

FAMILY RESOURCES USED  
IN SCHOOL-RELATED  
ACTIVITIES

Thesis for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY

HELEN ELIZABETH BELL

1973



3 1293 10015 6375

LIBRARY  
Michigan State  
University

This is to certify that the  
thesis entitled  
FAMILY RESOURCES USED  
IN SCHOOL-RELATED  
ACTIVITIES

presented by

Helen Elizabeth Bell

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Human Ecology

Major professor

Date May 9, 1973

~~APR 11 1974~~

~~JUN 19 1978~~

~~OCT 28 1979~~

~~NOV 8 1975~~

~~NOV 23 1981~~

~~DEC 7 1975~~

~~JAN 9 1981~~

~~JAN 23 1981~~

~~FEB 1 1981~~

~~FEB 1 1985~~

~~MAR 29 1976~~

~~MAR 29 1981~~

~~APR 19 1978~~

~~SEP 1 1973~~

~~JUN 8 1979~~

~~SEP 8 1996~~

330

R67

R65

R51

R31

R81

R85

R85

R35

R47

R57

R52

## ABSTRACT

### FAMILY RESOURCES USED IN SCHOOL-RELATED ACTIVITIES

By

Helen Elizabeth Bell

This study was an investigation of family resources used when the family's first child was in first grade and of relationships of resources used to selected family characteristics. The child's education was viewed as a mutually-shared goal between family and school. Family resources used in carrying out joint functioning with other social systems have received little research attention.

The study sample was comprised of mothers of children in 21 first grades in five elementary schools and their teachers. Names of children from intact families who were the first children to be in first grade were secured from school records. Ninety-seven interviews with mothers of families meeting the specified criteria were completed. About three-fourths of the families were in social class groups III (lower-middle) and IV (upper-lower). Median educational level of both mothers and fathers was 12 years.

Estimates of frequency and extent of time use were sought to describe parental time inputs in school-related activities. Questions were asked about use of family money to provide items related to children's education. Parental involvement was greater in activities carried out at home than at school. It was also greater in activities directly related to children's learning than in those supplementary



to schools' educational programs. Ninety-nine percent of the parents used time to discuss the schoolday with their children. Ninety-eight percent used time to assist children with schoolwork. The least involvement (27 percent) by parents was in helping with activities at school.

In most families, parents helped children arise and dress before school. Most mentioned breakfast as part of the before-schoolday routine. While over three-fourths of the parents provided money for lunch and milk at school, less than half provided for their purchase every schoolday. Three-fourths of the parents bought reference materials for children's use at home. About half supplied treats for special occasions at school and items for school fund-raising events.

School-related activities were arranged in three groupings which served as indicators of parental interest in helping further children's education. Point values were assigned grouped activities by the nature of, frequency and extent of parental time inputs. From them, parental school involvement scores were computed for each family.

A null hypothesis of no difference among families stratified by social class and parental school involvement scores was supported. A null hypothesis of no difference among families grouped by selected family characteristics and parental school involvement scores was rejected. Statistically significant differences resulted when sub-score II (helping children learn) and total parental school involvement score were tested with family income. The need for further investigation of the relationship of family income to parental school involvement is indicated.

Marginal relationship was obtained when sub-score III (helping with activities at school) was tested with families grouped by fathers' education. None of the results of parental school involvement scores tested with fathers' occupation, mothers' education, mothers' employment, mothers' membership in groups, sex of the first graders and number of other children in the families indicated relationships.

Mothers' responses to an open-ended question of help they thought schools wanted from parents were not related to the activities parents carried out. Nor were relationships found between mothers' and teachers' responses when each group was asked the help they thought schools wanted from parents.

Findings indicated that parents were serving as co-educators with schools. Their help was aimed at learning-related activities. No attempt was made to measure quality of time parents used. Investigation of quality of time use is needed. Public school educators need to plan ways of helping parents carry out the educative function effectively.

Parents did not think of physical preparations for the children's schoolday as being school-related. Family management educators need to help parents plan for children's physical readiness for educability.

Additional study of other factors such as parental values toward education, parental attitudes toward education and toward schools, personality factors that may be related to parental school involvement is indicated.

FAMILY RESOURCES USED IN  
SCHOOL-RELATED ACTIVITIES

By

Helen Elizabeth Bell

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Family Ecology

1973

G82791

To my mother who did  
not live to rejoice  
in the completion of  
this study but whose  
faith helped make it  
possible.

## ACKNOWLEDGMENTS

Appreciation is expressed to the advisory committee members: Dr. Beatrice Paolucci, chairman, for her insightful guidance and counsel during all stages of the developing study, to Miss Esther Everett for encouragement during the beginning phases of the study, to Dr. Jean Davis Schlater and Dr. Jay Artis who offered valuable criticisms, help and encouragement throughout; and, to Dr. E. Jane Oyer who willingly replaced Miss Everett on the committee and offered her support as the study drew to conclusion.

Gratitude is expressed for the interest shown and wholehearted cooperation extended by Dr. Charles H. Walters, Dr. Luther B. Sowers and other school personnel in the School District of the City of York; and, to the parents of the first graders in York, Pennsylvania who graciously consented to be interviewed.

Special thanks go to James Thomas, Director of the Statistical Laboratory in the College of Agriculture at The Pennsylvania State University, and his staff for assistance with coding, computer programming and analysis of data.

Finally, a special word of appreciation to family and friends who persisted in encouraging and helping in many ways to make it possible that this study continue over the years it was being developed and carried to completion.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vi
LIST OF FIGURES .....	xi
LIST OF APPENDICES .....	xii
 Chapter	
I. INTRODUCTION .....	1
Background of the Study .....	1
Objectives .....	4
Assumptions .....	5
Hypotheses .....	5
Definition of Terms .....	7
Conceptual Framework .....	8
Limitations of the Study .....	9
II. REVIEW OF THE LITERATURE .....	10
Family Resource Use .....	10
Family-School Relationships .....	21
Family-School Linkage .....	29
Summary .....	33
III. PROCEDURE .....	35
Selection and Description of the Sample .....	35
Development and Description of the Instruments .....	48
Data Collection .....	54
Data Analysis .....	60
IV. FINDINGS .....	64
Part 1 .....	64
Part 2 .....	95
V. SUMMARY, DISCUSSION, AND IMPLICATIONS .....	118
Summary of the Study .....	118

	Page
Discussion of the Study .....	121
Implications .....	129
REFERENCES .....	138
APPENDICES .....	145

## LIST OF TABLES

Table	Page
1. Social Class Positions of Population .....	40
2. Fathers' Occupations .....	41
3. Parents' Educational Attainment .....	42
4. Occupations of Mothers in Paid Employment .....	43
5. Ages of Mothers and Fathers .....	43
6. Schools, Classrooms and First Grade Population .....	44
7. Teachers Responding to Questionnaires .....	45
8. Number of Other Children .....	45
9. Care Provided Younger Children When Parents Visited Schools .....	46
10. Mothers' Membership in Groups .....	47
11. Family Income .....	48
12. Analysis of Data .....	62
13. Maximum Extent of Parental Involvement in School- related Activities .....	65
14. Extent of Parental Involvement in School-related Activities at Home .....	66
15. Parental Time Used for Two At-home School-related Activities .....	67
16. Frequency With Which Parents Assisted With Schoolwork .	68
17. Parental Time Used for Assisting Children With Schoolwork .....	69



Table		Page
18.	Help Given Children in Preparing for the Schoolday ....	69
19.	Breakfast Before the Schoolday .....	70
20.	Number and Frequency of Parents Providing Lunch and Milk Money .....	71
21.	Each Time and Annual Costs of Providing Lunch and Milk Money .....	72
22.	Handling of Childrens' Handiwork at Home .....	73
23.	Extent of Parental Involvement in School-related Activities at School .....	74
24.	Parental Time Used for Conferring with Teachers .....	75
25.	Parental Time Used for Visiting Classrooms .....	76
26.	Frequency With Which Parents Attended Special Programs at School .....	77
27.	Parental Time Used for Attending Special School Programs .....	77
28.	Mothers Who Helped At School .....	78
29.	Mothers' Use of Time for At-school Activities .....	78
30.	Frequency and Number of References Parents Supplied ...	79
31.	Approximate Annual Cost of Supplying References for Use at Home .....	79
32.	Frequency With Which Parents Sent Items to School Relating to a Unit Being Studied .....	80
33.	Frequency With Which Families Sent Treats to School ...	81
34.	Approximate Costs of Providing Treats for Special Occasions .....	82
35.	Frequency With Which Families Provided Items for School Fund-raising Events .....	82
36.	Approximate Costs of Providing Items for School Fund- raising Events .....	83

Table		Page
37.	Mothers' Expressed Ideas of the Help Schools Wanted From Parents .....	85
38.	Teachers' Expressed Ideas of Help Schools Wanted From Parents .....	87
39.	Parental School Involvement Sub-score I .....	90
40.	Parental School Involvement Sub-score II .....	91
41.	Parental School Involvement Sub-score III .....	92
42.	Parental School Involvement Total Score .....	94
43.	Correlation Matrix for Twelve Variables .....	96
44.	Summary of Means and Standard Deviations of Twelve Variables Measured for 97 Families .....	97
45.	Summary of One-way Analyses of Variance: Parental School Involvement and Family Social Class .....	98
46.	Summary of One-way Analyses of Variance: Parental School Involvement and Family Income Categories .....	101
47.	DLSD Test of Means of Family Income Categories and Parental School Involvement Sub-score II .....	102
48.	DLSD Test of Means of Family Income Categories and Parental School Involvement Total Score .....	103
49.	Summary of One-way Analyses of Variance: Parental School Involvement and Fathers' Occupation .....	104
50.	Summary of One-way Analyses of Variance: Parental School Involvement and Fathers' Education .....	104
51.	Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Education .....	105
52.	Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Employment .....	106
53.	Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Membership in Groups ..	106
54.	Summary of One-way Analyses of Variance: Parental School Involvement and Sex of First Grade Children ....	107

Table		Page
55.	Summary of One-way Analyses of Variance: Parental School Involvement and Number of Other Children in Families .....	107
56.	Chi Square Test of Parents Providing Supplementary Items and Selected Family Characteristics .....	110
57.	Chi Square Test of Six Variables .....	112
58.	Chi Square Test of Mothers' Response: "No Help Wanted" and Parental Involvement in School-related Activities .....	113
59.	Chi Square Test of Mothers' Response: "Assist With Learning" and Parental Involvement in School-related Activities .....	114
60.	Chi Square Test Comparing Mothers' and Teachers' Responses to Question of What Help Schools Wanted From Parents .....	116
61.	Summary of Activities Grouped for Parental School Involvement Score .....	157
62.	Scores Assigned Sub-score I, Question 2: Discussing the Schoolday .....	158
63.	Scores Assigned Sub-score I, Question 3: Visiting Classrooms .....	159
64.	Scores Assigned Sub-score I, Question 9: Sending Items for Study .....	160
65.	Scores Assigned Sub-score I, Question 29: Helping Child Prepare for Schoolday .....	161
66.	Scores Assigned Sub-score I, Question 32: Items Made at School and Brought Home .....	162
67.	Scores Assigned Sub-score II, Question 4: Conferring with Teacher About Schoolwork .....	163
68.	Scores Assigned Sub-score II, Question 7: Assisting With Schoolwork .....	164
69.	Scores Assigned Sub-score II, Question 8: Reading to Child .....	165

Table		Page
70.	Scores Assigned Sub-score II, Question 19: Provided Materials for Special Projects .....	166
71.	Scores Assigned Sub-score II, Question 20: References Provided for Use at Home .....	167
72.	Scores Assigned Sub-Score III, Question 6: Attending Programs at School .....	168
73.	Scores Assigned Sub-score III, Questions 10-16: Helping at School .....	169
74.	Scores Assigned Sub-score III, Question 17: Sending Treats to School .....	170
75.	Scores Assigned Sub-score III, Question 18: Sending Items for Fund-raising Events .....	170
76.	Mean and Variance Summary for Parental School Involvement and Family Social Class .....	172
77.	Mean and Variance Summary for Parental School Involvement and Family Income Categories .....	172
78.	Mean and Variance Summary for Parental School Involvement and Fathers' Occupation .....	173
79.	Mean and Variance Summary for Parental School Involvement and Fathers' Education .....	174
80.	Mean and Variance Summary for Parental School Involvement and Mothers' Education .....	175
81.	Mean and Variance Summary for Parental School Involvement and Mothers' Employment .....	175
82.	Mean and Variance Summary for Parental School Involvement and Mothers' Membership in Groups .....	176
83.	Mean and Variance Summary for Parental School Involvement and Sex of First Graders .....	177
84.	Mean and Variance Summary for Parental School Involvement and Number of Other Children in Families .....	177

## LIST OF FIGURES

Figure		Page
1	Model for Study of Family Resources Used in Sharing Educative Function With Schools and Relations to Family Characteristics .....	6

## LIST OF APPENDICES

Appendix	Page
A. Correspondence and Instruments .....	145
B. Parental School Involvement Scores .....	156
C. Tables .....	171

## CHAPTER I

### INTRODUCTION

#### BACKGROUND OF THE STUDY

Tasks fundamental to the survival of a family are called functional requirements (Broderick, 1970). They are derived from the fact that no family can survive without a minimum level of order and morale among its members. Nor can a family survive unless able to manage its resources to support material needs and to keep the family operating. Functional requirements have to do both with internal functioning of the family and with its relationship to the larger world.

Home management helps a family create an environment in which members can perform, grow and develop as individuals and at the same time cooperate in attaining group goals (Paolucci, 1966). Management is generally regarded as a series of dynamic processes by which family members cope with ever-changing demands reflecting individual and group goals. One basic management process is the organization and utilization of the family's resources.

Family use of resources for specified goals has been a topic of research by students of family management for many years. Money, time and energy have been the resources most often studied. The major emphasis has been upon their use for internal family maintenance

activities. Studies of money, time, and energy used by families were begun when household production made an important economic contribution to family welfare.

Development of manufacturing made domestic production not economical even for home consumption, according to Winch (1963). The shift from family farms to giant corporations as society's major productive units helped change the economic unity of the family. At the same time that economic interdependency was shifting, other family functions were being transferred to outside agencies. Education was one of them. Winch (1963) said, "As the practice of formal education grows in a society, the function of the family shifts from that of providing education to providing the opportunity to be educated (p. 122)."

As the system of public-supported education for all children developed, most parents were content with a subordinate role. They thought that school personnel were the experts who knew best how to educate their children. The White House Conference on Children (1970) reported a move toward reciprocal functioning between families and social organizations rather than a subordinate relationship. Litwak and Meyer (1967) explored the idea of shared functions between family and school. They suggested that the family carries out aspects of the educative function it is best equipped to do and that the school carries out other aspects for which it is best equipped.

Primary socialization of the next generation has and continues to take place within the family environment. But today's family is not equipped to provide the formal education needed by individuals who will move into the specialized activities of our technological society



(Bell and Vogel, 1968). At a prescribed age, the family sends its child to school. The family and school then share responsibility for growth and development of the child. School attendance is a family goal, decided for the family by society but one in which most families concur. They want their children to go to school and to succeed in school. Because of compulsory attendance laws, some degree of cooperation is required when children reach school age. The nature and extent of that cooperation is likely to vary among families.

According to Havighurst and Neugarten (1957), when a child enters school, the school will wield tremendous influence and will change his behavior in numerous ways but the school always operates in some kind of relation to the family.

Winch (1963) stated that the family provides the opportunity to be educated. How? What do families do when providing this opportunity? Do they manage family resources to this end? If so, what resources and in what ways are they used? An investigation of the reciprocal functioning between family and school would supply information essential to helping families make more effective use of private resources. It could also lead to more adequate understanding of and use of the family's share of the public resources supporting schools.

Sharing of the educative function by family and school offered an opportunity to explore family resource input in one reciprocal relationship. What resources did a family use? What school-related activities did parents carry out? Did parents share in school-related activities? What help did families think schools wanted of them? What help did teachers want from parents? Was there any difference

in resource use attributable to a family's social class? What family characteristics were related to resources used for school-related activities?

This study was designed to explore and describe the nature and extent of resources that mothers reported parents using in school-related activities and to determine relationships with selected family characteristics.

#### OBJECTIVES

The major objective of the study was to describe the utilization of family resources for school-related activities when sharing with the school the educating of first children to be in first grade and to investigate relationships with selected family characteristics. From this general statement, specific objectives were formulated:

1. To describe human and non-human resources families used in school-related activities when first children were in first grade.
2. To determine differences among families in social classes of resources used for school-related activities.
3. To determine relationships among resources used for school-related activities and selected family characteristics.
4. To describe the help mothers thought schools wanted and relationships to mothers' reported school-related activities.
5. To describe the help teachers said they wanted from parents and relationships to the help mothers thought schools wanted.

Figure 1 presents the model for the study.

#### ASSUMPTIONS

1. Parents want children to succeed in school.
2. School-related activities in which parents use family resources are family managerial activities.
3. Parents make resource inputs into education in addition to taxes paid for support of schools.
4. Teachers want help from parents of children they teach.
5. Mothers are knowledgeable about and are able to report use of family resources for school-related activities.
6. Frequency and extent of time used for school-related activities are indicators of another human resource, parental interest in helping educate children.

#### HYPOTHESES

1. There is no difference in resources used for school-related activities among parents of social class groups.
2. There is no difference in resources used in school-related activities and selected family characteristics.
3. There is no relationship between provision of supplementary school items and selected family characteristics.
4. There is no relationship between help mothers said they thought schools wanted and parental involvement in school-related activities.

## Objectives:

To describe use of family resources in helping educate its first child.

To determine differences in resource use by selected family characteristics.

To determine relationships of parental involvement in school-related activities and selected family characteristics.

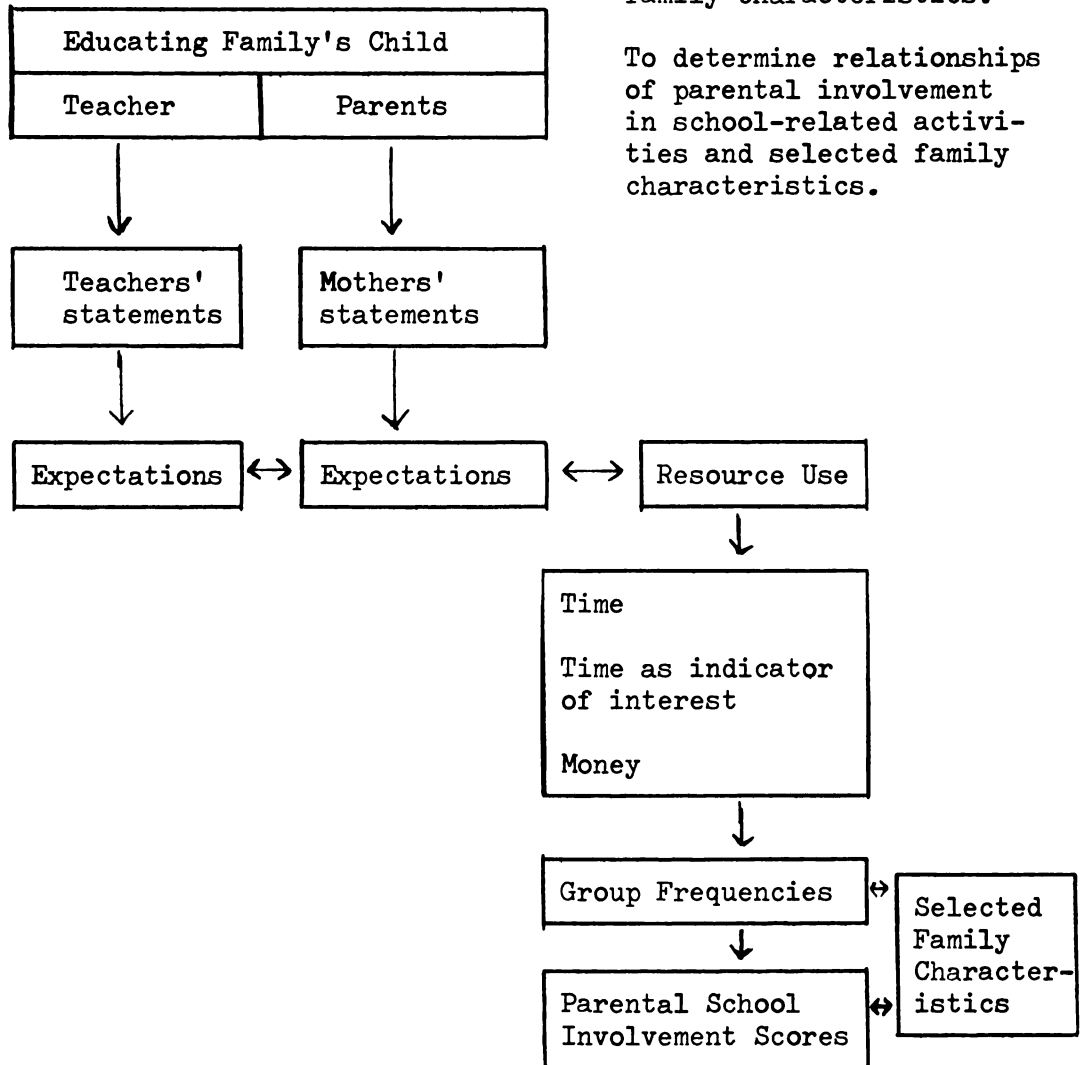


Figure 1. Model for Study of Family Resources Used in Sharing Educative Function With School and Relations to Family Characteristics

5. There is no relationship between help mothers said they thought schools wanted and help teachers said they wanted from parents.

#### DEFINITION OF TERMS

1. School-related activities were defined as those specific acts identified by mothers which mothers and/or fathers carried out that were directly related to school attendance and to the programs, both educational and supplementary, of the schools their children were attending.
  - a. Those school-related activities directly related to the schools' educational programs included: discussing the schoolday, visiting classrooms, assisting children with schoolwork at home, conferring with teachers about children's schoolwork, reading to or listening to children read, sending materials to be used for special school projects, serving as teachers' aides, attending parents' nights and other programs at school.
  - b. Those school-related activities supplementary to the schools' programs included: providing reference materials for children's use at home, accepting and displaying items at home that children made at school, helping children get ready for the schoolday, sending treats for school social functions, serving as room mothers, chaperones on field trips, cafeteria or

playground assistants, taking part in a parent-teacher organization and helping with its activities.

2. Resources used for school-related activities were defined as both human and non-human.

- a. Human resources were time and interest of parents which were indicated by extent and frequency of time used as measured in units of occurrences, hours, and minutes.
- b. Non-human resources were material goods and money parents chose to use to provide school-related items.

#### CONCEPTUAL FRAMEWORK

Our complex, technological society and the changing nature of family functions have led to interchanges with other social organizations. Reciprocal functioning between family and other social organizations is part of family managerial activities which contribute to the totality of family living. The conceptual framework of this study combined two theoretical viewpoints, one from family management and the other from sociology.

The family management viewpoint was stated by Paolucci (1966) when she said that home management centers its attention on the totality of living in the home, on individual and group goals of family members, and on alternative ways in which activities and resources can be organized and utilized for the achieving of those goals. A major group goal of the family is the growth and development of individual members.

The sociological theory dealing with linkages between two social systems was most relevant. Specifically, the theoretical viewpoint was that proposed by Litwak and Meyer (1967) which they called the "balance theory of coordination (p. 532)". They suggested that relations between primary groups and bureaucratic organizations may not be conflicting, as viewed by many sociologists, but rather are complimentary and that at some midpoint, the complementary contributions of each are maximized.

#### LIMITATIONS OF THE STUDY

1. Frequency and extent of family resource use was estimated in this exploratory study.
2. Only quantity of resources used were approximated. No attempt was made to assess quality of resource use.
3. School-related activities were chosen arbitrarily to serve as indicators of parental interest in helping children with their education.
4. Only first grade children in one school district were included in the sample.
5. No effort was made to relate family resource use to children's school achievement.
6. No information was sought as to taxes paid by families which help support the public school system.
7. Mothers were not asked about school clothing purchased, medical or dental check-ups provided, or other family expenditures that may have been prompted by school attendance.

## CHAPTER II

### REVIEW OF LITERATURE

#### FAMILY RESOURCE USE

Family centered purposive behavior by which means are used to achieve ends is a generally accepted definition of management. The behavior is comprised of a series of dynamic, interacting processes. Emphasis upon means or ends has shifted over the years, even though the definition has remained fairly constant.

Resource use is one concept that has long been accepted as basic to family management. This core concept was explicated by the home management committee which convened to define the cognitive content of the field (Home Economics Seminar, 1961). The committee's classification of resources included: technological, social, and personal.

Resources are means, recognized and evaluated as offering utility to some end, requiring direction. The ends, or goals, are those outcomes desired by individual members and by the family as a group. Maloch and Deacon (1970) spoke of goals and events as the demands to which a family responds by using its resources. Events were defined as pertinent occurrences to which one responds.

#### Changing Nature of Family Resource Use

At one time, home management served to direct a family's means toward the end of physical maintenance activities benefitting the



family. Fitzsimmons (1950) said, "In the home, management is concerned with the acquisition, use and care of resources in homemaking activities such as cooking, cleaning, baking, washing, ironing, care and education of children, and general maintenance of the home (p. 4)". However, twenty years later, Nichols (1970) summarized the changing purpose and outcome of resource use to that of family welfare. The goal not limited to housekeeping and physical maintenance of individual needs but a general statement of family welfare which reflects a broadened philosophical stance.

Schlater (1967) emphasized the broadened scope and human-centeredness of management;

Management operates in all aspects of the home and family situation. The sphere of home management was once viewed as confined to the work of the household; it was task-centered. Today we recognize that management is operative in all aspects of the home environment and in its relationships with the wider community of which the home is a part. The emphasis now is human-centered (p. 93).

In this statement, Schlater recognized the interrelatedness of home and community.

Liston (1964) spoke of shared functioning with other social institutions as adding to family welfare, "As the family manages it is concerned not only with what goes on within the four walls of the home but also with the functioning of the family in cooperation with other social institutions toward the general welfare of all (p. 56)".

Gross and Crandall (1963) stated their belief that the aim of effective management was to use the family's resources in a way that would bring the greatest satisfaction to the family. These authors

added that it was important to recognize and use all kinds of resources, including community resources, in the achievement of family goals.

Paolucci (1966) considered management to be operational in the totality of living, but limited it to home-centered spheres:

Home management centers its attention on the totality of living in the home; on the composite, plural, and common goals of members and the alternative ways in which home members and resources can be organized and utilized for the realization of home-centered goals (p. 338).

Gross (1966) summarized when she said,

The home economist in home management must see the handling of resources in the home as a human problem based on knowledge of human motivation and behavior. Without losing sight of the every day activities of the home manager, she must be able to apply this knowledge to living in families (p. 452).

Liston (1964) put it succinctly:

Family management must be interpreted in social perspective because the family does not manage and human beings do not grow and develop in a social vacuum (p. 55).

Review of these statements indicated general agreement that management encompasses the determination of family goals and the recognition, evaluation, and allocation of family resources toward achievement of the goals. There was indication that family activities outside the home were appropriately included in family managerial behavior. There were signs that managing toward the totality of family living extended beyond that of physical maintenance of the family. There were a few studies exploring a new emphasis upon the ends which evoke family managerial behavior.

Broderick (1970) saw a four-fold set of functions a family must find ways of performing to survive. He presented a conceptual framework of interacting relationships among management, family relations, economics, and sociology. Using the social scientists' grouping of tasks into expressive and instrumental, Broderick differentiated into necessary internal and external interlocking sets of functional requirements or tasks. As one example, he elaborated:

One task that is uniquely focal to the family is the socialization of children . . . Although this task cuts across the instrumental-expressive line and involves significant transaction with the larger society, it may be assumed primarily to be one of the chief jobs to be done in the family with young children (p. 2).

Broderick described education as one of the external tasks which the family related instrumentally. He said the family searches for ways to protect itself from demands of society or to use segments of it to implement the family's own internal tasks. The school, for example, aids in socialization of children.

Ater and Deacon (1972) reported research in which they investigated the association between interpersonal relationships among family members and managerial behavior. The managerial behavior they defined was standards and accompanying satisfaction with resources allocated to selected household tasks. The family relationship variables were marital agreement and social-emotional activity. Their findings supported the hypothesized association and indicated leads for other useful studies of the areas of intermesh between family management and family relationships.

Davey (1971) investigated the relationship of family interaction with family environment. Family interaction was defined as specified episodes of shared activity which involved two or more family members. Davey found significant relationships existing between percentage of time mothers shared with their children and family interaction. Family interaction was not significantly increased by fathers' time shared with children. Davey also found that variables such as school time, time of day, weekend days and school vacation season were significantly related to total family interaction scores.

Baker (1970) conceptualized a managerial - developmental framework. She examined managerial behavior as indicated by family resources used in creating an environment for educability of pre-school children. She viewed the family environment as a pervasive mix of economic, sociological, psychological and social psychological factors.

#### Family Resource Use for School-related Activities

Included in the review of family resource use studies are those in which investigation of school-related activities was reported.

According to Nolan and Tuttle (1959), "In the not too distant past, primary goods were produced as well as consumed in the home. The homemaker served an important economic function as a direct contributor to the production of the necessities of living for the family (p. 1)".

Investigation of time used for household activities has been a recurring research theme for 50 years. Walker (1969) compared time

used for household work by urban homemakers as indicated by studies covering a span of 40 years; total time was not lessened during those years. Walker (1969) said, "Families seem to have changed the 'mix' of their time use but have not really reduced total work time (p. 622)". A similar comparison was reported by Hall and Schroeder (1970) with similar conclusions.

The time studies by Walker (1969), Wiegand (1954) and Warren (1940) in New York state were based upon a task-oriented, house-keeping interpretation of homemakers' activities. Both Wiegand and Walker included homemakers employed in the labor force. They measured effect of the hours worked away from home upon homemaking work time and practices.

The three New York studies, as well as time use studies done elsewhere, included measures of time used for physical care of family members. Warren (1940) found so much time being used for care of young children that she included questions about the ages at which mothers started teaching routine activities such as drinking from a cup, undressing and brushing teeth.

Wiegand (1954) said that her measured "care of family members" was interpreted as including physical assistance to children and adults. "The care of children included dressing, feeding, bathing, putting them to bed, taking them to and from school or the doctor's office, and helping them with lessons. It did not include such activities as playing with them or reading to them (p. 29)".

Walker's (1969) study was built around the major hypothesis that time used for household work by the homemaker varies with the total number of children in the family and with their ages. She

found that both variables do affect total time used by homemakers for household work. Walker's findings, not yet reported completely, indicated that activities with and for their children affected mothers' use of time.

It is possible to interpret Walker's (1969) definition of household work as indicating a need for exploring time use for other than housekeeping tasks and physical care of family members. She said:

Household work has been broadly defined for the study to mean those activities which enable the family to operate as a family in today's world, or those household activities performed to provide the goods and services which the family uses (p. 621).

Going out from the family's home to take part in the work of the world, whether it be paid employment, school, providing goods and services for family use, or community involvement, then returning to gain support and encouragement from other members of the family is one way of enabling the family to operate in today's world.

Another research approach has been to study family task allocation among family members. Johannis (1957) found that child care was the family activity shared by parents more than any other activity. He found that about 45 percent of mothers and fathers shared in helping children with their school work. Mothers, primarily, saw to it that their children arose on time in the morning although some fathers also assumed this responsibility.

Parker (1966) looked at task distribution within the family and found that mothers and fathers shared responsibilities in the area

of child care. Among the families, 30 percent of both mothers and fathers supervised schoolwork.

The Nolan and Tuttle (1959) study of employed wives explored the assistance parents gave children with their lessons. When wives were employed, husbands were more likely to assist children with lessons. Husbands in farm families were less likely to help children with lessons than were either non-farm husbands or those of employed wives.

While school-related activities were not listed per se, Ketchum (1961) found that mothers mentioned time used for such activities. She sought the values underlying reported family activities. Ketchum found school-related statements in two value classifications. One value classification was helpfulness. Mothers' statements classified for helpfulness were: "Getting children off to school," and, "Bathing children so they'll be clean and ready for school." A second value classification was family life. Mothers' statements classified for family life were: "I like to be interested in children's schoolwork," and, "He needs encouragement with his schoolwork (Ketchum, 1961, p. 41)."

Three studies of historical importance to the management field explored a mix of factors that were thought to be aspects of managerial practices. Dickens (1943) looked at the effects of good household management on family living and found that specified characteristics of the "good" manager did relate positively to levels of family living. Those wives who were rated as the better managers belonged to more educational clubs and sought information from outside sources more often than did wives rated as less

effective managers. Children of better managers belonged to more educational clubs than did children of less effective managers.

Gross and Zwemer (1944) investigated the influence of selected factors upon the management of material and human resources in the home; they considered both present use and long time plans for use of resources; they looked at families in three economic groups. Among the 382 families surveyed, five-sixths of them had plans for children's formal education; higher education was probably their intent. These plans were held by 90 percent of the families in the comfort income group, by 86.5 percent of the medium income group, and by 72.6 percent of the low income group.

VanBortel and Gross (1954) investigated similarities and differences in managerial practices between upper and lower socioeconomic group homemakers. School activities were mentioned by both groups in the daily time records each homemaker kept for one week. The average weekly time of 49.2 minutes used by upper group homemakers was greater than the weekly average of 16.2 minutes used by lower group homemakers. There was a statistically significant difference between the number of women who participated in school activities, the upper group having more women who did participate than the lower. More upper than lower group women indicated college education for children as part of their plans for the future.

VanBortel and Gross (1954) sought information about homemakers' participation in community affairs:

P.T.A. was selected as a specific organization to represent a typical community activity whose membership was open equally to both groups. In direct questioning, 14 lower and 19 upper group women reported participation in P.T.A. (p. 33).



Indirect measures revealed that more homemakers from the lower socioeconomic group than from the upper said participation in community affairs was important but did not follow through by actually participating.

A study by Honey, Britton, and Hotchkiss (1959) investigated decision making and family financial resource use. It was carried out in a rural area consisting of both farm and non-farm homes. Of the 426 families included, 25 percent reported plans for the education of their children. It is assumed that higher education was their intent.

There is limited research relative to school-related expenditures when children are in elementary and secondary schools.

According to Gross and Grandall (1963):

In most studies of use of income, expenses for education are grouped in "other" and "miscellaneous" and so are not available for study . . . . Elementary and secondary education in America are examples of the tremendous contribution the community makes to the total real income of individual families. . . . The amount spent for education (by the family) is not in proportion to its significance; compulsory education laws indicate more accurately the importance American families place upon formal education (pp. 172-173).

While the data are not now available, the assumption remains that families choose to make expenditures for items they feel will help their children while at elementary and secondary school levels.

In summary, over the years home management research has included studies of use of single resources for family maintenance activities. Those resources most frequently studied were money, time, and energy. Research focus has been to learn patterns of resource use by families or individuals.

Deacon (1962) presented a rationale for the home management research focus when she said that money, time, and energy are evaluative and permit the study of interrelationships:

Money and time permit comparisons of various uses for resources in terms of alternative costs; they also provide a basis for evaluating all resources which are available to a family and measurable in terms of time or money (p. 761).

None of the studies reviewed investigated time used for school-related activities, per se. Several included a category of time use called care of family members; its intent was that of physical care. There were indications, however, that time used in activities with children was an important component of homemakers' total time use.

Some studies of family tasks allocation mentioned school-related activities but did not specify beyond general statements of helping with homework. Child care has been found to be one activity that parents shared. Studies that investigated a mix of managerial practices of homemakers included a few clues to school-related activities. There was little evidence of expenditures for school-related items when children were in elementary and secondary schools.

Research findings and management literature supported the use of time as a measurement of human resources invested by families. Lack of findings suggested the need to investigate allocation of money resources for school-related expenditures when children are in elementary grades. Students of family management encouraged an expanded interpretation of family managerial activities including reciprocal relationships with other social organizations.

## FAMILY-SCHOOL RELATIONSHIPS

The family holds primary importance as a socializing agent but at age five or six, it sends its child to school where he becomes involved with another important socializing agent, the school. The child is primarily a product of his family's training when he enters school (Havighurst and Neugarten, 1957). Whether or not there is active, direct communication between school and family, they share in the child's school participation. The school's influence is always carried out in relation to the influence of the family.

From an historical perspective, said Havighurst and Neugarten (1957), the school as a social institution has had an ever-enlarging set of functions to perform in the socializing process and an increasingly important place in the life of the child. As they viewed it, the American school system performs two essential functions. One of them is interpreting and transmitting the values of society and inducting children into their society. The second is to improve society by promoting its ideals and by helping children make their maximum contributions to the community.

Educating its young is probably a society's second most fundamental task, second only to the problem of organizing itself to carry out actions as a society. Once organized, if society is to maintain itself, the young must be shaped to fit into the roles on which society's survival depends (Coleman, 1961). According to Williams (1960), a complex, technologically advanced society, greatly dependent upon science and rapidly changing, requires an

elaborate system of instruction and indoctrination if it is not to regress to simpler levels.

As viewed by Bell and Vogel (1968), rise of the elaborate system of instruction necessitates a functional interchange between family and school:

The nuclear family is becoming almost exclusively responsible for primary socialization and socialization for family participation, but it does not provide the formal education to equip a person for more specialized activities outside the family (p. 8).

In exchange, the family expects its children to be adequately prepared for entrance into the mainstream of American life. Such interchanges between family and other social organizations are always two-way processes, although they may not be exactly balanced in the short run (Bell and Vogel, 1968).

Schultz (1971) expressed a greater return than accommodation to society's survival. He suggested that industrialized societies' investment in human capital has grown at a much faster rate than investment in non-human capital and that this growth may well be the most distinctive feature of modern economic systems. Two of the five categories of activities Schultz identified as improving human capital are the formally organized system of education at elementary, secondary, and higher levels; and informal study programs for adults.

Within this strong value commitment, American society has created a system of tax-supported public education available to all and enforced by compulsory attendance laws. Control of a community's schools remains in the hands of locally selected governing groups.

Local control leads to vast differences in school systems but they do, generally, reflect the dominant values of the community.

School districts have become large bureaucratic organizations as tasks have increased in complexity and as student enrollments have grown. One indication of the shift from small community school districts to large, formal organizations, is the decline of one-teacher schools from over 10,000 in 1929 to 241 in 1960 in Pennsylvania (Governor's Committee on Education, 1960).

In that same period, almost 20 percent more pupils attended one-third as many schools. At the end of the 1945 school year, Pennsylvania had a net school enrollment of 1,539,680 pupils in 2,544 school districts possessing 9,301 school buildings. By the end of the 1965 school year, there were 2,213,099 pupils in 1,870 school districts possessing 4,633 buildings (Pennsylvania Statistical Abstract, 1967).

While the educational system has arisen from a belief in its importance, Bell and Stub (1968) thought that Americans often paid lip service to the broad values of education but were really only interested in the short run, practical payoff. It may be that community members, and in particular parents, feel as though they don't understand the structured bureaucracy that schools have become, they may feel remote from schools, or that they are lacking in the ability to know what schools should be doing and consequently leave the school policy and programs to the "experts".

Frankena (1970) considered it important that we conceive of the family as educative in function. He said it is likely that some of the trouble today is due to the fact that parents have slighted this function leaving it too much to the schools.

Parents have remained passive for decades, assuming that the school "experts" knew best what educational methods to use. Presently, however, many parents are actively urging school reforms that they feel are essential. Turmoil in the 1960's arose over the educational system and its inability, as viewed by many critics, to meet the changing needs of society.

Fantini (1969) found actions by a group of parents of East Harlem in the fall of 1966 to be a significant turning point in parent-school relationships. They effectively prevented the opening of one New York city school. Their action became a symbol against the insensitivity and unresponsiveness of a large school bureaucracy to the concerns and aspirations of a community. From that beginning has come a different approach to urban school reform which Fantini expressed as a rekindling of principles that have long been held as central to quality education. As he described, "They are public accountability and control of education. It is the public that decides on policies and objectives for the school; it is the public that delegates to the professional the role of implementer and reserves for itself the role of accountant (p. 26)."

One working group in the White House Conference on Children (1970) stated its belief that school plays a central role in the lives of children and their parents. The school is in a position to enhance or weaken the relationship between children and adults. One of their recommendations was, "That the school, and more specifically, teachers should assume central responsibility for establishing and maintaining meaningful relationships between children and adults in all walks of life (p. 246)." Another urged that parents and children be actively

involved in formulating school policies and curricula . . . after all, "American schools are public institutions (p. 247)."

Parents have long been involved in their children's education. An extensive literature reported investigations into parental influence upon children's achievement in school and upon children's aspirations for additional schooling. Differences in school achievement and aspiration related to families' social class positions have also been studied. These reports will not be elaborated here. Most investigators found significant relationships between parental attitudes and values regarding school and academic achievement of their children. Most studies also found significant relationships between social class indicants and other variables measured (e.g. Hillard and Roth, 1969; Sewell, Haller and Portes, 1969; Herriott, 1963; Strodtbeck, 1961; Rosen, 1961; and Kahl, 1953).

A few studies assumed that neighborhood schools reflected the socio-economic status of families living in the neighborhood and investigated achievement or aspiration of youth attending those schools (e.g. McDill, Rigsby and Meyers, 1969; McDill, Meyers, and Rigsby, 1967; Boyle, 1966; and Krauss, 1964).

One longitudinal study was based on the assumption that parents were "significant others" in the lives of their school-aged children and that interaction between parents and their children had an effect upon children's school achievement and upon expectations for additional schooling (see Joiner, Erickson and Brookover, 1969; and Brookover, Erickson and Joiner, 1967).

In one phase of this study, parents were educated in ways of relating to their children in the role of "significant other". The results indicated a significant increase in grades of children in the experimental group (Brookover, LePere, Hamachek, Thomas, and Erickson, 1965).

Baker (1970) explored the family as environment for educability. She hypothesized that resources defined as objects, events, activities, or persons within the home are available and may be used as ways of helping prepare the preschool child for successful participation in the education system. From her study, Baker conceptualized a profile of family resourcefulness for educability made up of three groupings of resources considered to be necessary in three environmental properties of relevance to educability.

In a study of mother's role in socializing her child into the behavior expected of pupils in an urban school Hess and Shipman (1966) said:

The social and cultural distance between home and school is sometimes taken to indicate a lack of effort on the part of teachers or a lack of motivation on the part of parents. It seems more likely that neither is true and that attempting to fix the blame on either evades and confuses the more fundamental problems in the structure of society (p. 3).

Hess and Shipman (1966) concluded that the images mothers hold of school and probably transmit to their children come from the fact that mothers regard school as a distant and formidable institution with which they have little interaction and over which they exercise little control.



This study and others that came into being during the 1960's resulted from serious questions raised about the failure of the schools to make education relevant to children disadvantaged by race, place of residence and/or family background. Societal concern led to programs of compensatory education funded by the federal government.

According to Kerckhoff (1968), "Consistent with American values, a major approach to society's campaign against poverty is directed at the children of the poor and utilizes the mechanisms of education (p. 346)." Reports of pilot efforts in schools in many parts of the nation are to be found in the educational research literature. And, guides to school administrators and teachers are being published, as illustrated by one Office of Education publication (Meeting Parents Halfway, 1970).

One current trend is the direct involvement of parents in the schools and in their children's education. It seems, however, that one group of parents has been singled out. Wilkerson (1970) analyzed the programs of compensatory education as an expedient alternative to school integration. Most if not all of these special programs have been undertaken to provide school experiences designed to compensate for supposed inadequacies in the early developmental experiences of children from impoverished homes.

Wilkerson found that almost all programs stressed community involvement through home visits by teachers, parental participation in field trips, meetings of parents and teachers, and use of special school-community coordinators serving as go-betweens to family and school.

Operation Headstart is an example of a popular action program. Announced in February, 1965, it was launched officially in July of that year. It was intended as a summer experience to stimulate preschool children's intellectual and creative abilities. Plans were included for involvement of parents in the total educational effort. Kerckhoff (1968) said there has been increasing recognition that the value of good work with children is depreciated if parents do not cooperate with the program of the school.

Kerckhoff (1968) reviewed the programs that had, to date, been based on teaching parents to teach their children. Those programs included guided observations by parents of their children in interaction with teachers in preschool situations; use of a "Parents' Pledge of Cooperation" which asked parents to promise to provide certain educational aids and support to their children; lists of activities they should carry out at home; and sessions at which parents were presented materials and ways to use them which they, in turn, were supposed to use with their children. Kerckhoff concluded that a review of these programs raised problems in addition to methodological ones. His questions pertained to parents as teachers of their own as well as other parents' children or as teachers of other parents.

In summary, a working relationship between family and school has been viewed as desirable, benefitting both children and society. Costs to families of carrying out the relationship have not been investigated. Until the recent past, parental cooperation with schools has been limited to informal visits, attendance at school programs,

conferences with teachers, participation in parent-teacher organizations and their activities. Parental cooperation has been sought as a way of increasing schools' effectiveness.

Recently, educators have been moving from a locked-door to an open-door policy indicating an awareness that maximum education is more likely to occur where family and school are brought closer together (Litwak and Meyer, 1967). They are coming to realize that a child's motivation to learn is an important part of his ability to receive education and that everyday continual encouragement is also necessary if he is to be well educated (Litwak, 1968).

The turmoil of the 1960's led to infusion of vast amounts of federal money into programs of compensatory education. These programs brought about an involvement of parents in school activities not tried before. The aim was to help make successful the special education programs designed for their children. Often parents singled out for involvement were those considered to be disadvantaged in some way: economically, socially, culturally, by race, by sex, or by middle-class standards.

#### FAMILY-SCHOOL LINKAGE

Families have long been involved in their children's education. For most families the involvement has been informal and from the sidelines. Societal changes have helped pinpoint the need to involve parents formally and directly in schools' educational programs. Schools are seeking ways to do so effectively. Students of the family must be able to help families prepare to meet these new demands. The White House Conference on Children (1970) reported

that:

One significant research finding of the past decade on emergent family forms and activities in a rapidly changing society is that families function more in a reciprocal than a subordinate relationship with existing social organizations and that institutions are expecting more reciprocity in such dealings (p. 231).

The idea of the reciprocal relationship was supported by literature from family sociologists studying the linkages between social systems. In particular, development of ideas about linkages between primary groups and bureaucratic organizations. Talcott Parsons (1959) advanced the belief that structure of the isolated nuclear family was necessary for the survival of a complex industrialized society. He thought that a nuclear family was free to move when an employment opportunity offered by a bureaucratic organization made it necessary. As industrialized society developed, so did division of labor. Family and formal organization functioned each in its own sphere and did not interfere with the functioning of the other. Social scientists also believed that while the functions assigned the family were reduced, those remaining were highly specialized and essential to both family and societal maintenance.

Litwak (1968) suggested that Parsons' structural analysis did not go far enough. Rather than a primary group and bureaucratic organization functioning at different poles, he proposed that they function on a continuum with both working toward achievement of a common goal. Litwak (1965) looked at family structure and suggested that the family was not limited to performance of a few specialized functions. He believed that the family actively intervened in many, if not all, functions important to it. It did, however, contribute only part in

each area to the achievement of the goal; the other part was contributed by a formal organization.

According to Litwak (1968), the bureaucratic organization was ideally suited to deal with problems requiring technical knowledge and a concentration of resources. It offered trained experts with maximum knowledge and experience which could be brought to bear on a problem. In some situations the trained expert was needed and in others, the trained expert could offer little advantage over one untrained. The primary group could best handle problems requiring little technical knowledge. The primary group was best equipped to deal with a complex situation where technical knowledge could not be put together in time, or where knowledge was so limited or lacking that the untrained was as well able to act as was the trained expert.

Litwak and Meyer (1967) proposed calling uniform those areas in which the bureaucratic organization could best operate and nonuniform the areas in which the primary group was most effective. Further, they argued that both uniform and nonuniform tasks were to be found in most areas of social endeavor; therefore, both primary and bureaucratic group organizational forms were involved.

While close cooperation between the two is necessary for achieving goals, the primary group and bureaucratic organization do have antithetical atmospheres (Litwak, 1968). Their very difference in form accounts for the differential efficiency with which they deal with tasks. It seemed to Litwak and Meyer (1967) that there is a midpoint somewhere on the continuum at which the complementary contributions of both organizations are maximized. They gave this

theoretical viewpoint the name "balance theory of coordination" and proposed it as an alternative to linkage theory that views relations between social forms as conflicting (p. 532).

Litwak and Meyer (1967) explored an application of their "balance theory of coordination" to the school and family. Linkage between family and school arose from their common goal, that of education of children.

Sussman (1969) accepted the Litwak and Meyer conceptualization and said that most work done, to date, was a study of the bureaucratic organization's portion of the continuum. He believed it necessary to look at the reciprocal relationship from the family's point of view. Sussman suggested that linkage is both a process and condition; if viewed as a state of being then it can be described. He believed that the family may be viewed as both dependent and independent variable, adapting and influencing behavior of its members and outsiders simultaneously.

At another writing, Sussman (1968) said that one cannot generalize about the adjusting posture of the family or any other social institution with which it interacts. At best, one can identify problems, the positions assumed, and the mechanisms employed to achieve accommodation. An investigation and description of the family's input to a linkage with a social organization will serve as a necessary first step.

Sussman (1971), continuing to develop his ideas around the Litwak and Meyer viewpoint said, "The families which 'make it' are those which have become aware of and use options and develop successful linkages with nonfamily organizations (p. 47)." Families

function with varying degrees of proficiency. Included in their main tasks, as Sussman (1970) viewed them were: to develop the ability to socialize children; to enhance the competence of family members to cope with the demands of organizations in which they must function; and, to utilize those organizations. According to Sussman, the competency of the family in managing these societal relationships is becoming increasingly important.

#### SUMMARY

Litwak, Meyer, and Sussman wrote from the belief that the family is actor more than being acted upon in interaction with formal organizations.

Their conceptualizations imply action by families. Those family activities which make possible the reciprocal relationships with other social organizations make up part of the totality of family living. Determination of use of family resources is an element of family managerial behavior. Empirical testing of family resources used when family and school share the educative function will add to the information students of family management need when helping families improve managerial behavior.

The literature supported the contention that it was appropriate to explore what parents and teachers thought parents could contribute to their joint effort of educating children. Additionally, to investigate what resources parents used in carrying out the school-related activities they thought necessary to children's school participation. Indications of differences in school-related attitudes among families in different social classes supported the search for

relationships among social class positions, selected family characteristics and resource use.



## CHAPTER III

### PROCEDURE

#### SELECTION AND DESCRIPTION OF THE SAMPLE

This study is an exploratory investigation of family resources used in school-related activities when a family's first child was in first grade and of the relationships between resource use and selected family characteristics. It is descriptive in that it summarizes the nature and extent of the resource use reported by mothers.

Five first grades in one school district made up the study sample. School records were made available to the investigator who sought names of first children to be in first grade. Only names of children and parents constituting intact families were used. A total of 116 names were recorded. From that total, 97 useable schedules were obtained when mothers were interviewed.

Teachers from 21 classrooms in the five first grades were surveyed by questionnaire which was made up of questions similar to those asked of mothers. Their teaching service ranged from one to 38 years.

Procedures followed for the study will be discussed in the following sections: selection and description of the sample, development and description of the instruments, data collection, and data analysis.

### Selection of the Sample

The sample was a non-probability, purposive one selected to conform to established criteria. It was selected within one school district encompassing a moderate-sized Pennsylvania city of 50,335 total population. Intact families whose first child was in first grade during the spring of the year following the child's entrance to first grade were specified.

One school district sufficiently large to include young families across social class strata was sought. Specification of one school district was considered to be a control of variables. It was thought that administrative policy regarding open or closed-door philosophy and availability of such things as school lunch in all schools, workbooks, and other school supplies to all children at no additional expense to parents would be constant.

Families whose first child was in first grade were specified to maintain equality between families and to utilize the impact of first experiences. Since previous experience may lead to habitual responses, it was thought that first experiences with formal school organizations would make more evident to parents changes in patterns of family resource use due to school attendance.

Census data were searched for areas of population concentration. County and City Data Book (1967), a compilation of 1960 census data, was consulted. Total county populations by age were noted. Population counts for those six and seven years old in areas of population density were recorded. Median family incomes for each county and percentage of those having family incomes under \$3,000 and \$10,000 and over were recorded. Counties having a moderate-sized

city, with a proportion of young families sufficiently large to suggest a sample of 100 first children in first grade were noted. Count of families evidencing fairly equitable distribution among the two census income categories was recorded. One other consideration, accessibility, was important to the investigator.

It was as a result of the second contact made with a school district late in 1971 that study plans were initiated. An affirmative answer was received from the Superintendent of Schools of the School District of the City of York, Pennsylvania. The Educational Programs Committee of the city's school directors had approved the investigator's request to use the York City School District as study locale. Full cooperation was offered within school district policy.

1970 census data gave the York, Pennsylvania city population as 50,335 (U. S. Department of Commerce, August, 1971). The city constituted about 41 percent of the total urbanized area. None of the schools in suburban areas were included in the school district.

The city of York covered a 4.5 square mile area (Pennsylvania Industrial Census Series, 1970). Manufacturing constituted the second largest group of business enterprises in York County being surpassed only by agriculture. The greatest concentration of industry was around the city of York where the city, plus two boroughs and four townships surrounding it contained 299 plants. Those plants employed 34,411 workers at total wages and salaries of \$261.7 millions of dollars in 1970 (Pennsylvania Industrial Census Series, 1970).

Per capita income in York County in 1968 was \$3,439, somewhat higher than Commonwealth per capita income which was \$3,413. The unemployment rate in York County was a little over two percent of the Commonwealth's total unemployed in 1970 (Pennsylvania Industrial Census Series, 1970).

Within the boundaries of the school district, there were eleven elementary schools with 37 classrooms containing first grade students. As of February, 1972, there were 852 first graders attending the city schools. At the discretion of school administrators, five schools with 21 first grade classrooms were assigned to the study. They were chosen by an assistant school superintendent on the basis of size and social class composition.

At a second visit to the school district's administrative offices, copies of the tentative interview schedule and letter to be sent to parents were presented for review and suggestions. The school superintendent and his assistant superintendent who was working most closely with the study reviewed the instruments. A time schedule for collecting information concerning families and a tentative schedule for the interviewing were discussed.

Early in April, 1972, two and one half days were spent visiting the five schools. The assistant superintendent of schools introduced the investigator to school principals and authorized access to school records. In each school, full cooperation was extended, the records were made available and a place provided where they could be perused. One hundred sixteen names that seemed to fulfill the specified criteria were recorded. Names of families' first children entering first grade, names, addresses and phone numbers of parents and

and employers of parents were recorded where the information was available on the school's cumulative records.

Visits to the schools by the investigator were of benefit in addition to collecting names. School principals were interested in learning about the study and the rationale for its design. The investigator was able to explain procedures to be followed in subsequent contacts with the school and with parents. Several principals reported phone calls from parents after receipt of introductory letters to assure themselves that the study was approved by school officials.

Principals were asked if letters and questionnaires might be left in mail boxes for first grade teachers of those classrooms included in the sample. Permission was granted in each school. In two of the schools, principals escorted the investigator to first grade rooms where she was introduced to the teachers, giving her the opportunity to explain the study to teachers as well as to collect records from them.

#### Description of the Sample

Hollingshead's Two Factor Index of Social Positions (1957), was used to determine social class positions of families in the study. The area within the boundaries of the school district encompassed the central city. The study's sample was primarily working class families. However, there were 11 percent in the two upper class groups and 15 percent in the lowest indicating a trend toward the spread of social class strata intended in the study design.

Table 1 summarizes social class positions of the families.

Table 1. Families' Social Class Based on Factors of Fathers' Education and Occupation

Social Class Groups	Range of Computed Scores	Population (N = 97)	
		No.	Percent
I (upper)	11-17	5	5.2
II (upper-middle)	18-27	6	6.2
III (lower-middle)	28-43	18	18.6
IV (upper-lower)	44-60	53	54.6
V (lower-lower)	61-77	15	15.5

Hollingshead devised the index of social class positions on educational attainment and occupation of father. Over half of the sample fathers fell into three occupational groups. Fathers' occupations are shown in Table 2. Educational attainment of both mothers and fathers are summarized in Table 3.

Table 2. Fathers' Occupations

Occupations	Fathers (N = 97)	
	No.	Percent
Higher executives and major professionals	5	5.2
Business managers, lesser professionals, proprietors of medium-sized businesses	5	5.2
Administrative personnel, minor professionals small independent businesses	17	17.5
Technicians, clerical and sales; owners of small businesses	17	17.5
Skilled manual employees	31	32.0
Machine operators and semi-skilled employees	17	17.5
Unskilled employees and unemployed	5	5.2

Table 3. Parents' Educational Attainment

Education Completed	Mothers (N = 97)		Fathers (N = 97)	
	No.	Percent	No.	Percent
less than 8 years	--	----	2	2.1
8 up to 12 years	20	20.6	21	21.6
12 years	58	59.8	48	49.5
12 years plus some college, vocational or technical courses	12	12.4	16	16.5
4 years college	5	5.2	1	1.0
4 years college plus graduate study	2	2.1	8	8.2
No answer	--	----	1	1.0

About 60 percent of the mothers were high school graduates. Fifty percent of the fathers were high school graduates. More fathers than mothers had some education beyond high school. About twenty percent of both mothers and fathers stopped their education short of earning a high school diploma. Two percent of the fathers had less than eight years of schooling. No mother had that few years of school attendance.

When interviewed, 38 percent of the mothers were working at paid employment. Of those, 18.6 percent were employed full-time and the remaining 19.6 percent were working part-time. Classification by type of mothers' employment is shown in Table 4.



Table 4. Occupations of Mothers in Paid Employment

Occupations	Employed mothers (N = 37)	
	No.	Percent
Lesser professionals	3	3.1
Technicians, clerical and skilled manual	22	22.7
Sales	7	7.2
Unskilled	5	5.2

Ages of parents were secured as part of demographic data.  
Parents' ages are shown in Table 5.

Table 5. Ages of Mothers and Fathers

Age Groups	Mothers (N = 97)		Fathers (N = 97)	
	No.	Percent	No.	Percent
20-29	72	74.2	36	37.1
30-39	24	24.7	52	53.6
40-49	1	1.0	8	8.2
50-59	--	----	1	1.0

Criteria for selection specified that a family's first child be in first grade, but sex of the child was not specified. The population included 53.6 percent boys and 46.4 percent girls.

The schools, by number of classrooms and number of first grade pupils meeting study criteria, are shown in Table 6.

Table 6. Schools, Classrooms and First Grade Sample

School	First Grade Classrooms (N = 21)	First Grade Students (N = 97)	
	No.	No.	Percent
A	5	28	28.9
B	4	6	6.2
C	3	8	8.2
D	4	19	19.6
E	5	36	37.1

Questionnaires were completed and returned by 13 teachers at the time the interviews were conducted. All four teachers in School B responded. Shortly after the start of the school year in the fall of 1972, letters and questionnaires were sent to first grade teachers in the other four schools. They were asked to complete and return questionnaires if they had not done so the previous spring. Two additional questionnaires were received. Fifteen of the 21 teachers returned questionnaires, a 71 percent return. Table 7 shows teachers who responded by school.

Table 7. Teachers Responding to Questionnaires

Schools	First grade teachers (N = 21)	Those returning questionnaires (N = 15)	
	No.	No.	Percent
A	5	4	80.0
B	4	4	100.0
C	3	2	66.6
D	4	2	50.0
E	5	3	60.0

Number and ages of other children in the family were thought to have some effect on mothers' ability to participate in school-related activities, especially those that took them away from home. Table 8 shows number of other children.

Table 8. Number of Other Children

Number	Families (N = 97)	
	No.	Percent
3	7	7.2
2	23	23.7
1	52	53.6
0	15	15.5

Eighty-four percent of the families had at least one other child. Number of other children ranged from none to three and their ages

from a few weeks to six years. There was a total of 118 other children in the study families.

Sixteen percent of the families had no younger children and care was of no concern when parents visited schools. One mother gave no response when asked how younger children were cared for when she went to school for some activity. Table 9 summarizes arrangements families made for care of younger children when parents went to school.

Table 9. Care Provided Younger Children When Parents Visited Schools

Care provided <sup>a</sup>	No.	Percent
Took younger child(ren) along	27	27.8
Relative cared for child(ren)	21	21.6
Hired babysitter	20	20.6
One parent stayed with child(ren)	15	15.5
Traded babysitting with friend or relative	9	9.3
Friend cared for child(ren)	8	8.2
Visited school when younger child(ren) in nursery school or kindergarten	3	3.1

a Some mothers specified more than one way of caring for younger children

Three percent of the mothers said they made no school visits this year. Twenty percent of the mothers said they sometimes hired babysitters. Cost of hiring a babysitter for one school visit ranged from less than \$1.00 to \$5.00.

It was thought that mothers' membership in groups would serve as one indicator of her interest in participating in school-related activities away from home. Table 10 records mothers' memberships in groups.

Table 10. Mothers' Membership in Groups.

Number of Groups	Mothers (N = 97)	
	No.	Percent
5	1	1.0
4	4	4.1
3	10	10.3
2	32	33.0
1	43	44.3
0	2	2.1
No response	5	5.2

Each mother was asked to indicate an income group which included her family's income. Family incomes are shown in Table 11. About 67 percent of the employed mothers were in families in income groups of \$10,000 to \$12,999 and \$13,000 and over.

Table 11. Family Income

Income groups	Families (N = 97)	
	No.	Percent
\$13,000 and over	18	18.6
\$10,000 to \$12,999	30	30.9
\$ 8,000 to \$ 9,999	32	33.0
\$ 5,000 to \$ 7,999	10	10.3
Under \$5,000	5	5.2
No response	2	2.1

In summary, the study sample consisted of young, working class families in one school district in an industrialized, moderate-sized city. The sample was drawn from five elementary schools which included 21 first grade classrooms.

Only about one-third of the mothers were employed away from home at the time of the study. Most of the families had younger children. Most mothers participated in at least one community organization. About two-thirds of the families had incomes in the \$8,000 to \$13,000 range. Mothers were interviewed assuming that they would realistically report use of resources by both parents. Teachers were surveyed by questionnaire.

#### DEVELOPMENT AND DESCRIPTION OF THE INSTRUMENTS

Collecting statements that led to the interview schedule began several years ago. The questionnaire developed for use with teachers was an adaptation of mothers' interview schedule.

Mothers' interview schedule sought demographic data about the families. Two open-ended questions to elicit mothers' free responses with no prompting were used. The remaining questions were structured around specific activities related to school which had been secured from several sources of information.

Questions investigating frequency and extent of school-related activities asked about time used both at home and at school. Questions were included about those activities thought to be directly related to schools' educational programs and those supplementary, but nonetheless important, to the total educational effort.

Questions investigating aspects of money allocation were part of the schedule. Questions about costs of purchase of school lunch and milk were included. In addition, questions were included to learn about families discretionary spending to provide items related to school attendance but not required.

#### Mothers' Interview Schedule

It was first in extension meetings with groups of homemakers that the impact of school time demands upon mothers was heard frequently enough to attract the investigator's attention. When opportunities presented themselves, discussions were stimulated among groups of homemakers about ways in which their time was being used to assist children with school-related activities.

Questionnaires were used during extension meetings in two counties comprising suburban areas around metropolitan centers. Questions were asked about school-related activities and frequency with which they occurred. Mothers reported activities such as:

helping children dress for school, packing lunches, helping with homework when needed, visiting school and conferring with the teacher, attending parent-teacher organization meetings, helping with school plays and parties, taking them to meetings and school activities, serving as room mother.

On another occasion, a homemaker who was involved in many activities with family and community, was asked for an interview. The homemaker was an elected representative to the area school directors board. The interview was recorded on tape and subsequent playback as well as notes taken were useful in preparation of first drafts of the interview schedule.

A helpful in-depth interview was held with a first grade teacher who has had many years of experience. She emphasized the importance of parents' attitudes toward school and education. Attitudes revealed, often unconsciously, by acceptance or rejection of items the children make at school and take home, for example. The first grade teacher's comments resulted in a question about parents sending artifacts from home when such items contribute to a unit being studied in school.

Literature was searched for statements by educators and for research findings which indicated parental involvement in school-related activities. A recurring theme in the literature is the importance of early development of verbal ability. Parents who spend time with their children, read to them, and provide them books have been shown to affect children's cognitive development. Representative of this literature is a review presented by Freeberg and Payne (1967).



Bloom (1964), concluded that the first five to seven years of life may be the most significant for the growth and development of the stable characteristics used as general measures of human attributes. Measurement of intelligence is one attribute Bloom considered and from pertinent studies concluded that by age four, an individual has developed 50 percent of his mature intelligence as measured at age 17. From ages four to eight, he develops another 30 percent. Bloom stressed the need for more study of the environment and components in it leading to maximum individual growth and development.

The stress upon verbal skills and language development found in the literature led to questions investigating parental time used for reading to the child, spending time with him assisting with schoolwork, and supplying enriching materials for his use. Questions about a child's environment were basic to studies reported by Baker (1970) and by Hess and Shipman (1966) who explored environment for educability of preschool aged children. The programs of compensatory education of which Headstart may be the most widely known, are built upon the basic premise of overcoming environmental deficiencies in the early years of a child's life. They do so through experiences planned to foster cognitive development.

In an Office of Education publication entitled, Meeting Parents Halfway: A Guide for Schools (1970), there is a lengthy list of activities that may be suggested to parents as ways they can support their children's school efforts. And, in a volume by Reeves (1963), there are normative statements pertaining to parental involvement in schools. He said:

The school, partly unavoidably, forces responsibilities upon the home. Parents are required to send their children to school and on time . . . Children must be sent to school clean, but the school does not assume responsibility for sending them home clean . . . Parents must provide their children a noon meal, either funds to buy or a packed lunch . . . The teacher, without authority but in the name of cooperation, assigns duties to mothers such as preparing costumes for the school play, preparing food for a school picnic, sending money to buy new records or books, or for a charitable fund drive . . . Most parents comply to avoid any possible embarrassment to their children and because they want to cooperate (pp. 103-104).

Reeves included a list of ways in which parents can help schools.

Those pertinent to elementary grades were noted and used in developing questions pertaining to school-related activities.

Statements of school-related activities in which parents were involved began to emerge. Lists of statements were grouped and major areas of involvement were noted. Broad, open-ended questions around the groupings of activities were formulated.

These questions were used to interview five mothers of school-aged children. Three of the mothers were considered to be from middle social class groups and two of them were mothers of Headstart children chosen as representatives of a lower social class position.

The interviews were analyzed as were ways in which mothers responded to the questions. One activity volunteered by all five mothers was their use of time during the day to discuss the schoolday with their children. Mothers recognized the importance of this activity and provided time for it; mothers of several children said they planned such time with each child. On the basis of this information, a question about discussing the schoolday was included.

Responses to this pre-test were evaluated and discussed. It was decided that using open-ended questions exclusively might present problems to the interviewers and surely would present problems in coding answers. Therefore, it was decided that questions should be stated in more structured form, keeping two open-ended questions to elicit free responses from mothers.

A trial effort was made in the three middle-class homes to interview the children; children of the Headstart mothers were not available. There was no effort made to secure first graders for these pre-test interviews. The three children included one of kindergarten age, one in first and one in second grades. Information gained from the children did not seem to warrant pursuing that idea and no more thought was given to interviewing children.

A revised version of the interview schedule was used in another pre-test with five mothers of first children in first grade of one elementary school. On the basis of this pre-test, the mothers' interview schedule was revised and prepared for use in the study (Appendix A).

#### The Teachers' Questionnaire

It was decided to adapt the structured questions phrased for the mothers' interview schedule and use it as the teachers' questionnaire (Appendix A). No demographic data were elicited from teachers. Responses sought from teachers were specifically related to parent-school interactions.

In summary, mothers' interview schedule was developed primarily from two sources of information: from a search of the pertinent

literature and from activities reported by mothers in conversation and in pre-test interviews. Pre-testing of the instrument led to content and format of the instrument used.

The teachers' questionnaire was adapted from questions included in the mothers' interview schedule. Structured questions pertaining to school-related activities were paired with questions asked of mothers so that relationships might be tested. No background information was sought from teachers other than the name of the school in which they were currently teaching.

#### DATA COLLECTION

Following initial visits to schools to obtain names of first graders and their parents meeting criteria of the study, lists of the names were compiled. A map of the city was used to locate street addresses and homes grouped in proximity to each other.

The letter to be mailed to parents had been approved by administrative officers of the school district. It was next checked and approved by an Assistant Director of the Cooperative Extension Service of The Pennsylvania State University since letterhead and professional title of the investigator were to be used (Appendix A).

The letter to be distributed to first grade teachers, along with the survey questionnaire, were checked and approved by both school district officials and those of the Cooperative Extension Service (Appendix A).

Duplication of interview schedules, questionnaires, parents and teachers letters was initiated and envelopes prepared for mailing.

Parents letters were mailed 12 days before scheduled interviewing was to begin.

Two experienced interviewers were hired. They had previously done survey work for the Department of Rural Sociology of The Pennsylvania State University and their names were given the investigator by a faculty member who had worked with them.

The investigator trained the interviewers in one meeting. Interview schedules were presented to the interviewers and discussed. Lists of parents' names and addresses were divided between them. They were instructed to phone or request permission for each interview in advance when possible.

On that same day, a visit was made to the administrative offices of the school district where the assistant superintendent of schools met with the investigator and the interviewers for a review of procedures to be followed.

A tour of the city showed interviewers school locations. Names of school principals were given them, and they were instructed to introduce themselves to principals before starting interviews in a school locality. One school principal happened to be on the sidewalk in front of his school. The interviewer assigned that school introduced herself, and later that afternoon, began making contacts with parents of children in that school.

The interviewers were given packets of envelopes addressed to first grade teachers in each school to which they were assigned. They were asked to leave the envelopes to be put into first grade teachers' mailboxes when stopping at schools to introduce themselves to principals. Each envelope contained a copy of the letter to the

teacher, a copy of the questionnaire, and an envelope prepared for returning the questionnaire to the investigator.

The county extension home economist was invited to attend part of the interviewers' day of orientation. While she was not involved in the study, the investigator was working in her county. Letters to parents and teachers would identify the study as being done by a member of the Cooperative Extension staff. It was desirable that she be informed of extension activities being carried out in the county. It was essential that the county extension home economist meet the interviewers and know that they were about to carry out the field phase of the study.

A date was set with the interviewers for another meeting in one week at which time the investigator would collect completed schedules, discuss situations the interviewers had encountered, and determine what additional procedures were needed. With a final check to make sure each had the investigator's phone number and address and a final reassurance that a collect call would be welcome at any time, the investigator left and the field work was launched.

Data were collected in late April, 1972. Within a two-week time span, 106 interviews had been completed. The interviewers encountered few problems. There was only one refusal by a mother to grant an interview. One family had moved and no forwarding address was available. Five mothers were not found at home upon repeated attempts to contact them. Three mothers had so little use of the English language that the interview was considered to be impossible and not completed. Nine interviews were completed but schedules later set aside because the interview revealed that parents were separated or

that there was an older child in school. Ninety-seven mothers were interviewed and schedules considered to be useable. That was 91 percent of the families meeting study criteria. One interviewer completed 42 interviews; the other completed 55. The schedules of one interviewer contained more detailed information than did schedules of the second. Both interviewers collected the basic information sought with each question.

#### Development of Parental School Involvement Scores

Procedures for development of parental school involvement scores were considered. Frequency and extent of time use were sought in order to describe parental involvement in school-related activities. In addition, it was planned that parental school involvement scores were to be used in testing relationships with the independent variables chosen for study. Frequency and extent of parental time use were assumed to serve as indicators of another human resource, parental interest.

Reported use of family money was not included when determining scores since range of family incomes precluded similar possibilities for choice in assigning money for school-related uses. A more equitable possibility for choice in using time existed since the bounds of a 24-hour day were the same for all.

The parental school involvement score was determined by rating three aspects of parental involvement: (1) parental interest in and encouragement of children's education; (2) parental interest in helping children learn; (3) parental interest in helping at school. Each was assigned a specific score. The total parental school involvement

score carried a maximum point value of 99.

Sub-score I. Those school-related activities which indicated parental interest in and encouragement of children's education were grouped. School-related activities included in sub-score I were: discussing the schoolday, visiting the classroom, sending items related to a unit being studied, helping children with physical preparations for the schoolday, and accepting and displaying items made at school and brought home.

A possible total score of 36 points was determined for sub-score I with the highest score assigned families in which both parents were involved in the activity and the frequency and extent of time use reported was the maximum reported for that activity. A score of zero was designated as that to be assigned families in which neither parent carried out that activity and no time for it was reported. Decreasing scores were designated as extent of time reported for the activity decreased and as two parent involvement shifted to one parent carrying out the activity (Appendix B).

For two of the activities: helping children prepare for the schoolday and disposition of items made at school and brought home, frequency and extent of time use were not reported. Mothers' responses were studied and judgments made when establishing scores which reflected ways the activities were carried out within families (Appendix B).

Some mothers explained, when asked the question, that there were reasons for not having carried out a school-related activity. Some said the activity had not been requested nor encouraged by the school. It was decided to assign a higher score to a family that gave an



explanation than to those in which no answer had been given or an answer of "no" given with no explanation when asked the question.

Sub-score II. The school-related activities indicating parental interest in helping children learn were grouped. Included were: conferring with the teacher about schoolwork, assisting with schoolwork at home, reading to children, providing materials for special school projects, and supplying reference materials for children's use at home.

For three of the school-related activities: conferring with teachers about schoolwork, assisting with schoolwork at home, and reading to their children, mothers reported frequency and extent of time used for each activity. For the other two activities included in sub-score II, providing materials for special projects at school and supplying references for children's use at home, scores were determined primarily on the basis of frequency with which parents supplied materials and references. Estimations of the number of different references provided and the nature of materials for special projects were also used.

A total score of 40 was possible for sub-score II. The highest score was designated for assignment to families in which both parents were involved in the activity and the frequency and extent of time use were the maximum reported for that activity. Decreasing scores were determined on the basis of shift from both parent to one parent involvement in the activity and on the decreasing frequency and extent of time reported for that activity (Appendix B).

Sub-score III. Grouped together in sub-score III were those activities which took place at school and were primarily supplementary

to schools' educational programs. They were defined as indicating interest in helping at school. Included were: attending special programs at school, helping with activities at school, sending treats for special occasions, and sending items for school fund-raising events. The helping with at-school activities category included: chaperoning field trips, serving as room mothers, cafeteria, library, or playground assistants.

A total point value of 23 was assigned sub-score III. Involvement by parents and frequency and extent of time used to attend special school programs were established as criteria for determining scores. Number and frequency of at-school activities and contributions of treats and items for fund-raising events at school were given point values determined by frequency during the year. It was decided to add one point to an assigned score when mother gave an explanation for not carrying out one of the activities included in sub-score III. She may have said that younger children at home prevented helping at school, or that the school had not asked nor encouraged sending treats to school (Appendix B).

#### DATA ANALYSIS

Frequency analysis led to description of the study variables. Frequencies were used to compute parental school involvement scores for each family. One-way analysis of variance tests were applied to determine differences in parental school involvement by selected family characteristics. Chi square tests were used to determine relationships between mothers' responses of help they thought schools wanted and parental involvement in school-related activities; and, to

determine relationships between mothers' and teachers' expectations of help each group thought schools wanted from parents. Table 12 summarizes purpose of analysis, data and statistical procedures used in the analysis.

Table 12. Analysis of Data

Purpose of Analysis	Data	Method of Analysis
Description of families	Demographic data	Frequency distribution with descriptive statistics: Subprogram Fastmarg <sup>a</sup>
Description of families' resource use	Mothers' responses	Frequency distribution with descriptive statistics: Subprogram Fastmarg <sup>a</sup>
Description of teachers' ideas of desirable parental help	Teachers' responses	Frequency distribution <sup>b</sup>
Intercorrelation among variables	Demographic data and parental school involvement scores	Pearson product-moment correlation coefficient <sup>c</sup>
Test of Hypothesis 1 Differences in parental school involvement among families in social classes	Social class positions and parental school involvement scores	One-way analysis of variance <sup>d</sup>
Test of Hypothesis 2 Differences in parental school involvement among families grouped by selected family characteristics	Demographic data and parental school involvement scores	One-way analysis of variance <sup>d</sup>
Calculation of all possible comparisons among series of means	Computed means used in testing Hypothesis 1 and 2	Duncan's Least Significant Difference Test (DLSD) <sup>e</sup>
Test of Hypothesis 3 Relationships between resources used to supplement school programs and selected family characteristics	Demographic data and mothers' responses	Chi Square: Subprogram Fastabs <sup>f</sup>
Test of Hypothesis 4 Relationships between ideas of help wanted and reported parental school involvement	Mothers' responses	Chi Square: Subprogram Fastabs <sup>f</sup>

Table 12. (continued)

Purpose of Analysis	Data	Method of Analysis
Test of Hypothesis 5 Relationships between mothers' and teachers' ideas of help schools wanted from parents	Mothers' and Teachers' responses	Chi Square: Subpro- gram Fastabs <sup>f</sup>
Recalculation of signi- ficant Chi Square tests	Frequency distribution tables used in testing Hypotheses 3, 4 and 5	Frequency Analysis with Chi Square (FAWCS) <sup>g</sup>

a Norman H. Nie, and C. Hadlai Hull. Statistical Package for the Social Sciences: Update Manual. Chicago; University of Chicago, National Opinion Research Center, 1971

b Hand calculated

c David J. Wright and Jeremy D. Finn. Multivariate - Univariate and Multivariate analysis of Variance and Covariance: Fortran IV program; Occasional Paper No. 8. Michigan State University: College of Education, Office of Research Consultation, 1970. (Mimeographed.)

d Nancy C. Daubert. A Statistical Package Program: Anoves/Anovum (rev. ed.). The Pennsylvania State University: Computation Center, August, 1971. (Mimeographed.)

e Douglas Garwood. Contributed Program: Duncan's Least Significant Difference Test. The Pennsylvania State University: Computation Center, 1970. (Mimeographed.)

f Norman H. Nie, Dale H. Bent, and C. Hadlai Hull. Statistical Package for the Social Sciences. New York: McGraw Hill, 1970.

g Carlfred B. Broderick and W. H. Verity. Statistical Package Program (rev. ed.). The Pennsylvania State University: Computation Center, May, 1968. (Mimeographed.)

## CHAPTER IV

### FINDINGS

Findings are divided into two major parts presented in relation to the study's objectives and hypotheses. A major objective was to investigate the nature and extent of resources families used when their first children were in first grade. Frequency analysis of the data resulted in the descriptive information presented in the first part of this chapter.

Findings pertinent to relationships among variables is reported in the chapter's second part. Hypotheses stated no relationships between parental involvement in school-related activities when first children were in first grade and selected family characteristics. Results of the testing of hypotheses are reported in the second part of this chapter.

### PART 1

#### Resources Used in School-related Activities

Table 13 summarizes parental involvement in school-related activities by families. Maximum extent of reported involvement includes participation by mothers and fathers.

Table 13. Maximum Extent of Parental Involvement in School-related Activities

School-related activities	Parental Involvement	
	No.	Percent
Discussing the schoolday	96	99.0
Assisting with schoolwork	95	98.0
Helping children prepare for schoolday	90	92.8
Supplying money for lunch at school	85	87.6
Conferring with teacher about children's schoolwork	84	86.6
Visiting children's classroom	83	85.6
Reading to children	82	84.5
Displaying items children made at school and brought home	79	81.4
Attending special programs at school	77	79.4
Supplying reference materials	73	75.3
Supplying money for milk at school	73	75.3
Sending items to school relating to unit being studied	70	72.2
Providing treats for school parties	57	58.8
Providing materials for special projects	44	45.4
Providing items for fund-raising events	43	44.3
Taking part in activities at school	26	26.8

Six of the school-related activities carried out by more than 80 percent of the families were primarily at-home activities. Table 14 summarizes extent of parental involvement in three of them. Table 15 summarizes the frequency and extent of parental time used in discussing the schoolday and in reading with children.

Table 14. Extent of Parental Involvement in School-related Activities at Home

Activities at home	<u>Both parents</u>		<u>Mother only</u>		<u>Neither parent</u>	
	No.	Percent	No.	Percent	No.	Percent
Discussing schoolday	80	82.5	16	16.5	1	1.0
Assisting with schoolwork	73	75.3	22	22.6	2	2.1
Reading to Children	60	61.9	22	22.6	15	15.5



Table 15. Parental Time Used for Two At-home School-related Activities

Approximate time each occasion	Discussing schoolday with children		Reading to children <sup>a</sup>	
	No.	Percent	No.	Percent
Daily				
30 to 60 min.	15	15.5	11	11.3
20 to 29 min.	10	10.3	9	9.3
10 to 19 min.	51	52.6	8	8.2
5 to 9 min.	11	11.3	--	----
Several times a week				
30 to 60 min.	--	----	25	25.8
20 to 29 min.	1	1.0	5	5.2
10 to 19 min.	5	5.2	8	8.2
5 to 9 min.	3	3.1	--	----
Weekly or less often				
30 to 60 min.	--	----	6	6.2
20 to 29 min.	--	----	5	5.2
10 to 19 min.	--	----	4	4.1
5 to 9 min.	--	----	--	----
Time not used	1	1.0	15	15.5

a One mother made no estimate of time use

Use of time estimated by mothers was interpreted as parental time used for an activity in each family. Mothers were not asked to differentiate time use by mothers and by fathers.

About 90 percent of the families reported using time every schoolday to discuss the schoolday with their children. Over 50 percent of the parents used from 10 to 20 minutes each day for discussions about the schoolday.

While in 62 percent of the families both parents used time for reading to their children, 15 percent of the families did not use time for this school-related activity (Table 14). Thirty-four

percent of the mothers said their children preferred to read to themselves and to their parents now that they had learned to read. Over one-third of the families used from 30 to 60 minutes each time parents and children read together.

Table 16 summarizes the frequency with which parents assisted children with schoolwork. The schoolwork with which they most frequently helped was reading and mathematics. Four mothers said it was fathers in their families who gave most assistance with schoolwork. Time used for assisting with schoolwork is summarized in Table 17.

Table 16. Frequency With Which Parents Assisted With Schoolwork

Frequency	Parental involvement	
	No.	Percent
Daily	58	59.8
Several times a week	24	24.7
Weekly or less often	13	13.4
Time not used	2	2.1

Table 17. Parental Time Used for Assisting Children With Schoolwork

Approximate time each occasion	Parents	
	No.	Percent
30 minutes or more	43	44.3
20 to 29 minutes	21	21.6
10 to 19 minutes	31	32.0
Time not used	2	2.1

Table 18 summarizes the help given children to get ready for the schoolday. Help included awakening him, laying out clothes, helping with dressing and hair combing.

Table 18. Help Given Children in Preparing for the Schoolday

Who helped	Mothers' responses	
	No.	Percent
Both parents	9	9.3
Mother	63	64.9
Father	3	3.1
Child doing most, mother giving some help	15	15.5
Child on his own	6	6.2
No response to question	1	1.0

In about 77 percent of the families, parental time was used in helping children with before schoolday preparations. In 65 percent of the families, mothers were the ones primarily responsible.

Some mothers mentioned other activities their children carried out before the schoolday started. Six mothers said their children read in the morning, some reading with a parent. Five mothers said their children carried out assigned chores. Twenty-three mothers mentioned recreational activities such as television, coloring, playing with siblings or pets. Table 19 indicates the inclusion of breakfast as a part of the before schoolday routine.

Table 19. Breakfast Before the Schoolday

Who prepared	Mothers' responses	
	No.	Percent
Breakfast mentioned but not elaborated	55	56.7
Mother prepared	28	28.9
Father prepared	2	2.1
Child prepared own	5	5.2
Child fed elsewhere	2	2.1
No mention of breakfast	5	5.2

In two families where children were fed breakfast away from home, both parents reported for work so early that they could not feed their children at home. One child was taken to a day care center, the other to a babysitter where breakfast was provided.

One question was intended to determine parental involvement in regular transportation of children to school. Most children walked. A school bus transported 21 of them to their assigned school which

was several miles from their neighborhood. Six parents regularly drove children to school.

Table 20 summarizes the frequency with which parents provided money for purchase of lunch and milk at school. Three mothers said lunches were usually packed for their children. In 87 percent of the families money was provided for children to buy lunches at school. However, almost 40 percent of the families did not give children money for lunch every schoolday. Seventy-five percent of the families provided money for milk with 48 percent giving their children money each schoolday. About 27 percent gave their children money for milk less often than daily.

Table 20. Number and Frequency of Parents Providing Lunch and Milk Money

	Parents who provided		Frequency					
			daily		several times a week		occasionally	
	No.	Percent	No.	%	No.	%	No.	%
Lunch	85	87.6	47	48.5	28	28.9	10	10.3
Milk	73	75.3	47	48.5	15	15.5	11	11.3

Extrapolating from frequency and each time costs, estimates of annual costs for lunch and milk were computed (Table 21).

Table 21. Each Time and Annual Costs of Providing Lunch and Milk Money

Costs	Parents	
	No.	Percent
<b>Lunch</b>		
Each time:		
30 cents	47	48.5
35 cents	38	39.2
Annual:		
daily <sup>a</sup>		
\$50.00 to \$63.00	53	54.6
several times a week <sup>b</sup>		
\$25.00 to \$49.99	18	18.6
occasionally <sup>c</sup>		
less than \$24.99	14	14.4
No cost	12	12.4
<b>Milk</b>		
Each time:		
5 cents	69	71.7
10 cents	4	4.1
Annual:		
daily <sup>a</sup>		
\$9.00 to \$18.00	4	4.1
several times a week <sup>b</sup>		
\$9.00	43	44.3
occasionally <sup>c</sup>		
less than \$9.00	26	26.8
No cost	24	24.7

a Calculated on basis of 180 schooldays in school year

b Calculated on basis of three times a week for 36 weeks

c Calculated on basis of once a week for 36 weeks in school year

Acceptance and handling of items children made at school and brought home was one indication of parental interest in the child's efforts. Table 22 summarizes ways in which families handled these items.

Table 22. Handling of Children's School Handiwork at Home

Method of handling	Mothers' responses <sup>a</sup>	
	No.	Percent
Displayed in general area of family home	57	58.8
Showed to family members, discussed, displayed, then saved or shared	11	11.3
Displayed in child's own room or area designated as his	22	22.7
Items saved	42	43.3
Items evaluated to determine further handling	3	3.1
No response to question	2	2.1

a Where mothers gave more than one response, all were coded

Among the school-related activities in which parents were involved, the largest proportions were those carried out at home. Discussing the schoolday and assisting with schoolwork were almost universally carried out by families. Both mothers and fathers were involved in three-fourths or more of the families. It may be that these two activities were readily recognized as school-related and parents saw them as helping to advance their children's education.

Parents also helped with at-home activities that may have been less easily recognized as adding to their children's chances for success in school. They were: reading with children and accepting and displaying the items children made at school and brought home. These two activities were carried out in more than 80 percent of the families.

Parents helped children get ready for the schoolday, more mothers than fathers were involved in this activity. Parents made provisions for lunch and milk at school, but not all the parents and not on every schoolday.

Generally, parental involvement was not as great in at-school as in at-home school-related activities (Table 13). The proportion of parents who shared in at-school school-related activities was not as great as proportion of parents who shared in school-related activities at home. Yet, well over one-third of both mothers and fathers went to school for some activity. Table 23 summarizes parental involvement in three of the at-school activities.

Table 23. Extent of Parental Involvement in School-related Activities at School

Activities at school	Both parents		Mother only		Neither parent	
	No.	Percent	No.	Percent	No.	Percent
Visiting classrooms	43	44.3	40	41.2	14	14.4
Attending special programs at school	39	40.2	38	39.2	20	20.6
Conferring with teacher about schoolwork	36	37.1	48	49.5	13	13.4



Table 24 summarizes the frequency and extent of parental time used for conferring with teachers. Mothers were asked if they conferred with teachers about both schoolwork and non-schoolwork.

Table 24. Parental Time Used for Conferring With Teachers

Approximate time each conference	Conferred about schoolwork <sup>a</sup>		Conferred about non-schoolwork	
	No.	Percent	No.	Percent
Five or more times this year				
1 hr. or more	2	2.1	--	----
30 to 59 min.	5	5.2	3	3.1
10 to 29 min.	7	7.2	4	4.1
Two to four times this year				
1 hr. or more	2	2.1	1	1.0
30 to 59 min.	6	6.2	6	6.2
10 to 29 min.	42	43.3	22	22.7
One time this year				
1 hr. or more	--	----	2	2.1
30 to 59 min.	3	3.1	4	4.1
10 to 29 min.	16	16.5	6	6.1
Time not used	13	13.4	49	50.5

a One mother made no estimate of time used

Eighty-seven percent of the parents conferred with teachers about children's schoolwork and half of them conferred with teachers about non-schoolwork. Health and behavior were the non-schoolwork problems most frequently mentioned. Most of the parent-teacher conferences were from 10 to 30 minutes in length. Table 25 summarizes parental time used for visiting classrooms.

Table 25. Parental Time Used for Visiting Classrooms

Approximate time each visit	Parents	
	No.	Percent
Four or five times this year		
1 to 2 hrs.	1	1.0
30 to 59 min.	5	5.2
10 to 29 min.	6	6.2
Two or three times this year		
1 to 2 hrs.	16	16.5
30 to 59 min.	11	11.3
10 to 29 min.	25	25.8
One time this year		
1 to 2 hrs.	10	10.3
30 to 59 min.	6	6.2
10 to 29 min.	3	3.1
Time not used	14	14.4

Over half the parents visited children's classrooms two or three times during the school year. In about 25 percent of the families, each visit lasted from 10 to 30 minutes. Table 26 summarizes the frequency with which parents attended special programs at school.

Table 26. Frequency with Which Parents Attended Special Programs at School

Frequency	Parental involvement	
	No.	Percent
Four or more times	14	14.4
Three times	12	12.4
Two times	31	32.0
One time	20	20.6
Time not used	20	20.6

In 40 percent of the families, both parents attended special school programs. In another 40 percent, mothers attended programs alone. The remaining 20 percent of the parents did not carry out this school-related activity (Table 23). Table 27 summarizes parental time used for attending special school programs.

Table 27. Parental Time Used for Attending Special School Programs

Approximate time each occasion	Parents	
	No.	Percent
Two or more hours	39	40.2
One hour to 1 hour and 59 min.	31	32.0
15 to 59 min.	7	7.2
Time not used	20	20.6

Table 28 indicates the number of activities with which mothers helped at school. Table 29 summarizes the amount of time mothers estimated having used to help with activities at school. Mothers said they were the ones who helped at school. No mother said the child's father had helped with at-school activities.

Table 28. Mothers Who Helped at School

Number of activities this year	Mothers	
	No.	Percent
Four or five	1	1.0
Two or three	8	8.2
One	17	17.5
None	71	73.3

Table 29. Mothers' Use of Time for At-school Activities

Time used this year	Mothers	
	No.	Percent
10 to 20 hours or more	2	2.1
2 hours to 9 hours and 59 min.	14	14.4
30 to 119 minutes	10	10.3
Time not used	71	73.3

Twelve mothers said they helped with fund-raising events at school. Eight served as room mothers, seven went to school to assist with parties, six chaperoned field trips, and five mothers served as assistants in the library or cafeteria, as teacher's aides, or as block parents.

Table 30 summarizes parental provision of references for the children to use at home. Table 31 includes the approximate annual costs to parents of providing references for children's use at home.

Table 30. Frequency and Number of References Parents Supplied

Parents who supplied	Times this year				Number of references					
	Several		One or two		Three or four		Two		One	
	No.	%	No.	%	No.	%	No.	%	No.	%
73	45	46.4	28	28.9	11	11.3	10	10.2	52	53.6

Table 31. Approximate Annual Cost of Supplying References for Use at Home

Parents who supplied	Approximate Annual Cost									
	Over \$100		\$25 to \$100		\$10 to \$25		\$1 to \$10		Less than \$1	
	No.	%	No.	%	No.	%	No.	%	No.	%
73	3	3.1	11	11.3	15	15.5	27	27.8	17	17.5

Parents were occasionally asked to provide materials for use in special projects at school. In thirty-five percent of the families such materials were supplied infrequently; another 10 percent supplied them several times during the year. Most were items readily found at home such as milk and egg cartons, baby food jars, plastic

bottles, and cans. In eight percent of the families, materials were purchased. Half of those families who purchased items spent less than \$1.00 and half spent more than \$1.00 but less than \$4.00. Fourteen percent of the parents had not been asked to supply materials for special school projects.

Parents were occasionally asked to send items to school relating to a unit being studied. Table 32 summarizes the frequency with which parents sent items to school.

Table 32. Frequency With Which Parents Sent Items to School Relating to a Unit Being Studied

Number of times this year	Parents	
	No.	Percent
Weekly (36 times)	6	6.2
Every two weeks or monthly (9 - 18 times)	14	14.4
5 to 6 times	12	12.4
3 to 4 times	20	20.6
1 to 2 times	18	18.6
Items not sent	27	27.8

Those items sent to school which related to a unit being studied included mementos from trips, pictures, books, records, collections, sporting and recreational items.

Two other activities not directly related to educational programs, but supplementary to total school programs, were investigated. They were sending treats to school for special occasions and contributing

items for fund-raising events held to benefit schools. Table 33 summarizes the frequency with which families sent treats to schools.

Table 33. Frequency With Which Families Sent Treats to School

Number of times	Families	
	No.	Percent
Eight to ten times	5	5.2
Five to seven times	2	2.1
Two to four times	26	26.8
One time	24	24.7
Treats not sent	40	41.2

Table 34 summarizes the estimated costs each time a treat was provided. Based upon reported frequencies, an approximate annual cost for providing school treats was computed.





Table 34. Approximate Costs of Providing Treats for Special Occasions

Costs	Mothers' responses	
	No.	Percent
Each time:		
\$2.00 to \$6.00	15	15.5
\$1.00 to \$2.00	28	28.9
Less than \$1.00	14	14.4
Annual:		
\$5.00 to \$12.00	9	9.3
\$3.00 to \$5.00	21	21.6
Less than \$3.00	27	27.8

Table 35 summarizes the frequency with which families provided items for school fund-raising events. Table 36 summarizes the estimated costs of providing items for school fund-raising events. Based upon reported frequencies, an approximate annual cost to families for providing items for school fund-raising events was computed.

Table 35. Frequency With Which Families Provided Items for School Fund-raising Events

Number of times	Families	
	No.	Percent
Two or three times	9	9.3
One time	34	35.0
Not provided	54	55.7

Table 36. Approximate Costs of Providing Items for School Fund-raising Events

Costs	Mothers' responses	
	No.	Percent
Each time:		
\$2.00 to \$3.50	15	15.5
\$1.00 to \$2.99	24	24.7
Less than \$1.00	4	4.1
Annual:		
\$4.00 to \$21.00	5	5.2
\$2.00 to \$3.99	15	15.5
\$1.00 to \$2.99	19	19.6
Less than \$1.00	4	4.1

More than two-thirds of the parents were involved in some at-school activities related to their children's schooling. Where fathers' participation decreased, that of mothers-only increased. The activity which fewest fathers shared was conferring with teachers. However, in 37 percent of the families, both parents did confer with teachers about children's schoolwork.

Activities with the least parental involvement were those requiring help given at school. In only about one-fourth of the families was parental time used in going to school to help with activities. Mothers carried out the helping at-school activities. Several mothers said that younger children at home prevented it or that they had not been asked to help at school.

Discretionary use of money was reported for three activities: providing references for children to use at home, furnishing treats for special occasions at school, and contributing items for school fund-raising events. More parents thought it important to provide references for children to use at home than to provide treats for special school occasions or to send items to school fund-raising events.

Parents sometimes sent items that related to a unit the children were studying. Other parents hesitated to do so saying that schools had not asked nor encouraged the sending of items to supplement the school's programs. Parents occasionally provided materials for special projects at school. Materials most frequently sought were those readily found at home.

Two open-ended questions were included in the interview schedule to elicit free responses from mothers. So few answers were gained from the second question that its answers were coded with the first. It had been included mid-way through the schedule to allow mothers to volunteer additional ideas that may have been stimulated during the interview. The open-ended question asked mothers what help they thought schools wanted from parents. Table 37 summarizes their answers.

Table 37. Mothers' Expressed Ideas of the Help Schools Wanted From Parents

Categories of help wanted	Mothers' responses <sup>a</sup>	
	No.	Percent
To belong to PTA and to help with its activities	28	28.9
To assist child with learning	20	20.6
To help child "keep up" in school	16	16.5
To help child develop his personal abilities	15	15.5
To show interest, to encourage and appreciate his efforts in school	12	12.4
To help with activities at school such as room mother, field trip chaperone, etc.	11	11.3
To visit classroom	5	5.1
Think no help is wanted	11	11.3
Irrelevant answers to question	20	20.6
No response to question	1	1.0

<sup>a</sup> Where mothers expressed more than one idea, each was coded

Thirty-seven percent of the responses indicated that mothers thought schools wanted parents to help children with learning related activities. Twenty percent of the answers mentioned help with specific learnings such as mathematics, science, vowels, and reading. Sixteen percent of the responses were general statements such as helping with schoolwork or helping children "keep up" with their schoolwork. Twenty percent of the free response answers were

irrelevant statements such as: "All the help I can give", "In any way I can", and "Help when I am able to."

Teachers were surveyed by questionnaire inquiring into what help they wanted from parents. Teachers' responses are found in Table 38.

Table 38. Teachers' Expressed Ideas of Help Schools Wanted From Parents

Categories of help wanted	Teachers' responses <sup>a</sup>	
	No.	Percent
To confer with teacher about child's schoolwork	15	100.0
To visit child's classroom	14	93.3
To read to child frequently or as often as possible	14	93.3
To attend special programs at school when held or when able to	14	93.3
To help at school as needed as teachers' aides, classroom tutors, playground assistants, etc.	13	86.6
To assist child with learning as he needs it or asks for it	13	86.6
To show interest in and to encourage child's efforts in school	11	73.3
To help develop his personal abilities through experiences supplementary to school	8	53.3
To contribute to school parties for certain occasions, when asked or when parents want to	8	53.3
To contribute to fund-raising events when asked or when parents care to	8	53.3
To guide development of the child's personal habits: enough sleep, breakfast before school, time for TV	3	20.0
To know teacher and be familiar with program of school child attends	3	20.0

a All answers by teachers coded according to these categories

Teachers agreed about activities related to children's learning. Less agreement was found among activities supplementary to the schools' educational programs. All teachers said they expected parents to confer with them about children's schoolwork. Their answers indicated some difference of opinion about the frequency of the conferences. Forty-eight percent said they expected parents to confer when they felt it necessary or wanted to. Thirteen percent of the teachers said conferences should be held at either parent or teacher request, and 20 percent said they expected parents to confer regularly with them. None of the mothers volunteered the idea that they thought schools wanted parents to confer with teachers (Table 37). Yet, 87 percent of the families reported having conferred with teachers about schoolwork (Table 13).

Ninety-three percent of the teachers' responses indicated expectations for parental visits to classrooms. Five percent of the mothers said they thought schools wanted parents to visit classrooms (Table 37). In about 85 percent of the families, parents had visited their children's classrooms (Table 13).

Ninety-three percent of the teachers said they expected parents to attend special programs at school. No mother voluntarily said that attending programs was one way parents helped schools (Table 37). In 79 percent of the families one or both parents had attended special programs at school (Table 13).

Eleven percent of the mothers said they thought schools wanted help from parents with activities at school (Table 37). Almost 27 percent of the families had helped with some at-school activities

(Table 13). Eighty-six percent of the teachers said that they expected at-school help from parents (Table 38).

Parents were involved in school-related activities. Teachers expected certain kinds of parental involvement. Yet mothers' responses indicated that they were not thinking of parental involvement in school-related activities as being of help to schools.

#### Parental School Involvement Scores

Frequency and extent of time used for school-related activities and parental involvement in them were used to determine parental school involvement scores (Appendix B).

Three sub-scores were computed and the total score added from the sub-score points for each family. Sub-score I consisted of the school-related activities serving as indicators of parental interest in and encouragement of children's schooling. Included were: discussing the schoolday, visiting the classroom, sending items to school relating to a unit being studied, helping children get ready for the schoolday, accepting and displaying items children made at school and brought home. Table 39 summarizes the distribution of parental school involvement scores for sub-score I.



Table 39. Parental School Involvement Sub-score I

Range and scores	Frequency
0 - 2	0
3 - 5	0
6 - 8	4
9 - 11	5
12 - 14	26
15 - 17	16
18 - 20	25
21 - 23	13
24 - 26	6
27 - 29	2
30 - 32	0
33 - 35	0
36 - 38	0
	<hr/> 97

---

Median - 18

Thirty-six points were assigned as the possible total for sub-score I. Parental scores ranged from six to 27. One family had a score of six and two families had scores of 27. No family had a score of zero and none had a score of 36.

Sub-score II consisted of the school-related activities which served as indicators of interest in helping children learn. Included were: conferring with the teacher about schoolwork, assisting with schoolwork, reading to children, providing materials for special school projects, supplying references for children to use at home. Distribution of parental school involvement scores for sub-score II are summarized in Table 40.

Table 40. Parental School Involvement Sub-score II

Range and scores	Frequency.
0 - 2	1
3 - 5	0
6 - 8	1
9 - 11	3
12 - 14	6
15 - 17	11
18 - 20	16
21 - 23	10
24 - 26	19
27 - 29	11
30 - 32	10
33 - 35	2
36 - 38	6
39 - 41	1
	<hr/> 97
<hr/> Median - 24	

Forty points were assigned as the possible total score for sub-score II. When computed, one family had a score of one and one family had a score of 40. No family had a score of zero.

Sub-score III consisted of school-related activities considered to be indicators of parental interest in helping at school. Activities which were supplementary to schools' education programs were grouped in sub-score III. It included: attending special programs at school, helping with activities at school, sending treats for special occasions, sending items for fund-raising events. Distribution of parental school involvement scores for sub-score III are summarized in Table 41.

Table 41. Parental School Involvement Sub-score III

Range and scores	Frequency
0 - 2	12
3 - 5	17
6 - 8	17
9 - 11	30
12 - 14	14
15 - 17	7
18 - 20	0
21 - 23	0
	<hr/> 97
<hr/> Median - 8	

Twenty-three points were assigned as the possible total score for sub-score III. Scores ranged from zero to 17. Seven families had a score of zero. One family had a score of 17. No family had a score of 23.

The three sub-scores were added to arrive at the total score for each family. Distribution of total parental school involvement scores are summarized in Table 42.

Table 42. Parental School Involvement Total Score

Range and scores	Frequency
20 - 22	0
23 - 25	2
26 - 28	1
29 - 31	6
32 - 34	4
35 - 37	7
38 - 40	9
41 - 43	8
44 - 46	9
47 - 49	7
50 - 52	6
53 - 55	11
56 - 58	6
59 - 61	8
62 - 64	5
65 - 67	6
68 - 70	0
71 - 73	2
74 - 76	0
77---99	0
	<hr/> 97
<hr/> Median - 48	

It was possible for a family to have a total score of 99. However, scores computed for families ranged from 23 to 72. Two families had total parental school involvement scores of 23. One family had a total parental school involvement score of 72.

## PART 2

### Tests of Hypotheses

A correlation matrix for twelve variables is presented in Table 43. Few of the variables were related. Level of significance chosen was  $p = 0.05$  if the  $r$  was  $\pm 0.50$ .

Table 43. Correlation Matrix for Twelve Variables

	No. other children in family	No. other children in family	Mothers' education	Fathers' education	Fathers' occupation	Social class position	Mothers' employment	Mothers' mem- bership in groups	Family income	Sub-score I	Sub-score II	Sub-score III	Total score
No. other children in family	1.00												
Mothers' education	-0.126	1.00											
Fathers' education	0.107	0.55	1.00										
Fathers' occupation	-0.025	-0.35	0.62	1.00									
Social class position	-0.018	-0.43	-0.78	0.91	1.00								
Mothers' employment	-0.245	0.009	-0.12	0.04	0.09	1.00							
Mothers' membership in groups	-0.015	0.026	-0.19	-0.11	-0.14	0.18	1.00						
Family income	-0.133	0.464	0.39	-0.32	-0.38	0.23	0.14	1.00					
Sub-score I	0.028	0.002	0.12	-0.13	-0.12	0.14	0.24	0.13	1.00				
Sub-score II	0.078	0.085	0.03	-0.11	-0.09	0.07	0.01	0.14	0.17	1.00			
Sub-score III	0.073	0.093	0.25	-0.20	-0.21	0.08	0.48	0.25	0.40	0.19	1.00		
Total score	0.089	0.090	0.16	-0.19	-0.18	0.13	0.28	0.23	0.65	0.78	0.66	1.00	

df = 89      p = 0.05 if  $r \geq 0.50$

Significant correlations were found between fathers' educational attainment and fathers' occupation; between fathers' occupation and social class position of families. There seems to be some relationship between fathers' and mothers' educational attainment. A summary of means and standard deviations for the twelve variables appears in Table 44.

Table 44. Summary of Means and Standard Deviations of Twelve Variables Measured for 97 Families

Variables	Means	Standard deviations
No. other children in family	2.155	0.763
Mothers' education	2.100	0.861
Fathers' education	3.211	1.106
Fathers' occupation	4.322	1.444
Social class position	3.655	0.962
Mothers' employment	1.600	0.804
Mothers' membership in groups	2.711	0.940
Family income	3.577	1.005
Sub-score I	18.333	4.743
Sub-score II	23.466	7.756
Sub-score III	7.944	4.548
Total score	49.744	12.135



The level of significance chosen for rejection of an hypothesis was the probability of chance success of five percent ( $p = 0.05$ ). It was used as the basis for rejecting or not rejecting each hypothesis.

### Hypothesis One

There is no difference in resources used for school-related activities among parents in social class groups.

Hypothesis one was not rejected. The pre-determined level of significance of 0.05 was not reached in the one-way analysis of variance testing of differences among means of family social class groups with each parental school involvement sub-score and total score.

Analysis of variance findings are summarized in Table 45.

Table 45. Summary of One-way Analyses of Variance: Parental School Involvement and Family Social Class<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	89.90	4	22.47	0.956	0.436
error	2162.56	92	23.51		
Sub-score II					
source	319.4	4	78.86	1.334	0.263
error	5507.0	92	59.86		
Sub-score III					
source	164.3	4	41.07	2.189	0.076
error	1726.2	92	18.76		
Total score					
source	1330.	4	332.6	2.347	0.060
error	13038.	92	141.7		

a Mean and variance summary found in Appendix C Table 76.

Family social class groups were: I (upper), II (upper-middle), III (lower-middle), IV (upper-lower), and V (lower-lower) as shown in Table 1.

One-way analysis of variance testing did not reveal differences among means of family social class groups and parental school involvement at the pre-determined level of significance. There was movement toward significant relationships, however, in tests of means of family social class groups, sub-score III and total parental school involvement score.

Duncan's modified least significant difference test which tests homogeneity of the means was applied to these data. Duncan's test showed that none of the means of family social class groups were significantly different from each other when tested with sub-score I and sub-score II. When tested with sub-score III, means of social class groups II (upper-middle) and V (lower-lower) did differ significantly from each other.

Duncan's test of means of family social class and total parental school involvement score showed homogeneity of means for social class groups I (upper) and IV (upper-lower). Means of those two groups did not differ from each other but differed significantly from means of social class groups II (upper-middle), III (lower-middle) and V (lower-lower) when tested with total parental school involvement scores.

In a further test of possible relationships, a statistical measure (the Mann-Whitney U test) was applied to scores of families in the social class groups at ends of the continuum. Combined scores for the 11 families in social class group I (upper) and in group II

(upper-middle) were tested with those of the 15 families in social class group V (lower-lower). No significant statistical relationship was obtained.

Findings of one-way analysis of variance testing of hypothesis one did not permit rejection of the hypothesis. Duncan's least significant difference test was applied to those results moving toward the 0.05 probability level.

#### Hypothesis Two

There is no difference in resources used in school-related activities and selected family characteristics.

Hypothesis two was rejected. With two exceptions, no one-way analysis of variance test reached the pre-determined level of significance. Significant probability levels (0.05) were obtained, however, in the differences of means of family income categories and parental school involvement sub-score II. Differences also occurred in means of family income categories and total parental school involvement score. Table 46 summarizes the one-way analyses of variance testing of parental involvement in school-related activities and families grouped by family income.

Table 46. Summary of One-way Analyses of Variance: Parental School Involvement and Family Income Categories<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	114.3	4	28.57	1.260	0.292
error	2040.1	90	22.67		
Sub-score II					
source	608.1	4	152.02	2.683	0.036*
error	5100.1	90	56.67		
Sub-score III					
source	124.5	4	31.13	1.617	0.177
error	1732.2	90	19.25		
Total score					
source	1663.	4	415.8	3.080	0.020*
error	12149.	90	135.0		

a Mean and variance summary found in Appendix C Table 77

\* Significant at 0.05 level

Means of family income categories (Table 11) were significantly different (0.036) when tested with sub-score II, the grouping of school-related activities that indicated parental interest in helping children learn. A probability level of 0.02 was obtained when means of family income categories were tested with total parental school involvement scores.

Duncan's least significant difference test (DLSD) was applied to data to determine the significant differences among means of family income categories. Findings are summarized in Tables 47 and 48.

Table 47. DLSD Test of Means of Family Income Categories and Parental School Involvement Sub-score II

Income Categories	N	Means <sup>a</sup>
4 (\$10,000 - \$12,999)	30	26.4000 A
5 (\$13,000 and over)	18	22.7220 AB
3 (\$8,000 - \$9,000)	32	21.6880 B
2 (\$5,000 - \$7,999)	10	21.4000 B
1 (under \$5,000)	5	17.000 B

a Means followed by same letter are not significantly different from each other

Duncan's test showed two homogeneous groupings of means of family income categories when tested with parental school involvement sub-score II. Means of income categories of \$10,000 to \$12,999 and of \$13,000 and over were not significantly different from each other. Means of family income categories of under \$5,000, \$5,000 to \$7,999, \$8,000 to \$9,999 and of \$13,000 and over were not significantly different from each other. The significant difference in means was found to exist between income category \$10,000 to \$12,999 and those of family income categories below \$10,000.

Similar results were obtained when family income categories were tested with total parental school involvement score. The Duncan's least significant difference test results are summarized in Table 48.

Table 48. DLSD Test of Means of Family Income Categories and Parental School Involvement Total Score

Income Categories	N	Means <sup>a</sup>
4 (\$10,000 - \$12,999)	30	54.1330 A
5 (\$13,000 and over)	18	50.5000 AB
3 (\$8,000 - \$9,999)	32	47.4690 B
2 (\$5,000 - \$7,999)	10	42.0000 B
1 (under \$5,000)	5	41.6000 B

a Means followed by same letter are not significantly different from each other

One-way analysis of variance tests were applied to the specified family characteristics of fathers' occupation, fathers' education, mothers' education, mothers' employment, mothers' membership in groups, sex of first grade children, and number of other children in the families. Summaries of the analyses of variance testing are reported in the following tables.

Table 49. Summary of One-way Analyses of Variance: Parental School Involvement and Fathers' Occupation<sup>a</sup>

Parental School Involvement Score	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	88.0	6	14.67	0.610	0.722
error	2164.45	90	24.05		
Sub-score II					
source	515.8	6	85.97	1.457	0.202
error	5310.6	90	59.01		
Sub-score III					
source	185.5	6	30.92	1.632	0.147
error	1705.0	90	18.94		
Total score					
source	1572.	6	262.0	1.843	0.100
error	12796.	90	142.2		

a Mean and variance summary found in Appendix C Table 78

Table 50. Summary of One-way Analyses of Variance: Parental School Involvement and Fathers' Education<sup>a</sup>

Parental School Involvement Score	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	124.4	5	24.88	1.055	0.391
error	2123.1	90	23.59		
Sub-score II					
source	83.31	5	16.66	0.274	0.926
error	5477.43	90	60.86		
Sub-score III					
source	200.8	5	40.16	2.144	0.067
error	1686.0	90	18.73		
Total score					
source	839.6	5	167.9	1.153	0.339
error	13109.9	90	145.7		

a Mean and variance summary found in Appendix C Table 79

One-way analysis of variance testing of means of fathers' education categories (Table 3) did not obtain results at the pre-determined level of significance (0.05). There was movement toward significant relationship when means of fathers' education categories were tested with parental school involvement sub-score III. Those were school-related activities indicating parental interest in helping at school.

The Duncan's modified least significant difference test was applied to the data. One cell included one case and another included two. Therefore, caution is indicated in interpreting the findings. The means that were significantly different from each other when tested with sub-score III were those for education beyond high school and below attainment of high school graduation.

Table 51. Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Education<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	61.42	4	15.36	0.645	0.632
error	2191.03	92	23.82		
Sub-score II					
source	179.8	4	44.96	0.732	0.572
error	5646.6	92	61.38		
Sub-score III					
source	85.13	4	21.28	1.085	0.369
error	1805.37	92	19.62		
Total score					
source	360.6	4	90.15	0.592	0.669
error	14007.8	92	152.26		

a Mean and variance summary found in Appendix C Table 80



Table 52. Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Employment<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	49.48	1	49.48	2.094	0.151
error	2197.43	93	23.63		
Sub-score II					
source	29.23	1	29.23	0.501	0.481
error	5422.52	93	58.31		
Sub-score III					
source	5.968	1	5.968	0.301	0.585
error	1845.022	93	19.839		
Total score					
source	221.5	1	221.5	1.528	0.220
error	13482.9	93	145.0		

a Mean and variance summary found in Appendix C Table 81

Table 53. Summary of One-way Analyses of Variance: Parental School Involvement and Mothers' Membership in Groups<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	178.6	5	35.72	1.599	0.169
error	1921.6	86	22.34		
Sub-score II					
source	236.5	5	47.30	0.778	0.568
error	5227.8	86	60.79		
Sub-score III					
source	474.0	5	94.80	5.821	0.001 <sup>b</sup>
error	1400.5	86	16.28		
Total score					
source	1178.	5	235.5	1.624	0.162
error	12477.	86	145.1		

a Mean and variance summary found in Appendix C Table 82

b Variance could not be computed. One cell contained one case. It cannot be interpreted as significant.

Table 54. Summary of One-way Analyses of Variance: Parental School Involvement and Sex of First Grade Children<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	24.39	1	24.39	1.040	0.310
error	2228.06	95	23.45		
Sub-score II					
source	102.6	1	102.57	1.702	0.195
error	5723.9	95	60.25		
Sub-score III					
source	8.415	1	8.415	0.425	0.516
error	1882.080	95	19.811		
Total score					
source	5.234	1	5.234	0.035	0.853
error	14363.137	95	151.191		

a Mean and variance summary found in Appendix C Table 83

Table 55. Summary of One-way Analyses of Variance: Parental School Involvement and Number of Other Children in Families<sup>a</sup>

Parental School Involvement Scores	Sum of squares	df	Mean squares	F ratio	p
Sub-score I					
source	0.9426	3	0.3142	0.013	0.998
error	2251.5110	93	24.2098		
Sub-score II					
source	198.3	3	66.09	1.092	0.357
error	5628.2	93	60.52		
Sub-score III					
source	23.96	3	7.987	0.398	0.755
error	1866.53	93	20.070		
Total score					
source	149.5	3	49.83	0.326	0.807
error	14218.9	93	152.89		

a Mean and variance summary found in Appendix C Table 84

None of the one-way analyses of variance tests revealed differences in parental school involvement when tested with the specified family characteristics of: fathers' occupation, fathers' education, mothers' education, mothers' employment, mothers' membership in groups, sex of families first grade children, and number of other children in families.

One-way analyses of variance tests did reveal significant differences when means of family income categories were tested with parental school involvement sub-score II and with total parental school involvement score. The pre-determined probability level of 0.05 was reached. Therefore, family income made some difference in parental involvement in those school-related activities serving as indicators of parental interest in helping children learn.

To determine the significant differences among means of family income categories, the Duncan's modified least significant difference test was applied to the data. Mean of the family income category of \$10,000 to \$12,999 differed significantly from means of groups of family incomes falling below \$10,000.

Duncan's test revealed similar results when means of family income categories were tested with total parental school involvement score. The mean significantly different was that of the family income category of \$10,000 to \$12,999 and means of family income categories below \$10,000.

Since family income and parental school involvement sub-score II and total score did reach the pre-determined level of significance (0.05) when tested, hypothesis two was rejected.

Movement toward significant relationship ( $p = 0.067$ ) was obtained when means of fathers' education categories were tested with parental school involvement sub-score III. The Duncan's modified least significant difference test was applied. Means of fathers' education categories differing significantly from each other were those where more than 12 years of education had been completed and those with less than 12 years of education.

### Hypothesis Three

There is no relationship between provision of supplementary school items and selected family characteristics.

Hypothesis three was rejected. Table 56 summarizes items parents provided supplementing their children's education and results of chi square testing of relationships with selected family characteristics.

Table 56. Chi Square Test of Parents Providing Supplementary Items and Selected Family Characteristics

	Fathers' occupation		Family income		Fathers' education	
	Chi square	p	Chi square	p	Chi square	p
Items provided	df=6		df=5		df=6	
Treats for special occasions	12.81	0.046*	4.789	0.442	7.009	0.319
Items for school fund-raising events	8.097	0.231	6.154	0.292	8.794	0.185
Materials for special school projects	6.497	0.369	5.560	0.351	1.231	0.975
References for use at home	5.346	0.500	7.392	0.193	11.856	0.065
Hire babysitter when going to school	18.772	0.004*	3.809	0.577	16.082	0.013*

\* significant > 0.05

Table 56. (continued)

	Mothers' education		Mothers' employment		Sex of first grade children	
	Chi square	p	Chi square	p	Chi square	p
Items provided	df=4		df=2		df=1	
Treats for special occasions	5.801	0.215	1.122	0.570	2.815	0.093
Items for school fund-raising events	5.911	0.206	0.771	0.680	0.352	0.553
Materials for special school projects	5.187	0.269	10.284	0.0058*	1.752	0.186
References for use at home	4.965	0.291	1.185	0.553	0.089	0.765
Hire babysitter when going to school	5.438	0.245	0.044	0.978	0.153	0.695

\* significant > 0.05

The pre-determined level of significance ( $p = 0.05$ ) was reached in the chi square test of providing a babysitter when parents went to school and fathers' occupation; in the chi square test of providing a babysitter and fathers' education; in the chi square test of sending treats to school and fathers' occupation; and, in the chi square test of providing materials for special school projects and mothers' employment.

For those findings where level of significance was reached, a second frequency distribution analysis was run with chi square. Row and column cells were collapsed to eliminate empty cells and those containing frequencies less than five where possible. Fewer degrees of freedom resulted. Significant probability levels ( $0.05$ ) were confirmed. Table 57 summarizes the findings of the second chi square test. On the basis of these findings hypothesis three was rejected.

Table 57. Chi Square Test of Six Variables

	Supplementary Items Provided					
	Hired baby-sitter		Sent treats to school		Provided materials special projects	
Family characteristics	chi square	p	chi square	p	chi square	p
	df=3		df=4		df=2	
Fathers' education	13.93	0.003*				
Fathers' occupation	18.15	0.001*	9.21	0.056*		
Mothers' employment					10.284	0.006*
* significant	0.05					

#### Hypothesis Four

There is no relationship between help mothers said they thought schools wanted and parental involvement in school-related activities.

Hypothesis four cannot be rejected. Table 58 summarizes computed chi squares for mothers' response of, "No help wanted" and parental involvement in school-related activities. Table 59 summarizes mothers' response of "Assist child with learning" and parental involvement in school-related activities.

Table 58. Chi Square Test of Mothers' Response: "No Help Wanted" and Parental Involvement in School-related Activities

School-related activities	Mothers' response: "No help wanted"		
	Computed chi square	df=3	p
Discussing schoolday	0.343		0.952
Assisting with schoolwork	3.945		0.268
Reading to children	2.436		0.488
Visiting classroom	1.544		0.672
Conferring with teacher about schoolwork	5.056		0.168
Attending special school programs	3.946		0.267



Table 59. Chi Square Test of Mothers' Response: "Assist with Learning" and Parental Involvement in School-related Activities

School-related activities	Mothers' response: "Assist with learning"		
	computed chi square	df=1	p
Assisting with schoolwork	0.068		0.794
Visiting classroom	1.428		0.232
Conferring with teacher about schoolwork	0.0016		0.968
Attending special school programs	0.055		0.814

Chi square was used to test for possible relationships between mothers' responses and school-related activities. The pre-determined probability level (0.05) was not reached in tests of mothers' response, "Help children develop abilities," and parental involvement in assisting with schoolwork (chi square 0.118 and  $p = 0.732$ ).

Mothers' responses were tested by chi square with mothers-only involvement in school-related activities. Probability levels were not judged to be significant in tests of mothers' responses, "No help wanted," and discussing the schoolday (chi square 0.497 and  $p = 0.919$ ); nor in the "No help wanted," response and reading to children (chi square 0.807 and  $p = 0.848$ ).

Mothers' response, "Assist with learning" was tested by chi square with mothers-only involvement in assisting children with schoolwork. The pre-determined level of probability (0.05) was not reached (chi square 1.084 and  $p = 0.582$ ). When the "Assist with learning"

response was tested with mothers-only involvement in attending special school programs, the level of significance was not reached (chi square 0.729 and  $p = 0.393$ ).

Mothers' response, "Assist with learning," was tested by chi square with mothers' involvement in visiting the classroom. A marginal probability level (0.062) was reached. However, findings cannot be accepted uncritically since responses from mothers were few and some of the cells contained less than five cases.

Chi square testing of mothers' responses to the open-ended question asking what help they thought schools wanted from parents and parental involvement in school-related activities led to findings that do not support rejection of hypothesis four.

#### Hypothesis Five

There is no relationship between help mothers said they thought schools wanted and help teachers said they wanted from parents.

Hypothesis five cannot be rejected. Responses were tested by chi square to determine relationships between mothers' and teachers' responses. Findings are summarized in Table 60.

Table 60. Chi Square Test Comparing Mothers' and Teachers' Responses to Question of What Help Schools Wanted from Parents

Responses	Chi square	df	p
Show interest in and encourage children	0.122	1	0.727
Help children develop abilities	2.594	3	0.459
Assist children with learning	4.068	2	0.131
Confer with teacher about schoolwork	0.375	2	0.829
Help with activities at school	7.132	3	0.068
Help with school fund-raising events	1.425	2	0.490

Only one chi square test moved toward the level of probability pre-determined as significant (0.05). Responses from mothers and teachers indicated both groups thought schools wanted parents to help with at-school activities. Since none of the other responses indicated relationships, hypothesis five was not rejected.

A statistically significant difference was found among families grouped by family income in parental involvement as indicated by family resources used in school-related activities. Parental involvement in school-related activities was not found to differ among families grouped by other selected family characteristics.

There were a few statistically significant relationships between parental provision of items supplementary to school attendance and selected family characteristics. Fathers' education and fathers'

occupation were statistically significant when tested with hiring a babysitter. Fathers' occupation was related to sending treats to school. And, mothers' employment was related to providing materials for special projects at school.

Mothers' ideas of the help schools wanted from parents were not found to be related to parental involvement. Nor were mothers' and teachers' ideas of the help schools wanted from parents found to be related to each other at the pre-determined probability level.

Findings from the testing of hypotheses led to the acceptance of hypotheses one, four and five and rejection of hypotheses two and three.

## CHAPTER V

### SUMMARY, DISCUSSION, AND IMPLICATIONS

This chapter includes a summary and discussion of the study findings. It includes implications for additional research, for the family management educator and for the public school educator.

#### SUMMARY OF THE STUDY

The study was conducted in one school district in a Pennsylvania industrial city. While five social class groups were represented, almost three-fourths of the families were in groups III (lower-middle) and IV (upper-lower).

The study sample was drawn from 21 first grades in five elementary schools. Study criteria specified intact families whose first child had entered first grade that school year. Names of 116 children and parents meeting the criteria were obtained from school records. Ninety-seven useable schedules were obtained by interviewing mothers out of a possible 106 families.

A major objective of the study was to investigate and describe use of family resources. Descriptive findings contributed specific information about parental use of time and money when children were in first grade. Parents used quantities of time in school-related activities. No attempt was made to measure quality of that time use. There were expenditures of money related to school attendance even

though the school district supplied most of the materials used in the schools' educational programs.

Findings supported the assumption that parents wanted children to succeed in school and assigned family resources toward achievement of that goal. Proportion of participation was greater in those school-related activities carried out at home than at school. Participation was also greater in those activities related to children's learning than in those supplementary to the schools' educational programs.

Mothers estimated frequency and extent of time used for specific school-related activities. No attempt was made to differentiate mothers' and fathers' time use. In all but one of the families some time was used by parents to discuss the schoolday with children. In 98 percent of the families, some time was used by parents in assisting children with schoolwork. Least parental involvement (helping with activities at school) was reported by about 27 percent of the families (Table 13). Fathers were more involved in school-related activities carried out at home than in at-school activities.

Three groupings of school-related activities were formulated on the nature of and the frequency and extent of parental time used. The three activity groupings served as indicators of parental interest in helping further children's education. Parental school involvement scores for each family were computed from point values assigned activities included in each group. Time use was the resource basic to the assignments, money use was not considered.

Family scores were used to test an hypothesis that there was no difference in parental school involvement among families grouped by social class. The hypothesis was not rejected.

Family school involvement scores were used to test an hypothesis that there was no difference in parental school involvement among families grouped by selected family characteristics. The hypothesis was rejected. The pre-determined level of probability was reached when family income categories were tested with sub-score II (helping children learn) and with total parental school involvement score.

Marginal relationship was reached in sub-score III (helping with activities at school) and fathers' education. None of the other tests of parental school involvement indicated relationships with selected family characteristics.

Questions were posed to learn how parents helped children with physical preparations for the schoolday. Mothers most frequently called children and helped them dress. Breakfast was mentioned by most families. Parents provided money for children to buy lunch and milk at school although only about half the families provided for their purchase every schoolday.

Where parents chose to use money resources for items supplementary to the schools' educational programs, more (75 percent) supplied references for children's use at home than sent treats to school (59 percent) or supplied items for school fund-raising events (44 percent).

An hypothesis stating no relationship between providing items supplementary to the schools' programs and selected family characteristics was rejected. Some of the tests obtained results at the pre-determined probability level.

An hypothesis stating no relationship between mothers' responses to an open-ended question of help they thought schools wanted from parents and parental involvement in school-related activities was not rejected. Few responses were obtained from the open-ended question. Eleven percent of the mothers thought schools wanted no help. The single most frequent response was that mothers thought schools wanted parents to belong to parent-teacher organizations.

Mothers' responses indicated that they were not thinking of helping the schools when helping children with school-related activities.

Teachers' responses to an open-ended question inquiring into the help they wanted from parents were tested with mothers' responses. The hypothesis stating no relationship between mothers' and teachers' responses was not rejected. Mothers' and teachers' responses indicated only one idea that approached significant relationship. Both groups expressed the idea that schools wanted parents to help with activities at school.

#### DISCUSSION OF THE STUDY

The study sample was selected by specified criteria and treated as a nonprobability sample. Findings cannot be generalized to other samples. Only first grade children in one school district were included. Schools were assigned at the discretion of school district administrators who considered family social class mix and school size when making the assignments. While they cannot be generalized, there is no reason to believe that different results would be obtained if the study were to be replicated in a school district serving an



industrial city of about 50,000 inhabitants. There was a consistency in estimates of frequency and extent of resource use which caused the investigator to accept the findings as reliable estimates of family resource use related to school activities.

Major conclusions from this study were:

1. That parents regularly used quantities of time in school-related activities. /
2. That parents wanted to help further the education of their children and that they were more involved in activities directly related to children's learning than in activities supplementary to schools' programs.
3. That parents were not aware of being co-educators with schools.
4. That there was no difference in parental involvement in school-related activities in families stratified in five social classes.
5. That there was some difference in parental school involvement in families grouped by family income, but that there was no difference in parental school involvement in families grouped by other selected family characteristics.
6. That teachers expected parents to help reinforce their educational programs.

An indication of extent of annual time use in school-related activities was gained by extrapolating from estimated times reported by families. If maximum time had been used for each school-related activity for which such data were available, it is possible for a family to have used 553 hours, or 23 days, in school-related activities in the school year. Minimum frequency and extent of time was calculated at 23.5 hours, or one day, used during the school year. Almost twice as many families reported maximum as reported minimum frequency and extent of time use. Time use fell between these extremes in most families.

Parents were serving as co-educators with schools as indicated by the nature of the activities and by frequency and extent of time used. They were not aware of the educative interaction with schools, however. That mothers were unsure of help to schools was indicated by the lack of answers, by responses that were meaningless, and by the thought expressed by 11 percent of them that schools wanted no help from parents when asked the help they thought schools wanted from parents.

Chi square tests obtained no relationships between mothers' responses to the open-ended question of help they thought schools wanted from parents and school-related activities parents carried out.

Parents were young. Since it was their first child to enter the formal school setting, parents were inexperienced in interacting as parents with school personnel. Median educational level of parents was 12 years. These findings raise other questions. What comprised the educational activities parents carried out as they helped first grade children? What was the quality of time they used? Did they rely upon their own school experiences for educational guidelines? Did they seek advice from relatives, friends, and/or teachers? Parents conferred with teachers. What questions did they ask, or did they ask any? Did they receive help from schools in knowing how to perform as educators? Do schools want to utilize parental interest in the educative function? Were parent-teacher organizations effective channels for helping parents be educators? What were their attitudes toward schools? What attitudes toward schools were being conveyed to their children? Did parents think

they exercised any control over schools and educational programs?

That parents wanted to help children's educational efforts was evident. Proportion of parental involvement was greatest in those activities directly related to schools' educational programs. In more than 80 percent of all families, parents discussed the school-day, assisted with schoolwork, conferred with teachers about schoolwork, visited classrooms, read to children, and displayed items made at school and brought home. Involvement was least in those activities carried out at school.

Yet, help with activities at school was the only response in which there was an indication that mothers and teachers shared an idea of the help both groups thought schools wanted from parents.

Teachers' responses indicated their interest in having parents reinforce schools' educational programs. Teachers agreed (100 percent) that they wanted parents to confer with them about children's schoolwork. There was agreement among 93 percent of the teachers that they wanted parents to visit children's classrooms, to read to children and to attend special programs at school. Teachers were not asked in what ways they helped parents know what was expected of them. Did they recognize a need to educate parents as well as children? What help did they give parents during conferences or visits to school that parents could use when assisting children at home?

Mothers reported time used in helping children with before schoolday preparations. The literature supports the idea that educability includes a physical state conducive to learning as well as a

mental one. How did parents help children be prepared physically for school attendance? Breakfast was mentioned in all but five percent of the families. In another five percent, children prepared their own breakfast. How adequately prepared were these children for the start of a schoolday?

Parents provided money for purchase of lunch (87 percent) and milk (75 percent) at school. Yet, only 47 percent of the families provided money for lunch and milk every schoolday. What provisions were made the other schooldays? Were parents aware of the importance of sufficient sleep, a nutritionally adequate breakfast, lunch and milk as aids to effective functioning in school?

Parents also provided items supplementary to school programs which required use of money resources. Parental interest in reinforcing schools' educational programs was again evident. In 75 percent of the families, parents chose to provide references for children's use at home. Fifty-nine percent of the families supplied treats for special occasions at school and 44 percent provided items for school fund-raising events.

A few instances of statistical significance were found when chi square tests were applied to parental provision of supplementary school-related items and selected family characteristics. Fathers' occupation was significantly related to sending treats to school for special occasions and to hiring a babysitter. Fathers' education was significantly related to hiring a babysitter. Mothers' employment was significantly related to providing materials for special school projects. However, so few families participated in these

supplementary school-related activities that findings must be viewed cautiously.

School-related activities were grouped to obtain parental school involvement scores. Scores were used to test for relationships with independent variables.

The one-way analysis of variance test of parental school involvement sub-score II was statistically significant ( $p = 0.036$ ) as was total parental school involvement score and family income ( $p = 0.02$ ). Parental school involvement sub-score II consisted of activities related to helping children learn. It included: conferring with the teacher, assisting with schoolwork at home, reading to children, providing materials for special school projects, supplying references for children to use at home. Was the relationship between this group of activities and family income the result of parents' education? Did they want their children to learn because they had or had not? In this study, fathers' education and family income were positively related but at  $r = 0.39$ . Correlation between mothers' education and family income ( $r = 0.46$ ) was greater (Table 43). Mothers' education was not found to be related to parental school involvement.

A Duncan's modified least significant difference test showed that mean of the family income group \$10,000 to \$12,999 differed significantly from means of family income groups below \$10,000. Families were almost evenly divided above and below the \$10,000 income level. Amount of income may not be the significant variable. There are probably other factors operating. Is the specificity of goals of the learning-related activities part of the explanation?

Is it possible that commitment to one's source of income and commitment to helping children learn are related? If so, does commitment to helping children learn reflect an attitude, or a personality attribute, that is the contributing variable?

Differences in means of families stratified in five social classes and parental school involvement scores did not reach the pre-determined probability level. However, movement toward relationship was obtained in tests of sub-score III (helping with activities at school) and family social class ( $p = 0.076$ ). Test of total parental school involvement score and family social class obtained a  $p = 0.06$ . Activities included in sub-score III were: attending special programs at school, helping with activities at school, sending treats for special occasions, providing items for school fund-raising events.

Attending special programs at school was carried out by more families (79 percent) than helping with activities at school (27 percent), sending treats (59 percent), or providing items for school fund-raising events (44 percent). Attending special programs at school may have been improperly grouped with the other activities. It may have been interpreted as relating to learning rather than supplementary to the schools' educational programs. Sub-scores I and II, more directly related to the learning aspects of schools' programs, did not approach significance when tested with means of family social class groups.

If attending special programs at school had been separated from others in this sub-score grouping, would results have differed?

Are all parents interested in helping advance their children's learning? Is it in a feeling of social inadequacy to deal with school personnel and other parents that social class differences are manifested? These indications of movement toward relationship of parental school involvement and social class suggest the need to look at other variables. What factors cause parents to participate, or not, in at-school activities?

Hollingshead used fathers' education and occupation as the two factors in determining family social class position. There were five families in class I (upper) and six in class II (upper-middle). Unequal division of two social classes with the other three suggests caution in interpreting findings.

Marginal relationship was obtained between parental school involvement sub-score III (helping with activities at school) and fathers' education ( $p = 0.067$ ). A Duncan's modified least significant difference test was used. Means of groups of fathers that had completed more than 12 years of education were significantly different from those that had completed eight up to 12 years of education. Fathers with higher educational attainment may have been more supportive of total school programs including providing treats for special occasions and items for school fund-raising events. It may be that fathers with higher educational attainment encouraged their wives to help with activities at school. Mothers' and fathers' educational levels were correlated at  $r = 0.55$  (Table 43).

However, no relationship was found between parental school involvement and mothers' education, nor between parental school involvement and mothers' employment or her membership in groups. Analysis of variance tests of parental school involvement and sex of first grade children revealed no relationship; and, number of children in families was not found to be related to parental school involvement.

Study findings contributed information about use of family resources when first children were in first grade. They obtained little evidence of relationships between school-related activities and selected family characteristics. Findings raised additional questions and suggested the need to explore other variables contributing to differences among families in parental involvement in school-related activities.

## IMPLICATIONS

### For Further Research

Statistically significant differences among means of families grouped by family income when tested with parental school involvement scores suggest questions for additional study. The significantly different grouping of school-related activities (sub-score II) was that having to do with helping children learn. Why did that grouping of activities bear a relationship to income? Why did the other school-related activities grouped in sub-score I (interest in and encouragement of the child) and sub-score III (helping with activities at school) not show significant differences when tested



with means of family income groups? Was there movement toward significant relationship among these two groupings sufficiently strong to influence results when the total parental school involvement score was tested with means of family income groups? Additional testing of school-related activities grouped as they were in this study with other samples would be useful. It may also be useful to regroup school-related activities and test with family income categories in other samples.

What is there about family income that makes the difference? Amount of income does not seem to offer the explanation. When differences among family income categories were tested, it was the mean of the \$10,000 to \$12,999 income group that differed significantly from income groups below \$10,000. Mean of the \$13,000 and over income group did not differ from means of groups under \$10,000. Why? What other factors caused a significant relationship between one family income group and parental involvement in learning-related school activities? Does that income group include families that are competitively striving for upward mobility?

Fathers' education and occupation were factors used in determining family social class position. Education and occupation are likely to affect family income. Means of fathers' occupational groups were not significantly different when tested with parental school involvement scores. Means of fathers' educational groups were not significantly different at the pre-determined probability level when tested with parental school involvement scores. Why did no relationship result when these family characteristics were tested

with parental school involvement scores, yet a statistically significant relationship resulted in sub-score II (help with learning), total score and family income?

There was a marginal relationship obtained when fathers' education and sub-score III (helping at school) were tested. Sub-score III was also that component of the parental school involvement score for which marginal relationship was obtained when tested with means of family social class groups. What is the relationship between fathers' education and parental involvement in helping at school? Is educational level a more powerful determinant of parental interest in helping at school than fathers' occupation and family income? If so, why? Are parents' own educational backgrounds and attitudes in operation in relation to this grouping of activities (sub-score III) that are supplementary to schools' educational programs? Additional study of educational backgrounds and of the values and attitudes parents hold toward education and toward schools is indicated.

Some of the items parents chose to provide that were supplementary to their children's education were significantly related to fathers' occupation. They were providing treats for special occasions and hiring babysitters. Is the influential factor that of occupation, or is occupation as a contributor to family income the cause of the relationship? Fathers' education was significantly related to hiring a babysitter; why?

Attitudes may be in operation in determining whether or not to provide treats for special occasions at school. Study of parental attitudes toward schools' programs, both educational and

supplementary, would be useful. Study of parental attitudes toward schools in relation to parents' education and occupation might also yield explanatory insights. ✓

Mothers' employment did not prove to be related to parental involvement in school-related activities. Yet, a significant probability level was reached when mothers' employment was tested with providing materials for special school projects. Time mothers used in school-related activities was not related to her employment. Is providing materials for special school projects one activity for which she does not have time? A more detailed study of working mothers of first graders is indicated.

Additional testing of bases upon which parents choose to provide items supplementary to children's education needs to be done. Parental values and attitudes related to such decisions may be a fruitful field for study. ✓

Questions arise when considering the amount of time parents used in school-related activities. What is the meaning of this time use to the family? What patterns of interaction within the family does it foster? or hinder? Does it help promote a positive attitude, or a negative one, toward education among children? Does the time used by parents help children's school achievement? Does it help children create positive self-images? Or, are children torn by the need to satisfy both parents and teachers who view their educative functions differently? Interviews were conducted with mothers. What results would be obtained if fathers were interviewed?

What does parental time used for school-related activities do for teachers and schools? Do teachers view parents as co-educators? Do they want to? If so, how do teachers help parents prepare to carry out the educative function? Or, do teachers feel threatened by parents using time to help their children learn school-related curricula? Will parents use of time build bonds of support that teachers and schools accept or will it increase the possibility for antagonism between families and schools? Additional study of parents' perception of their educative function and of teachers' perception of parents' educative function is needed.

Findings of this study suggest that a communications gap exists between families and schools. Before attempting to strengthen communications, study must be made of the communications links now used. Are parent-teacher organizations effective linkages? How do children serve as linkage agents between families and schools? How do parents serve as links?

Parents visited schools and conferred with teachers. What did they discuss? Are parents willing to seek help for themselves as educators? Parents' interest seems to lie in helping their children learn; they aim to do more than socialize children for participation in schools. What is the relationship of parental time used to children's achievement in school? If parents were helped to use educative time more effectively, would it affect children's school achievement?

There was no attempt made to measure quality of the time parents used in school-related activities. Search for a measure of quality of

time use needs to be undertaken. If no such measure now exists, then development and testing of one is indicated.

Present study data can have additional tests applied. There may be relationships among variables not yet determined. One-way analysis of variance tests resulted in some differences moving toward significance. If several marginally significant variables were tested with multivariate analysis, would significant differences be obtained?

#### For the Family Management Educator

Findings of this study showed parents to be using family resources for school-related activities. They were helping schools with learning-related activities. Parents did not think of helping the schools; their aim was in helping their children who were in school.

The family management educator needs to recognize the involvement of parents in their children's education. It was shown to be a part of family management activities when there was a child in first grade. Accepting the fact that parents are involved, the family management educator can then develop ways of helping parents consciously accept their educative role and carry it out more effectively.

The need to help educate young families was apparent from the study. Those having their first encounter as parents with schools were interested in helping and were doing so as they saw fit. No measurement of quality of time use was attempted. To be effectively used for school-related activities, time use requires guidance and

direction. Parents may be eager to learn how to become better educators when first experiencing interaction with schools.

This study found that money was used to buy items parents considered to be important in supplementing schools' programs. Was that money well spent? How was its use planned in relation to other family goals? The family management educator can help families develop the ability to define goals and to make decisions enabling their fulfillment. These family management learnings are particularly important to young families who are establishing patterns of family management.

Families did not see the daily routine before the start of a schoolday as being school-related. The family management educator can help families accept and manage toward the measures guaranteeing a state of physical readiness for learning: being clean, dressed for weather conditions, having a nutritionally adequate breakfast and provisions for an adequate lunch, having sufficient sleep, and reflecting habits that include controlled television viewing, recreation, and acceptance of tasks assigned at home as well as at school.

The family management educator can help parents plan time for increasing their capabilities as educators as well as planning the time used in educating their children. The family management educator generally serves as a link between family and community and can help parents utilize community resources. In most communities there are resources from which parents may seek help in increasing their skills as educators. Recognition and acceptance of the importance of the educative function must come first.

The family management educator can help increase the effectiveness of linkages between schools and families by helping create ways for both groups to learn to know and understand each other.

#### For the Public School Educator

Programs of parent education, particularly for young parents, can be planned and carried out by the public school educator and family management educator working together. Each can contribute in helping families find more effective ways of managing the family educative function.

Findings of this study showed that parents' interest was sufficient to cause them to use quantities of time in school-related activities. Those activities for which most parents used time were related to learning. School administrators and teachers can recognize parents as educators and can help them learn to be effective educators. Programs of parent education sponsored by their schools can help parents know what to include and how to carry out the educative function at home so that it complements that of the schools. Understanding of the functions each carries out will be the foundations upon which to build programs of parent education.

Parents wanted to help at school as well as at home but felt unsure of themselves in at-school activities. There was some indication of agreement between parents and teachers about help with activities at school. Administrators and teachers can plan the activities that will be most meaningful to parents, to children's education, and to the schools.

Some parents thought that schools wanted them to belong to the parent-teacher organization. If a parent-teacher organization is an accepted channel for communication between parents and the school, then its programs can help educate both parents and teachers to the reciprocal function they are carrying out.



## LIST OF REFERENCES

## LIST OF REFERENCES

### Journals

- Ater, E. Carolyn, and Deacon, Ruth E. Interaction of Family Relationship Qualities and Managerial Components. Journal of Home Economics, 34, 2 (May, 1972), pp. 257-263.
- Boyle, Richard P. The Effect of the High School on Students' Aspirations. American Journal of Sociology, 71, 5 (March, 1966), pp. 628-639.
- Deacon, Ruth E. Home Management Focus and Function. Journal of Home Economics, 54, 9 (November, 1962), pp. 760-762.
- Fantini, Mario D. Participation, Decentralization and Community Control. The National Elementary Principal, 48, 5 (April, 1969), pp. 25-31.
- Freeberg, Norman E., and Payne, Donald T. Parental Influence on Cognitive Development in Early Childhood: A Review. Child Development, 38, 1 (March, 1967), pp. 65-87.
- Gross, Irma H. Impact of Certain Basic Disciplines on Home Management in Family Living. Journal of Home Economics, 58, 6 (June, 1966), pp. 448-452.
- Hall, Florence Turnbull, and Schroeder, Marguerite Paulsen. Effects of Family and Housing Characteristics on Time Spent on Household Tasks. Journal of Home Economics, 62, 1 (January, 1970), pp. 23-29.
- Herriott, Robert E. Some Social Determinants of Educational Aspirations. The Harvard Educational Review, 33, 2 (Spring, 1963), pp. 157-175.
- Hilliard, Thomas, and Roth, Robert M. Maternal Attitudes and the Non-Achievement Syndrome. The Personnel and Guidance Journal, 47, 5 (January, 1969), pp. 424-428.
- Johannis, Theodore B., Jr. Participation by Fathers, Mothers, and Teenage Sons and Daughters in Selected Child Care and Control Activity. The Coordinator, 6, 2 (December, 1957), pp. 31-32.

- Joiner, Lee M.; Erickson, Edsel L.; and Brookover, Wilbur B. Socio-economic Status and Perceived Expectations as Measures of Family Influence. The Personnel and Guidance Journal, 47, 7 (March, 1969), pp. 655-659.
- Kahl, Joseph A. Educational and Occupational Aspirations of "Common Man" Boys. The Harvard Educational Review, 23, (Summer, 1953), pp. 186-203.
- Kerckhoff, Richard K. Teaches Parents to Teach Children. Journal of Home Economics, 60, 5 (May, 1968), pp. 346-349.
- Krauss, Irving. Sources of Educational Aspirations Among Working Class Youth. American Sociological Review, 29, 6 (December, 1964), pp. 867-879.
- Litwak, Eugene. Technological Innovation and Theoretical Functions of Primary Groups and Bureaucratic Structures. The American Journal of Sociology, 73, 4 (January, 1968), pp. 468-481.
- McDill, Edward L.; Meyers, Edmund D., Jr.; and Rigsby, Leo C. Institutional Effects on the Academic Behavior of High School Students. Sociology of Education, 40, 3 (Summer, 1967), pp. 181-199.
- McDill, Edward L.; Rigsby, Leo C.; and Meyers, Edmund D., Jr. Educational Climates of High Schools: Their Effects and Sources. The American Journal of Sociology, 74, 6 (May, 1969), pp. 567-586.
- Paolucci, Beatrice. Contributions of a Framework of Home Management to the Teaching of Family Relationships. Journal of Marriage and the Family, 28, 3 (August, 1966), pp. 338-342.
- Parker, Frances J. Task Distribution Within the Family. Journal of Home Economics, 58, 5 (May, 1966), pp. 373-375.
- Rosen, Bernard C. Family Structure and Achievement Motivation. American Sociological Review, 26, 4 (August, 1961), pp. 574-585.
- Schlater, Jean Davis. The Management Process and Its Core Concepts. Journal of Home Economics, 59, 2 (February, 1967), pp. 93-98.
- Sewell, William H.; Haller, Archibald O.; and Portes, Alejandro. The Education and Early Occupational Attainment Process. American Sociological Review, 34, 1 (February, 1969), pp. 82-91.
- Sussman, Marvin B. Family Systems in the 1970's: Analysis, Policies, and Programs. The Annals of the American Academy of Political and Social Science, 396, (July, 1971), pp. 40-56.

Sussman, Marvin B. Adaptive, Directive, and Integrative Behavior of Today's Family. Family Process, 7, 2 (September, 1968), pp. 239-250.

Walker, Kathryn E. Homemaking Still Takes Time. Journal of Home Economics, 61, 8 (October, 1969), pp. 621-624.

#### Books

Bell, Norman W., and Vogel, Ezra F. (Eds.) A Modern Introduction to the Family. (Rev. ed.). New York: The Free Press, 1968.

Bell, Robert R., and Stub, Holger R. (Eds.) The Sociology of Education. (Rev. ed.). Homewood, Illinois: The Dorsey Press, 1968.

Bloom, Benjamin S. Stability and Change in Human Characteristics. New York: John Wiley and Sons, Inc., 1964.

Coleman, James S. The Adolescent Society. New York: The Free Press of Glencoe, 1961.

Fitzsimmons, Cleo. The Management of Family Resources. San Francisco: W. H. Freeman and Co., 1950.

Gross, Irma H., and Crandall, Elizabeth W. Management for Modern Families. New York: Appleton - Century - Crofts, 1963.

Havighurst, Robert J., and Neugarten, Bernice L. Society and Education. Boston, Massachusetts: Allyn and Bacon, 1957.

Litwak, Eugene, and Meyer, Henry J. The School and the Family: Linking Organizations and External Primary Groups. Lazarsfeld, Paul F.; Sewell, William H.; and Wilensky, Harold L. (Eds.) The Uses of Sociology. New York: Basic Books, Inc., 1967. pp. 522-543.

Litwak, Eugene. Extended Kin Relations in an Industrial Democratic Society. Shanas, Ethel, and Streib, Gordon F. (Eds.) Social Structure and the Family. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1965. pp. 290-323.

Meeting Parents Halfway: A Guide for Schools. Washington, D. C. U. S. Department of Health, Education, and Welfare. Office of Education. Educational Resources Information Center, 1970.

Nie, Norman H.; Bent, Dale H.; and Hull, C. Hadlai. Statistical Package for the Social Sciences. New York: McGraw Hill, Inc., 1970.

- Nie, Norman H., and Hull, C. Hadlai. Statistical Package for the Social Sciences: Update Manual. Chicago, Illinois: University of Chicago. National Opinion Research Center, 1971.
- Parsons, Talcott. The Social Structure of the Family. Anshen, Ruth N. (Ed.) The Family: Its Function and Destiny. New York: Harper and Brothers, 1959.
- Reeves, Charles E. Parents and the School. Washington, D. C.: Public Affairs Press, 1963.
- Schultz, Theodore W. Investment in Human Capital. New York: The Free Press, 1971.
- Strodtbeck, Fred L. Family Integration, Values, and Achievement. Halsey, A. H.; Floud, Jean; and Anderson, C. Arnold (Eds.). Education, Economy, and Society. New York: The Free Press of Glencoe, 1961. pp. 315-347.
- Wilkerson, Doxey A. Compensatory Programs Across the Nation: A Critique. Passow, A. Harry (Ed.). Reaching the Disadvantaged Learner. New York: Teachers College Press, 1970.
- Williams, Robin M., Jr. American Society. (2nd Ed. Rev.) New York: Alfred A. Knopf, 1960.
- Winch, Robert F. The Modern Family. New York: Holt, Rinehart and Winston, 1963.

#### Government Documents

- Bureau of Industrial Development. Pennsylvania Industrial Census Series: Release No. M-5-70. Harrisburg: Department of Commerce, 1970.
- Bureau of Statistics. Pennsylvania Statistical Abstract: 1967. Harrisburg: Department of Internal Affairs, 1967.
- U. S. Bureau of the Census. 1970 Census of Population, Number of Inhabitants: Pennsylvania. Washington, D. C.: U. S. Department of Commerce, August, 1971.
- U. S. Bureau of the Census. County and City Data Book: 1967. Washington, D. C.: U. S. Department of Commerce, 1967.

## Reports and Proceedings

- Broderick, Carlfred B. The Interrelationships of Family Functions. The Family: Focus on Management. Washington, D. C.: American Home Economics Association, 1970.
- Brookover, Wilbur B.; LePere, Jean M.; Hamachek, Don E.; Thomas, Shailer; and Erickson, Edsel L. Self-concept of Ability and School Achievement.II. East Lansing, Michigan: Michigan State University, College of Education, Bureau of Educational Research Services, October, 1965.
- Brookover, Wilbur B.; Erickson, Edsel L.; and Joiner, Lee M. Self Concept of Ability and School Achievement. III. East Lansing, Michigan: Michigan State University, Human Learning Research Institute, 1967.
- Dickens, Dorothy. Effects of Good Household Management on Family Living. Bulletin 380. State College, Mississippi: Mississippi State College, Agricultural Experiment Station, May, 1943.
- Governor's Committee on Education. E. Pluribus Unum: A Statistical Study of the Organization of Pennsylvania's School Districts in 1960. Educational Research Monograph No. 5. Harrisburg: December, 1960.
- Gross, Irma H., and Zwemer, Evelyn A. Management in Michigan Homes. Technical Bulletin 196. East Lansing, Michigan: Michigan State College, Agricultural Experiment Station. June, 1944.
- Hess, Robert D., and Shipman, Virginia C. Maternal Attitude Toward the School and the Role of Pupil: Some Social Class Comparisons. Paper prepared for the Fifth Work Conference on Curriculum and Teaching in Depressed Areas. New York: Columbia University Teachers College. June 20-July 1, 1966. (U. S. Department of Health, Education and Welfare, Office of Education. Microfilm EDO18472).
- Home Economics Seminar. French Lick, Indiana: July 24-28, 1961.
- Honey, Ruth R.; Britton, Virginia; and Hotchkiss, Alida S. Decision-Making in the Use of Family Financial Resources. Bulletin 643. University Park, Pennsylvania: The Pennsylvania State University, Agricultural Experiment Station, March, 1959.
- Liston, Margaret I. Management in the Family as Social Process. Conceptual Frameworks: Process of Home Management. Proceedings of a Home Management Conference. East Lansing, Michigan: Michigan State University, June 17-20, 1964. pp. 52-72.

- Maloch, Francille, and Deacon, Ruth E. Components of Home Management in Relation to Selected Variables. Research Bulletin 1042. Wooster, Ohio: Ohio Agricultural Research and Development Center, November, 1970.
- Nichols, Addreen. Research, Our Knowledge Base. The Family: Focus on Management. Washington, D. C.: American Home Economics Association, 1970.
- Nolan, Francena L., and Tuttle, Dawn H. Certain Practices, Satisfactions, and Difficulties in Families with Employed Homemakers. Bulletin 655. University Park, Pennsylvania: The Pennsylvania State University, Agricultural Experiment Station, August, 1959.
- Report to the President: White House Conference on Children. Washington, D. C.: U. S. Government Printing Office, 1970.
- Van Bortel, Dorothy Greey, and Gross, Irma H. A Comparison of Home Management in Two Socio-Economic Groups. Technical Bulletin 240. East Lansing, Michigan: Michigan State College, Agricultural Experiment Station, April, 1954.
- Warren, Jean. Use of Time in Its Relation to Home Management. Bulletin 734. Ithaca, New York: Cornell University, Agricultural Experiment Station, June, 1940.
- Wiegand, Elizabeth. Use of Time by Full-time and Part-time Homemakers in Relation to Home Management. Memoir 330. Ithaca, New York: Cornell University, Agricultural Experiment Station, July, 1954.

#### Unpublished Materials

- Baker, Georgianne R. Patterning of Family Resources for Educability: Conceptualization and Measurement in Costa Rican Families. Unpublished Ph.D. dissertation, Michigan State University, 1970.
- Broderick, Carlfred B., and Verity, W. H. Statistical Package Program: Frequency Analysis with Chi Square. (Rev. ed.) Computation Center, The Pennsylvania State University, May, 1968. (Mimeographed.)
- Daubert, Nancy C. A Statistical Package Program: Anoves/Anovum. (Rev. ed.) Computation Center, The Pennsylvania State University, August, 1971. (Mimeographed.)
- Davey, Alice J. Relationship of Family Interaction to Family Environment. Unpublished Ph.D. dissertation, Michigan State University, 1971.

- Frankena, William. Toward a Philosophy of the Family. Paper read before the Clara Brown Army Symposium, University of Minnesota, Minneapolis, March, 1970. (Mimeographed.)
- Garwood, Douglas. Contributed Program: Duncan's Least Significant Difference Test. Computation Center, The Pennsylvania State University. 1970.
- Hollingshead, August B. Two Factor Index of Social Positions. New Haven, Connecticut, U. S. A.: August B. Hollingshead, 1957. (Mimeographed.)
- Ketchum, Frances Nettie. A Study of Homemakers Values as Reflected in Time Used for Family and Personal Activities. Unpublished Master's thesis. Michigan State University. 1961.
- Sussman, Marvin B. Some Conceptual Issues in Family-Organizational Linkages. Paper given at the session on Family Bureaucracy, 64th meeting of American Sociological Association. San Francisco, California, September 1, 1969. (Mimeographed.)
- Wright, David J., and Finn, Jeremy D. Multivariate-Univariate and Multivariate Analysis of Variance and Covariance: Fortran IV Program. Occasional Paper No. 8. Michigan State University, College of Education, Office of Research Consultation, 1970.



## APPENDICES

APPENDIX A  
CORRESPONDENCE  
and  
INSTRUMENTS

COOPERATIVE EXTENSION SERVICE

\*  
 \* The Pennsylvania State University  
 \* College of Agriculture  
 \* In cooperation with the  
 \* U. S. Department of Agriculture  
 \* University Park, Pennsylvania 16802  
 \*

310 Agricultural Administration Building  
 April, 1972

Dear

With the approval and cooperation of the School District of the City of York, I am carrying out a study among parents of children in first grade.

Schools conduct the formal programs necessary to educate our children. But, parents help, too. I want to learn what school-related activities parents carry out when a child begins his formal education. To do so, I am asking to interview mothers of children in first grade this year. I hope you are willing to answer a few questions for me.

The interview can be done in your home and will take about 30 minutes. An interviewer will contact you within the next few days to ask for your cooperation and to arrange a satisfactory time for the interview.

Thank you for your willingness to cooperate. By answering these questions you give us information that will help us plan programs of adult education.

Sincerely,

Helen E. Bell  
 Home Management Specialist

HEB:dd

Interview No. \_\_\_\_\_  
 School \_\_\_\_\_  
 Date \_\_\_\_\_  
 Interviewer \_\_\_\_\_

1. Do you think the school wants help from you now that \_\_\_\_\_  
 is in first grade? What kinds of help? (child's name)

- |   | Do you ? | Yes | No | If yes,<br>how often? | For how long,<br>usually, at<br>one time? | Does your<br>husband<br>help? |
|---|----------|-----|----|-----------------------|---|-------------------------------|
| 2. Discuss the schoolday with _____<br>when he (she) comes home?    |          |     |    |                       |   |                               |
| COMMENTS _____  |          |     |    |                       |   |                               |
| 3. Visit _____'s<br>classroom?                                      |          |     |    |                       |   |                               |
| COMMENTS _____  |          |     |    |                       |   |                               |
| 4. Confer with the teacher about _____'s<br>schoolwork?             |          |     |    |                       |   |                               |
| COMMENTS _____  |          |     |    |                       |   |                               |
| 5. Discuss child's problems other than schoolwork with the teacher? |          |     |    |                       |   |                               |
| COMMENTS _____  |          |     |    |                       |   |                               |

	Do you ?	Yes	No	If yes, how often?	For how long, usually, at one time?	Does your husband help?
6. Attend special programs at school such as Parents' Nights, plays, musical and art events?						
COMMENTS						
7. Review lessons with _____?						
COMMENTS						
8. Read books to _____?						
COMMENTS						
9. Send items from home that relate to a unit being studied in school: mementos from trips, pictures, books, and such things?						
COMMENTS						
10. Help with activities at school: such as room mother?						
11. library assistant?						
12. cafeteria assistant?						
13. chaperone on field trip?						

	Do you?	Yes	No	If yes, how often?	For how long, usually, at one time?	Does your husband help?
14.	when there's a party at school?	_____	_____	_____	_____	_____
15.	work at fund-raising events at school?	_____	_____	_____	_____	_____
16.	other (please specify)	_____				
	COMMENTS	_____				
17.	Send "treats" to school for special occasions?	_____	_____	_____	About how much does it cost each time?	_____
	COMMENTS	_____				
18.	Send items for fund- raising events at school?	_____	_____	_____	About how much does it cost each time?	_____
	COMMENTS	_____				
19.	Provide materials for special school projects such as art or science projects?	_____	_____	_____	If you have to buy them, do you? _____ Yes _____ No  About how much have you spent this year?	_____
	COMMENTS	_____				
20.	Supplement school's program by buying books, magazines, and other materials for  _____				About how much have you spent this year?	_____
	to use at home?	_____	_____	_____		
	COMMENTS	_____				

21. Can you think of other activities related to \_\_\_\_\_'s  
going to school that you have done this year? \_\_\_\_\_

22. Do you give \_\_\_\_\_ money to buy things at school?

\_\_\_\_\_ Yes \_\_\_\_\_ No

For:

How Often?

About How Much at One Time?

23. Milk \_\_\_\_\_

24. Lunch \_\_\_\_\_

25. Workbooks \_\_\_\_\_

26. Special readers,  
newspapers, etc. \_\_\_\_\_

27. Crayons, paints  
or other  
supplies \_\_\_\_\_

28. Other (please  
specify) \_\_\_\_\_

29. Who gets \_\_\_\_\_ ready for school in the morning? \_\_\_\_\_

What is your usual routine on school mornings? \_\_\_\_\_

30. How far from home is the school that your child attends? \_\_\_\_\_

31. How does he (she) get there? \_\_\_\_\_

32. When \_\_\_\_\_ brings home something he (she) has made in  
school, what do you usually do with it? \_\_\_\_\_

33. Now, please tell me about your family.

In which group is your age?

34. Your husband's age?

\_\_\_\_\_ 20-29

\_\_\_\_\_ 20-29

\_\_\_\_\_ 30-39

\_\_\_\_\_ 30-39

\_\_\_\_\_ 40-49

\_\_\_\_\_ 40-49

\_\_\_\_\_ Over 50

\_\_\_\_\_ 50-59

\_\_\_\_\_ Over 60

35. How many other children are there in your family? \_\_\_\_\_

36. What are their ages? \_\_\_\_\_  
 \_\_\_\_\_

(If there are other children, ask)

37. When you go to school for a program or conference with the teacher, what do you do with your younger children? \_\_\_\_\_  
 \_\_\_\_\_

38. If you hire a babysitter, about how much does it cost you each time you go to school? \_\_\_\_\_

39. How many years schooling did you complete? \_\_\_\_\_

40. How many years schooling did your husband complete? \_\_\_\_\_

41. What is your husband's job? \_\_\_\_\_  
 Please explain just what it is he does \_\_\_\_\_

42. Are you working away from home now? \_\_\_\_\_ Yes \_\_\_\_\_ No

43. If yes, are you working: \_\_\_\_\_ part-time \_\_\_\_\_ full-time

44. At what kind of job are you working? \_\_\_\_\_  
 Please explain just what it is you do? \_\_\_\_\_

45. What kind of work does your husband's father do? \_\_\_\_\_

46. What kind of work does your father do? \_\_\_\_\_

47. Do you belong to any groups that meet regularly, such as:  
       church \_\_\_\_\_ extension homemakers' group \_\_\_\_\_  
       union club \_\_\_\_\_ other (please specify) \_\_\_\_\_  
       social club \_\_\_\_\_

48. Into which of these groups does your annual average family income fall?

\_\_\_\_\_ Under \$5,000  
 \_\_\_\_\_ \$5,000 to \$7,999  
 \_\_\_\_\_ \$8,000 to \$9,999  
 \_\_\_\_\_ \$10,000 to \$12,999  
 \_\_\_\_\_ \$13,000 and over



COOPERATIVE EXTENSION SERVICE

\*  
 \* The Pennsylvania State University  
 \* College of Agriculture  
 \* In cooperation with the  
 \* U. S. Department of Agriculture  
 \* University Park, Pennsylvania 16802  
 \*

310 Agricultural Administration Building  
 April, 1972

Dear

With the approval and cooperation of the administrators of the School District of the City of York, I am conducting a study among parents of children in York's first grades. I want to learn what school-related activities parents carry out as they cooperate with schools in the educating of their children. I am investigating the effect upon families of the interaction with schools in the hopes that we may learn what families can do to help improve their children's participation in formal schooling.

The sample is to be drawn from parents whose first child is in first grade this year. I plan to interview mothers from the selected families. The interview will take about 30 minutes. Interviewers will contact the families after an introductory letter has been mailed to them. This letter is sent to acquaint you with the research plan, and also to ask your cooperation.

In order to have a bench-mark measure of what the school expects, will you please fill out this questionnaire and return to me in the enclosed, self-addressed, stamped envelope.

Thank you for your willingness to cooperate in this study of family-school interaction.

Sincerely,

Helen E. Bell  
 Home Management Specialist

HEB:dd  
 Enclosures



COOPERATIVE EXTENSION SERVICE

\*  
\* The Pennsylvania State University  
\* College of Agriculture  
\* In cooperation with the  
\* U. S. Department of Agriculture  
\* University Park, Pennsylvania 16802  
\*

310 Agricultural Administration Building  
September 8, 1972

Dear First Grade Teacher:

You may have filled out and returned a copy of this questionnaire last spring. If so, please forgive my second intrusion upon your time and disregard this letter. I have no record of teachers' names who did return questionnaires. I asked only that you identify your school.

I am contacting teachers in the schools included in my study again since I'm anxious for as complete a return as possible. If you did not fill out and mail back one of these questionnaires last spring, will you please take a few minutes to do so now. Thank you. I appreciate your cooperation.

Sincerely,

Helen E. Bell  
Home Management Specialist

HEB:dd  
Enclosures

School \_\_\_\_\_

Date \_\_\_\_\_

1. What help, with their child's education, do you expect from parents? (Please jot down the first things that come to your mind.)

Do you want parents to ?	Yes	No	If yes, how often
2. Discuss the schoolday with the child when he (she) comes home?	_____	_____	_____
3. Visit their child's classroom?	_____	_____	_____
4. Confer with you about the child's schoolwork?	_____	_____	_____
5. Discuss a child's problems, other than schoolwork, with you?	_____	_____	_____
6. Attend special programs at school, such as Parents' Nights, musical and art events, plays?	_____	_____	_____
7. Reinforce your efforts by reviewing lessons with the child?	_____	_____	_____
8. Read books to the child?	_____	_____	_____
9. Send items from home that relate to a unit being studied in school: mementos from trips, pictures, books, artifacts, and such things?	_____	_____	_____
10. Help with activities at school such as: room mother?	_____	_____	_____

Do you want parents to ?	Yes	No	If yes, how often
11. library assistant?	_____	_____	_____
12. cafeteria assistant?	_____	_____	_____
13. chaperone on field trips?	_____	_____	_____
14. parties at school?	_____	_____	_____
15. fund-raising events?	_____	_____	_____
16. other? (please specify)	_____		
17. Send "treats" to school for special occasions?	_____	_____	_____
18. Send items for fund-raising school events?	_____	_____	_____
19. Provide materials for special school projects such as art or science projects?	_____	_____	_____
20. Supplement the school's program by buying books, magazines, and other reference materials for the child to use at home?	_____	_____	_____
21. Do you think of other school-related activities you believe parents can carry out to assist you in educating their child? If so, what are they?	_____ _____ _____		

APPENDIX B

PARENTAL SCHOOL  
INVOLVEMENT SCORES

Table 61. Summary of Activities Grouped for Parental School Involvement Score

Questions and Topics in Three Sub-scores		Points Value
Sub-score I Showing interest in and encouraging child's schooling		
Question	Topic	
2	discussing schoolday	10
3	visiting classroom	10
9	sending items for study	5
29	helping child get ready for schoolday	6
32	accepting and displaying items child made at school	5
Total		36
Sub-score II Helping child learn		
4	conferring with teacher about schoolwork	10
7	assisting with schoolwork at home	10
8	reading to child	10
19	providing materials for special school projects	4
20	supplying references to use at home	6
Total		40
Sub-score III Helping with at-school activities		
6	attending special programs at school	10
10-16	helping at school	6
17	sending treats	5
18	sending items for fund-raising events	2
Total		23
Total Parental School Involvement Score		99

Table 62. Scores Assigned Sub-score I, Question 2: Discussing the Schoolday

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did regularly, other occasionally	One parent did, other did not	Both parents did not
Daily for 30-60 min.	10	7	6	
Daily for 20-29 min.	9	6	5	
Daily for 10-19 min.	8	5	4	
Daily for 5-9 min.	7	4	3	
Several times a week; 20 or more min.	8	5	3	
Several times a week; 10-19 min.	7	4	2	
Several times a week; 5-9 min.	6	3	1	
Not done				0



Table 63. Scores Assigned Sub-score I, Question 3: Visiting Classrooms

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did regularly, other occasionally	One parent did, other did not	Both parents did not
4 or 5 times for 1 or 2 hours, or more	10	7	6	
4 or 5 times for 30 to 59 min.	9	6	5	
4 or 5 times for 10 to 29 min.	8	5	4	
2 or 3 times for 1 or 2 hours, or more	9	6	5	
2 or 3 times for 30 to 59 min.	8	5	4	
2 or 3 times for 10 to 29 min.	7	4	3	
1 time for 1 or 2 hours, or more	8	5	2	
1 time for 30 to 59 min.	7	4	1	
1 time for 10 to 29 min.	6	3	1	
Not done				0

Table 64. Scores Assigned Sub-score I, Question 9: Sending Items For Study

Frequency	Score
Parents sent:	
weekly	5
every 2 weeks or monthly	4
5 or 6 times this year	3
3 or 4 times this year	2
1 or 2 times this year	1
Parents did not send, gave reason	2
Parents did not send, gave no reason	0

Table 65. Scores Assigned Sub-score I, Question 29: Helping Child Prepare for Schoolday

Parental Involvement	Score
Both parents helped. Mother or father prepared breakfast. Helped with reading or schoolwork before child left for school.	6
Mother or father assisted child with arising, dressing. Breakfast mentioned. Parent helped by packing lunch or driving child to school.	5
Child cared for by other adult if parents at work; care included breakfast.	4
Mother or father assisted. Breakfast mentioned. Child carried out chores.	3
Child arose himself, carried out most of his preparations with minimum help from a parent. Breakfast mentioned.	2
Child arose, dressed and fed himself with little help; chose his own before-school activities.	1
No help from parents indicated	0

Table 66. Scores Assigned Sub-score I, Question 32: Items Made at School and Brought Home

Parental Involvement	Score
Items child made at school were brought home, shown to family members, discussed. Received with praise and encouragement; then displayed or saved	5
Items displayed in some general area of home	4
Items displayed in child's own room or in space designated as his own	3
Items were saved, stored in box, scrapbook or in child's room	2
Items were first evaluated by parents, if deemed worthy, were then displayed or saved	1
No response indicated no handling of items by parents	0

Table 67. Scores Assigned Sub-score II, Question 4: Conferring with Teacher About Schoolwork

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did, regularly, other occasionally	One parent did, other did not	Both parents did not
5 or more times for 1-2 hours	10	7	6	
5 or more times for 30-59 min.	9	6	5	
5 or more times for 10-29 min.	8	5	4	
2 to 4 times for 1-2 hours	9	6	5	
2 to 4 times for 30-59 min.	8	5	4	
2 to 4 times for 10-29 min.	7	4	3	
1 time for 1-2 hours	8	5	2	
1 time for 1-2 hours	7	4	1	
1 time for 1-2 hours	6	3	1	
Not done				0

Table 68. Scores Assigned Sub-score II, Question 7: Assisting With Schoolwork

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did regularly, other occasionally	One parent did, other did not	Both parents did not
Daily for 30 min. or more	10	7	6	
Daily for 20-29 min.	9	6	5	
Daily for 10-19 min.	8	5	4	
Several times a week; 30 min. or more	9	6	5	
Several times a week; 20-29 min.	8	5	4	
Several times a week; 10-19 min.	7	4	3	
Weekly or less often; 30 min. or more	8	5	2	
Weekly or less often; 20-29 min.	7	4	1	
Weekly or less often; 10-19 min.	6	3	1	
Not done				0

Table 69. Scores Assigned Sub-score II, Question 8: Reading to Child

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did, regularly, other occasionally	One parent did, other did not	Both parents did not
Daily for 30-60 min.	10	7	6	
Daily for 20-29 min.	9	6	5	
Daily for 10-19 min.	8	5	4	
2 or 3 times a week; 30-60 min.	9	6	5	
2 or 3 times a week; 20-29 min.	8	5	4	
2 or 3 times a week; 10-19 min.	7	4	3	
Once a week or less; 30-60 min.	8	5	2	
Once a week or less; 20-29 min.	7	4	1	
Once a week or less; 10-19 min.	6	3	1	
Not done				0

Table 70. Scores Assigned Sub-score II, Question 19: Provided Materials for Special Projects

Parental Involvement	Score
Items were frequently supplied for special projects at school. When needed, parents bought as well as sent things readily found at home.	4
Items readily found at home were frequently supplied.	3
Items were infrequently supplied; when they thought it desirable, parents did buy some things.	2
Items were infrequently supplied and only those things readily found at home were sent.	1
Parents did not send	0



Table 71. Scores Assigned Sub-score II, Question 20: References  
Provided for Use at Home

Parental Involvement	Score
Parents purchased 3 or 4 different kinds of reference materials several times this year	6
Parents purchased 2 different kinds of references several times this year	5
Parents purchased 1 reference several times this year	4
Parents purchased 3 or 4 different kinds of reference materials one or two times this year	3
Parents purchased 2 different kinds of references one or two times this year	2
Parents purchased 1 reference, one or two times this year	1
Parents did not purchase references this year	0

Table 72. Scores Assigned Sub-score III, Question 6: Attending Programs at School

Frequency and Extent of Occurrence	Parental Involvement			
	Both parents did	One parent did regularly, other occasion- ally	One parent did, other did not	Both parents did not
4 or more times this year; 2 or more hours each time	10	9	8	
4 or more times this year; 1-2 hours each time	9	8	7	
4 or more times this year; 15-59 min. each time	8	7	6	
3 times this year; 2 or more hours each time	9	8	7	
3 times this year; 1-2 hours each time	8	7	6	
3 times this year; 15-59 min. each time	7	6	5	
2 times this year; 2 or more hours each time	8	7	6	
2 times this year; 1-2 hours each time	7	6	5	
2 times this year; 15-59 min. each time	6	5	4	
1 time this year; 2 hours or more each time	7	6	3	
1 time this year; 1-2 hours each time	6	5	2	
1 time this year; 15-59 min. each time	5	4	1	
No time this year				0

Table 73. Scores Assigned Sub-score III, Questions 10-16: Helping at School

Frequency and Extent of Occurrence	Parental Involvement		
	Mother did	Mother did not, gave reason	Mother did not, gave no reason
Helped with 4-5 activities; 10-20 hours	6		
Helped with 4-5 activities; 2-10 hours	5		
Helped with 4-5 activities; 30-119 min.	4		
Helped with 2-3 activities; 10-20 hours	5		
Helped with 2-3 activities; 2-10 hours	4		
Helped with 2-3 activities; 30-119 min.	3		
Helped with 1 activity; 10-20 hours	4		
Helped with 1 activity; 2-10 hours	3		
Helped with 1 activity; 30-119 min.	2		
Did not help		1	
Did not help			0

Table 74. Scores Assigned Sub-score III, Question 17: Sending Treats to School

Parental Involvement	Score
Parents did 8-10 times this year	5
Parents did 5-7 times this year	4
Parents did 2-4 times this year	3
Parents did 1 time this year	2
Parents did not send but gave reason	1
Parents did not send; gave no reason	0

Table 75. Scores Assigned Sub-score III, Question 18: Sending Items for Fund-raising Events

Parental Involvement	Score
Parents did 2-3 times this year	2
Parents did 1 time this year	1
Parents did not send this year	0

## APPENDIX C

### TABLES

Table 76. Mean and Variance Summary for Parental School Involvement and Family Social Class

Family Social Class Positions	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
I Upper (N=5)	17.8	26.7	22.6	30.3	8.6	14.8	49.0	98.0
II Upper-middle (N=6)	21.3	19.5	26.2	185.8	12.2	7.8	59.7	169.9
III Lower-middle (N=18)	18.8	18.3	26.1	49.2	7.6	15.5	52.5	110.3
IV Upper-lower (N=53)	18.0	28.0	22.7	53.0	8.0	21.9	48.7	155.4
V Lower-lower (N=15)	17.0	13.6	20.5	61.7	6.1	15.9	43.6	131.4

Table 77. Mean and Variance Summary for Parental School Involvement and Family Income Categories

Family income	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Under \$5,000 (N=5)	18.4	15.8	17.0	39.5	6.2	15.2	41.6	62.8
\$5,000 to \$7,999 (N=10)	15.4	24.9	21.4	66.7	5.2	19.5	42.0	167.1
\$8,000 to \$9,999 (N=32)	17.9	27.2	21.7	55.4	7.9	18.4	47.5	166.4
\$10,000 to \$12,999 (N=30)	19.2	22.0	26.4	56.7	8.6	15.9	54.1	131.6
\$13,000 and over (N=18)	18.7	15.9	22.7	57.6	9.1	27.2	50.5	83.4

Table 78. Mean and Variance Summary for Parental School Involvement and Fathers' Occupation

Fathers' Occupation	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Higher executives and major professionals (N=5)	17.8	26.7	22.6	30.3	8.6	14.8	49.0	98.0
Business managers, lesser professionals and proprietors (N=5)	20.6	20.3	27.0	227.0	12.8	6.7	60.4	208.3
Administrative Personnel, lesser professionals, and small business owners (N=17)	19.5	22.3	27.1	44.0	7.6	17.8	54.2	74.6
Technicians, clerical and sales (N=17)	18.4	26.9	21.1	48.9	8.2	15.9	47.7	147.5
Skilled manual (N=31)	17.8	28.1	23.0	54.5	7.9	23.2	48.7	164.1
Machine operators and semi-skilled (N=17)	17.4	19.1	22.1	70.1	7.4	19.1	46.8	186.7
Unskilled and unemployed (N=5)	16.8	10.2	19.2	8.7	4.6	19.8	40.6	27.3

Table 79. Mean and Variance Summary for Parental School Involvement and Fathers' Education

Fathers' education	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Less than 8 yrs. (N=2)	14.5	4.5	18.5	4.5	6.5	0.5	39.5	0.50
8 up to 12 yrs. (N=21)	16.9	20.9	22.9	54.1	6.3	17.2	46.2	117.9
12 years (N=48)	18.3	24.0	23.4	54.2	7.8	22.3	49.5	154.7
12 years plus additional training (N=16)	20.2	27.4	24.2	81.8	10.0	14.7	54.4	145.9
4 years college (N=1)	19.0	0.0	28.0	0.0	2.0	0.0	49.0	0.0
4 years college plus graduate study (N=8)	18.1	22.9	23.4	88.3	10.1	10.1	51.6	184.8



Table 80. Mean and Variance Summary for Parental School Involvement and Mothers' Education

Mothers' education	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
8-12 yrs. (N=20)	18.5	24.1	22.2	47.3	8.5	15.1	49.2	85.6
12 years (N=58)	18.0	25.9	23.0	62.6	7.5	19.8	48.6	167.9
12 years plus additional training (N=12)	19.3	19.5	26.5	83.7	7.3	27.7	53.1	201.2
4 years college (N=5)	15.8	2.7	21.0	60.5	10.4	17.3	47.2	147.2
4 years college plus graduate study (N=2)	21.0	32.0	24.5	12.5	12.0	18.0	57.5	4.5

Table 81. Mean and Variance Summary for Parental School Involvement and Mothers' Employment

Mothers' employment	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Not employed away from home (N=60)	17.7	23.5	23.6	68.5	7.7	18.6	47.9	157.4
Employed full- time (N=18)	18.3	23.8	23.2	49.1	7.8	23.9	49.3	154.2
Employed part- time (N=19)	19.9	21.5	25.2	47.5	8.8	20.3	53.9	108.4

Table 82. Mean and Variance Summary for Parental School Involvement and Mothers' Membership in Groups

Mothers' Membership in Groups	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Belonged to no group (N=2)	17.5	12.5	30.0	0.0	1.5	4.5	49.0	2.0
One group (N=43)	16.9	23.2	23.7	53.5	6.6	16.5	47.2	140.3
Two groups (N=32)	19.5	24.9	22.5	66.3	8.1	16.4	50.1	160.7
Three groups (N=10)	19.5	14.3	23.0	80.7	12.5	18.5	55.0	157.1
Four groups (N=4)	21.3	11.6	28.8	66.9	11.5	9.0	61.5	62.3
Five groups (N=1)	17.0	0.0	26.0	0.0	15.0	0.0	58.0	0.0

Table 83. Mean and Variance Summary for Parental School Involvement and Sex of First Graders

Sex of children in study	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
Boys (N=52)	17.8	22.8	24.2	60.9	7.7	15.3	49.6	149.1
Girls (N=45)	18.8	24.2	22.1	59.5	8.2	25.0	49.1	153.6

Table 84. Mean and Variance Summary for Parental School Involvement and Number of Other Children in Families

Number other children in families	Parental School Involvement Scores							
	Sub-score I		Sub-score II		Sub-score III		Total	
	mean	var.	mean	var.	mean	var.	mean	var.
None (N=15)	18.1	20.4	24.3	71.8	7.3	29.9	49.7	162.9
One (N=52)	18.2	18.7	22.0	52.1	8.1	19.3	48.3	128.6
Two (N=23)	18.4	38.1	25.3	54.1	7.6	17.3	51.3	198.7
Three (N=23)	18.1	28.8	22.6	129.3	9.3	13.2	50.0	167.7

