, parents, was divided into mother and father. Analyses of their responses were treated separately.

The mean attitude scores and t-value for students with mothers who do not favor the year-round calendar (Group 1) and for students with mothers who do favor the year-round calendar (Group 2) on the SAYR are reported in Table 6. The mean scores of Groups 1 and 2 were 6.55 and 3.54, respectively. There were 149 cases in Group 1 and 172 cases in Group 2.

Attitude Score Deviation t-Value se De-Others 5.12 2.45 3.63	TABLE 5:	Mean Attitude Scores and t-Value for Students Whose Vacation Schedule is Determined by Others and for Students Who Determine Their Own Vacation Schedule	nd t-value for Stude nd for Students Who	nts Whose Vacatio Determine Their C	n schedule is Wn Vacation
se De- Others 5.12 2.45 3.63 3.67 2.13	Group	Mean Attitude Score	Standard Deviation	t-Value	Probability
3.63	Students W Vacation i termined b N = 285	- hers	2.45		
eir 3.67				3.63	00.
	Students W Determine Own Vacati N = 42	eir	2.13		

Round

ar-R				I
Not Favoring a Ye nd Calendar	Probability		00.	
ents with Mothers voring a Year-Rour	t-Value		13.38	
nd t-Value for Stud ts with Mothers Fav	Standard Deviation	2.27		1.65
Mean Attitude Scores and t-Value for Students with Mothers Not Favoring a Year-Ro Calendar and for Students with Mothers Favoring a Year-Round Calendar	Mean Attitude Score	6.55		3.54
TABLE 6: Mean Cale	Group	<pre>1. Mothers Not   Favoring a   Year-Round   Calendar   N = 149</pre>		2. Mothers Favoring a Year-Round Calendar N = 172

The standard deviations for Groups 1 and 2 were 2.27 and 1.65, respectively.

The Student's t test with separate variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was 13.38, indicating significance at the .05 level and the rejection of the null hypothesis.

The mean attitude scores and t-value for students with fathers who are not in favor of the year-round calendar (Group 1) and for students with fathers who are in favor of the year-round calendar (Group 2) on the SAYR are reported in Table 7. The mean scores of Groups 1 and 2 were 6.30 and 3.57, respectively. There were 150 cases in Group 1 and 159 cases in Group 2. The standard deviations of Groups 1 and 2 were 2.39 and 1.70, respectively.

The Student's t test with separate variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was 11.50, indicating significance at the .05 level and the rejection of the null hypothesis. The rejection of the null hypotheses for the variables of mother and father indicates that students with one or both parents who are in favor of the year-round calendar are more favorable to the concept of year-round school than students whose parents are not in favor of the year-round calendar.

# Hypothesis #7

Students who have their brothers and sisters on the same attendance calendar are more favorable to the concept of year-round school than

Mean Attitude Scores and t-Value for Students with Fathers Not Favoring a Year-Round Calendar and for Students with Fathers Favoring a Year-Round Calendar TABLE 7:

	 			1
l Calendar	Probability		00.	
Students with Fathers Favoring a Year-Round Calendar	t-Value		11.50	
s with Fathers Fa	Standard Deviation	2.39		1.70
Calendar and for Student	Mean Attitude Score	6.30		3.57
Cal	Group	<pre>1. Fathers Not    Favoring a    Year-Round    Calendar    N = 150</pre>		2. Fathers Favoring a Year-Round Calendar N = 159

students who do not have their brothers and sisters on the same attendance calendar.

The mean attitude scores and t-value for students not having their siblings on the same attendance calendar (Group 1) and for students having their siblings on the same attendance calendar (Group 2) on the SAYR are reported in Table 8. The mean scores of Groups 1 and 2 were 4.72 and 5.00, respectively. There were 111 cases in Group 1 and 210 cases in Group 2. The standard deviations for Groups 1 and 2 were 2.43 and 2.49, respectively.

The Student's t test with pooled variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was -0.97, indicating no significance at the .05 level and the retention of the null hypothesis. Students who have their brothers and sisters on the same attendance calendar are no more favorable to the concept of year-round school than students who do not have their brothers and sisters on the same attendance calendar.

# Hypothesis #8

Students who have close friends on the same attendance calendar are more favorable to the concept of year-round school than students who do not have close friends on the same attendance calendar.

The mean attitude scores and t-value for students not having close friends on the same attendance calendar (Group 1) and for students having close friends on the same attendance calendar (Group 2) on the SAYR are reported in Table 9.

Mean Attitude Scores and t-Value for Students Not Having Their Brothers and Sisters on the Same Attendance Calendar and for Students Having Their Brothers and Sisters on the Same Attendance Calendar 56 Probability .16 t-Value -0.97 Deviation Standard 2.49 2.43 Attitude Score 5.00 4.72 Mean on Same Calendar N = 210Students Having Their Siblings Same Calendar N = 111 Students Not Having Their Siblings on TABLE 8: Group 2

Group Attitude Score  1. Students Not Having Close Friends on the Same Calendar N = 154 5.39				
he r		Standard Deviation	t-Value	Probability
		2.33		
			3.47	00.
2. Students Having Close Friends on the Same Calendar N = 174 4.46	10	2.48		

The mean scores of Groups 1 and 2 were 5.39 and 4.46, respectively. There were 154 cases in Group 1 and 174 cases in Group 2. The standard deviation of Groups 1 and 2 were 2.33 and 2.48, respectively.

The Student's t test with pooled variance was used to test the null hypothesis ( $H_0$ :  $\mu_1 = \mu_2$ ). The t-value obtained was 3.47, indicating significance at the .05 level and the rejection of the null hypothesis. Students who have close friends on the same attendance calendar are more favorable to the concept of year-round school than students who do not have close friends on the same attendance calendar.

# Hypothesis #9

Students who can elect a September to June calendar or school are more favorable to the concept of year-round school than students who cannot elect a September to June calendar or school.

The mean attitude scores and t-value for students not able to elect a September to June calendar or school (Group 1) and for students able to elect a September to June calendar or school (Group 2) on the SAYR are reported in Table 10.

The mean scores of Groups 1 and 2 were 5.18 and 3.23, respectively. There were 280 cases in Group 1 and 47 cases in Group 2. The standard deviations of Groups 1 and 2 were 2.45 and 1.69, respectively.

The Student's t test with separate variance was used to test the null hypothesis (H $_0$ :  $\mu_1$  =  $\mu_2$ ). The t-value

Mean Attitude Scores and t-Value for Students Who Cannot Elect a September to June Calendar or School and for Students Who Can Elect a September to June Calendar or School TABLE 10:

	t-Value Probability		00.	
	Standard Deviation	2.45		1.69
Calendar or School	Mean Attitude Score	5.18		3.23
Cal	Group	<pre>1. Students Who    Cannot Elect    a September    to June Cal-    endar or School    N = 280</pre>		2. Students Who Can Elect a September to June Calendar or School N = 47

obtained was 6.77, indicating significance at the .05 level and the rejection of the null hypothesis. Students who can elect a September to June calendar or school are more favorable to the concept of year-round school than students who cannot elect a September to June calendar or school.

## Summary

In this chapter, the results of the study were presented. The results confirmed that students' attitudes toward the 45-15 year-round school calendar were more favorable when they: (1) perceive themselves as achieving well; (2) determine their own vacation schedule; (3) have one or both parents in favor of year-round school; (4) have close friends on the same attendance calendar; (5) can elect a September to June calendar or school. Although all hypotheses were tested at the .05 level, those hypotheses having significance at the .05 level were also significant beyond the .001 level.

## Chapter 4

SUMMARY, CONCLUSIONS, AND IMPLICATION OF THE STUDY

The purpose of this study was twofold. First, an attitudinal assessment instrument was constructed to evaluate students' attitudes toward the 45-15 year-round school calendar and second, an identification was made of those personal and school calendar characteristics presumed to affect students' attitudes toward that calendar. A summary of the study, conclusions, discussion, and implications of the study are included in this chapter.

## Summary

In the last decade, many school districts have implemented year-round programs as an answer to their dilemmas. The literature has revealed that attitude plays a significant role in the success or failure of the implementation and continuation of year-round schools. Because of the importance ascribed to attitude and because students are the major recipients of any educational program, the attitudes of students toward the 45-15 year-round school calendar were deemed an important area of investigation.

<sup>&</sup>lt;sup>1</sup>Elk Grove Unified School District, "Process Evaluation of the Elk Grove Year-Round School Project," (Elk Grove, California: Elk Grove Unified School District, February, 1974), p. 150.

A review of the literature led to the identification of ten personal and school calendar characteristics presumed to affect students' attitudes toward the 45-15 year-round school calendar. Those ten personal and school calendar characteristics comprised section one of the questionnaire. Section two of the questionnaire was developed by compiling a list of opinion statements reflecting the attitudes of students toward the 45-15 year-round school calendar. The resulting fourteen items comprised section two of the question-naire which was an equal-appearing interval scale based on Thurstone's technique.

The sample consisted of twelve 45-15 year-round senior high schools in the United States. A sample of 330 students from the identified schools participated in the study. The sample was acquired by selecting one social studies class in each of the twelve schools.

Data delivery and collection were handled through the mail. A contact person in each school received, distributed, collected, and returned the completed questionnaires. Returns were received from 100 percent of the schools involved in the study. Students' responses were recorded on computer data sheets, transferred to punched computer cards, and analyzed by using SPSS subprograms Condescriptive¹ and Student's t.²

Norman H. Nie and others, Statistical Package for the Social Sciences, (2nd ed.; New York: McGraw-Hill Book Company, 1975), pp. 181-202.

<sup>&</sup>lt;sup>2</sup>Nie, pp. 249-275.

## Conclusions

The following conclusions were based on the data and subsequent analyses:

- The following personal and school calendar characteristics were determined not to have any significant relationship to students' attitudes toward the 45-15 year-round school calendar:
  - a. Sex.
  - b. Experience in year-round school.
  - c. Employment option.
  - d. Sibling attendance patterns.
- 2. The data supported the following conclusions for the remaining five hypotheses:
  - a. Students perceiving themselves as achieving well in school (80-100) had more favorable attitudes toward the 45-15 year-round school calendar than students perceiving themselves as not achieving well (below 80) in school.
  - b. Students determining their own vacation schedule had more favorable attitudes toward the 45-15 year-round school calendar than students whose vacation schedule was determined by others.
  - c. Students having one or both parents in favor of year-round school had more

favorable attitudes toward the 45-15 year-round school calendar than students having parents not in favor of year-round school.

- d. Students having close friends on the same attendance calendar had more favorable attitudes toward the 45-15 year-round school calendar than students not having close friends on the same attendance calendar.
- e. Students who can elect a September to June calendar or school had more favorable attitudes toward the 45-15 year-round school calendar than students who cannot elect a September to June calendar or school.

Of the five independent variables having a significant relationship to students' attitudes toward the 45-15 year-round school calendar, all but one, scholastic achievement, were classified as school calendar characteristics. Thus, it can be concluded tenuously that students' attitudes toward the 45-15 year-round school calendar appear to be more a function of school calendar characteristics than of personal characteristics.

Based on the results of this study and the conclusions drawn by this researcher, school districts should give consideration to the aforementioned conclusions in an attempt to improve the attitudes of their students toward the 45-15 year-round school calendar.

# Discussion of Hypotheses

The findings of this study will be amplified by discussing the results and suggesting proposals. The following discussion should not be interpreted to mean that students' attitudes and proposals for their improvement take precedence over all other school board objectives. The reader should realize that the implementation of the following proposals may not be always possible because of financial, geographical, and other limitations placed on many school districts.

Hypothesis #1. The testing of this hypothesis yielded findings which were not supportive of the literature which suggested that females had a more favorable attitude toward year-round school than did males. This might be explained in that the literature was not overwhelmingly supportive of hypothesis #1. The literature revealed one study indicating a more favorable male attitude toward the 45-15 year-round calendar and two other studies revealing a negligible difference in attitude toward the 45-15 year-round school calendar. Further research is needed to reconcile these differences.

Hypothesis #2. The findings resulting from the testing of this hypothesis are also in conflict with the literature which indicated that attitude becomes more positive the longer one is on the 45-15 year-round school calendar. Perhaps this conflict can be resolved if one remembers that the maximum experience on a 45-15 calendar that a student was able to report

was five years. It could be speculated that it requires longer than five years of experience on that calendar to transform those negative attitudes to positive attitudes. Because of this weak speculation, it is suggested that further research be conducted to reconcile this conflict of findings.

Hypothesis #3. The findings suggest that students perceiving themselves as being A or B students had more favorable attitudes toward year-round school than students perceiving themselves as being C, D, or E students. This conflicts with the literature which indicated no significant relationship between students' attitudes toward the 45-15 year-round calendar and scholastic achievement. Perhaps this conflict of findings can be resolved if one remembers that this study dealt with students' perceptions of their achievement which might be different from statistical achievement as indicated by the literature. It could be that students perceive themselves as being higher achievers than studies of actual achievement reveal.

Hypothesis #4. The testing of this hypothesis resulted in findings supportive of the literature which suggested that students desiring employment are no more favorable to the 45-15 year-round school concept than students not desiring employment. There was a striking similarity

between the percentage of students desiring employment on both the traditional and 45-15 school calendars. Likewise, the percentage of students obtaining jobs was also strikingly similar for both types of school calendars. The fact that approximately 58 percent of the schools in the study were located in warm geographic areas induces the speculation that the employment variable may be a function of geographic location rather than school calendar.

Hypothesis #5. The findings were supportive of the speculation that students who determine their own vacation schedule are more favorable to the concept of year-round school than students whose vacation schedule is determined by others. School districts should allow students to determine their own vacation schedules by prescheduling students according to their vacation preference when possible.

Hypothesis #6. The testing of this hypothesis resulted in findings supportive of the literature which suggested that students with one or both parents who are in favor of the 45-15 year-round calendar are more favorable to the concept of year-round school than students whose parents are not in favor of the 45-15 year-round calendar. School districts should determine, as well as attempt to improve, the attitudes of their students' parents by conducting parental surveys and enacting campaigns to improve parents' attitudes toward year-round school.

Because a significant relationship was found to exist between parental attitudes and their childrens' attitudes toward year-round school, the educational background of parents might be a causative factor for this relationship. It is believed that educated parents are more concerned about school and transfer this concern, through their opinions, to their children who acquire similar attitudes. Lesser educated parents, through lack of understanding, are not as concerned over school matters and do not influence their childrens' attitudes to the degree that educated parents do. Because of this lack of parental influence, the children of lesser educated parents are left to form their own attitudes which may or may not be similar to those of their parents. In summary, the more parental education, the more positive the relationship between the attitudes of parents and their children.

Hypothesis #7. The testing of this hypothesis yielded results which showed that speculation was unwarranted. The findings indicated that students who have their brothers and sisters on the same attendance calendar are no more favorable to the concept of year-round school than students who do not have their brothers and sisters on the same attendance calendar.

Because siblings are usually of different age, there is little likelihood of them sharing common time in school by

having the same classes. This diminishes interaction between the siblings, the results of which are tantamount to being on different attendance calendars. Perhaps this is one reason why the null hypothesis was retained. Another reason might be that because siblings generally share common time during non-school hours, the importance of their being on identical attendance calendars is diminished and therefore has little effect on their attitudes toward the 45-15 year-round school calendar.

Hypothesis #8. The findings were supportive of the speculation that students who have close friends on the same attendance calendar are more favorable to the concept of year-round school than students who do not have close friends on the same attendance calendar. School districts should schedule close friends on the same attendance calendar by asking students with whom they desire to attend school and then make a sincere effort to fulfill the students' desires.

Perhaps the rejection of the null hypothesis can be explained partially by the age factor. Close friends are more likely to be of the same age than are siblings. This tends to place close friends in the same grade level and increases their chances of having the same classes. Having the same classes increases their interaction time with one another and gives them a more favorable attitude toward school. Thus, it becomes important that close friends attend

school on the same attendance calendar. However, because close friends may live in different geographical areas, which determine the students' attendance calendar, school boards might face unreasonable financial expenditures to achieve this objective. Consequently, discretion must be used in order to achieve the best results for both the students and the school board.

Hypothesis #9. The findings supported the speculation that students who can elect a September to June calendar or school are more favorable to the concept of year-round school than students who cannot elect a September to June calendar or school. These findings indicate that school districts should allow students to elect a September to June calendar or school by offering a choice of schools operating on different calendars or by offering a choice of school calendars within the same school. This has already been accomplished successfully at Gar-Field High School in Prince William County, Virginia.

One reason why the null hypothesis was rejected may be a function of geographic location. Certain climates may have a significant effect on students' attitudes toward year-round school. For example, a student attending school in a cold geographical area may not have a favorable attitude toward year-round school because he wants to take advantage of the few months of warm weather he is able to experience

during the summer by attending school on a traditional calendar.

Summary. The accomplishment of all these suggestions might be impossible in that they may conflict with other educational objectives, but the extent to which they are accomplished will have a significant and positive effect on students' attitudes toward their year-round school program. The attempt to meet these objectives should be a continuing concern enacted whenever possible without detriment to the educational program.

## Discussion of Instrument

Because students' attitudes play a significant role in the success or failure of the implementation and continuation of 45-15 year-round school programs, part of this study was devoted to the development of an instrument which measured students' attitudes toward that calendar.

The instrument yielded findings which supported the majority of hypotheses. This enhanced the validity of the instrument and lent to the credibility of its use. A minority of hypotheses were not supported by the findings. Reasons for this might be found by examining section one of the instrument, which consisted of ten independent variables presumed to affect students' attitudes toward the 45-15 year-round calendar. Section one was designed to apply generally to the twelve school districts pertinent to this

study. Particular school districts may find that adding to or deleting from the list of variables in section one may better reflect the attitudes of their students toward their 45-15 program. For example, some year-round school districts, already scheduling close friends on the same attendance calendar or giving their students freedom to choose a vacation schedule, may opt to replace these with more pertinent variables. Also, because of their location, some school districts may wish to add variables which are functions of geography.

Summary. The instrument constructed as part of this study was comprised of two sections. Section one, consisting of ten personal and school calendar characteristics, could and should be modified by particular year-round school districts to better reflect their students' attitudes. The second section, a Thurstone intensity scale, adequately reflects students' attitudes toward the 45-15 year-round calendar and need not be modified.

#### Future Research

This is one of the first dissertations to be done in which a viable instrument was developed to evaluate students' attitudes toward the 45-15 year-round school calendar. This instrument has opened up additional areas of investigation which form the foundation for future research.

Future research should be conducted to develop instruments which are: (1) predictive as well as evaluative;

(2) capable of measuring students' attitudes toward any type of year-round school concept; (3) capable of measuring the attitudes of people other than students; (4) capable of employing different techniques in the analysis of data in an effort to yield different and perhaps more pertinent results. For example, a factor analysis could be done to identify any common factors among the variables.

Although this study identified specific personal and school calendar characteristics which were related to students' attitudes toward the 45-15 year-round school calendar, additional research should be conducted in the following areas:

- 1. What personal and school calendar characteristics affect elementary and middle school students' attitudes toward year-round school?
- 2. How does the geographic area of the United States affect the attitudes of students toward year-round school?
- 3. How does the educational background of parents influence the attitudes of their children?

Finally, research needs to be conducted on those findings which were inconsistent with the literature and on year-round school programs other than the 45-15 concept.

APPENDIXES

# APPENDIX A

STUDENT ATTITUDE INVENTORY ON YEAR-ROUND EDUCATION

#### STUDENT ATTITUDE INVENTORY ON YEAR-ROUND EDUCATION

#### Dear Student:

You have been selected in a random sample of social studies students in the United States to participate in a survey of students' attitudes toward the year-round program in your school building. A few minutes of your time is all that will be required to complete the inventory which follows. The inventory is divided into two sections. The first section is designed to obtain personal and school calendar information. The second section is designed to obtain your opinions about the 45-15 calendar in your school. Individual data will be held in the strictest of confidence and anonymity of individual responses is assured.

Students, as the major recipients of any educational program, should have keen insights concerning their attitudes toward the year-round program in their school building. Your views, in combination with those of other students in the sample, are vitally important to enable this researcher to determine accurately the attitudes of students toward their year-round program, and to identify hindrances and possible approaches to the improvement of year-round programs in the United States.

The participation of everyone in the sample is crucial to the success of the study. Your completion of the questionnaire will be appreciated greatly.

Sincerely,

Harold Lewis Doctoral Student

#### STUDENT ATTITUDE INVENTORY ON

#### YEAR-ROUND EDUCATION

Dear Student:

The questionnaire will serve as your answer sheet. Use either pen or pencil. Please do not fold or mutilate the questionnaire.

### SECTION 1: Personal and School Calendar Information.

Please choose the one most appropriate answer for each item below and circle the corresponding number on this questionnaire. Questions 1-10 represent Section 1 of the questionnaire.

## Example:

If the first two questions were as follows:

- 1. Sex: (1) Male (2) Female
- 2. I have been in a year-round program for:
  - (1) 1 year (2) 2 years (3) 3 years
  - (4) 4 years (5) 5 or more years

and you responded in the following way, your answer would be interpreted as follows:

- 1. Sex: (1) Male (2) Female Indicates you are male.
- 2. I have been in a year-round program for:
  - (1) 1 year (2) 2 years (3) 3 years
  - (4) 4 years (5) 5 or more years

Indicates you have been in a year-round program for 4 years.

Please respond to <u>all</u> items, beginning with item number 1 on the next page.

#### STUDENT ATTITUDE INVENTORY ON

#### YEAR-ROUND EDUCATION

## Section 1: Personal and School Calendar Information.

- 1. My sex is:
  - (1)Female
  - (2) Male
- 2. I have been in a year-round program for:
  - l year or less (1)
  - (2) 2 years
  - (3) 3 years
  - (4)4 years
  - (5) 5 years or more
- 3. I consider myself an:
  - A student (90-100) (1)
  - (2) B student (80-89)
  - (3)
  - C student (70-79) D student (60-69) (4)
  - E student (below 60) (5)
- 4. I now hold or plan to hold a job while in school.
  - (1) No
  - (2) Yes
- 5. I have a choice as to when I take my vacation.
  - (1)No
  - (2) Yes
- 6. My mother favors year-round school: (1) No (2) Yes
- 7. My father favors year-round school: (1) No (2) Yes
- 8. All of my brothers and sisters are on the same attendance calendar.
  - (1) No
  - (2) Yes
- 9. My close friends are on the same attendance calendar.
  - (1)No
  - (2) Yes

- 10. I can elect a September to June calendar or school if I choose.
  - (1) No
  - (2) Yes

## SECTION 2: Opinions on Year-Round Schools.

Please read each statement carefully and circle the number of one or more statements on which you are in agreement. Questions 11-24 represent Section 2 of the questionnaire.

#### Example:

If the statements were as follows:

- Year-round school is great!
- Year-round school stinks!

and you responded in the following way, your answers would be interpreted as follows:

- 1 Year-round school is great! indicates you are in agreement.
- Year-round school stinks! indicates you are in agreement.

NOTICE: You circle nothing if you are in disagreement.

## Section 2: Opinions on Year-Round Schools.

- 11. Year-round school is great!
- 12. I like year-round school because the 15-day breaks are absolutely super.
- 13. I like year-round school because you don't get tired of school.
- 14. I like year-round school because it give me a chance to go places during times when those places are not crowded.
- 15. I like year-round school because it's convenient.
- 16. Year-round school is pretty good.

- 17. I like year-round school because the summer vacation is shorter.
- 18. I like year-round school because I am refreshed after vacations.
- 19. I like year-round school, but hate its being mandatory.
- 20. I can take it or leave it.
- 21. Athletically, year-round school is bad because vacations are taken up by sports.
- 22. I don't like year-round school because my friends are on different color calendars.
- 23. I think year-round school is ridiculous.
- 24. Year round school stinks!

# APPENDIX B

SCHOOLS PARTICIPATING IN THE STUDY

# SCHOOLS PARTICIPATING IN THE STUDY

	NUMBER OF	D. D
NAME AND LOCATION OF SCHOOL	RESPONDING STUDENTS	PERCENTAGE OF TOTAL SAMPLING
Sunnyside High School 1725 East Bilby Road Tucson, Arizona Principal: William J. Lasovich	27	8%
Mesa Verde High School 7600 Lauppe Lane Citrus Heights, California 95610 Principal: N.B. Triplett	38	12%
Gulf Comprehensive High School Route 5, 900 E. Louisiana Avenue New Port Richey, Florida 33552 Principal: James E. Campbell	24	7%
Hudson Senior High School 1000 Cobra Way New Port Richey, Florida 33552 Principal: Coy Pigman	30	9%
Land of Lakes Junior-Senior High School Route 1, Box 18 Land O'Lakes, Florida 33539 Principal: Leroy McClain	29	9%
Pasco Comprehensive High School 1204 Highway 52 Dade City, Florida 33525 Principal: Wayne C. Malone	30	9%
Zephyrhills High School 1975 N. 12th Street Zephyrhills, Florida 33549 Principal: Raymond B. Stewart	29	9%
Bolingbrook High School 350 W. Blair Lane Bolingbrook, Illinois 60439 Principal: Donald Weber	29	9%
Romeoville High School 100 N. Independence Blvd. Romeoville, Illinois 60441 Principal: Joseph Sini	26	8%

# Schools participating in the study continued.

	NUMBER OF	
	RESPONDING	PERCENTAGE OF
NAME AND LOCATION OF SCHOOL	STUDENTS	TOTAL SAMPLING
Northville High School 775 North Center Street Northville, Michigan 48167 Principal: Michael Tarpinian	14	<b>4</b> %
Gar-Field Senior High School 89006 Smoketown Road Woodbridge, Virginia 22191 Principal: Dr. David Meyers	29	<b>9</b> %
Woodbridge Senior High School 30013 Old Bridge Road Woodbridge, Virginia 22191 Principal: Mr. Haynes Davis	25	_7%_
TOTAL	330	100%

SELECTED BIBLIOGRAPHY

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#### 1. Books.

- Bouden, Haywood S. Two Hundred Years of Education. Richmond, Virginia: Diety Printing Company, 1932.
- Dawes, Robyn M. Fundamentals of Attitude Measurement. New York: John Wiley and Sons, Inc., 1972.
- Downie, N.M., and R.W. Heath. <u>Basic Statistical Methods</u>. 4th ed. New York: Harper and Row, 1974.
- Elsbree, Willard S. The American Teacher. New York: American Book Company, 1939.
- Fishbeen, M. (ed.). Readings in Attitude Theory and Measurement. New York: John Wiley and Sons, Inc., 1967.
- Gove, James R., and Kenneth L. Hermansen. <u>The Year-Round</u>
  <u>School: The 45-15 Breakthrough</u>. Hamden, Connecticut:
  <u>Linnet Books</u>, 1971.
- Greenwold, A.G., T.C.Brock, and T.M. Ostrom (eds.). Psychological Foundations of Attitudes. New York: Academic Press, 1968.
- Guilford, J.P. <u>Psychometric Methods</u>. New York: McGraw-Hill Book Company, Inc., 1954.
- Halloran, J.D. Attitude Formation and Change. Liecester, Great Britain: Blackfriars Press, 1967.
- Harman, H.H., and K.J. Holzinger. Factor Analysis: A Synthesis of Factorial Methods. Chicago: The University of Chicago Press, 1941.
- Jackson, Philip W. Life in Classrooms. New York: Holt, Rinehart, and Winston, Inc., 1968.
- Jahoda, Marie, and Neil Warren (eds.). Attitudes. Middlesex, England: Penguin Books, Ltd., 1966.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, Inc., 1964.
- Likert, Rensis, and Gardner Murphy. <u>Public Opinion and the Individual</u>. New York: Harper and Brothers Publishers, 1938.

- Manske, Arthur J. The Reflection of Teachers' Attitudes in the Attitude of their Pupils. New York: Teachers College, Columbia University, 1936.
- Maxson, Robert C., and Walter E. Sistrunk (eds.). A
  Systems Approach to Educational Administration.

  Dubuque, Iowa: William C. Brown Company Publishers,
  1973.
- Morgan, Clifford T. <u>Introduction to Psychology</u>. 2nd ed. New York: McGraw-Hill Book Company, 1961.
- Murchison, Carl (ed.). Handbook on Social Psychology.
  Worcester, Massachusetts: Clark University Press, 1935.
- Nie, Norman H., and others. Statistical Package for the Social Sciences. 2nd ed. New York: McGraw-Hill Book Company, 1975.
- Noll, Victor H., Dale P. Scannel, and Rachel P. Noll (eds.).

  Introductory Readings in Educational Measurement.

  Boston: Houghton Mifflin Company, 1972.
- Oppenheim, A.N. Questionnaire Design and Attitude Measurement. New York: Basic Books, Inc., 1966.
- Remmers, H.H. <u>Introduction to Opinion and Attitude Measurement.</u>
  New York: Harper and Brothers, 1954.
- Rosenberg, Milton J., and others. Attitude Organization and Change: An Analysis of Consistency Among Attitude Components. New Haven: Yale University Press, 1966.
- Servetter, Leonard. <u>Year-Round School Program: A Case Study</u>. Chula Vista, California: People Education and Communication Enterprises, Inc., 1973.
- Shaw, Marvin E., and Jack M. Wright. Scales for the Measurement of Attitudes. New York: McGraw-Hill Book Company, 1967.
- The 1985 Committee of the National Conference of Professors of Educational Administration (eds.). Educational Futurism. Berkeley, California: McCutchan Publishing Corporation, 1971.
- Theobald, Robert (ed.). <u>Futures Conditional</u>. New York: The Bobbs-Merrill Company, Inc., 1972.
- Thurstone, L.L. and E.J. Chave. <u>The Measurement of Attitude</u>. Chicago, Illinois: The University of Chicago Press, 1929.

- Triandis, Harry C. Attitude and Attitude Change. New York: John Wiley and Sons, Inc., 1971.
- VanTil, William (ed.). <u>Curriculum: Quest for Relevancy</u>. Boston: Houghton-Mifflin Company, 1974.

### 2. Periodicals.

- Adams, Andrew. "Look Hard at This Year-Round School Plan,"

  The American School Board Journal, CLVI (July,

  1968), pp. 11-15.
- Adams, Velma A. "Extended School Year: Status Report," School Management, XIV (June, 1970), pp. 13-19.
- "Are you ready for year-round schools?" Changing Times, May, 1974, pp. 45-47.
- Bailey, Judith I. "The Teacher's View—What it Involves." Virginia Journal of Education. LXVI (April, 1973), pp. 16-18.
- Eysenck, H.J. "Criterion Analysis—An Application of the Hypothetico-Deductive Method in Factor Analysis,"

  Psychological Review, LVII (January, 1950), 38-53.
- Guilford, J.P. "Factor Analysis in a Test Development Program," <a href="Psychological Review">Psychological Review</a>, LV (March, 1948), p. 93.
- Holt, Howard. "Year-Round School and System Shock,"
  Phi Delta Kappan, LIV (January, 1973), pp. 310-311.
- Young, Ken M. "Catalyst for Educational Change or Varnish for the Status Quo?" <u>Virginia Journal of Education</u>, LXVI (April, 1973), pp. 14-15.

## 3. Dissertations.

- Hunt, Walter A. "Characteristics of School Districts
  Related to Implementation of Year-Round Schools."
  Unpublished Doctor's dissertation, Virginia Polytechnic
  Institute and State University, 1973.
- Leffel, Linda G. "The Relationship Between Selected School District Characteristics and Planning Styles for Year-Round Education." Unpublished Doctor's dissertation, Virginia Polytechnic Institute and State University, 1973.

- Pettus, Alvin M. "Measuring Teachers' Attitudes Concerning Certain Environmental Issues, With Implications for Environmental Educators." Unpublished Doctor's dissertation, Virginia Polytechnic Institute and State University, 1974.
- Rice, Paul G. "An Assessment of Teachers' Attitudes Toward the 45-15 Year-Round School Concept." Unpublished Doctor's dissertation, Virginia Polytechnic Institute and State University, 1975.
- Richmond, Mossie J., Jr. "Current Applications, Implementations, Implications, and Effects of the Extended School Year Contract." Unpublished Doctor's dissertation, Ball State University, 1973.

## 4. Year-Round Education Reports.

- Alvirne High School District. "Questions and Results on YRE." Hudson, New Hampshire: Alvirne High School District, February, 1974.
- "Attitudes Toward Year-Round Schools." San Diego, California: Economic Behavior Analysts, Inc., December, 1974.
- Berryessa Union Elementary School District. "Summary of the Final Evaluation Report." Santa Clara, California: Center for Planning and Evaluation, September, 1973.
- Blanton, William E., and Phillip Harris. A Summary of the Interim Evaluation for the Jefferson County Board of Education Elective Quarter Plan. Indiana: Indiana University, November 26, 1973.
- Boyce, Elaine M. "Report to the Western Association of Year-Round Schools." Berkeley, California: Field Service Center, Department of Education, University of California, November 10, 1974. (Mimeographed.)
- Boyce, Elaine M. "Year-Round Education: The Concept of the Year-Round School." Berkeley, California: Field Service Center, March, 1974.
- Campbell, Bruce. "Extended School Year Program." Trenton, New Jersey: Office of Program Development, May, 1973.

- Campbell, Bruce. "Year-Round Education Activities in the United States: First Annual Survey of State Education Agencies Concerning Activities, Including Legislation, in Year-Round Education in the United States." Trenton, New Jersey: New Jersey Department of Education, April, 1973. (Mimeographed.)
- Campbell, Bruce. "Year-Round Education Activities in the United States: Second Annual Survey of State Education Agencies Concerning Activities, Including Legislation, in Year-Round Education in the United States." Trenton, New Jersey: New Jersey Department of Education, April, 1974. (Mimeographed.)
- Campbell, Bruce. "Year-Round Education Activities in the United States: Third Annual Survey of State Education Agencies Concerning Activities, Including Legislation, in Year-Round Education in the United States." Trenton, New Jersey: New Jersey Department of Education, April, 1975. (Mimeographed.)
- Campbell, Myra G. "Year-Round School: Perceptions of Parents, Students, and Staff from Six San Diego Pilot Project Elementary Schools." San Diego, California: San Diego City Schools, February, 1973.
- Chula Vista City School District. "Evaluation of Costs for Year Round Schools Operation." Chula Vista, California: Chula Vista City School District, 1973.
- Chula Vista City School District. "YRS is Here and It's Working: An Evaluation Summary of Year-Round Schools." Chula Vista, California: Chula Vista City School District, July, 1973.
- Chung, Roy. "Potential Impact of the 45-15 School Calendar Plan on the Changing Life Styles of the Harmon, Wettengel, and Ulloa School Communities: A Preliminary Report to the Territorial Board of Education." Agana, Guam: Government of Guam, February 5, 1974.
- Clark County School District. "Interim Report of Year-Round School." Clark County, Nevada: Department of Research and Development, August, 1973.
- Colorado Springs Public Schools. "Year-Round School: Concept Six." Colorado Springs, Colorado: Colorado Springs Public Schools, (n.d.).

- Covey, Don and Martin Sincoff. "Working Educational Documents for Implementing the Four Quarter Year-Round Program at South Mountain High School." Phoenix, Arizona: Phoenix Union High School, November 5, 1973.
- Cranston Public Schools. "The Continuous School Year." Cranston, Rhode Island: Cranston Public Schools, March, 1972.
- Delran Public School System. "Final Report on Full Year Education." Burlington County, New Jersey:
  Delran Public School System, May 18, 1973.
- Elk Grove Unified School District. "Process Evaluation of the Elk Grove Year-Round School Project." Elk Grove, California: Elk Grove Unified School District, February 21, 1974.
- Elk Grove Unified School District. "Secondary Program for Year-Round School—ESEA Title III Application." Elk Grove, California: Elk Grove Unified School District, June, 1973.
- Escondido Union School District. "First Report—Year-Round Education." Escondido, California: Escondido Union School District, December, 1974.
- Evergreen School District No. 114. "Opinion Poll—Year-Round School Report, Information Packet." Vancouver, Washington: Evergreen School District No. 114, February 4, 1974.
- Francis Howell School District. "Year-Round School Questionnaire." St. Charles, Missouri: Francis Howell School District, December, 1972.
- Frary, Robert B. "The Need for Evaluation Models." Paper presented at the Fifth National Seminar on Year-Round Education, Virginia Beach, Virginia, May 8-11, 1973. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1973. (Mimeographed.)
- Glines, Donald E. and Robert Ellers. "Year-Round Education Activities." Sacramento, California: California State Department of Education, October, 1974. (Mimeographed.)
- Glinke, George B. "Year-Round Education: The Utica Story."
  Utica, Michigan: Utica School District, December, 1970.

- Glowski, Mathew R. "A Report on Extended School Year Programs." New Jersey: Northern Valley Regional High School District, January, 1974.
- Gove, James R. "Testimony Presented to General Subcommittee on Education." Washington, D.C.: Government Printing Office, April 24, 1972.
- Grand Forks Public Schools. "A Time for Direction——
  A Time for Decision." Grand Forks, North
  Dakota: Grand Forks Public Schools, October,
  1968.
- Gresham Grade Schools—District No. 4. "Gresham Grade Schools: An Introduction." Gresham, Oregon: Public Information Office, August, 1972.
- Gresham Grade Schools—District No. 4. "Student Rights and Responsibilities Code." Gresham, Oregon: Gresham Grade Schools—District No. 4, August, 1972.
- Hayward Unified School District. "Four-Quarter Extended Year Program: Second Evaluation Report." Hayward, California: Hayward Unified School District, May, 1972.
- Heller, Melvin P. "The Extended School Year—Evaluation and Pitfalls." Proceedings of the Sixth National Seminar on Year-Round Education, Chicago, Illinois, 1974. Springfield, Illinois: State Department of Education, 1974.
- Holt, Howard B. "A Secondary School Staff Evaluates its Year-Round Program." San Diego, California: San Diego State College, June 2, 1972.
- Hubbell, Ned S. and Associates. "Attitudes Toward Year-Round School in Prince William County, Virginia." Port Huron, Michigan: Ned S. Hubbell and Associates, Inc., September, 1972.
- Irvine Unified School District. "Year-Round School— Regular School." Irvine, California: Irvine Unified School District, January, 1974.

- Jensen, George M. "The Calendar—Underdeveloped Educational Resource." Paper presented at the Third Annual National Seminar on All-Year Education, Cocoa Beach, Florida, 1971. Horse Shoe, North Carolina: National School Calendar Study Committee, 1974.
- Johnson, Lyndon Baines. Address given at the Convention of American Association of School Administrators, Atlantic City, New Jersey, February 16, 1966.
- Johnson, Oz. "Strategies for Year-Round Education in Jefferson County, Kentucky." Mt. Sequoya
  National Seminar on Year-Round Education.
  Fayetteville, Arkansas: Arkansas School Study
  Council, 1969.
- Johnston, John A., James D. Kieley, Robert J. Staaf, and Gerald Stiles. "Economics and Year-Round Education, Time Vouchers: A Positive Choice." Paper presented at the First Annual Mid-South Educational Research Association Convention, New Orleans, Louisiana, November 9-11, 1972. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1972. (Mimeographed.)
- Lahaderne, Henriette M. "Year-Round Schools: An Assessment of the Programs Initial Year in Four Chula Vista Elementary Schools." Chula Vista, California: Chula Vista School District, November, 1972.
- LaMesa-Spring Valley School District. "An Assessment of Attitudes Toward the La-Mesa-Spring Valley School District Year-Round School." LaMesa, California: LaMesa-Spring Valley School District, June, 1972.
- LaMesa-Spring Valley School District. "Evaluation of Scholastic Achievement in the Year-Round School." LaMesa, California: Division of Instruction, March, 1974.
- LaMesa-Spring Valley School District. "A Visual Summary of LaMesa-Spring Valley School District's Year-Round Attitudinal Survey." LaMesa, California: LaMesa-Spring Valley School District, June 20, 1972.
- McLain, John D. "The Flexible All-Year School." Clarion, Pennsylvania: Research Learning Center, Clarion State College, 1969.

- Monroe, Bruce and Helen Farmer. "Predicting the Future for Year-Round Education." Proceedings of the Fifth National Seminar on Year-Round Education, Virginia Beach, Virginia, 1973. Richmond, Virginia: Virginia Department of Education, 1973.
- Monroe Township Public Schools. "Extended School Year Feasibility Study Program." Williamstown, New Jersey: Monroe Township Public Schools, 1973.
- Mora School District. "Mora 45-15 Day Year-Round School Plan Education Report." Mora, Minnesota: Mora School District, May, 1973.
- Nadig, Larry. "Research Project Comparing the 45-15 School Schedule with the Regular School Schedule." Santee, California: Santee School District, September, 1973.
- National Council on Year-Round Education (Comp.) National Reference Directory of Year-Round Education.

  Clarion, Pennsylvania: National Council on Year-Round Education, January, 1976.
- Nelson, Gary K. Department of Law Letter Opinion No. 73-27-L (R-39). Phoenix, Arizona: Office of the Attorney General, June 13, 1973. (Mimeographed.)
- Nielsen, Wilhelmine. "First Report—Year-Round Schools." Escondido, California: Escondido Union School District, 1973.
- Northville Public Schools. "Extended School Year-45-15 Plan." Northville, Michigan: Northville Public Schools, 1973.
- O'Dell, Allan M. "A General Report on the Year-Round School Plan." St. Charles, Missouri: Francis Howell School District, May, 1972.
- Office of Extended School Year. The Extended School Year Information Folio. Phoenix, Arizona: State Department of Education, 1973.
- Ohlson, Harry B. "Evaluation of the San Diego Unified School District's Pilot Year-Round School Project." San Diego, California: San Diego Unified School District, January 29, 1975.

- Old Adobe Union School District. "The Evaluation of the 45-15 Staggered Year-Round Calendar." Petaluma, California: Old Adobe Union School District, April, 1972.
- Olsen, Johannes I., and Paul D. Rice. "Do We... or Don't We... Have to Change the Instructional Program for Year-Round Operation." Proceedings of the Sixth National Seminar on Year-Round Education, Chicago, Illinois, 1974. Springfield, Illinois: State Department of Education, 1974.
- Pajaro Valley Unified School District. "Year-Round School Evaluation, First Year Report." Watsonville, California: Pajaro Valley Unified School District, January, 1974.
- Parks, David J. "The Evaluation of the Impact of YRE on School Organization." Paper presented at the Fifth National Seminar on Year-Round Education, Virginia Beach, Virginia, May 8-11, 1973. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1973. (Mimeographed.)
- Parks, David J. "The Measurement of Attitude Toward Year-Round Education (YRE)." Proposal for college research grant. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, February, 1975. (Mimeographed.)
- Parks, David J. "Research on Year-Round Education." Paper presented at the American Research Association Convention, Chicago, Illinois, April 15-19, 1974.

  Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1974. (Mimeographed.)
- Parks, David J., and Donald E. Parks. "Interest Groups and Year-Round Schools in California, 1973-1974."

  Blacksburg, Virginia: Virginia Polytechnic Institute and State University, December, 1974. (Mimeographed.)
- Parks, David J., and Linda G. Leffel. "Needed Research in Year-Round Education." Paper presented at the American Educational Research Association Convention, Chicago, Illinois, February 25—March 1, 1973. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1973. (Mimeographed.)
- Pennsylvania Department of Education. "Year-Round School." Harrisburg, Pennsylvania: Bureau of Administrative Leadership Services, November, 1971.

- Polk County School System. "The Extended School Year."

  Des Moines, Iowa: Polk County School System,

  April, 1970.
- Port Huron Area School District. "The Four-Quarter Plan and its Feasibility for the Port Huron Area School District." Port Huron, Michigan: Port Huron Area School District, January 31, 1970.
- Predovich, Daniel L. "The Year-Round School: Vehicle for Curricular Change." Mt. Sequoya National Seminar on Year-Round Education. Fayetteville, Arkansas: Arkansas School Study Council, 1969.
- Prince William County Schools. "Report of Survey of Students at Gar-Field High School." Prince William County, Virginia: Educational Planning and Analysis Office, December, 1974.
- Probinsky, Jean. "The Implications of the 45-15 Calendar for Changing Family Life Patterns." Paper presented at the Second Annual Meeting of the Mid-South Educational Research Association, Memphis, Tennessee, November 14-17, 1973.
- Proceedings of the Fourth National Seminar on Year-Round
  Education. San Diego, California State Department
  of Education, San Diego County, 1972.
- Proceedings of the Fifth National Seminar on Year-Round
  Education. Virginia Beach, Virginia, May, 1973.
  Richmond, Virginia: State Department of Education, 1973.
- Proceedings of the Sixth National Seminar on Year-Round
  Education. Chicago, Illinois, 1974. Springfield,
  Illinois: State Department of Education, 1974.
- Radenheimer, Paul. "The Second Annual Year-Round School Attitudinal Survey." LaMesa, California: LaMesa-Spring Valley School District, November, 1973.
- Richmond, Mossie J. "Design and Delimits Determine Effects of ESY Programs." Jonesboro, Arkansas: Arkansas State University, 1974.
- Richmond, Mossie J., and Jack D. Riegle, "Current Status of the Extended School Year." Jonesboro, Arkansas: Arkansas State University, 1974.
- Roth, Rodney. "Extended School Year in Michigan." Kalamazoo, Michigan: Western Michigan University, February, 1973.

- Ryan, Rita M. "A Study of the Year-Round School." Research paper, University of Delaware, November, 1973. (Mimeographed.)
- San Diego Department of Education. "Year-Round School Articulation and Compatibility Study." LaMesa, California: Grosemont Union High School District, December, 1972.
- San Diego Public Schools. "Current Status of Year-Round Education." San Diego, California: Department of Education, July 15, 1974.
- Sarasota County School District. "A Feasibility Study of the Year-Round Utilization of School Buildings in Sarasota County." Sarasota, Florida: Sarasota Division of Personnel and Program Development, October, 1973.
- Schlechty Associates. "Extensiveness—Accuracy of Parent Information about Virginia Beach 45-15 Pilot Program." Virginia Beach, Virginia: Schlechty Associates, April 1, 1973.
- Staaf, Robert J. "The Effect of Year-Round Education on Costs and Public Support: The Economics and Politics of a Time Voucher." Paper presented at the American Educational Research Association Convention, New Orleans, Louisiana, March 1, 1973. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1973. (Mimeographed.)
- Territorial Board of Education. "Feasibility Study—Final Report." Agana, Guam: Government of Guam, July 3, 1973.
- Thomas, George I. "It's time to Reschedule the School Year." Paper presented at the Twenty-Ninth Annual Meeting of the National School Boards Association, Miami Beach, Florida, April 12-15, 1969.
- Tregellas, Joy. "Extended School Year Feasibility Study Program." Williamstown, New Jersey: Monroe Township Public Schools, May, 1973.
- University of Virginia. "Final Project Report on Year-Round School Achievement Evaluation of Prince William County Schools." Charlottesville, Virginia: Bureau of Educational Research, October, 1972.
- Urbandale Community School District. "Year-Round Education." Urbandale, Iowa: Urbandale Community School District, 1973.

- U.S. Congress. House. Committee on Education and Labor. Year-Round Schools. Hearing, 92nd Congress, 2nd Session, April 24, 1972. Washington, D.C.: Government Printing Office, 1972.
- U.S. Superintendent of Documents (Comp.). "Year-Round Schools: The 45-15 Plan." Washington, D.C.: Government Printing Office, 1972.
- The Utica Community School District. "The Four-Quarter Staggered School Year: A Feasibility Study to Extend the School Year." Utica, Michigan: The Utica Community School District, July, 1970.
- Valley View School District #96. "Final Report on Evaluation of the 45-15 Plan, A Year-Round School Operation." Lockport, Illinois: Valley View School District #96, July, 1972.
- Vause, Edwin H. "The Year-Round School Bag: Some Cool for Up-Tight Educators." Mt. Sequoyah National Seminar on Year-Round Education. Fayetteville, Arkansas:

  Arkansas School Study Council, 1969.
- Waner, Alfred W. "The Extended Contract as Currently Being Practiced in Year-Round Schools in the State of California." A dissertation proposal; no university listed, California, 1973. (Mimeographed.)
- Washoe County School District. "An Analysis of the Year-Round School Program." Reno, Nevada: Research and Development Department, June, 1973. (Mimeographed.)
- Western School District. "Considerations for Implementation of a K-12 45-15 Plan." Parma, Michigan: Western School District, 1973.
- White, Wayne H. "Five Years of Year-Round Education."
  Reston, Virginia: Virginia Polytechnic Institute
  and State University, 1974. (Mimeographed.)
- Willard, David T. "A Feasibility Study on the Year-Round School: 1972-1973." Naperville, Illinois: Naperville Community School District, 1973.
- Worner, Wayne. "Feasibility Study—Educational Baseline."

  Proceedings of the Sixth National Seminar on YearRound Education, Chicago, Illinois, 1974. Springfield,
  Illinois: State Department of Education, 1974.

# 5. Newspapers

The Washington Post. Washington, D.C., June 22, 1975.

# 6. Personal Communication

Beville, Stuart M. Personal Interview. May 13, 1975.
Boynton, Robert. Telephone Interview. July 2, 1975.

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Hand Louis

AN ASSESSMENT OF SECONDARY SCHOOL STUDENTS' ATTITUDES

TOWARD THE 45-15 YEAR-ROUND SCHOOL CALENDAR

by

Harold Lewis

(ABSTRACT)

Since the early 1960s, schools on the 45-15 year-round school calendar have been implemented in an increasing number of school districts throughout the United States.

Literature has shown that the success of these programs is related to students' attitudes.

The main body of knowledge we have concerning students' attitudes is contained in feasibility studies having limitations. Because of the importance ascribed to students' attitudes, these limitations must be eradicated as much as possible in order to develop a viable attitudinal assessment instrument to evaluate students' attitudes. The evaluation of students' attitudes with such an instrument is the first step toward providing insight into those variables which are associated with favorable and unfavorable attitudes toward year-round education.

The weaknesses in previously developed instruments and the importance of students' attitudes in the success or failure of year-round programs formed the basis for a two-pronged approach to this study. First, an attitudinal inventory was constructed to evaluate students' attitudes toward the 45-15

year-round school calendar and second, an identification was made of those personal and school calendar characteristics presumed to influence students' attitudes toward that calendar.

A research instrument, developed in accordance with Thurstone's technique, was given to selected students in operational public high schools in the United States employing the 45-15 year-round school calendar. The resulting data were analyzed using SPSS subprograms Condescriptive and Student's t. The results revealed that students' attitudes toward the 45-15 year-round school calendar were more favorable when they: (1) perceive themselves as achieving well; (2) determine their own vacation schedule; (3) have one or both parents in favor of year-round school; (4) have close friends on the same attendance calendar; and (5) can select a September to June calendar or school.

The personal and school calendar characteristics determined not to have any significant relationship to students' attitudes toward the 45-15 year-round school calendar were:

(1) sex; (2) experience in year-round school; (3) employment; and (4) sibling attendance patterns.