CHARACTERISTICS OF SCHOOL DISTRICTS RELATED TO IMPLEMENTATION OF YEAR-ROUND SCHOOLS

by

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Dissertation submitted to the Graduate Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

in

Educational Administration

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December, 1973

Blacksburg, Virginia

ACKNOWLEDGMENTS

The writer wishes to express appreciation to the individuals whose contributions to this study are mentioned throughout this dissertation. These helpers are too numerous to mention here, but it would be remiss not to express gratitude to those without whom this study would not have been completed.

The writer is especially grateful to both Dr. David Parks and Dr. Robert Frary who provided invaluable help during the planning, investigation, and reporting of this study.

Appreciation is also extended to committee members Drs. Terry Graham and Harold Schoen for their promptness in reading copy and making suggestions for improvement.

A special thanks is due my wife, Avis, and my young children, Laura and Michael, who rarely complained about my absence and who provided encouragement when it was needed most.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

THE PROBLEM

The pressures for innovation in the public schools have been increasing in the last ten years. These pressures come from federal sources which provide money for schools to implement "innovative or exemplary" programs; from state sources which provide money for research projects; and from local sources such as school boards, administrators, teachers, students, and taxpayers. As a result of this increased pressure the key words in public school education have become innovation and relevancy.

One of the most widely discussed innovations during the last ten years has been year-round schools. When interest in this innovation has gone past the discussion stage, the next step has usually been a feasibility study at the district level. In some cases interest has diminished after the study was completed; in others, Restricted Models of year-round schools have been implemented; and in some, Full-Scale Models of year-round schools have been adopted.

Statement of Hypotheses

This research is concerned with discovering why some districts discontinued activity after their feasibility study was completed while others began operational models.

More specifically, this research seeks data about these districts to test the following hypotheses:

1. There are differences between school districts that implement Full-Scale Models of year-round schools after a feasibility study and those that implement no year-round model.

2. There are differences between school districts that implement Full-Scale Models of year-round schools after a feasibility study and those that implement Restricted Models.

3. There are differences between school districts that implement Restricted Models of year-round schools after a feasibility study and those that implement no year-round model.

Basic Questions

In addition to seeking significant differences in characteristics of the districts in each category, the writer sought to discover characteristics that could be used to distinguish each group of districts from the other two groups. For this purpose the characteristics themselves were classified as demographic, economic, educational, political, and organizational. Based upon this categorization of characteristics, this study suggests answers to the following basic questions related to implementation of year-round schools:

1. What demographic characteristics of school districts are related to implementation of year-round models? Does a rapid increase in student population, the physical size of the district, or the racial composition of the community lead to interest in year-round schools?

2. What economic characteristics of school districts are related to implementation of year-round models? Does the availability of state and federal funds encourage districts to undertake research that may or may not be directly beneficial to the district itself? Are legal bonding limit, high cost of education, overcrowding in classrooms, double shifts, and lack of financial support from the district related to the quest to obtain maximum use of buildings throughout the year?

3. What educational characteristics of school districts are related to implementation of year-round models? Are improvement in the curriculum, improvement of instruction, and improvement in learning situations for students motivators for implementing year-round schools?

4. What political characteristics of school districts are related to implementation of year-round models? Does the attitude of the community, especially the business and industrial sector, affect school decisions? Who were the prime movers in initiating studies, and who participated in them? Is the method of selecting the superintendent or the local board of education related to the direction a district will take after studying year-round schools?

5. Is organization of the school district related to implementation of year-round models? Are more year-round schools operational at the elementary level than at the secondary level? Does the fact that a district levies its own taxes make a difference?

6. How can an analysis of school districts that have studied year-round schools or implemented year-round programs provide guidelines for other school districts to use in their studies or provide direction for organizational patterns to be investigated or avoided?

Definition of Terms

School District is any geographical subdivision of a state which is empowered to organize public schools for the state. School district is synonymous with school division.

Feasibility Study refers to those studies conducted at the school district level. In some cases all schools within the district were involved in the study; in other cases only a few schools within the district participated in the study; and in one case schools in three separate districts cooperated in conducting the same study.

Year-Round School is one that is open for students at least 220 days during the calendar year. Many school systems throughout the United States operate a nine-month school and a summer school. The total days for these two combined is usually less than 220 days.

All-Year School is used interchangeably with year-round school.

Extended School Year is used interchangeably with year-round and all-year school.

Constant Attendance indicates that the number of students enrolled in a school from its own attendance area does not vary more than ten percent during the school year.

Variable Attendance indicates that the number of students enrolled in a school from its own attendance area varies more than ten percent some time during the school year.

Full-Scale Year-Round Model is one that requires Constant Attendance throughout the school year.

Restricted Year-Round Model is one that permits Variable Attendance at some time during the school year.

Delimitations

This study did not attempt to serve as a means to predict whether or not school districts that conduct feasibility studies in the future will implement year-round schools. It did attempt to discover a list of characteristics that distinguish school districts that implemented Full-Scale Models, those that implemented Restricted Models, and those that implemented no models from each other. These lists of characteristics, while not valid for pure predic-

tive purposes, may be used as guidelines to limit the scope of and provide boundaries for future studies by school districts.

The two operational definitions used for classifying year-round schools in this study, Full-Scale Model and Restricted Model, provide an umbrella under which all year-round plans can be categorized. In some cases this method of classification collects very different year-round programs under the same category. This is particularly evident if one reviews the curriculum of year-round programs. A continuous progress approach to curriculum, a packaged curriculum for individualized instruction, or virtually any curriculum can be and is operated with either model. Since curriculum was not the focus of this study, this imposes no restrictions.

Investigation was limited to public school districts in the United States in which a year-round feasibility study was completed during the ten-year period 1963-73. This ten-year period for study was chosen because it covers the span of time in which almost all of the recent activity concerning year-round schools has been initiated. This is substantiated by the fact that in 1963, according to the information received by this writer from the fifty state departments of education, no school districts in the United States were conducting feasibility studies on year-round schools or had a year-round plan in operation.

Parochial and private schools were not used in this study because of the vast differences among them, because their legal control is from different sources, and because of their lack of activity in the area studied.

At the present time fifty-three school districts have feasibility studies in progress which are not used in the results of this study. It was necessary for the writer to choose some date for completion of studies that would allow districts time to make a decision on implementation of year-round schools and would allow the writer to define the population for this study. The date chosen was May 31, 1973.

Significance of the Study

During the last ten years (1963-73), the attention given year-round schools by the media, particularly by professional periodicals, and by schools and universities is evidence of the importance with which the public views this idea. This view of its importance has not produced any real degree of clear thinking about the concept on the part of professional educators and, apparently, has produced only confusion among the general public.

Lack of operational definitions, misinformation, and biased sources have hindered investigation and research. Bias in collecting information is clearly seen in the Gallup Poll conducted in 1972. In this survey Gallup used the following questions to obtain opinions:

> To utilize school buildings to the full extent, would you favor keeping the school open year around? Each student would attend school for nine months over the course of a year. Do you approve or disapprove?[1]

The first question implicitly assumes utilizing buildings to the "full extent" is a desirable goal and does not take into account costs and other limitations involved in implementing any kind of year-round plan. The explanation that each student would attend school for nine months over the course of a year is true for some models of year-round schools but not true for others. In any case an intelligent reply requires knowledge of vacation patterns, attendance patterns, costs, curriculum changes, and many other facts about the year-round plan that the investigator had in mind. Results of this type of survey only add to the confusion that is already rampant. The basic concept of year-round schools must be more clearly defined in order to obtain meaningful data. This study provides a clear definition of the year-round concept and subdivides it into Full-Scale and Restricted Models. Within these categories factors such as costs, effects on students, effects on vacation patterns, and attitudes of community can be studied within the same frame of reference and have more validity when comparisons are made throughout the country.

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[1]George H. Gallup, "Fourth Annual Gallup Poll of Public Attitudes Toward Education," Phi Delta Kappan, 54:38, September, 1972.

In 1963 there were no feasibility studies being conducted in the United States concerning year-round schools. Yet, at the present time, approximately 53 studies are in progress, 117 have been completed by local school districts, and 51 school districts have year-round schools in operation. Very little of this activity has been analyzed with the intent of studying characteristics of the various school districts which implement a particular model. Research needs to determine if the characteristics of school districts that implement year-round schools are different from the characteristics of those that do not. In particular, it may be possible to study the characteristics of a school district and determine with some degree of accuracy whether the school district would implement year-round schools after a feasibility study. It may also be possible to suggest whether a Full-Scale or Restricted Model should be implemented in a particular district.

Future research on the topic of year-round schools might use the results of this study to help develop a list of district characteristics related to implementation and test their predictive value on the fifty-three districts which are now studying year-round schools. If a predictive list of district characteristics related to implementation of year-round schools can be developed, personnel at the local, state, and federal levels who finance and conduct research projects could use the results to make more efficient use of research money. Whether the results of this

study have valid predictive value or not, school districts studying year-round schools in the future may use these results as guidelines to direct their studies and to limit the area of decision making. As examples, school districts that are seeking ways to reduce cost would not desire to implement Restricted Models of year-round schools; and when lay persons are chosen to participate in the study, civic organizations, apparently, provide the best source.

Chapter 2

REVIEW OF LITERATURE

The extensive literature of the last ten years has primarily focused on several broad facets of the year-round school question. These facets are: (1) the cost of year-round operations, (2) the achievement and adjustment of students, (3) the curriculum revisions related to year-round programs, (4) the attitudes of professionals, parents, students, businessmen, and other lay people toward year-round schools, and (5) the effects of year-round schools on other community institutions. The major portion of this literature concerns feasibility studies conducted by individual school districts and evaluation reports on the year-round programs that have been put into operation.

A research of the literature dating back to the early days of the public school system in the United States does not reveal an attempt to empirically compare school districts that have studied and/or operated year-round schools. The literature does reveal, however, that year-round schools are not just a twentieth century phenomenon.

Length of School Year: Academy and Private Elementary Schools

In the early days of our nation's history, when life was predominantly rural, the length of the school year was based on the requirements of an agricultural economy.[1] In rural sparsely settled areas the school year was usually three to four months long since children were needed for farm work during the late spring, summer, and early fall. These winter schools in rural areas were taught by make-shift teachers who worked at other employment for two-thirds of the year.[2] In the larger cities in 1840 schools were in session nearly all year long. The predominant pattern was four terms of twelve weeks each with a vacation of one week at Christmas, one week at Easter, and two weeks in summer.[3]

Before the coming of the common school,[4] the length of the school year was determined from a purely business

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[1]National Education Association, Research Division, (Research Summary, 1968-S2), The Rescheduled School Year, (Washington: National Education Association, 1968), p. 6.

[2]William T. Harris, Elementary Education, ed. Nicholas M. Butler. Education in the United States. Reprint ed. Lawrence A. Cremin, American Education: Its Men, Ideas, and Institutions (New York: Arno Press & The New York Times, 1960), p. 80.

[3]U. S. Office of Education, Biennial Survey of Education 1926-1928, Bulletin, 1930, No. 16 (Washington: Government Printing Office, 1930), p. 86.

[4]Common schools were genuinely free schools for all under public governmental control, rather than under private, charitable, or religious control.

point of view. When the clientele were available, schools were in session. The academies provided education for the children of middle-class merchants and not for the general populace. The common man could not afford to pay the tuition of the academy schools. Other private schools were run by individual teachers as profit-making business enterprises.[5]

Length of School Year: The Common School

By 1870 a majority of the people had accepted the fact that a free society was better served if most of the children went to common, non-sectarian schools. This made it possible for the United States to build a universal system of free elementary schools sooner than any other country in the world.[6] Secondary schools at this time, however, were still largely in private and religious hands.

The average length of school term and average number of days attended by each student in the public schools during the last three decades of the nineteenth century reveal an increase in both categories:[7]

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[5]R. Freeman Butts, "Search for Freedom: The Story of American Education," Contemporary American Education, eds. Stan Dropkin, Harold Full, and Ernest Schwarcz (2nd ed.; New York: The Macmillan Company, 1970), p. 89.

[6]Ibid., p. 98.

[7]Harris, op. cit., pp. 131-132.

Year	Average School Term	Average Days Attended
1870-71	132.1	79.4
1879-80	130.3	81.1
1889-90	134.7	86.3
1897-98	143.1	97.8

During the 1897-98 school session the average length of school term between states varied from a high of 191 days for Rhode Island to a low of 68.8 days for North Carolina. The average number of days attended by each student varied from 143.2 in Massachusetts to 37.2 in North Carolina.[8]

Ideal School Term in 1900

William T. Harris, U. S. Commissioner of Education in 1900, summed up the trend in the length of the school year:

> . . . The school year of ideal length should be about 200 days, or 5 days per week for 40 weeks, i.e., nine and one-half months. In the early days of city schools the attempt was made to hold a session of over 46 weeks in length, allowing only six weeks or less for three short vacations. But experience of their advantage to the pupil has led to the increase of the holidays to nearly double the former amount.[9]

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[8]Harris, op. cit., p. 131.

[9]Harris, op. cit., p. 80.

By 1900 half of the school population lived in cities and towns within reach of elementary schools holding sessions of 180 to 200 days per year and taught by professional teachers.[10] In 1909-10 the average number of days in the school term for urban areas was 184.3 and for rural areas, 137.7.[11] In 1917-18 the average term for cities had decreased to 182 days and the average term for rural schools had increased to 143 days.[12] In 1928 the average term for city schools was 183 days and for rural schools 156 days.[13] During the next twenty years rural schools continued to increase the length of their sessions in order to improve education and cities continued to reduce the length of theirs for the same reason. However, it was not until 1955 that the terms for city and rural schools were virtually the same length. In this year the average length of term for city schools was 180 days and for rural schools 178 days.[14]

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[10]Harris, op. cit., p. 80.

[11]U. S. Bureau of Education, A Comparison of Urban and Rural Common School Statistics, Bulletin, 1912, No. 21 (Washington: Government Printing Office, 1912), p. 28.

[12]U. S. Bureau of Education, Biennial Survey of Education 1916-1918, Vol. III, Bulletin, 1919, No. 90 (Washington: Government Printing Office, 1921), p. 29.

[13]U. S. Office of Education, Biennial Survey of Education 1928-1930, Bulletin, 1931, No. 20 (Washington: Government Printing Office, 1932), p. 69.

[14]U. S. Office of Education, Biennial Survey of Education 1954-56, Statistical Summary of Education 1955-56, (Washington: Government Printing Office, 1956), pp. 44, 58.

Vacation Schools

After the all-year schools were abandoned by cities, private organizations established vacation schools. These first sprung up in Boston, Providence, and Chicago and were so successful that boards of education began to consider vacation schools for the public school system. In 1897 the Board of Education in New York City opened a number of vacation schools and by 1899 twenty cities had established schools of the vacation type.[15] In 1917 summer sessions were held for high school pupils in 109 cities and for elementary school pupils in 211 cities.[16]

The early vacation schools were founded by social workers and philanthropic societies with the idea of counteracting the harmful effects of idleness by city school-age children in the summer. As the vacation schools were taken over by boards of education, the subjects of the regular curriculum were gradually introduced. The possibilities for the return to the all-year school were realized when school systems introduced longer summer terms and permitted pupils to earn advanced credits as well as make up failures of previous terms.[17]

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[15]Henry J. Otto, "Elementary Education-III. Organization and Administration," Encyclopedia of Educational Research, ed. Walter S. Monroe (Revised Ed.; New York: The Macmillan Co., 1950), p. 375.

[16]Bertha Y. Hebb, "All-Year Schools Have Many Advantages," School Life, 8:198, May, 1923.

[17]Otto, op. cit., p. 375.

Early Twentieth Century Year-Round Schools

In 1904 Bluffton, Indiana, implemented the four-quarter plan of operation but abandoned it in 1915.[18] In 1923 ten cities were cited as having returned some schools to the all-year school calendar.[19] Albuquerque, New Mexico; Amarillo, Texas; Ardmore, Oklahoma; Bluffton, Indiana; Eveleth, Minnesota; Gary, Indiana; Mason City, Iowa; Newark, New Jersey; Omaha, Nebraska; and Tulsa, Oklahoma, were the ten listed. At least two of these, according to some sources, had abandoned all-year schools before 1923. Bluffton, Indiana, abandoned the experiment in 1915[20] and Mason City, Iowa, in 1920.[21] By 1925 El Paso, Texas; Bayonne, New Jersey; and Minot, North Dakota, had implemented all-year schools. Aliquippa, Pennsylvania, in 1928 and Ambridge, Pennsylvania, in 1930 operated the four-quarter plan.[22] By

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[18]NEA Research Div., op. cit., p. 11.

[19]Hebb, op. cit., p. 198.

[20]Clyde L. Ogden, "The Four Quarter Plan...How Practical An Idea?" American School Board Journal, 133:19, July, 1956.

[21]W. S. Deffenbaugh, Summer Sessions of City Schools, U. S. Bureau of Education Bulletin, 1917, No. 45 (Washington: Government Printing Office, 1918), p. 28; see also Edward J. McNally and others, "Report On the All-Year School," The Elementary School Journal, 30:516, March, 1930.

[22]NEA Research Div., op. cit., p. 11.

1950 only Chattanooga, Tennessee, had schools organized on a year-round basis and by 1956 there were none.[23]

The general pattern for all-year schools in the early twentieth century was the rotating four-quarter plan in which each pupil attended three consecutive quarters of approximately twelve weeks each and vacationed the other quarter. In this plan pupils were divided into four equal groups and vacation for each group was a different quarter of the year. There were other all-year plans operated during this time. The trimester plan was used in Amarillo, Texas;[24] and the continuous school year plan in Newark, New Jersey, and Nashville, Tennessee.[25]

Twelve-Month Teacher Employment

The all-year school movement of the early twentieth century reached its peak in 1925 and rapidly faded away. By 1950 it was almost completely replaced by sophisticated summer schools in both rural and urban areas. In 1946 the thrust for year-round schools was no longer aimed at students but was directed toward teacher employment. These programs were often called "12 months," "all year," or "year-round" programs. Most of these programs were varia-

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[23]Ogden, op. cit., p. 20.

[24]"All-Year Schools," The Elementary School Journal, 21:10-11, September, 1920.

[25]NEA Research Div., op. cit., p. 15.

tions of the "summer school" as operated in many school districts. Ogden described them:

> . . . until it ran into legal difficulties (a State law prohibiting a tax levy in support of a school beyond nine calendar months without a vote of the people in the district), Decatur, Ill., in 1949-50 and 1950-51 organized its schools the year around the calendar. Schools were open 11 months, teachers paid for 12 months, and one month was vacation at full pay. During June and July, the teaching force either taught in summer sessions providing remedial study and recreation or worked on curriculum planning or furthered their professional education by attending university summer schools or went on summer leave without pay. . . . Glencoe, Ill. (1946), Rochester, Minn. (1946), Centerline, Mich. (1947), Lexington, Ky. (1948) are other communities where teachers are employed on a 12 months' contract and assigned to summer school teaching duties, curriculum study, recreation, school census counts, etc., during the summer months.[26]

Feasibility Studies and Implementation, 1963-73

The literature during the last ten years on year-round schools has been voluminious and exceedingly repetitious. Numerous articles have appeared in periodicals, several books have been published, approximately fifteen evaluation reports have been made on operational programs, three master's theses have been written, a number of doctoral dissertations finished, and over one hundred ERIC documents prepared. In this writer's judgment one of the most valuable parts of this literature is feasibility studies that have been conducted at the school district level.

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[26]Ogden, op. cit., p. 21.

Although the majority of these have been financed by local funds, approximately twenty-nine have been financed by state and federal money. The Michigan State Department of Education allocated $100,000 to eight school districts to conduct feasibility studies during the 1969-70 fiscal year. Ann Arbor Public Schools were allocated $18,500; Freeland Community Schools, $5,635; Northville Public Schools, $19,565; Okemos, Haslett, and East Lansing Districts jointly, $17,600; Port Huron Area School District, $19,200; and Utica Community Schools, $19,500.[27]

For fiscal 1972-73 seven districts in Pennsylvania were given money by the State Department of Education to assist in studying year-round schools. Manheim Township School District was given $30,600; State College Area School District, $15,600; Neshaminy School District, $20,500; Gateway School District, $7,500; Fairview School District, $25,000; Central Bucks School District, $17,000; and Wissachickon School District, $14,000.[28]

In 1969 Prince William County Public Schools in Virginia received a federal grant of approximately $45,500 for a feasibility study on year-round schools. As a result

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[27]Northville Public Schools, Year-Round School Is It Feasible? (Northville, Michigan: Northville Public Schools, 1970) pp. 2-3.

[28]Based on letter to Mr. Donald M. Carroll, Jr., Commissioner of Office of Basic Education, from Benjamin D. Hengst, Chief of Management Support Services, Department of Education of Pennsylvania, December 7, 1972.

of this study, the 45-15 plan was put into operation in 1970 in three elementary schools and in one middle school. In 1972 the Virginia Department of Education awarded money to six of its school divisions to conduct studies on year-round programs.[29] Prince William County received $84,500 for a planning and preparational study to implement the 45-15 plan at the secondary level; Loudoun County received $56,800; Roanoke County, $50,500; York County, $50,500; Virginia Beach City, $82,000; and Richmond City, $52,500. Loudoun County and Virginia Beach City have completed their studies and implemented the 45-15 plan at the elementary level in the summer of 1973. Roanoke County, York County, and Richmond City studies are incomplete.

Phoenix Union High School District in Phoenix, Arizona, received a $60,000 grant from Title III of the Elementary and Secondary Education Act to study year-round schools in 1970-71; and Widefield School District #3, in Security, Colorado, received $18,000 in federal funds in 1970-72 to conduct their study.[30]

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[29]Based on personal correspondence between Charles E. Clear, Director of Research and Statistics in the Virginia State Department of Education, and the writer.

[30]Based on personal correspondence between Dr. Gerald DeGrow, Superintendent of Phoenix Union High School District, and the writer. Also, personal correspondence between W. L. Stenson, Acting Superintendent of Widefield School District #3, and the writer.

The pattern for most of the feasibility studies has been: (1) a historical look at year-round schools, (2) an evaluation and assessment of local educational needs, (3) determination of lay community and professional attitudes, (4) need for curriculum changes, and (5) estimates of cost in comparison with traditional nine-month schools. Those districts that have adopted year-round models have attempted to determine the effects on student achievement, to analyze costs, and to survey attitudes of students, professionals, parents, and business community.

Research reports on cost and student achievement yield no definitive results. Some school districts contend that year-round schools have produced savings and that there were no differences in student achievement.[31] Others claim that their year-round plans are more expensive and that student achievement is less.[32]

As a result of their study in 1970, Northville Public Schools in Northville, Michigan, concluded that year-round schools were feasible and acceptable to the community. "We cannot help but be convinced," they said, "that the year-round school program must be the way of the

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[31]"Year-Round Schools Can Reduce Costs," Education U.S.A., October 30, 1972, p. 49.

[32]Ralph L. Witherspoon, Effects of Trimester School Operation on the Achievement and Adjustment of Kindergarten and First Through Third Grade Children: Final Report. Tallahassee: Institute of Human Development, Florida State University, February, 1968.

future . . . ." They contended that millions of dollars in construction costs can be saved by every growing district, that operation of a year-round program will bring about measurable improvement in education, and that with the year-round concept, curriculum can be designed to better meet the individual needs of all children.[33] Yet, Port Huron Area School District in Michigan maintains that their study shows:

> The cost of operating a four-quarter school year is 3.87 mills more than the cost of operating a regular school year program for the first year of operation . . . . After the first year of operation, the cost of the four-quarter plan was figured at 2.49 mills above and beyond the amount levied for a regular year type operation.[34]

Whether the extra operational cost is more than savings in construction has not been proved.

Acceptance by the community has varied from district to district. In Utica, Michigan, 88% of the parents would rather construct more buildings than to change their vacation from summer months in order to operate a mandatory four-quarter plan. In Prince William County, Virginia,

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[33]Northville Public Schools, Year-Round School Is It Feasible? (Northville, Michigan: Northville Public Schools, 1970) p. 101.

[34]Port Huron Area School District, A Study of the Feasibility of the Four-Quarter Plan of School Year Operation (Port Huron, Michigan: Port Huron Area School District, 1970) p. 137.

85% of the parents preferred the mandatory 45-15 plan of year-round schools over other alternatives.[35]

Summary

The earliest schools in the United States were open when the clientele could attend. In cities they usually were operated all year. In rural areas schools were open only in the winter months when children were not working on the farm. With the coming of the common school came compulsory attendance, other state laws concerning education, and local governmental regulation. Rural schools gradually lengthened the school term for the purpose of improving education, and city schools shortened the school term for the very same reason.

In the early nineteenth century at least sixteen cities had returned to year-round schools. Some of these were operated on an experimental basis to forestall new construction of school buildings and some to provide educational opportunities of a remedial nature for immigrant children. Others provided acceleration for many of their more capable students. By 1956 all of these year-round attempts had been abandoned.

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[35]Based on personal correspondence between Stuart M. Beville, Superintendent of Schools in Prince William County, Virginia, and the writer.

The thrust in the fifties was toward twelve-month employment for teachers. Several cities still employ teachers on a twelve month contract and assign them to summer school teaching, curriculum study, or some other duty.

From 1963 to the present there has been a new flurry of activity concerning the year-round school. States, districts, or local schools conducting studies have come up with variations to fit their local needs and labelled their year-round plans with new titles. Some of the titles of the better known plans are: (1) Continuous School Year, (2) Rotating Four-Quarter, (3) Continuous Four-Quarter, (4) Multiple Trails, (5) Trimester, (6) Quadrimester, (7) Quinmester, (8) Extended K-12, and (9) 45-15. All of the year-round plans can be classified as either Full-Scale Year-Round Models or Restricted Year-Round Models.

There are great differences in the year-round models proposed by the various school districts. The literature concerning them reveals that costs of year-round education depends on the type of year-round plan and individual ways of figuring costs, that student achievement and adjustment is poorer in some cases and equal in others, and that community acceptance depends on the kind of model put into operation and whether or not it is mandatory.

Chapter 3

METHODOLOGY

Ex post facto research is defined by Kerlinger as:

> . . . that research in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable or variables. He then studies the independent variables in retrospect for their possible relations to, and effects on, the dependent variable or variables.[1]

This method has three built-in weaknesses: (1) lack of control of independent variables, (2) the inability to randomize, and (3) the risk of improper interpretation.[2]

In spite of these weaknesses the majority of the research conducted in education and in the social sciences is ex post facto research. Understanding the limitations and recognizing the contributions of research using the ex post facto method, this study attempted to use this method to find characteristics of school divisions that are related to the implementation of year-round schools at the district level.

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[1]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 360.

[2]Ibid., p. 371.

Population

All public school districts in the United States that have completed feasibility studies on year-round schools during the last ten years, 1963-73, were the subjects of this study. In order to identify these school districts, the chief officer (whose title in most cases is Superintendent of Public Instruction or Commissioner of Education) in each state department of education was requested to complete the instrument which is included in Appendix A of this dissertation. This instrument was divided into four parts. Part one was used to gather information to identify the districts within the state that had completed feasibility studies during the last ten years; part two was used to gather information on districts that were currently operating year-round schools; part three was used to identify districts that had implemented and abandoned year-round programs during the ten year period 1963-73; and part four was used to identify districts that were planning to implement year-round programs soon after their studies were completed. Returns were received from all fifty states.

One-hundred seventy districts were identified by using the instrument in Appendix A. Fifty-three of these had not completed feasibility studies by May 31, 1973, and data from them could not be used for this study. Of the remaining 117, in Table 1, who had completed feasi-

bility studies, fifty-one had year-round plans in operation in one or more schools within their district, and sixty-six had not put a plan into operation nor had plans to implement one in the foreseeable future.

Table 1

Decisions Concerning Implementation of Year-Round Schools of the 117 Public School Districts in U.S. Comprising the Population for This Study

Decision of District	No. of Districts	No. Included in this Study	Percent Included in this Study
Implemented Full-Scale Model	24	20	83
Implemented Restricted Model	27	22	82
Did Not Implement	66	44	67
Total	117	86	73

Note.--Districts that completed their studies by May 31, 1973, are included in this study.

Forty-two of the fifty-one districts having year-round programs in operation were included in this study. Twenty-two of these are operating Restricted Models and twenty are operating Full-Scale Models. Of the sixty-six districts that did not put a year-round plan into operation, forty-four were included in this study.

Table 2

Year-Round Feasibility Studies and Programs by State

State	No. of District Feasibility Studies		No. of Districts Implementing Programs		No. of Districts not Implementing Programs
	In Progress	Completed	Full-Scale Models	Restricted Models	
Alaska		1			1
Arizona	(7)[a]	6(1)	1	1	4(1)
California	(1)	15(6)	9(4)	4	2(2)
Colorado	(2)	5	1	1	3
Florida		1(3)	1	(2)	(1)
Georgia		1		1	
Idaho		1			1
Illinois	(10)	2(1)	1	(1)	1
Iowa		3			3
Kentucky		1		1	
Maine		1(1)			1(1)
Maryland	(2)	1			1
Massachusetts	(2)	(4)			(4)
Michigan		5(3)		3(1)	2(2)
Minnesota		1	1		
Missouri		2	1		1

[a]The numerals in parentheses indicate the number of districts in each state and each category not included in this study.

Table 2 (continued)

State	No. of District Feasibility Studies		No. of Districts Implementing Programs		No. of Districts not Implementing Programs
	In Progress	Completed	Full-Scale Models	Restricted Models	
Montana		1		1	
Nebraska	(1)				
Nevada	(1)	2	1	1	
New Hampshire		2		1	1
New Jersey	(8)	3(2)			3(2)
New Mexico	(2)	(1)			(1)
New York		2			2
North Carolina		2		2	
North Dakota		2			2
Ohio	(1)	(1)			(1)
Oklahoma		2			2
Oregon		5(2)	1	(1)	4(1)
Pennsylvania	(7)	2		2	
Rhode Island	(1)	(3)			(3)
South Carolina		3(1)		1	2(1)
Tennessee	(2)	1(1)			1(1)
Texas	(1)	1		1	
Utah	(1)	1		1	
Vermont		1			1
Virginia	(3)	3	3		

Table 2 (continued)

State	No. of District Feasibility Studies		No. of Districts Implementing Programs		No. of Districts not Implementing Programs
	In Progress	Completed	Full-Scale Models	Restricted Models	
Washington		1		1	
Wisconsin	(1)	6(1)			6(1)
Total	(53)	86(31)	20(4)	22(5)	44(22)

Thirty-eight of the fifty states had districts that had completed feasibility studies. Data from thirty-five of these thirty-eight were used in this dissertation. Massachusetts, New Mexico, and Ohio were the only states, in Table 2, with districts that had completed feasibility studies and from which data could not be obtained by this writer. Massachusetts had four districts; New Mexico, one; and Ohio, one that had completed feasibility studies, but none of these had put year-round programs into operation.

Since the reader may wish to generalize findings to school districts nationwide, it is necessary to look at the population under study and compare it with districts throughout the United States. Enrollments, Table 3, reveal that the eighty-six districts included in this study are comprised of a substantially greater per cent

of medium and large districts than the national average. This information should be evaluated along with the fact that approximately one-half of the districts under study are medium sized, one-fourth small, and one-fourth large.

Table 3

Comparison of Enrollment of School Districts in Study With All Districts in U.S., 1972-73[a]

Size	In Study		United States	
	Number	Percent	Number	Percent
Less than 5,000	25	29.1	14,633	88.6
5,000-24,999	40	46.5	1,699	10.3
25,000 or more	21	24.4	183	1.1
Total	86	100.0	16,515	100.0

[a]U. S. Department of Health, Education, and Welfare, Educational Directory, 1972-73, Public School Systems, No. (OE) 73-11701 (Washington: Government Printing Office, 1973), passim.

The thirty-five states represented in this study are geographically distributed throughout the United States and include a representative distribution of small, medium, and large states (Table 2, pp. 29-31). The districts within these states also include representative

samples of rural (22%), urban (46%), and inner city (32%) areas of population.[3]

A detailed analysis of the characteristics of school districts included in this study is presented in Chapters 4 and 5 of this dissertation.

Data Collection Procedures

Data for this study were collected primarily from two surveys. One survey was sent to the chief officer in each of the fifty state departments of education in order to identify school districts that had completed feasibility studies on year-round schools during the last ten years and to identify those that had put a year-round plan in operation during this same period of time. The second survey was sent to superintendents of schools in the districts identified by the first survey. The second survey was designed to collect data that could be used to test the hypotheses in Chapter 1.

Systematic bibliographical library research was used to validate the data received from the two surveys. Materials from the libraries of Virginia Polytechnic Institute and State University, the University of Virginia, and the University of Wisconsin were used for this purpose.

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[3]Warren A. Hughes, Statistics of Local Public School Systems, Fall 1969, U. S. Department of Health, Education, and Welfare Publication No. (OE) 72-14 (Washington: Government Printing Office, 1971), passim.

In addition, communication by telephone and visits to several school districts were used to clarify information received on surveys.

Data Collection Instruments

Two instruments were used by the writer to collect data. The first of these was used to identify and categorize the population for this study (Appendix A), and the second was used primarily to obtain data necessary to test the hypotheses (Appendix C).

The first instrument, as previously discussed in this chapter, was used to identify the school districts that completed feasibility studies on year-round schools during the last ten years and to determine which districts have year-round plans in operation. The date the study was completed, the date of implementation of a year-round program, intentions to implement a program soon, and whether a year-round program had been implemented and abandoned were four other questions asked in this survey to help determine the validity of the data received. These items could be readily validated when questionnaires were sent to the superintendents of schools of the districts identified by the chief school officers at the state level.

Kerlinger's observations concerning validity seem appropriate to the writer's methods. He says:

> Survey research has a unique advantage among social scientific methods: it is sometimes possible to check the validity of survey data without too much difficulty. In checking the validity of a measuring instrument, it is necessary to use an outside criterion. One compares one's results to some outside, presumably valid, criterion. For instance a respondent tells us he voted in the last election of school board members. We can check whether he did or not by checking the registration and voting records.[4]

This checking of the validity of a measuring instrument with an outside criterion is called predictive or concurrent validity by Kerlinger.[5] The other type of validity that seems appropriate to the writer's instruments is called content validity. Kerlinger says that when a test, survey, or other instrument used for measurement is prepared it must be examined by the preparer to determine each item's relevance to the characteristics that are to be measured. In addition colleagues who are knowledgeable concerning the characteristics to be measured should evaluate the content of the measuring instrument. "Content validity is the representativeness or sampling adequacy of the content--the substance, the matter, the topics--of a measuring instrument."[6] The content validity of the first instrument used by the

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[4]Ibid., p. 401.

[5]Ibid., p. 447.

[6]Ibid., p. 445.

writer is by definition very high since its primary purpose was the identification of the population for this study.

The accuracy of the data received from the chief school officer of each state department of education was checked by comparing the districts identified by them with two other lists. Wayne M. Worner, Administrative Coordinator of the National Council on Year-Round Education with headquarters located at Virginia Polytechnic Institute and State University, provided lists of schools interested in year-round programs; and Bruce Campbell, Director of Extended School Year Programs for the New Jersey State Department of Education, provided a research document, "Year-Round Education Activities in the United States," published by him in April, 1973.

Campbell's list, summarized in Table II, page iv of his publication, contained ninety-nine year-round programs from the fifty states. Three of the programs in Florida listed by Campbell were not district programs but had been planned, studied, and implemented by individual schools. Because they were not district programs, Florida's S. Bryan Jennings Elementary School, Cocoa High School, and Nova Schools were not included in this dissertation. Also, Bradford County Schools in Florida in Campbell's list had operated an extended summer session in 1970 and 1972 which did not fit the operational definition of year-round schools used by this writer and were not

included in this study. Campbell included in his list one other program which this writer did not use because it could not be determined that it was a year-round program. No substantiation was found by this writer from other sources that Pennsbury School District in Pennsylvania had completed a feasibility study on year-round schools. All other programs listed by Campbell, and some that are not in his list, are included in this study. The writer's list contained 117 districts. These districts are identified in Tables 9, 10, and 11 in Appendix D of this dissertation.

Worner's unpublished list of year-round schools contained individual schools and school districts that were "interested" in year-round programs. His list included many of the 117 districts identified by this writer and a great number that were not. Apparently, a substantial number of the public school districts included in Worner's list had expressed interest in year-round schools but had not actually followed up their expressed interest with an investigation of year-round programs.

The final validation of data received from the chief school officers was accomplished when the writer communicated with the superintendent of schools in each district that had been identified. Twelve of those listed

by the chief school officers were not identified by the superintendents of the districts as year-round programs.[7]

Second Instrument

The second instrument used by the writer (Appendix C) was prepared in two parts. The first part contained items to be answered by the superintendent of each school district that had completed a feasibility study on year-round schools during the past ten years. Part two contained items to be completed by the superintendent of school districts that had implemented a year-round program during this same period of time. The purpose of this questionnaire was to collect data concerning the characteristics of the districts that the writer judged to be important in testing the hypotheses and clarifying basic questions in this study.

Items were included to obtain data on demographic, economic, educational, political, and organizational characteristics of school districts. These five categories seemed appropriate to the writer since schools are only one of the interdependent institutions in a community.

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[7]Baltimore City and Anne Arundel County Schools in Maryland; Hilton Public Schools in New York; New Hanover County and Craven County Schools in North Carolina; Canby Elementary School District in Oregon; Deer Park, El Paso, San Marcos, and United Independent School Districts in Texas; Addison-Rutland School District in Vermont; and Wausau District Public Schools in Wisconsin were not year-round programs.

Changes in one community institution often cause or precipitate changes in other institutions.

After a tentative questionnaire had been constructed eleven educators (Appendix B) from the State of Virginia who were knowledgeable concerning year-round schools were asked to evaluate the content validity of the questionnaire. The suggestions of these eleven educators were included in the final instrument (Appendix C). Further validation of content was received from David J. Parks, Robert Frary and Larry S. Mayer who were all members of the Advisory Committee for this dissertation. "Content validation," Kerlinger says, "consists essentially in judgment. Alone or with others, one judges the representativeness of the items."[8]

In order to determine if a measure is reliable, one must seek to answer whether it is an accurate and stable measure of the property measured.[9] Accurate and stable measures are easier to obtain with a survey when only simple, factual data are required. Many items on this survey such as enrollments, racial percentages, number of schools, size of district, method of choosing superintendent and board of education, grade levels in the district, money spent in various categories, and similar questions all require factual answers which are relatively easy to verify.

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[8]Ibid., p. 446.

[9]Ibid., p. 430.

The Educational Directory and Directory of Public Elementary and Secondary Schools in Selected Districts published by the U. S. Department of Health, Education, and Welfare; and the Digest of Educational Statistics published by the U. S. Office of Education were used to check factual answers. The reliability of attitude responses was harder to determine. Since this writer was more interested in group measures than individual attitude measures, it is felt that reasonable reliability was obtained. Data on attitudes obtained from local district surveys and reported by the district school superintendents were used in this study. Approximately fifteen of the districts have published results of their feasibility studies which include attitudes of administrators, teachers, parents, students, and business or industry. These same attitude items are the ones included in the survey sent to districts. There were no significant differences in attitudes in the published feasibility studies and those listed by the district superintendents.

Preparation of Data for Analysis

Data for all variables were divided into two, three, or four categories. For the dependent variable data were divided into the categories of no implementation, implementation of a Restricted Model, and implementation of a Full-Scale Model. The categories for grade levels, transportation costs, and per pupil cost of education were determined

by national averages. Categories for other variables were determined by the judgment of the writer.

Grade Levels

Districts with only grades in the K-7 range were classified as elementary school districts, those with only grades in the 8-12 range were classified as secondary, and those with grades overlapping the two categories were classified as K-12 districts.

Transportation Cost

The average cost of transportation for school districts in the United States was 3.4% of their operating budget in 1971-72 according to the survey published in the January, 1973, issue of School Management. For the purpose of this study, less than 2% of the operating budget for transportation was classified as low, 2% and less than 4% was classified as average, and 4% or more was classified as high.

Per Pupil Cost

School Management, January, 1973, lists the national average of $906 spent per pupil in average daily membership from the 1971-72 operating budget. For this study the writer classified an amount of $800 or less spent per pupil in average daily membership from the operating budget as low, more than $800 and less than $1000 as average, and $1000 or more as high.

Student Population

Student enrollment was used to classify districts as small, medium, and large. Districts with a student enrollment less than 5,000 were classified as small, districts with 5,000 and less than 25,000 student enrollment were classified as medium, and districts with a student enrollment of 25,000 or more were classified as large.

A decrease in population, low increase, and high increase were categories used to classify population data. If the average population increase was 5% or more per year from 1963 to 1973, it was classified as a high increase, less than 5% per year and greater than 0 was classified as low increase, and no increase and any decrease were classified as a decrease in population.

Races were categorized as white, black, and Spanish American. The white student population within the district was classified as low, average, and high. Under 70% white population was classified as low, 70% and less than 90% was classified as average, and 90% or more was classified as high.

Both Black and Spanish American student populations were classified in like manner. Less than 5% was scored as low, 5% and less than 25% was scored as average, and 25% or more was scored as high.

Area of District

A district smaller than 21 square miles was classified as small, one 21 square miles and less than 60 square miles was classified as average, and one 60 square miles or more was classified as large.

Education and Employment

If all four-year colleges with schools of education were located more than 20 miles from the district this was classified as far. If a district had four-year colleges with schools of education located within 20 miles and still outside the district, this was classified as average; and when districts had four-year colleges with schools of education located within the district, this was classified as near.

For high school graduates, continuation of formal education at an institution of higher learning and seeking full time employment were scored as follows: Less than 30% was scored as low, 30% and less than 55% was scored as average, 55% and more was scored as high.

Construction of Buildings and School Bond Data

If a school district had constructed less than 10% of its school buildings in the last ten years, it was classified as a low construction district, 10% and less than 20% construction was classified as average; 20% construction and more was classified as high.

Data from the question concerning legal bonding limit were used to classify districts into three categories. Not applicable was a category if the question did not apply to the district. If a district had sold bonds amounting to less than 75% of its legal limit, it was classified as average; and if the district had sold bonds amounting to 75% or more of its legal limit, it was classified as high.

Attitude of Population

The survey contained two categories of questions concerning attitudes of teachers, administrators, parents, students, and business and industry toward year-round schools. Answers to questions in the first category were given as percentages of these populations that were in favor of year-round schools; answers in the second category were given as percentages of these populations that opposed year-round schools. Less than 50% in favor was scored as low, 50% and less than 75% in favor was scored as average, and 75% or more in favor was scored as high. Less than 15% against was scored as low, 15% and less than 30% against was scored as average, and 30% or more against was scored as high.

Reason for Undertaking a Feasibility Study

Reasons for undertaking a feasibility study were divided into three categories. If respondents rated the reason first, second, or third, it was scored as high. A

rating of fourth, fifth, or sixth was scored as average, and a rating of seventh, eighth, ninth, tenth, or none at all was scored as low.

Initiators and Participants

Questions concerning who were the initiators of feasibility studies at the district level were structured so that answers were divided into two categories, yes or no. The yes category simply meant the individual was an initiator of the study; the no category meant he was not.

Participation in the study was divided into four levels. Level one was used to indicate that the particular individual did not participate in the feasibility study, level two indicated that the individual participated after the study ended, level three indicated that the individual participated after the study began, and level four indicated that the individual participated from the very beginning of the study.

Other Two-Category Questions

Answers to eight other survey questions were divided into two categories. That is, members of the local board of education and the superintendent were either appointed or elected; the school district either levied its own taxes or it did not. The school district either used federal money in its study or it did not, state money or it did not, and local money or it did not; and the school

district had one or more school referenda passed or defeated or it did not.

Schools That Implemented

If the number of schools within the district in which a year-round program was implemented equalled or exceeded 20% of the total number of schools in the district, it was scored as high implementation; if the number was less than 20% and more than 10%, it was scored as average implementation; and if the number was 10% or less, it was scored as low implementation. Pupil enrollment in the schools that implemented a year-round program was scored in like manner. If the schools that implemented a year-round program enrolled 20% or more of the total number of pupils in the district, it was scored as high, less than 20% and more than 10% was scored as average, and 10% or less was scored as low.

Data from questions concerning the source of money used to implement a year-round program were divided into two categories, local and federal/state.

Analysis of Data

The dependent variable, implementation of a year-round school program, was divided into three categories in order to test the three hypotheses in this study. The categories used for the dependent variable were: (1) no implementation, (2) implementation of a Restricted Model, and (3) implementation of a Full-Scale Model. Fifty-eight

independent variables were divided into two, three, or four categories each (Appendix E, Table 13). The fifty-eight independent variables and the dependent variable were intercorrelated using computer program BMD03D[10] which accounts for missing data through pairwise deletion of cases. In this way missing data for an item in any of the eighty-six cases did not exclude the item from the correlation matrix. Inspection of the resulting matrix revealed a number of substantial correlation coefficients. However, the large number of coefficients involved, $\frac{n(n-1)}{2}$ or 1711, precluded a systematic analysis which could be readily conveyed to the reader. Therefore, the writer decided to factor analyze the correlation matrix using computer program BMD03M.[11] In this program intercorrelations of variables are subjected to principal components analysis and Varimax rotation. The principal component technique extracts the roots and associated components in descending order of magnitude. Components with a root of one or greater are subjected to a Varimax rotation.[12] The

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[10]W. J. Dixon (ed.), BMD Biomedical Computer Programs (2d ed.,; Berkeley and Los Angeles: University of California Press, 1970), pp. 60-65.

[11]Ibid., pp. 169-184.

[12]George W. Mayeske and others, "A Study of Our Nation's Schools" (working papers printed by U. S. Office of Education, 1972), p. 22. Kaiser demonstrated in 1960 that for a principal component to be internally consistent "'it is necessary and sufficient that the associated eigen value (or latent root) be greater than one.'"

principal component method extracts factors and a Varimax rotation attempts to maximize the high and low weights of a component so that variables that have a high weight on a component can be thought of as having common factor variance (Appendix F, Table 14).

In this study if an independent variable had a large variance in common with the dependent variable, it was concluded that the independent variable was related to implementation of year-round schools since the dependent variable was a measure of implementation. Therefore, the factor on which the dependent variable loaded was very important since the loadings of the independent variables on the same factor indicated that they were related to implementation of year-round programs. Variables that were not related to implementation of year-round schools but which had substantial correlation with each other loaded on other factors. In all, the fifty-eight independent variables and one dependent variable were reduced to twenty independent and distinct factors. It was not the purpose of this writer to attempt to identify or label any of twenty factors except the one on which the dependent implementaion variable had substantially loaded since it was not needed in the analysis. It was, however, interesting to observe which variables were highly related to each other even though they had a low correlation to the implementation variable. The variables, characteristics of school districts, that were highly related are discussed in

Chapter 4 under the subheading of, "Findings Related to Basic Questions and Additional Findings."

After it was determined which independent variables were related to implementation of year-round schools by using factor analysis, the Chi-square test of independence was used on each of these variables to determine whether the districts that implemented a Full-Scale Model differed with respect to each variable from districts that implemented a Restricted Model. In addition, the Chi-square test of independence was used to display for the reader that a Full-Scale and Restricted Model differed with respect to each variable from districts that did not implement any model of year-round schools.

Data from Part II of the district survey were supplied only by those districts that had implemented year-round programs. These data were measures of four independent variables--source of implementation money, grade levels of implementation, number of schools implementing, and total enrollment in implementing schools--and one dependent variable--type of year-round model implemented (Appendix G, Table 15). The Chi-square test of independence was used to determine if districts that implemented a Full-Scale Model differed on each independent variable from districts that implemented a Restricted Model of year-round schools.

Summary

Ex post facto research was used to gather data to test the following hypotheses:

1. Differences exist in the characteristics of school districts that implement a Full-Scale Model of year-round schools and those that implement a Restricted Model.

2. Differences exist in the characteristics of districts that implement a Full-Scale Model of year-round schools and those that implement no model.

3. Differences exist in the characteristics of school districts that implement a Restricted Model of year-round schools and those that implement no model.

The districts that had completed feasibility studies of year-round schools during the last ten years were identified by information from surveys sent to the chief officer of the fifty state departments of education. A second survey consisting of two parts was sent to the superintendent of schools in each district that had been identified by the first survey.

From Part one of the second survey fifty-eight independent variables were studied in retrospect for their relation to the dependent implementation variable. General factor analysis was used to determine which independent variables had variance in common with the dependent implementation variable. The Chi-square test of independence was used on these variables to determine whether the

districts that implemented Full-Scale Models differed with respect to each of these variables from districts that implemented a Restricted Model and from the districts that did not implement any model of year-round schools. Further, the Chi-square test of independence was used to determine if districts that implemented a Restricted Model differed with respect to each variable from districts that did not implement any model of year-round schools.

Part two of the second survey contained four independent variables and was only completed by districts that implemented year-round schools. The Chi-square test of independence was used to determine if districts that implemented a Full-Scale Model differed with respect to each independent variable from districts that implemented a Restricted Model of year-round schools.

Chapter 4

FINDINGS

In the first analysis with program BMD03M fifty-nine variables and eighty-six districts were used. There were fifty-eight independent variables and one dependent variable. Each of these variables, listed in Appendix E, Table 13, contained from two to four categories. Twenty factors were rotated and significant loadings of variables, Table 4, on each factor were determined.[1] As a result of this analysis, the five variables that measured unfavorable attitude toward implementation of year-round schools were dropped from further study. They were measuring the same concept as the five favorable attitude variables and in approximately the same degree of intensity.

Elimination of Other Variables

The race variables of white, black, and Spanish American were scrutinized for possible relationships among them.[2] The Spanish American variable loaded on a factor

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[1]A significant loading is interpreted as either a positive or negative loading with a weight greater than .50.

[2]The non-white variable was not used in the analysis because it was a combination of black, Spanish American, and Indian variables. The Indian variable was not used because of its negligible importance to the total group.

Table 4

Variables Loading on Same Factor As the Dependent Implementation Variable When Fifty-Nine Variables Were Used

Variables	Factor Loading[a]
Implementation Variable	68
Positive Teacher Attitude Variable	90
Positive Administrator Attitude Variable	81
Positive Parent Attitude Variable	76
Positive Student Attitude Variable	78
Positive Business or Industry Attitude Variable	65
Negative Teacher Attitude Variable	-84
Negative Administrator Attitude Variable	-87
Negative Parent Attitude Variable	-82
Negative Student Attitude Variable	-84
Negative Business or Indsutry Attitude Variable	-70

[a]The variable loading has been rounded to two decimal places and the decimal removed.

on which no other variable had a significant loading. This variable and the secondary grade level variable were dropped from further analysis because they had no significant variance in common with any of the other variables, including the dependent variable.

The black variable was dropped from further analysis because it was inversely related to the white variable. In a school district with a high black population, the white population was always low and vice versa. The participation of administrators variable was dropped from further consideration at this point because it contributed no variance whatsoever. In all eighty-six school districts, administrators participated from the very beginning of the feasibility study.

Twelve other variables were not included in the second analysis. Variables forty, forty-five, and fifty-five were "other" variables and had no significant variance in common with any other variables. The K-12 grade level variable was dropped in order to isolate the elementary grade level variable. Its significant loading was a high negative loading on the same factor on which the elementary grade level variable had a high positive loading. The four initiators of the feasibility study variables, two participators in the study variables, the tax levy variable, and federal money for study variable were eliminated from further analysis because the contribution of their variance was clear to the writer at this stage in the analysis.

Their contribution is explained on page 62 of this dissertation under the subheading of "Findings Related to Basic Questions and Additional Findings."

The same programs, BMD03D and BMD03M, were used to analyze the reduced set of thirty-eight variables. When this reduced set of variables was analyzed by the principal component method (Appendix H, Table 16), only twelve factors were rotated and only one of these was a "new" factor that had not appeared in the original analysis. The dependent implementation variable and the five attitude variables, Table 5, had high loadings on the same factor; no other variables had substantial loadings on this factor.

Table 5

Variables Loading on Same Factor As the Dependent Implementation Variable When Thirty-Eight Variables Were Used

Variables	Factor Loading[a]
Implementation Variable	70
Positive Teacher Attitude Variable	85
Positive Administrator Attitude Variable	81
Positive Parent Attitude Variable	82
Positive Student Attitude Variable	83
Positive Business or Industry Attitude Variable	80

[a]The variable loading has been rounded to two decimal places and the decimal removed.

In the third analysis (Appendix I, Table 17), the writer chose to eliminate the five positive attitude variables in order to determine if any other variables would load on the same factor as the dependent implementation variable.

Table 6

Variables Loading on Same Factor As the Dependent Implementation Variable When No Attitude Variables Were Included

Variables	Factor Loading[a]
Implementation Variable	56
Elementary District	92
Graduates Pursuing Formal Education	83[b]
Graduates Pursuing Full-Time Jobs	56[b]

[a]The variable loading has been rounded to two decimal places and the decimal removed.

[b]Caused by elementary districts that were given the highest score of four for the not applicable category.

Two variables, graduates pursuing formal education after graduation and graduates pursuing full-time jobs after graduation, were measuring the same concept as the elementary school variable and all three loaded on the same factor as the dependent implementation variable (Table 6). These two variables, concerning pursuits of graduates from high school, had been scored with the highest weight of four for elementary school districts which were in the

non-applicable category. Therefore, their variance was the same variance as that of elementary school districts. No other variables loaded on the same factor as the dependent implementation variable and no other new evidence was observed in the third analysis.

Table 7

Chi-Square Test of Independence for Attitudes Toward Year-Round Schools and Grade Levels in Districts

Variable	Chi-Square for Full-Scale Model Implementation and Restricted Model Implementation	Chi-Square for Full-Scale Model Implementation and no Implementation	Chi-Square for Restricted Model Implementation and no Implementation
Teacher Attitude	.30	27.12*	36.44*
Administrator Attitude	.01	24.12*	29.54*
Parent Attitude	1.53	15.72*	30.70*
Student Attitude	.00	12.75*	19.57*
Business/Industry Attitude	.28	7.11*	4.48†
Grade Levels Included in District	5.38†	19.59*	1.45

*Significant at the .01 level

†Significant at the .05 level

The Chi-square test of independence was used, Table 7, on the five positive attitude variables and the elementary district variable to determine whether the districts that implemented Full-Scale Models differed significantly with respect to each of these variables from districts that implemented Restricted Models. Further, the Chi-square test of independence was used to display to the reader that districts that implemented a Full-Scale or a Restricted Model differed with respect to each of the above variables from districts that did not implement any model of year-round schools. The data used in these analyses are displayed in Appendix J, Table 18.

Analysis of Part II of the Survey

Part two of the survey was completed by those districts that had implemented a Full-Scale or Restricted Model in one or more of their schools. Each of the four independent variables in this part of the questionnaire was divided into two categories (Appendix G, Table 15). Sources of money for implementation were categorized into local sources and federal/state sources; grade level in districts was categorized into elementary and K-12/secondary; number of schools was categorized into few/average and many; and enrollment was categorized into low/average and high. The Chi-square test of independence was used, Table 8, to determine if those districts that implemented Full-Scale Models and those that implemented Restricted Models differed

significantly with respect to each of the four independent variables. Data for this analysis are displayed in Appendix K, Table 19.

Table 8

Chi-Square Test of Independence for Full-Scale and Restricted Models of Year-Round Schools on Variables in Part 2 of the District Survey

Variable	Chi-Square
Use of Local or Federal/State Funds for Implementation	4.11†
Implementation at Elementary or K-12/Secondary Grade Levels	11.66*
Number of Schools in Which Year-Round Programs Were Implemented	3.40
Enrollment of Schools in Which Year-Round Programs Were Implemented	3.44

*Significant at the .01 level

†Significant at the .05 level

Summary of Findings

Hypothesis One

Hypothesis number one stated the belief that there are differences between school districts that implement Full-Scale Models of year-round schools after a feasibility study and those that implement no year-round model after a feasibility study.

An analysis of the data in this study showed that at the .01 level of probability there were two differences in these groups. They were:

1. The attitude of teachers, administrators, parents, students, and business/industry was very favorable toward year-round schools in the Full-Scale Model implementation group. In the districts that did not implement any year-round model the attitude of these groups was much less favorable.

2. There were substantially more elementary school districts in the group that implemented Full-Scale Models than in the group that did not implement any model of year-round schools.

Hypothesis Two

Hypothesis number two stated the belief that there are differences between school districts that implement Full-Scale Models of year-round schools after a feasibility study and those that implement Restricted Models after a feasibility study.

Analysis of data showed that at the .05 level of probability there were two differences in these groups; at the .01 level there was one additional difference. Specifically:

1. A significantly greater number of the districts that implemented Full-Scale Models used local funds for implementation ($p<.05$). Those that implemented Restricted

Models tended to use federal or state funds to help finance the cost of putting their programs into operation.

2. There were significantly more elementary districts in the group that implemented Full-Scale Models than in the group that implemented Restricted Models ($p<.05$).

3. Implementation of Full-Scale Models was significantly higher in elementary schools than implementation of Restricted Models; and conversely, implementation of Restricted Models was significantly higher in secondary schools ($p<.01$).

Hypothesis Three

Hypothesis number three stated the belief that there are differences between school districts that implement a Restricted Model of year-round schools after a feasibility study and those that implement no year-round model after a feasibility study.

Analysis of the data showed that at the .01 level the attitude of teachers, administrators, parents, and students was more favorable toward year-round schools in the Restricted Model implementation group than in the districts that did not implement any year-round model; and that at the .05 level of significance the attitude of business/industry was more favorable for the Restricted Model also.

Findings Related to Basic Questions and Additional Findings

Factor analysis using the BMD03M program expressed the original fifty-nine variables into a smaller set of independent variables or factors. Loading on these factors indicated the following:

1. Districts in which local boards of education were appointed tended to have taxes levied by some outside source and tended not to have high increases in population.

2. Districts that had reached their legal bonding limit tended to have high increases in population, overcrowding in schools, and double shifts in schools. They tended not to provide for acceleration or remediation of students.

3. Where federal funds were available, no local money was used for feasibility studies.

4. Where the cost per pupil was high, districts tended to place a high priority on saving money as their reason for studying the feasibility of year-round schools. In the same districts curriculum improvement, improvement of instruction, and initiation of educational change had low priorities as reasons for their studies.

5. When state money was used for the study, state departments of education had a higher participation in the study and teachers participated less.

6. Studies were initiated by the superintendent in more cases in which he was appointed than in which he was elected.

7. If lay personnel participated in the study, they tended to be members of organizations or members of the press.

8. When teachers participated in the studies, students did also.

9. In small districts boards of education tended to have more participation in the study.

10. When boards of education initiated the studies, better use of school buildings was given high priority as a reason for the study and college personnel had little participation in them.

11. High cost of transportation, getting referenda passed, and operating double shifts in schools were all positively related.

12. Larger districts tended to have higher percentages of black population and tended to have colleges with schools of education located within their boundaries.

13. Construction was lower in districts where referenda had been defeated.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 is presented in three major sections. A summary of the study is presented in the first section, conclusions based on findings are presented in the second section, and recommendations for further research are presented in the third section.

Summary

During the last ten years availability of federal and state funds for educational changes in the public schools has pressured school districts into developing innovative or exemplary programs. Pressure for change during this same period of time has come also from school boards, administrators, teachers, students, and local taxpayers. The concept of year-round schools has received a great deal of attention from groups at all governmental levels. As a result of this attention, 53 public school districts throughout the nation have feasibility studies in progress at the present time, 117 have completed studies, and 51 have year-round programs in operation in one or more schools.

The Purpose

The purpose of this study was to determine the differences in the characteristics of school districts that completed feasibility studies on year-round schools during the last ten years. More precisely, the writer endeavored to determine if there were differences in characteristics of school districts that implemented Full-Scale Models of year-round schools, districts that implemented Restricted Models of year-round schools, and districts that did not implement any year-round model. Concurrently, the answers to some basic questions concerning year-round schools were also sought. (1) Are a rapid increase in student population, the physical size of the district, or racial composition of the community related to implementation of year-round schools? (2) Does the availability of federal and state funds pressure districts to undertake research that may not be directly beneficial to the district? (3) Is lack of local financial support related to the quest to obtain maximum use of buildings throughout the year? (4) Are improvements in curriculum, improvement of instruction, and improvement in learning situations for students motivators for research concerning year-round schools? (5) Does the attitude of all sectors of the community affect decisions to implement year-round programs? (6) Who are the prime movers in initiating studies and making changes? (7) Are more year-round programs operational in elementary schools than at the secondary level?

(8) Can an analysis of the characteristics of school districts that have studied year-round schools provide guidelines for other school districts that wish to investigate the concept?

Significance

The basic concept of year-round schools has different meanings for different people. Consequently, misinformation about and inappropriate comparisons of year-round schools are widespread. This study provides a clear definition of the year-round concept and subdivides it into Full-Scale and Restricted Models. Full-Scale Models require Constant Attendance of students. That is, the number of students enrolled in a school from its own attendance area does not vary more than ten percent throughout the year. In Restricted Models the number of students enrolled in a school from its own attendance area varies more than ten percent some time during the year. The use of these definitions in research can prevent confusion and provide reliable data for comparisons to be made.

No research that this writer found attempts to investigate the relationship of characteristics of school districts to implementation of year-round schools. This study examined the year-round concept in a way that will help to determine this relationship.

Procedure

A series of steps was followed in conducting the study. First, an extensive effort was made to determine which public school districts in the United States had completed a feasibility study on year-round schools during the ten year period, 1963-73, and which districts had implemented a year-round program during the same period of time. In order to identify these school districts, the chief officer in each state department of education was requested to complete a questionnaire which was constructed to provide the needed information. The information received from this survey was validated by sources in the bibliography of this dissertation, by correspondence with the superintendent of schools of each district identified, by data collected by the National Council on Year-Round Education, and by Bruce Campbell's research document on year-round schools in the United States published in April, 1973.

The second step was the construction of an instrument to send to the superintendent of schools of each district which had conducted a feasibility study on year-round schools. Part one contained items to be answered by the superintendents of all districts which had completed feasibility studies. Part two contained items to be completed by the superintendents of districts which had implemented a year-round program in one or more schools. The content of this instrument was validated by eleven public school educators in Virginia who were knowledgeable concerning year-round

schools and by three members of the advisory committee for this dissertation.

The third step of the study was to send a questionnaire to the superintendent of schools in each district which had been identified as a member of the population from which to gather data. The fourth step included a check on the validity of responses received from the superintendents. Publications from the U. S. Department of Health, Education, and Welfare and from the U. S. Office of Education were used to check factual data. Other data were validated by using information from feasibility studies published by the districts themselves and by a search of the literature on year-round schools.

The fifth step was preparation of a plan for scoring data received from the various districts. In this plan variables were divided into two, three, and four categories and each category assigned a weight of 1,2; 1,2,3; or 1,2,3, 4. In the sixth step general factor analysis and Chi-square test of independence were used to analyze data.

The information received from the analysis of data was used in the seventh and final step to test the three hypotheses expressed at the beginning of this study.

Delimitations

The study was limited in three ways. First it investigated only public school districts in which a year-round feasibility study had been completed. Second, it was

limited to the period of years 1963 through May 31, 1973. Third, the population under study may not be representative of all public school districts in the United States.

Findings

The attitude of teachers, administrators, parents, students, and business/industry in a community toward implementation of year-round schools is important in predicting whether year-round programs will be put into operation. It is not a valid prediction of whether a Full-Scale or Restricted Model will be implemented (Table 7, p. 57).

Elementary school districts are more likely to implement year-round schools than secondary or K-12 districts.

Full-Scale Models are more likely to be implemented in elementary school than Restricted Models. Restricted Models are more likely to be implemented in secondary schools.

Districts that implement Full-Scale Models are more likely to use local money for implementation than those that implement Restricted Models. Those districts that implement Restricted Models are more likely to receive federal or state funds to help put year-round plans into operation (Table 8, p. 59).

Conclusions and Discussion

On the basis of the evidence in this study several conclusions are warranted:

1. No list of characteristics of school districts can be made that will be valid for predicting whether or not a district will implement year-round schools after a feasibility study. The characteristics of school districts that did not implement a year-round program after a feasibility study did not differ significantly from the characteristics of those districts that put a year-round plan into operation.

2. No list of characteristics of school districts can be made that will be valid for predicting whether or not districts that implement year-round schools will use a Full-Scale or Restricted Model. There were no substantial differences in the characteristics of these two groups of districts.

3. Attitude of teachers, administrators, parents, students, and business/industry toward year-round schools is the best predictor of whether or not a district will implement a year-round program. This fact should serve as a warning to initiators of year-round school studies. If implementation of a year-round program is the goal, the people in the district must be convinced that year-round schools are the best way to improve education for students or the least damaging of several alternatives. This usually requires involving a large number of people in the study and clearly defining for the entire community how all of its traditional institutions will be affected. The changes necessary on the part of the family, the church, the

government, business, and the schools have to be weighed against natural resistance to change and against advantages that will accrue.

4. Federal or state money is used more frequently to implement Restricted Models of year-round schools than to implement Full-Scale Models. This may be because Restricted Models, due to their voluntary attendance periods, cost more to implement than Full-Scale Models.

5. It is easier to implement a Full-Scale Model in elementary schools than in secondary schools. This may be due to the rigid fashion in which secondary schools are organized and to the rigid nature of curriculum requirements.

6. Implementation of year-round schools or the type of model implemented is not a direct result of:

a. Overcrowding in schools

b. Desiring to get better use of buildings

c. Desiring to avoid double shifts

d. Desiring to save money

e. Desiring to improve the curriculum

f. Desiring to improve instruction

g. Desiring to initiate educational change

h. Desiring to provide for acceleration of students

i. Desiring to provide for remediation of students

j. Choosing boards of education and superintendents by election or appointment

k. Having a high concentration of minority groups

l. Having bond referenda defeated

m. Having bond referenda passed

n. Reaching the maximum bonding limit

o. Having school taxes levied by school boards

p. Being large or small in physical or population size

q. Having a high percent of high school graduates going to college or working at full time jobs

r. Having a rapid increase in student population

s. Having colleges with schools of education within or in close proximity to the district

t. Desiring to use federal and state money

u. Having a particular group initiate or participate in the study

A large number of school districts in this study that met most of these specifications did not implement year-round schools to help solve their problems. Some districts looked for solutions in other ways and some chose to live with their problems. The above characteristics will not differentiate between school districts that implement year-round schools after a feasibility study and those that do not or between those that implement a Full-Scale Model and those that implement a Restricted Model. Because this study did not yield a list of characteristics of school districts that could be used for predictive purposes does not nullify the use of the results for other reasons. Analysis of data herein points toward several interesting facts:

1. 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 schools at this time) will determine the direction a school district will take concerning year-round programs.

2. That changes are easier to make at the elementary level than at the secondary level.

3. That when federal and state money is available, districts are more willing to innovate. Conversely, districts are more reluctant to spend local money to make changes that are still in the experimental stage.

4. That Full-Scale Models of year-round schools cost less than Restricted Models.

5. That year-round programs may be implemented without radically changing the curriculum of the schools.

Recommendations

On the basis of the data in this study and a knowledge of year-round school operation in public schools throughout the United States, the following recommendations are presented:

1. That clear operational definitions be used by all researchers in collecting information on year-round schools in order to obtain a body of data that can be used for comparison purposes. The need for clear, concise definitions is readily apparent when the literature concerning year-round schools is reviewed. This is illustrated by

the fact that one source listed sixty-seven different models of year-round programs.[1]

2. Further research, including the fifty-three districts with studies still in progress (Appendix D, Table 12), be devoted to the task of developing a list of characteristics or specifications to guide school districts in making decisions about year-round schools.

3. In-depth research of the people in a district involved in a feasibility study on year-round schools be made to determine why the district did or did not implement year-round programs.

4. Further research be made to determine what effects year-round schools have on students.

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[1]Utica Community Schools, The Four-Quarter Staggered School Year 1/4+1/4+1/4+1/4=365 A Feasibility Study to Extend the School Year (Utica, Michigan: Utica Community Schools, 1970), p. iv and Appendix D pp. 1-51.

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APPENDIXES

APPENDIX A

National Council on Year-Round Education

COVER LETTER ACCOMPANYING QUESTIONNAIRE
TO CHIEF SCHOOL OFFICER OF EACH
STATE DEPARTMENT
OF EDUCATION

George M. Jensen
President
Chairman
Nat'l School Calendar
Study Committee
P. O. Box 37
Horse Shoe, No. Car. 28742
Tel. (704) 891-4495

James R. Gove
V. P. & Pres. Elect
Ass't. Superintendent
Valley View Unit School
District
Romeoville, Ill 60441
(805) 886-3747

Dr. John D. McLain
Secretary-Treasurer
Director
Research Learning Center
Clarion State College
Clarion, Pa. 16214
(814) 226-6000

HEADQUARTERS
Dr. Wayne M. Worner
Administrative Coordinator
College of Education
Virginia Polytechnic
Institute & State
University
Blacksburg, Va. 24061
Tel. (703) 951-5642

Dear _____:

The information requested is needed to update our records. Will you please complete the four forms enclosed and return them by March 15. If the correct response is "none," please indicate and return the forms.

Form #1 is for data on year-round feasibility studies completed during the ten-year period of 1963-73.

Form #2 is for data on currently operating year-round plans.

Form #3 is for data on year-round plans operating since 1963 but later abandoned.

Form #4 is for year-round plans to be in operation soon.

A self-addressed stamped envelope is enclosed for your convenience.

Thank you very much for your help.

Very truly yours,

Walter A. Hunt
Virginia Polytechnic Institute
and State University
Lane Hall, Room 110
Blacksburg, Virginia 24061

Enclosures

IDENTIFICATION QUESTIONNAIRE

Districts That Completed Year-Round Feasibility Studies
During the Ten-Year Period 1963-73
Form #1

State _____ Date _____

NAME OF DISTRICT	NAME OF SUPERINTENDENT OF SCHOOLS	ADDRESS OF SUPERINTENDENT OF SCHOOLS	DATE FEASIBILITY STUDY WAS COMPLETED

Districts Currently Operating Year-Round Schools
Form #2

State _____ Date _____

NAME OF DISTRICT	NAME OF SUPERINTENDENT OF SCHOOLS	ADDRESS OF SUPERINTENDENT OF SCHOOLS	YEAR OPERATION BEGAN

Districts That Abandoned Year-Round Operations
During the Ten-Year Period 1963-73
Form #3

State _____ Date _____

NAME OF DISTRICT	NAME OF SUPERINTENDENT OF SCHOOLS	ADDRESS OF SUPERINTENDENT OF SCHOOLS	YEARS OF OPERATION (19 to 19)

Districts That Will Soon Operate Year-Round Schools
Form #4

State _____ Date _____

NAME OF DISTRICT	NAME OF SUPERINTENDENT OF SCHOOLS	ADDRESS OF SUPERINTENDENT OF SCHOOLS	DATE OPERATION IS EXPECTED

APPENDIX B

COVER LETTER ACCOMPANYING ORIGINAL QUESTIONNAIRE

Dear_____:

For a dissertation at Virginia Polytechnic Institute and State University I am attempting to determine what characteristics of local district are related to implementation of year-round schools. Most of my data will be collected by questionnaire.

Will you please review the enclosed questionnaire and make suggestions for improving it in the following ways:

1. content
2. language
3. form

Since my basic desire is to receive clear useable data from my survey, any help you can suggest will be appreciated.

Please return as soon as possible my original questionnaire and your suggestions in the enclosed envelope.

Thank you very much for your help. If I can be of assistance to you in the future please let me know.

Sincerely,

Walter A. Hunt

Enclosures

VIRGINIA EDUCATORS WHO EVALUATED ORIGINAL QUESTIONNAIRE

Name	Position	Location
Dr. John J. Baldino, Jr.	Supervisor York County Schools	Yorktown
Mr. Charles Clear	Director of Educational Research & Statistics State Department of Education	Richmond
Dr. Kenneth E. Fulp	Assistant Superintendent Chesapeake City Schools	Chesapeake
Dr. Robert Haynes, Sr.	Assistant Superintendent Roanoke City Schools	Roanoke
Dr. Mary Lovern	Assistant Supervisor of Educational Research State Department of Education	Richmond
Dr. Joseph H. Lyles	Assistant Superintendent Hampton City Schools	Hampton
Dr. James C. Mounie	Director of Research, Planning & Development Virginia Beach City Schools	Virginia Beach
Dr. M. Don Pack	Superintendent Roanoke City Schools	Roanoke
Dr. Joseph Roberts	Supervisor of Educational Research State Department of Education	Richmond
Dr. William A. Volk	Supervisor of Research Prince William County Schools	Manassas
Dr. Gene Watson	Director of Special Programs Roanoke City Schools	Roanoke

APPENDIX C

COVER LETTER ACCOMPANYING QUESTIONNAIRE
TO SUPERINTENDENTS

Dear_____:

(Name of Chief School Officer and Name of State) State Department of Education sent me your name indicating that your district had completed a study concerning year-round schools.

Will you please complete the enclosed questionnaire and return it to me by April 17.

Part I of the questionnaire is to be completed by all districts including those who did not put year-round schools into operation.

Part II of the questionnaire is to be completed only by districts who put year-round schools into operation.

I am on leave of absence from my job as Assistant Superintendent of Schools in Roanoke County, Virginia, and realize that you are very busy at this time of year. However, I desperately need this information so that I can complete my dissertation and return to my job.

If you do not have time to complete the questionnaire during this busy season of the year, please refer it to someone on your staff who will complete it and return it to me by April 17.

Thank you very much for your assistance. If you wish to receive any information I have or the results of my study, please let me know.

A self-addressed, stamped envelope is enclosed for your convenience.

Very truly yours,

Walter A. Hunt

Enclosures

QUESTIONNAIRE TO SUPERINTENDENTS

Survey of School Districts That Completed Feasibility Studies of Year-Round Schools During the Last Ten Years (1963-73)

Part I

Part I of the survey is to be completed by all districts and returned by_____.

_____

(Name and Address of the District) (Date)

1. Check the grade levels that are included in your district.
   a. K-7_____ d. 1-12_____
   b. K-8_____ e. 8-12_____
   c. K-12_____ f. Other (Specify)_____

2. Fill in the table below to indicate the number of students that were enrolled in public schools in your district for the years requested.

Race Category	Number of Students Enrolled		
	1963-64	1970-71	1972-73
White			
Black			
Spanish American			
Indian			

3. The local Board of Education:
   a. Is appointed by_____
   b. Is elected by_____

4. The local Superintendent of Schools:
   a. Is appointed by_____
   b. Is elected by_____

5. What percent of your operating budget is spent for transporting students to school? _____

6. How much money was spent per pupil in average daily attendance or in average daily membership from the operating budget in the 1971-72 school session?_____

7. Does your school district levy its own taxes?
_____Yes _____No

8. How many four-year colleges with Schools of Education are located:
   a. Within your district?_____
   b. Within 10 miles of your district?_____
   c. Within 20 miles of your district?_____

9. The area of your school district is:
   a. Less than 21 square miles_____
   b. 21 to 60 square miles_____
   c. Over 60 square miles_____

10. What percent of your high school graduates:
   a. Continue formal education at some institution?____
   b. Seek full time employment?_____
   c. Do neither of the above?_____

11. How many schools are there in your district?_____

12. How many school buildings in your district were built:
   a. Between 1963-67?_____Cost of construction_____
   b. Between 1968-72?_____Cost of construction_____

13. List the beginning and completion date of your feasibility study.
   a. Beginning Date_____month_____year
   b. Completion Date_____month_____year

14. Indicate the amount of money you received for your study from the sources listed below?
   a. From federal sources_____
   b. From state sources_____
   c. From local sources_____

15. When your study was made, what percent of the legal bonding limit had been reached by your school district?
   a. 76% to 100%_____
   b. 51% to 75%_____
   c. 24% to 50%_____

16. How many school bond referenda were passed by your district during 1963-73?_____ Defeated during 1963-73?_____

17. What percent of the groups listed below were in favor of year-round schools for your district when your study was completed?
   a. Teachers_____%
   b. Administrators_____%
   c. Parents_____%
   d. Students_____%
   e. Business or Industry_____%

18. What percent of the groups listed below opposed year-round schools for your district when your study was completed?

a. Teachers_____%
b. Administrators_____%
c. Parents_____%
d. Students_____%
e. Business or Industry_____%

19. Check the appropriate column to indicate when each of the following participated in your study.

	Not at All	From Beginning of Study	After Study Began	After Study was Completed
Administrators				
Teachers				
Students				
Board of Education Member				
Lay Personnel				
College or University Personnel				
Service Organization				
Newspaper Personnel				
Other (Specify)				

20. Check which of the following were prime movers in initiating your study.

a. Local Superintendent of Schools_____
b. Local Board of Education_____
c. State Department of Education_____
d. Teachers_____
e. Other (Specify)_____

21. Rank each of the following that influenced your district to undertake a feasibility study. Use numbers (1, 2, 3...) with number 1 representing the one with the greatest influence.

a. The possibility of saving money_____
b. Better use of school buildings_____
c. Overcrowding in schools_____
d. Double shifts in schools_____
e. Improvement in curriculum_____
f. Improvement in instruction_____
g. Initiation of change in schools_____
h. Provision for acceleration of students_____
i. Provision for remediation for students_____
j. Other (Specify)_____

If you implemented year-round schools in your district after completing your feasibility study, please complete Part II of this survey.

Survey of Districts That Implemented Year-Round Schools

During the Last Ten Years (1963-73)

Part II

This part of the survey is to be completed by districts that implemented year-round schools during the last ten years.

1. How much money over normal appropriations was provided for implementation of year-round schools from the sources below?
   a. From federal sources_____
   b. From state sources_____
   c. From local sources_____

2. At what grade levels was implementation made?_____

3. How many schools implemented year-round education?_____

4. What is the total enrollment of the schools in question 3?_____

5. What plan for year-round schools was implemented?_____

   _____

   _____

   _____

6. How many student attendance days are in your year-round school year?_____

7. What was the beginning date of implementation?
   _____month _____year

8. In your plan the days for student attendance and vacations are:
   a. Selected by the student_____
   b. Determined by school district administrative staff_____
   c. Other (Specify)_____

9. What percent of your students in the year-round schools attend:
   a. During the summer_____% c. During the winter_____%
   b. During the fall_____% d. During the spring_____%

THANK YOU VERY MUCH FOR YOUR TIME AND FOR YOUR ANSWERS!

APPENDIX D

Table 9

Districts Listed by States That Completed Feasibility Studies but Did Not Implement Year-Round Schools, 1963-73

State	Name of School District	Date Study Was Completed
Alaska	Anchorage Borough School District	Aug. 1972
Arizona	Mesa Public Schools	Aug. 1972
	Phoenix Union High School District	June 1971
	Scottsdale High School District*	Nov. 1971
	Sunnyside School District #12	Jan. 1972
	Tucson School District #1	Dec. 1971
California	Rowland Unified School District*	1972
	San Juan Unified School District	Jan. 1973
	Santa Rosa City Schools*	1967
	Simi Valley Unified School District	Spring 1972
Colorado	Adams County School District #12	Sept. 1972
	Littleton Public Schools #6	Feb. 1972
	Widefield School District #3	Dec. 1972
Florida	Polk County*	1968
Idaho	Boise Independent School District #1	Mar. 1972
Illinois	Waukegan Community Unit School District #60	Feb. 1973
Iowa	Clinton Community School District	April 1970
	Urbandale Community Schools	May 1972
	Western Dubuque Community School District	1972
Maine	MSAD #15 Gray-New Gloucester*	Summer 1971
	Westbrook Schools	Nov. 1971

Table 9 (continued)

State	Name of School District	Date Study Was Completed
Maryland	Harford County	Feb. 1972
Massachusetts	Cohassett*	1970
	Framingham*	1971
	Rockland*	1972
	Westborough*	1971
Michigan	Ann Arbor School District*	1970
	Freeland School District*	1970
	Port Huron School District	Jan. 1972
	Utica School District	June 1970
Missouri	Hazelwood School District	Mar. 1972
N. Hampshire	Keene School District	Aug. 1972
New Jersey	Belleville	May 1972
	Black Horse Pike Regional	May 1972
	East Orange*	1971
	Hanover Park Regional High School District*	1972
	Madison Township	April 1970
N. Mexico	Alamorgordo Public Schools*	Dec. 1972
New York	Commack Public Schools	Aug. 1969
	Syosset Public Schools	Oct. 1969
N. Dakota	Bismarck Public School District #1	Spring 1971
	Grand Forks Public School District #1	Dec. 1968
Ohio	Cincinnatti City Public Schools*	1967
Oklahoma	Healdton Independent #55	May 1973
	Moore Public Schools	Feb. 1973

Table 9 (continued)

State	Name of School District	Date Study Was Completed
Oregon	Beaverton Schools #48	Sept. 1972
	Portland Public Schools	Nov. 1971
	Salem Public School District #24J	Mar. 1972
	Tigard School District*	1970
	West Linn Public Schools	Feb. 1973
Rhode Island	Cranston School District*	March 1972
	Narragansett School District*	Jan. 1973
	North Kingstown School District*	Jan. 1973
S. Carolina	Florence Public School District #1	Sept. 1972
	Richland County School District #1	Aug. 1972
	Spartanburg School District*	Aug. 1972
Tennessee	Memphis City Schools	May 1972
	Montgomery-Clarksville School District*	( )†
Vermont	Chittenden South School District #14	May 1971
Wisconsin	Burlington Area School District	June 1972
	Hamilton Joint School District	July 1971
	Milwaukee Public Schools	March 1973
	Oconomowoc School District #3*	1971
	Plymouth Joint School District #8	June 1972
	Port Washington Public Schools	Oct. 1971
	Racine Unified School District #1	Feb. 1972

*These districts are not included in this study.

†Date of completion not known.

Table 10

Districts Included in This Study That Implemented Year-Round Schools, 1963-73

State	Name of School District	Date of Implementation
Arizona	Roosevelt School District #66	July 1973
	Yuma School District #70	June 1973
California	ABC Unified School District	Sept. 1971
	Bear Valley Unified School District	July 1972
	Berryessa Union School District	July 1972
	Chula Vista City School District	July 1971
	Corona-Norco Unified School District	July 1972
	Escondido Union School District	July 1972
	Fountain Valley Elementary School District	Feb. 1973
	Hesperia Elementary School District	July 1972
	La Mesa-Spring Valley School District	July 1971
	Old Adobe Union School District	July 1972
	Pajaro Valley Unified School District	July 1972
	San Joaquin School District	July 1972
	Santee School District	July 1972
Colorado	Cherry Creek #5	Sept. 1972
	Jefferson County Public School District	July 1973
Florida	Pasco County School District	July 1973
Georgia	Atlanta Public Schools	Sept. 1968
Illinois	Valley View District #365	June 1970
Kentucky	Jefferson County School District	Sept. 1972

Table 10 (continued)

State	Name of School District	Date of Implementation
Michigan	East Lansing School District*	Jan. 1972
	Haslett School District	Jan. 1972
	Okemos School District	Jan. 1972
Minnesota	Mora Public Schools	July 1971
Missouri	Francis Howell School District	July 1969
Montana	Missoula County School District	June 1973
Nevada	Clark County School District	Jan. 1973
	Washoe County Schools	July 1972
New Hampshire	Union #27	Sept. 1972
North Carolina	Buncombe County Public Schools	Sept. 1972
	Winston-Salem/Forsyth	July 1971
Oregon	Gresham Grade School District #4	July 1972
Pennsylvania	Fairview School District	Jan. 1973
	Rochester Area Schools	Sept. 1971
South Carolina	Rock Hill School District #3	Aug. 1973
Texas	Fort Worth Ind. School District	Aug. 1970
Utah	Nebo School District	Aug. 1972
Virginia	Loudoun County Public Schools	July 1973
	Prince William County Schools	June 1970
	Virginia Beach City Schools	June 1973
Washington	Franklin Pierce School District #402	Sept. 1969

*East Lansing, Haslett, and Okemos jointly operate year-round schools.

Table 11

Districts Not Included in This Study That Implemented Year-Round Schools, 1963-73

State	Name of District
California	Hayward Unified School District
	Lakeside Union Elementary School District
	Ocean View Elementary School District
	San Diego City Unified School District
Florida	Dade County School District
	Hernando County School District
Illinois	Chicago City Schools
Michigan	Northville School District
Oregon	Molalla Elementary School District

Table 12

Districts With Studies of Year-Round Schools in Progress, June 1, 1973

State	Name of School District
Arizona	Apache Junction Schools
	Buckeye District #33
	Elroy District #11
	Flagstaff Public Schools
	Kyrene District #28
	Peoria District #11
	Tolleson Union High School District #214
California	Elk Grove Unified School District
Colorado	Boulder Balley Re-2
	Colorado Springs District #11
Illinois	Dixon Public Schools
	Dundee Community Unit School District #300
	Lake Park T.H.S.D. #108
	Markham School District #144
	Meredian Community Unit School District
	Peoria Public School District
	Pontiac Community Consolidated Schools
	Posen-Robbins District #143 1/2
	Washington Community High School District
	Waterloo Community Unit School District #5
Maryland	Carroll County Schools
	Frederick County Schools
Massachusetts	Bellingham School District
	Marchfield School District
Nebraska	Papillion Public Schools
Nevada	Carson City School District

Table 12 (continued)

State	Name of School District
New Jersey	Delran Township School District
	Gloucester Township School District
	Long Branch School District
	Monroe Township School District
	Mt. Laurel Township School District
	Tenafly School District
	Warren Hills Regional School District
	Washington Township School District
New Mexico	Roswell Public Schools
	Santa Fe Public Schools
Ohio	Butler County Schools
Pennsylvania	Butler Area School District
	Central Bucks School District
	Gateway School District
	Manheim Township School District
	Neshaminy School District
	State College Area School District
	Wissahickon School District
Rhode Island	Foster-Glocester School District
Tennessee	Hamilton County Schools
	Knox County Schools
Texas	Houston Independent School District
Utah	Granite School District
Virginia	Richmond City Schools
	Roanoke County Schools
	York County Schools
Wisconsin	Union Grove High School District

APPENDIX E

Table 13

Variables, Categories, and Weights Used for Scoring Part 1 of the District Survey

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
1	1	1	Implementation	None	1
				Restricted Model	2
				Full-Scale Model	3
2	2	2	Population	Decrease or No Increase	1
				More Than 0% and Less Than 5% Per Year	2
				5% or More Per Year	3
3	3	3	White Students	Less Than 70%	1
				70% and Less Than 90%	2
				90% or More	3
4			Black Students	Less Than 5%	1
				5% and Less Than 25%	2
				25% or More	3
5			Spanish American Students	Less Than 5%	1
				5% and Less Than 25%	2
				25% or More	3
6	4	4	Board of Education	Appointed	1
				Elected	2
7	5	5	Superintendent	Appointed	1
				Elected	2

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
8	6	6	Transportation	Less Than 2% of Operating Budget	1
				2% and Less Than 4% of Operating Budget	2
				4% or More of Operating Budget	3
9	7	7	Education Cost Per Student	Less Than $800 Per Year	1
				$800 and Less Than $1000 Per Year	2
				$1000 or More Per Year	3
10			School Tax Levies	Not Levied by Board of Education	1
				Levied by Board of Education	2
11	8	8	School of Education	More Than 20 Miles from District	1
				Less Than 20 Miles and More Than 0 Miles From District	2
				Within District	3
12	9	9	District Area	Less Than 21 Square Miles	1
				21 to 60 Square Miles	2
				60 Square Miles and Larger	3

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
13	10	10	Graduates Pursuing Formal Education	Less Than 30%	1
				30% and Less Than 55%	2
				55% and More	3
				Not Applicable	4
14	11	11	Graduates in Full-Time Jobs	Less Than 30%	1
				30% and Less Than 55%	2
				55% and More	3
				Not Applicable	4
15	12	12	School Construction	Less Than 10% of Buildings, 1963-73	1
				10% and Less Than 20% of Buildings, 1963-73	2
				20% and More of Buildings, 1963-73	3
16			Federal Money for Study	No	1
				Yes	2
17	13	13	State Money for Study	No	1
				Yes	2
18	14	14	Local Money for Study	No	1
				Yes	2
19	15	15	Bonding Limit Reached	Not Applicable	1
				Less Than 75%	2
				75% and More	3
20	16	16	School Referenda Passed	No	1
				Yes	2
21	17	17	School Referenda Defeated	No	1
				Yes	2

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
22	18		Teacher Attitudes	Less Than 50% Favorable	1
				50% and Less Than 75% Favorable	2
				75% and More Favorable	3
23	19		Administrator Attitudes	Less Than 50% Favorable	1
				50% and Less Than 75% Favorable	2
				75% and More Favorable	3
24	20		Parent Attitudes	Less Than 50% Favorable	1
				50% and Less Than 75% Favorable	2
				75% and More Favorable	3
25	21		Student Attitudes	Less Than 50% Favorable	1
				50% and Less Than 75% Favorable	2
				75% and More Favorable	3
26	22		Business/Industry Attitudes	Less Than 50% Favorable	1
				50% and Less Than 75% Favorable	2
				75% and More Favorable	3

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
27			Teacher Attitudes	Less Than 15% Unfavorable	1
				15% and Less Than 30% Unfavorable	2
				30% or More Unfavorable	3
28			Administrator Attitudes	Less Than 15% Unfavorable	1
				15% and Less Than 30% Unfavorable	2
				30% or More Unfavorable	3
29			Parent Attitudes	Less Than 15% Unfavorable	1
				15% and Less Than 30% Unfavorable	2
				30% or More Unfavorable	3
30			Student Attitudes	Less Than 15% Unfavorable	1
				15% and Less Than 30% Unfavorable	2
				30% or More Unfavorable	3
31			Business/Industry Attitudes	Less Than 15% Unfavorable	1
				15% and Less Than 30% Unfavorable	2
				30% or More Unfavorable	3

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
32			Administrator Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
33	23	18	Teacher Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
34			Student Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
35			Board of Education Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
36	24	19	Lay Person Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
37	25	20	College Personnel Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
38	26	21	Service Organization Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
39	27	22	Newspaper Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
40			Others Participation	None	1
				After Study Ended	2
				After Study Began	3
				Before Study Began	4
41			Superintendent Initiated Study	No	1
				Yes	2
42			Board of Education Initiated Study	No	1
				Yes	2

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
43			State Department of Education Initiated Study	No Yes	1 2
44			Teachers Initiated Study	No Yes	1 2
45			Others Initiated Study	No Yes	1 2
46	28	23	Reason For Study/ To Save Money	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	1 2 3
47	29	24	Reason For Study/ Better Use of School Buildings	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	1 2 3
48	30	25	Reason For Study/ Overcrowded Schools	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	1 2 3
49	31	26	Reason For Study/ Double Shifts	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	1 2 3

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
50	32	27	Reason For Study/ Curriculum Improvement	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	 1 2 3
51	33	28	Reason For Study/ Improve Instruction	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	 1 2 3
52	34	29	Reason For Study/ Educational Charge	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	 1 2 3
53	35	30	Reason For Study/ Student Acceleration	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	 1 2 3
54	36	31	Reason For Study/ Student Remediation	Seventh, Eighth, Ninth, Tenth Not Rated Fourth, Fifth, Sixth First, Second, Third	 1 2 3

Table 13 (continued)

Variable No. In Matrix			Title of Variable	Categories	Weight
1st Matrix	2nd Matrix	3rd Matrix			
55			Reason For Study/ Other	Seventh, Eighth, Ninth, Tenth Not Rated	1
				Fourth, Fifth, Sixth	2
				First, Second, Third	3
56	37	32	Student Enrollment Size of District	Less Than 5,000	1
				5,000 and Less Than 25,000	2
				25,000 or More	3
57	38	33	Elementary District	No	0
				Yes	1
58			Secondary District	No	0
				Yes	1
59			K-12 District	No	0
				Yes	1

APPENDIX F

Table 14

Matrix 1: Loadings of Fifty-Nine Variables on Twenty Rotated Factors

1	2	3	4	5	6	7	8	9	10
68(1)[a]	-85(16)	-79(3)	78(13)	-65(19)	-89(58)	-53(9)	81(5)	70(15)	34(2)
90(22)	79(18)	85(4)	58(14)	-44(48)		-77(46)		-66(21)	-80(6)
81(23)		59(11)	92(57)	73(53)		73(50)			-65(10)
76(24)		54(56)	-81(59)	72(54)		55(51)			
78(25)						39(52)			
65(26)									
-84(27)									
-87(28)									
-82(29)									
-84(30)									
-70(31)									

Table 14 (continued)

11	12	13	14	15	16	17	18	19	20
-84(17)	80(7)	70(36)	81(55)	79(33)	-42(12)	79(40)	-57(37)	48(8)	1.0(32)
-61(43)	-67(41)	73(38)		50(34)	80(45)	61(45)	76(42)	79(20)	
37(44)		68(39)					40(47)	42(49)	

[a]The variable number identified in Appendix E, Table 13 is in parenthesis preceded by its factor loading rounded to two decimal places with the decimal removed.

APPENDIX G

Table 15

Variables and Categories Used for Scoring
Part 2 of the District Survey

Variables	Categories
Source of Money Used in Implementation	Local Federal/State
Grade Levels at Which Year-Round Programs Were Implemented	Elementary K-12/Secondary
Number of Schools in Which Year-Round Programs Were Implemented	10% or Less of Schools in District More Than 10% and Less Than 20% of Schools in District 20% or More of Schools in District
Enrollment in Schools in Which Year-Round Programs Were Implemented	10% or Less of Total District Enrollment More Than 10% and Less Than 20% of Total District Enrollment 20% or More of Total District Enrollment

APPENDIX H

Table 16

Matrix 2: Loading of Thirty-Eight Variables on Twelve Rotated Factors

1	2	3	4	5	6
70(1)[a]	60(30)	85(8)	88(10)	50(7)	81(6)
85(18)	-76(35)	62(37)	78(38)	-74(28)	48(9)
81(19)	-75(36)			-50(29)	
82(20)				75(32)	
83(21)				60(33)	
80(22)				48(34)	

Table 16 (continued)

7	8	9	10	11	12
39(3)	69(24)	-66(5)	44(15)	61(2)	73(11)
81(13)	76(26)	72(12)	73(23)	-74(4)	58(16)
-57(14)	72(27)	-42(17)			-49(25)
					45(31)

[a]The variable number identified in Appendix E, Table 13 is in parenthesis preceded by its factor loading rounded to two decimal places with the decimal removed.

APPENDIX I

Table 17

Matrix 3: Loadings of Thirty-Three Variables on Eleven Rotated Factors

1	2	3	4	5	6
-45(7)[a]	56(1)	79(8)	66(19)	-46(5)	80(13)
-52(17)	83(10)	66(32)	79(21)	76(12)	-68(14)
-76(23)	56(11)		73(22)	-55(17)	
74(27)	92(33)				
70(28)					
53(29)					

Table 17 (continued)

7	8	9	10	11
85(6)	50(15)	82(18)	53(2)	58(3)
46(9)	52(16)		-83(4)	60(24)
	-38(20)	39(20)		-60(30)
	62(25)			-51(31)
	63(26)			

[a]The variable number identified in Appendix E, Table 13 is in parenthesis preceded by its factor loading rounded to two decimal places with the decimal removed.

APPENDIX J

Table 18

Data Used for Chi-Square Test of Independence for Part 1 of the Survey

Implementation Level	Teacher Attitude				Administrator Attitude				Parent Attitude			
	Low/Av.		High		Low/Av.		High		Low/Av.		High	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Full-Scale Model	5	25	15	75	3	15	17	85	12	60	8	40
Restricted Model	3	14	19	86	2	9	20	91	8	36	14	64
No Implementation	39	93	3	7	35	83	7	17	42	100	0	0

Table 18 (continued)

Implementation Level	Student Attitude				Business/Industry Attitude				Grade Levels in District			
	Low/Av.		High		Low/Av.		High		Elem.		Sec./K-12	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Full-Scale Model	6	55	5	45	5	45	6	55	9	45	11	55
Restricted Model	10	48	11	52	13	62	8	38	2	9	20	91
No Implementation	41	98	1	2	37	88	5	12	0	0	44	100

APPENDIX K

Table 19

Data Used for Chi-Square Test of Independence
for Part 2 of the Survey

Implementation Level	Money for Implementation				Grade Level for Implementation			
	Federal/State		Local		Elementary		Sec./K-12	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Full-Scale Model	4	27	11	73	17	85	3	15
Restricted Model	14	67	7	33	6	27	16	73

Table 19 (continued)

Implementation Level	No. of Schools Implemented				Enrollment for Implemented Schools			
	Few/Av.		Many		Low/Av.		High	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Full-Scale Model	9	45	11	55	7	35	13	65
Restricted Model	17	77	5	23	15	68	7	32

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CHARACTERISTICS OF SCHOOL DISTRICTS RELATED TO IMPLEMENTATION OF YEAR-ROUND SCHOOLS

by

Walter Akers Hunt

(ABSTRACT)

Public school districts in the United States that completed feasibility studies on year-round schools during the last ten years were the population for this study. These districts were divided into three categories--those that did not implement a year-round program, those that implemented a Restricted Model, and those that implemented a Full-Scale Model--to study their characteristics. Both a Restricted and a Full-Scale Model of year-round schools required at least 220 days during the calendar year for attendance of students. Only the Full-Scale Model required the number of students enrolled in a school from its own attendance area not to vary more than ten percent at any time during the school year; the Restricted Model permitted the enrollment to vary more than ten percent.

One-hundred seventeen school districts were surveyed by questionnaire to determine if differences in their characteristics had value for predicting into which of the three categories they would fall. This study

indicated that the most important predictor of whether or not a district implemented year-round schools was the attitude of teachers, administrators, parents, students, and business/industry toward implementation. It also indicated that more Full-Scale Models of year-round programs were implemented in elementary schools and more Restricted Models were implemented at the secondary level. Other characteristics of the school districts could not be used to predict their implementation category.

A list of the 117 districts categorized into three implementation groups, a list of 53 districts with studies in progress, a description of the investigation, and suggestions for further study are included.