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The Influence of Junior First Grade on Academic Ability and Self-Concept of Academic Ability

Mary Ann Boettger
Western Michigan University

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THE INFLUENCE OF JUNIOR FIRST GRADE ON
ACADEMIC ABILITY AND SELF-CONCEPT
OF ACADEMIC ABILITY

by

Mary Ann Boettger

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Educational Leadership

Western Michigan University
Kalamazoo, Michigan
December 1991
The educational practice of retaining students in junior first grade for a year between kindergarten and first grade was the focus of this study.

Four groups of 1983-1984 students were compared in 1990-1991: (1) those recommended for first and placed in first grade (F-F), (2) those recommended for junior first and placed in junior first grade (JF-JF), (3) those recommended for junior first and placed in first grade (JF-F), and (4) those borderline between junior first and kindergarten, but placed in first grade (B-F).

The groups were compared on gender, birth month, retention, absences, and lunch status, as well as academic achievement (class placement, grade point average, scores on the California Achievement Tests [CAT, CTB/McGraw-Hill, 1987] and category of achievement on the Michigan Educational Assessment Program [MEAP, Michigan Department of Education, 1988]) in mathematics and reading. The research groups were also compared on the total score of the Self-Concept of Academic Ability (Brookover,
Paterson, & Thomas, 1962).

There were 120 randomly chosen subjects with 30 per group. The findings of this study were that the placed junior first graders were the lowest social class students, had the most retentions, were assigned to the lowest mathematics and reading classes, scored the lowest on the CAT in mathematics and reading, had lower grade point average in reading, and had the lowest self-concept of academic ability.

The major recommendation made in this study was elimination of the extra year between kindergarten and first grade.
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The influence of junior first-grade on academic ability and self-concept of academic ability

Boettger, Mary Ann, Ed.D.
Western Michigan University, 1991

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DEDICATION

This study is dedicated to each child and adult who walked "life's road" with me. Together, we recorded tragedies, joys, and a vision for the future.

Mary Ann Boettger
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Acknowledgments—Continued

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Mary Ann Boettger
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CHAPTER I

INTRODUCTION

The educational practice of retaining students is being questioned by both researchers and educators (Chafe, 1984; Doyle, 1989; McNergney & Haberman, 1989; Shepard & Smith, 1989). Retention is the student placement in the same grade or a special program for the duration of a year in lieu of academic promotion (Chafe, 1984). Researchers have found many negative outcomes of retention and have called the practice into question. Basically, desired schooling outcomes of increased academic achievement and positive self-concept of academic ability, among other student developmental outcomes, have been found to be negatively affected by retention (Chafe, 1984; Doyle, 1989; McNergney & Haberman, 1989).

Junior first grade is a form of retention in a special program that was introduced by the Gesell Institute of Human Development, New Haven, Connecticut. The program maintained unready students for a year before they encountered the regular first grade curriculum (Ilg, Ames & Baker, 1981). Unready students were defined as students not able to cope and develop socially, emotionally, academically, and physically in the school environment.
without undue stress (Carll & Richard, 1977). Increased academic achievement and positive self-concept of academic ability were the goals of junior first grade; however, there has been little research investigating either variable. This study addresses the question of whether junior first grade placement enhances academic achievement and self-concept of academic ability.

Operational Definitions

The following terms and definitions are used in this study:

Absences were the number of half-days that a student was not in attendance at school.

Academic achievement was the degree of mastery in subject areas taught in schools. Academic achievement in mathematics and reading was studied. Student class placement, grade point average, totals on the California Achievement Tests (CAT, CTB/McGraw-Hill, 1987), and category of achievement on the Michigan Educational Assessment Program (MEAP) were used to measure this variable.

Birth month was birth during the months of July 1977 through May 1978 or June 1978 through November 1978. A child must be 5 years old on or before December 1 to enter public school that year. Older subjects who were held out of kindergarten for one year were older and had birthdays from the previous year (1977). The subjects in
this study were divided into two groups: July 1977 through May 1978 or June 1978 through November 1978.

California Achievement Tests (CAT, CTB/McGraw-Hill, 1987) were standardized tests developed, published, and sold by the McGraw-Hill Company.

Class placement was the location of a student in the mathematics and reading classes. The students were placed in high, middle, or low classes based on subject mastery and probability of success as determined by the teachers and counselors.

Gender was being of the male or female sex.

Grade point average (GPA) was conversion of letter grades to a scale of numerical equivalents (A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D+ = 1.3, D = 1.0, D- = 0.7, E+ = 0.3, E = 0.0). The numerals were added then divided to provide an average.

Grade(s) retained was the grade or grades repeated. Placement in junior first grade was considered a retention.

Hot lunch status was the level of payment by a student for a school hot lunch. Payment was free, reduced, or fully paid. The designation was determined by the Michigan Food and Nutrition Program (Michigan Department of Education, 1989) and Federal PL 94-105 (National School Lunch Act and the Child Nutritional Act of 1966,
Amendments, 1975). These guidelines were reprinted by the Director of Food Services and distributed to parents in the school district. Factors considered were total family size and family income. Needy students were those who paid a reduced amount or no money for a hot lunch.

**Junior first grade** was the nontraditional academic year between kindergarten and first grade. Students who completed the kindergarten year and were determined unready to succeed in the first grade curriculum were placed in junior first grade. Placement in junior first grade was for one year preceding regular first grade.

**Michigan Educational Assessment Program (MEAP, Michigan Department of Education, 1988)** was norm-referenced tests developed, published, and required by state directive to be administered at the 4th, 7th, and 10th grades in Michigan.

**Recommended versus final placement in junior first:** Recommended placement, based on a test, placed students in first grade, junior first, borderline (between junior first and kindergarten), and retain in kindergarten. Final placement was based on teacher or administrator observations and judgments, testing, unmet grade objectives, parent requests, and availability of space in the program. Final placement was the grade which the student attended after kindergarten. The recommended placement was listed first, followed by a dash and then the final
Retention was the educational practice of a student remaining in the same grade or in an alternative program for an extra year of instruction.

Self-concept of academic ability was the student's self-evaluation of his or her ability to master the requirements of school work. The Self-Concept of Academic Ability Scale (Brookover, Paterson, & Thomas, 1962), an eight-question scale to determine a student's self-evaluation of academic ability was used to measure this variable.

Purpose of Study

The purpose of this study was to compare the academic achievement and self-concept of academic ability of four groups of students: (1) those recommended for first grade and placed in first grade (F-F), (2) those recommended for junior first grade and placed in junior first grade (JF-JF), (3) those recommended for junior first grade and placed in first grade (JF-F), and (4) those borderline between junior first grade and kindergarten, but placed in first grade (B-F). The groups were compared on gender, birth month, retention, absences, and lunch status, as well as academic achievement (class placement, grade point average, totals on the California Achievement Tests and category of achievement on the
Michigan Educational Assessment Program) in mathematics and reading. The research groups were, also, compared on the total score of the Self-Concept of Academic Ability Scale (Brookover et al., 1962).

Research Hypotheses

This study tested seven specific research hypotheses:

1. The number of males recommended for first and placed in first grade (F-F) will be less than those males recommended for junior first and placed in junior first grade (JF-JF), which will be less than those males recommended for junior first and placed in first grade (JF-F), which will be less than the number of males in borderline, but placed in first grade (B-F) (Schurr, Brookover, Towne, Hohn, & Joiner, 1967).

2. The number of students with July 1977 through May 1978 birthdays recommended for first and placed in first grade (F-F) will be greater than those students recommended for junior first and placed in junior first grade (JF-JF), which will be greater than those students recommended for junior first and placed in first grade (JF-F), which will be greater than students in borderline, but placed in first grade (F-F) (Carll & Richard, 1977; Stennett & Earl, 1984).
3. The number of students retained in a grade for students recommended for first and placed in first grade (F-F) will be less than those students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than students in borderline, but placed in first grade (B-F) (Chafe, 1984).

4. The number of half-day absences for students recommended for first and placed in first grade (F-F) will be less than those students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than students in borderline, but placed in first grade (B-F) (Shepard & Smith, 1989).

5. The number of needy lunch status for students recommended for first and placed in first grade (F-F) will be less than students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than students in borderline, but placed in first grade (B-F) (Brookover, Erickson, & Joiner, 1967).

6. The academic achievement for students recommended for first and placed in first grade (F-F) will be
higher than students recommended for junior first and placed in junior first grade (JF-JF), which will be higher than those students recommended for junior first and placed in first grade (JF-F), which will be higher than students in borderline, but placed in first grade (B-F) (Chafe, 1984; Doyle, 1989; Finlayson, 1977; McNerney & Haberman, 1989; Pipitone, 1986; Shepard & Smith, 1989).

7. The self-concept of academic ability for students recommended for first and placed in first grade (F-F) will be higher than students recommended for junior first and placed in junior first grade (JF-JF), which will be higher than those students recommended for junior first and placed in first grade (JF-F), which will be higher than students in borderline, but placed in first grade (B-F) (Chafe, 1984; Shepard & Smith, 1989).

Conceptual Framework

Doyle (1989) wrote that retention of students in American public schools was approximately 29% in the early 1900s and that elementary students could be retained two or more times. Over half of all elementary students became dropouts and less than 10% of the students who started high school graduated.

Retention, based on development or behavioral age, relied on the level of functioning for a total organism
(social, emotional, physical, and intellectual). Developmental age, in this study, was a numerical score based on a district test using the Gesell School Readiness Test (Gesell Institute of Child Development, 1978). Chronological age was time in days, months, and years since birth. Developmental age vied with chronological age as the standard for school entrance during the 1950s. The Gesell Institute of Child Development promulgated the philosophy that a child functions as a total organism and behavioral components could be averaged into a developmental age. Furthermore, use of the Gesell School Readiness Test (Gesell Institute of Child Development, 1978) for 5- through 9-year-olds provided a developmental age for proper grade placement and school success (Ilg, 1982).

Proper placement included junior first grade, a year between kindergarten and first grade. This placement provided an additional year to grow (time), an environment of movement with concrete and direct discoveries (experiences), and unrestricted recognition as a unique person (acceptance) (Carll & Richard, 1977).

There were common characteristics of junior first and retained students. These characteristics were:

1. There were more boys in these groups, especially those born in the last half of the year (Carll & Richard, 1977; Stennett & Earl, 1984), and twice as many males as
females in a special program (Schurr et al., 1967).

2. Students were older chronologically (Chafe, 1984), which indicated a divergence for one or more years.

3. The socioeconomic status was lower (Brookover et al., 1967).

4. More absences were recorded for these groups (Shepard & Smith, 1989).

Rationale for this study was that junior first grade would enhance academic achievement and self-concept of academic ability. The variables studied further analyzed the characteristics of each group.

Limitations

This study contains certain limitations:

1. Two hundred and seventy-nine students of the original population were no longer in the school district and were unavailable for this study. These students may differ in systematic, unknown ways from those who remained. There was no differential attrition from the original population across groups, however.

2. Students retained in junior first grade were one year older than those not placed and not retained. This difference remained as they moved through the regular grades, at administration of tests, and collection of data.
3. Placement criteria were subjective and lacked tight controls. Criteria for final placement rested with teacher or administrator observations and judgments, testing, unmet grade objectives, parent requests, and availability of space in the program.

4. Students placed in junior first grade (JF-JF) had parental approval. This parent support may be an operating factor that is different for these students than for students who were placed in first grade (F-F), recommended for junior first and placed in first grade (JF-F), or borderline, but placed in first grade (B-F).

5. The data presented in this study were from the 1983-1984, 1989-1990, and 1990-1991 school years.

6. The results of this study were reported as observed. Students selected by a Table of Random Numbers remained in the study even when data for them were missing. The areas that had missing data were totals in mathematics and reading from the California Achievement Tests and category of achievement on the Michigan Educational Assessment Program. The intent was to report the findings as they actually existed.

Overview

The purpose of this chapter was to provide an introduction to the research problem and define operational terms. Information concerning the purpose of the study,
conceptual framework, and limitations was included. Chapter II contains a review of literature. Chapter III contains the research hypotheses and a discussion of the design, procedures, and methodology used in this study. Chapter IV contains the findings of this study. This study concludes in Chapter V with a discussion of the findings and implications for future research.
CHAPTER II

REVIEW OF LITERATURE

A literature search was completed by using the following key words in the areas of education, sociology, and psychology: academic ability, self-esteem, and self-concept. The following descriptors further narrowed the search: junior first, transitional first, primary first, pre-first, bridging, young six, developmental first, academic achievement, aptitude, retention, failure, and self-worth. Professional and popular books, magazines, newspapers, and dissertations were reviewed. Focus of the review centered on the number of junior first graders in Michigan, definition of this grade, and the positive or negative findings of junior first grade studies.

Number of Junior First Graders in Michigan

Junior first grades have been in operation in Michigan from 1 to 20 years according to a survey of districts in fall 1983. Eighty-eight public school districts responded that junior first grade classrooms existed in the district. The number of students involved was unavailable because that question was not included in the
survey (Riley, Jaworski, & Stoury, 1984). An update to the survey was attempted through a phone call to the State Department of Education, Early Childhood Division, in March 1990 and proved inconclusive. State student accounting forms list kindergarten then first grade, without a designated column for junior first (see Appendix B, p. 103). Districts could count junior first graders as kindergartners since the curriculum is similar and an extension of that year, or as first graders since the kindergarten year was completed.

The overriding question of how many students experienced junior first grade remained. During January 1991, this researcher sent a survey directed to 559 public school superintendents throughout Michigan asking the number of junior first graders included in that district's Fourth Friday count for the 1990-1991 school year. The results are reported in this study.

Since many students experience this extra year between kindergarten and first grade, there are several important questions to be asked. Are the dimensions of child development considered a factor in this placement? What is a junior first grade? What are the curricular goals? Does junior first grade enhance the academic achievement and self-concept of academic ability of these students?
Dimensions of Development

The concept of development in the field of early childhood education draws information from human development, child development, and child study. There are two dimensions to development: dynamic and normative. Dynamic describes the sequence, transformation, and order in which learning and development occur, delayed impact, and cumulative effect of frequent or repeated experiences. Normative describes ages and stages (a point in time) at which most children can or cannot perform (Katz, 1988).

The writings and research of Jean Piaget, a Swiss psychologist, investigated the dynamic aspects of child development in thought and knowledge. His observations listed four major stages of development: infancy, early childhood, childhood, and adolescence. Variations in developmental patterns of individuals were retained through notations of approximate ages for each stage. Cognitive thought was found to be a developmental, sequentially ordered process that matured over time (Bybee & Sund, 1982).

The normative dimension of development was studied by Dr. Arnold Gesell in the early 1900s (Ilg, 1982). Clinical observations yielded norms and developmental or behavioral age descriptions in the mental, physical,
social, emotional areas, and play interests of children. Chronological age was time in days, months, and years since birth. Developmental age was a numerical score at which a child was functioning as a total organism (social, emotional, intellectual, and physical) as determined on the Gesell School Readiness Test. Developmental age in school placement was the focus of activity at the Gesell Institute of Child Development since 1951. Administration of the Gesell School Readiness Test was recommended for ages 5 through 9 years. School readiness is the ability to cope and sustain socially, emotionally, academically, and physically in the school environment without stress. Placement by developmental age would remediate or prevent school learning problems, insure readiness and success in accomplishing school requirements, maximize potential, and have children academically ready for the grade. The assessment was viewed as a preventative tool that would, along with appropriate grade placement, make a positive difference in student success. The developmental point of view considered growth as orderly, structured, predictable; that each child has an individual rate and pattern of growth; that the child acts as a total organism; and that readiness is determined by the biological-maturational make-up of each child and cannot be hurried (Carll & Richard, 1977).
The Junior First Grade Program in the Bay City Public Schools

This study was conducted in Bay City, Michigan. The program in Bay City involved several components. Children tested prior to encountering the year of regular first grade curriculum and scoring a developmental or functioning age of 5 to 5-1/2 on the Gesell School Readiness Test (Ilg, 1982) were recommended for a year in junior first grade. The year was sometimes identified as junior first grade, transitional first, transition room, readiness room, bridging room, full-day kindergarten, half-day kindergarten, and half-day first (Riley et al., 1984). Junior first grade was a readiness year with an adjusted curriculum that was to have a beneficial, direct effect on retentions, high school dropouts, tone of a school, and provide time to work on the basic problems of early childhood learning (Carll & Richard, 1977).

In other words, children who completed the kindergarten year and were determined unready to successfully cope and sustain socially, emotionally, academically, and physically in the school environment without stress were placed in junior first grade for a year. Main characteristics of the junior first room were: movement-experience-discovery activities, 6-year-olds, time for readiness to emerge, unrestricted acceptance, centers for blocks, science, mathematics, language, library, art and
music, housekeeping, woodworking, and body balance (Carll & Richard, 1977). Decisions for junior first grade placement were based on one or several of the following criteria: scores on tests, teacher or principal observations, space in the program, parent consent, and in the state of Tennessee, by court order (Whitefield, 1985). Class size ranged from 12 to 20 (Day, 1986). Junior first grade was the nontraditional alternative to retention in kindergarten.

Retention

One of the adjustments by American schools, as the number of students increased, was sequencing grades based on age. The age of the student influenced placement decisions as early as 1904 in the district under study. Twelve years of schooling were organized into three departments of 4 years. There was a delay in starting young students because grades were further divided into B and A for each year, as one B, one A, etc. First graders were admitted to school only during the first 2 weeks of each semester with entry in September for B and January for A. These students were 7 years old and received enough home or school instruction so they did not qualify for the subprimary (kindergarten) level (Bay City Board of Education Manual, 1904).
The kindergarten year was regarded as a rite of passage, and movement from one status to another with a distinct student role. Students passed from nonstudents to quasi-students to first grade students (Cox, 1980). Mastery of the curriculum at each grade became the criteria for promotion to the next grade (Chafe, 1984). An interruption in movement from one grade to the next may result in placement in the same grade or a special program for a year (Chafe, 1984). This interruption was termed a retention. When a student did not master the required curriculum, retention in grade became the practice. In 1904, a New York Schools Superintendent voiced concern with improving low achievement through retention (Coffield & Blommers, 1954).

Retention, in this study, was defined as the educational practice of a student remaining in the same grade or in an alternative program for an extra year of instruction between kindergarten and first grade. Since junior first grade interfered with movement from kindergarten to first grade and diverted the accepted student role, were the desired goals of increased academic achievement and positive self-concept of academic ability compromised? This educational remedy for academic failure has been studied to determine the positive or negative effects. Two recent studies and the findings are discussed in the following section.
A meta-analysis by Holmes and Matthews (1984) of 44 retention studies was extended by Holmes (1989) with an additional 19 studies. These studies, combined, found 54 negative and 9 positive results. The reader was cautioned in two areas regarding the 9 positive studies: (1) Intensive remediation and unusual ability of students were involved, and (2) grade peers rather than age peers were compared and the positive results disappeared when longitudinal studies were analyzed together. If IQ and past achievement were matched, the negative effect of repeating a grade averaged a -.30 standard deviation.

The efficacy of retention in kindergarten through third grade was examined by Meisels and Liaw (1991). Data from the National Education Longitudinal Study of 1988 were used. The 1988 study concluded that at the eighth grade, those retained demonstrated lower academic achievement, self-concept, and internal locus of control. The students most likely to be retained were boys, minorities, and of lower socioeconomic status. The above study answered three questions. Who is retained? Is kindergarten through third grade more advantageous than retention in fourth through eighth grade? Does retention improve student outcomes?

Conclusions of the study were:

1. Blacks and Hispanics were retained in greater proportions than whites, boys outnumber girls, lower
socioeconomic status (SES), and students in first through third grade were more likely to be retained. Kindergarten retainees were more likely to be white with higher SES. The largest number of retentions occurred in the first four years of school.

2. Early retainees were white, male, and younger than later retainees. The SES did not differ between early and later retainees. Schools initiated more retentions than parents and parents were more likely to request early retentions.

3. Early retainees had higher grades, were more likely to have learning problems, and be placed in special education. They had less emotional and behavioral problems than later retainees. Parents were more satisfied with the education of the early retainer. There were no significant differences, at eighth grade, on achievement test scores or self-concept. The comparisons did not favor early or late retention. When the retainees were compared with the matched never-retained group, the latter had significantly higher grades, higher and more positive self-concept, more internal locus of control, and parents were more satisfied with their children's school experience. Early retainees had lower grades, test scores, more learning problems (1-1/2 times higher), and more often assigned to special education (2 times higher).
Researchers listed four characteristics of junior first and retained students. Characteristics that were common to both groups are: (a) There were more boys in these groups, especially those born in the last half of the year (Carll & Richard, 1977; Stennett & Earl, 1984), and there were twice as many males as females in a special program (Schurr et al., 1967); (b) students were older chronologically (Chafe, 1984), which indicated a divergence for one or more years; (c) the socioeconomic status was lower (Brookover et al., 1967); and (d) more absences were recorded for these groups (Shepard & Smith, 1989).

Retention continues despite the cumulative evidence of research which concludes that negative results persist and outweigh the positive. If retention were abolished, several issues would surface as expressed in an article by Natale (1991). These issues are: (a) a common belief that if children try, they can be normal; (b) students should be ready for the grade; (c) where will low-achieving students be placed; and (d) there is a need for lower class size of 15:1. Possible solutions were listed as: after-school tutoring, summer school, extra assistance, and converted schools so the traditional grade levels and grading systems are changed. The use of developmentally appropriate curriculums, more parent involvement, realization that children learn at different
rates, change in the knowledge base of the professionals, and maintenance of accurate state reporting systems and statistical data regarding number and effect of retentions were listed.

Academic Achievement

The value of retention as a positive factor of increasing academic achievement has been questioned by researchers and educators. Reviews of literature and research studies dating back 80 years conclude with negative findings. Retention provided no academic benefit and often lower scores (Chafe, 1984; Doyle, 1989; Finlayson, 1977; McNergney & Haberman, 1989; Pipitone, 1986; Shepard & Smith, 1989). Findings in one study showed a gain of one month in reading for one year of retention (Shepard & Smith, 1987) and the impact of a junior first or transition room appeared detrimental to early reading achievement when compared with students not retained (Talmadge, 1981). The researchers in a study of Educable Mentally Impaired students in special class placement explained that irreversible changes in public identity and alignment with the label of deviant occurred among students removed from "regular student" to a lesser role (Schurr et al., 1967).
Self-Concept of Academic Ability

Positive self-concept of academic ability is another goal of retention. An eight-question, paper and pencil scale was developed for use in an individual or group setting to study this goal. The scale is entitled the Self-Concept of Academic Ability Scale (Brookover et al., 1962). Difficulty of the reading level was measured by the Thorndike-Lorge word list. All words were at the third grade level except 10: 7 were at fourth grade level and 3 were at the sixth and seventh grade level (Towne & Joiner, 1966). The scale has been cited in over 175 publications and has been used by over 200 researchers (Brookover, 1989).

Earlier research concluded that self-concept is not negatively affected by retention (Finlayson, 1977). However, later studies modify the conclusion by stating that self-concept improves during the year of placement, but may disappear over time (Chafe, 1984) and that the extra year does not boost self-concept (Shepard & Smith, 1987).

The most comprehensive and recent publication reviewed was by Shepard and Smith (1989). The conclusions reiterate findings of this review of literature.

Chapter I provided an introduction to the research problem and defined operational definitions. Information
concerning the purpose of the study, conceptual framework, and limitations were included. This chapter contained a review of literature. Chapter III contains the research hypotheses and a discussion of the design, procedures, and methodology used in this study. Chapter IV contains the findings of this study. This study concludes in Chapter V with a discussion of the findings and implications for future research.
CHAPTER III

DESIGN AND METHODOLOGY

Introduction

The purpose of this study was to compare the academic achievement and self-concept of academic ability of four groups of 1983-1984 students in Grades 6 and 7 in 1990-1991: (1) those recommended for first and placed in first grade (F-F), (2) those recommended for junior first and placed in junior first grade (JF-JF), (3) those recommended for junior first and placed in first grade (JF-F), and (4) those borderline between junior first and kindergarten, but placed in first grade (B-F). Seven variables were compared in order to further define each group: gender, birth month, retention, absences, hot lunch status, and academic achievement (class placement, grade point average, totals on the California Achievement Tests [CAT, CTB/McGraw-Hill, 1987], and category of achievement on the Michigan Educational Assessment Program [MEAP, Michigan Department of Education, 1988]) in mathematics and reading, and the total score on the Self-Concept of Academic Ability Scale (Brookover et al., 1962).
Chapter I provided an introduction to the research problem and defined operational terms. Information concerning the purpose of the study, conceptual framework, and limitations was included. The seven research hypotheses were stated. Chapter II contained a review of literature. This chapter contains the design, procedures, and methodology used in this study.

This chapter is divided into the following sections: (a) subjects, (b) sampling plan, (c) design and instrumentation, (d) data gathering procedures, (e) data analysis procedures, and (f) chapter summary.

This was a study of one junior first grade and was designed to test seven research hypotheses which compared four groups of students. The hypotheses were:

1. The number of males recommended for first and placed in first grade (F-F) will be less than those males recommended for junior first and placed in junior first grade (JF-JF), which will be less than those males recommended for junior first and placed in first grade (JF-F), which will be less than the number of males in borderline but placed in first grade (B-F) (Schurr et al., 1967).

2. The number of students with July 1977 through May 1978 birthdays recommended for first and placed in first grade (F-F) will be greater than those students recommended for junior first and placed in junior first grade (JF-JF), which will be greater than those students
recommended for junior first and placed in first grade (JF-F), which will be greater than students in borderline, but placed in first grade (B-F) (Carll & Richard, 1977; Stennett & Earl, 1984).

3. The number of students retained in a grade for students recommended for first and placed in first grade (F-F) will be less than those students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than students in borderline, but placed in first grade (B-F) (Chafe, 1984).

4. The number of half-day absences for students recommended for first and placed in first grade (F-F) will be less than those students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than students in borderline, but placed in first grade (B-F) (Shepard & Smith, 1989).

5. The number of needy lunch status for students recommended for first and placed in first grade (F-F) will be less than students recommended for junior first and placed in junior first grade (JF-JF), which will be less than those students recommended for junior first and placed in first grade (JF-F), which will be less than
students in borderline but placed in first grade (B-F) (Brookover et al., 1967).

6. The academic achievement for students recommended for first and placed in first grade (F-F) will be higher than students recommended for junior first and placed in junior first grade (JF-JF), which will be higher than those students recommended for junior first and placed in first grade (JF-F), which will be higher than students in borderline, but placed in first grade (B-F) (Chafe, 1984; Doyle, 1989; Finlayson, 1977; McNergney & Haberman, 1989; Pipitone, 1986; Shepard & Smith, 1989).

7. The self-concept of academic ability for students recommended for first and placed in first grade (F-F) will be higher than students recommended for junior first and placed in junior first grade (JF-JF), which will be higher than those students recommended for junior first and placed in first grade (JF-F), which will be higher than students in borderline, but placed in first grade (B-F) (Chafe, 1984; Shepard & Smith, 1989).

Subjects

Demographics

The study was completed during the 1990-1991 school year in a public school district located in central
Michigan. This district covered 254 square miles which included urban, suburban, and rural areas and all or part of 3 cities, and all or part of 11 townships in 2 counties. The four major employers were (1) General Motors, (2) Bay Medical Hospital, (3) Bay City Public Schools, and (4) agriculture in the outlying areas.

The school district reopened elementary buildings due to space needed for computer programs and population shifts—three in 1984-1985, one in 1985-1986, and one in 1986-1987. District-wide consolidation took place during summer 1990, closing one high school, one intermediate school, and five elementary schools. This school district has not passed a millage election increase since 1979 (Hollenbeck, 1990).

Students

The kindergarten classes totaled 785 in the spring of 1984 with 745 screened and 40 not tested due to absence. Recommended placement was 339 to first grade, 182 to junior first grade, 180 scoring borderline, 44 recommended for retention in kindergarten, and 40 absent. The district provided 100 spaces for the junior first grade program and a child was placed only with parent approval. Thus, of the 182 students recommended for junior first grade, the 100 placed had parent approval.
Recommended placement for the year following the 1983-1984 kindergarten experience was: total students = 785 (100%), first grade = 339 (43.2%), junior first = 182 (23.2%), borderline = 180 (22.9%), retain in kindergarten = 44 (5.6%), and absent for testing = 40 (5.1%).

Final placement for this entire group is unavailable because of attrition. The final placement of the surviving students became the basis for the four groups in this study: (1) recommended for first and placed in first grade (F-F), (2) recommended for junior first and placed in junior first grade (JF-JF), (3) recommended for junior first and placed in first grade (JF-F), and (4) borderline between junior first and kindergarten but placed in first grade (B-F).

During 1990-1991, the subjects were attending seventh grade if they had not been retained, sixth grade with retention in developmental kindergarten, junior first, or any one regular grade, and in fifth grade if they experienced two retentions. One student, due to advanced age when entering kindergarten, attended ninth grade in a high school.

The fifth graders were housed in K-5 elementary buildings. The sixth and seventh graders were housed in two areas: (1) a combined intermediate and high school that enrolled 759 sixth, seventh, and eighth graders and a high school enrollment of 1,507 and (2) a mid-district
building housing 1,517 sixth, seventh, and eighth graders in one building as the result of summer consolidation.

Sampling Plan—Students

Names of 1990-1991 enrolled students who attended kindergarten in this district during 1983-1984 were highlighted. A research team of trained recorders located these names on official enrollment computer sheets that listed sixth and seventh graders and all students district-wide.

The original class lists used to identify subjects in the groups were prepared in the spring of 1984. Since this study was conducted in the winter of the 1990-1991 school year, each group evidenced attrition from the original membership. Attrition accounted for a total loss of 279 (35.5%) students. The breakdown by recommended placement from the original pool was: first 116 (14.7%), junior first 64 (8.1%), borderline 66 (8.4%), retain in kindergarten 18 (2.2%), and absent 15 (1.9%). The rate of attrition was fundamentally the same across the groups. Whether students remained in the district or left did not appear to be a function of the group.

Students eliminated from this study left the district, attended parochial schools in the area, attended a district school in fifth or ninth grade, or parents refused to submit signed consent forms. The surviving
subjects who were retained as kindergartners totaled 13. This group and the 20 absent were eliminated due to low number of subjects.

Final placement determined the base pool of subjects for this study. The participating groups and number of surviving subjects possessing consent forms and completed Self-Concept of Academic Scales on May 17, 1991, were:

1. Recommended for first and placed in first grade (F-F)—142 of 213 = 66.6%.

2. Recommended for junior first and placed in junior first (JF-JF)—44 of 47 = 93.6%. (All students had to be recommended to gain placement, which means 44 of 44, or 100%, were recommended for junior first grade.)

3. Recommended for junior first and placed in first grade (JF-F)—56 of 59 = 94.9%.

4. Borderline but placed in first grade (B-F)—64 of 107 = 59.8%.

A Table of Random Numbers in Appendix C of *Educational Research* (Borg & Gall, 1983) was used to equalize the groups to 30 each. The table was entered by using white poker chips with one numeral (1-10) written on each one to determine which column would be used. The chip with numeral 3 was drawn. Chips with the letter T for top and B for bottom were drawn for a 2 of 3 direction. Starting point of the columns would be the bottom. Chips with the letter R for right and L for left were drawn to
determine which side of the column would be used. L was drawn 2 of 3 times. The research team, consisting of trained volunteers, monitored and participated in this activity. The 30 subjects per group were selected by using the Table of Random Numbers in this order: Column 3, bottom to top and numerals on the left side of the column. To insure sufficient number of columns for use, progression of the columns was in sequence: Column 3, then 4, then 5. A total of 120 subjects in four groups were selected for this study.

Design and Instrumentation

The 1983-1984 kindergarten students were screened in spring 1984 by kindergarten teachers. The teachers administered a two-part screening test that was developed in the district. The test was composed of (a) "Complete the Person," which required students to draw missing body parts to complete the figure of a person, and (b) "Shapes," which required students to copy the forms of a circle, cross, square, triangle, divided triangle, and diamond from a model. Scoring was based on the Gesell School Readiness Test (Gesell Institute of Child Development, 1978) guidelines and averaged into a developmental age for each student. The recommended placement was based solely on the developmental age obtained from the individual student's averaged scores on the tests.
The four categories of recommended placement as determined by the spring tests were: (1) first, (2) junior first, (3) borderline, and (4) kindergarten. These were reduced to three final, fall placements (first, junior first, and kindergarten) for the year following kindergarten. The borderline group were children who would have difficulty successfully completing the regular first grade curriculum; however, placement was usually in first grade. Final placement of the original 785 students was based on two factors: (1) test scores or (2) recommendation of the teacher and administrator. Final placement in junior first grade was determined by teacher or administrator observations and judgments, testing, unmet grade objectives, parent approval, and available space.

California Achievement Tests (CAT)

California Achievement Tests (CTB/McGraw-Hill, 1987) were national, norm-referenced, objective-based, and measured achievement of basic academic skills in grades K-12. Subject areas tested were reading, spelling, language, mathematics, and study skills. CAT tests were timed; however, the allotment permitted almost all students to attempt all items. Internal consistency, standard error of measurement, and standard error curves measured reliability for CAT Form E. Content validity was

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supported by the percentage in the norming sample who mastered the objective at a given level and grade and use of the Bayesian procedure. Summary data, intercorrelation coefficients, and test-retest reliabilities were available.

Scale score statistics included means, standard deviations and medians for levels 10-20 based on response-pattern scoring. This study compared the Normal Curve Equivalency of scale scores at the fifth and sixth grades on CAT Form E.

A student's score for each objective was reported on a Mastery Band within a confidence interval of 0.00 to 1.00. There was a 2 to 1 odds that the child's score would lie within the band which was a 67% confidence interval (CTB/McGraw-Hill, 1987).

Michigan Educational Assessment Program (MEAP)

The following information was in the Technical Report, Volume 1 and Volume 2 (Phelps, Donovan, Roeber, Carr, & Caswell, 1980, 1981). These public documents are not copyrighted and permission to reprint was not necessary (see Appendix A, p. 86).

Michigan's 4th, 7th, and 10th graders were tested in reading and mathematics on selected minimal performance objectives. The tests were not timed.
Reliability was measured by the Kuder-Richardson Formula 20 (KR20) to estimate internal consistency. The point biserial correlation coefficient was used to estimate item discrimination and performance on all objectives. Phi correlation coefficients reflected level of difficulty and "The 1980 Experimental Mathematics and Reading Study" (Phelps et al., 1980) provided stability over time.

Content validity was based on (a) critical judgments and consensus of teachers; (b) measurement and curriculum specialists; (c) those involved in development, revision, and construction of the minimal skills objectives and test measures; and (d) citizens.

Student ranking of category of achievement in mathematics and reading was used in the study. The ranking was 0, 1, 2, 3, or 4 depending on the number of objectives attained and listed on the Individual Student Report. At least two out of three test questions were answered correctly to attain an objective. Most students were expected to be at Category 4 because the performance objectives tested were considered minimal and attainable.

The ranking by category of achievement was determined by the number of objectives attained: Category 4 = 3/4 or more objectives attained, Category 3 = 1/2 to 3/4, Category 2 = 1/4 to 1/2, Category 1 = 1/4 or less, and Category 0 = no objectives attained.
Report Cards

Student achievement in mathematics and reading was compared by converting the final letter grade, issued for each child by the teacher, into a numerical score. The letter-to-numerical score was developed in the district (A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D+ = 1.3, D = 1.0, D- = 0.7, E+ = 0.3, E = 0.0). No weighted scores or differentiation were considered for students in remedial or advanced classes (Alpha Math, Program for the Academically Talented, or Special Education). The grades were taken at face value at the student's present placement.

Attendance which was recorded on report cards was compared. The recorded number of half-day absences were assumed accurate.

Class Placement

The location of a student in mathematics and reading class as determined by the teachers was used to measure academic achievement. The students were ranked at high, middle, or low placement. Counselors provided this information.
General Self-Concept of Academic Ability (GSCA)

The following information can be found in Self-Concept of Ability and School Achievement, Cooperative Research, Project 845 (Brookover et al., 1962). Permission for use of information and administration of the scale was obtained from the principal investigator, Dr. Wilbur Brookover (see Appendix A, p. 84).

Project 845 was the first study investigating the student's self-concept of academic ability. Since there were no instruments to measure this variable, one was developed. This instrument is referred to by several titles: Self-Concept of Ability Scales (Brookover et al., 1962), General Self-Concept of Academic Ability (Schurr et al., 1967; Towne & Joiner, 1966), and Michigan State Self-Concept of Ability Scale (Shavelson, Hubner, & Stanton, 1976).

The two-part instrument was titled, "Self-Concept of Ability Scale--Form A: General and Self-Concept of Academic Ability in Specific School Subjects." The two sections can be used together or as separate instruments, administered as paper and pencil tests and were developed for a group or individual setting. The General Self-Concept of Ability Scale contained eight items that provided a choice of responses ranging from 1 to 5 with 1 being the most positive response. The total score ranged
from 8 to 40 depending on the student's response for each item. The initial instrument was developed for use by junior and senior high students. Modifications of the original scale became the Self-Concept of Academic Ability Scale, Elementary Form as developed by Brookover et al. (1962) and was the form used in this study.

Scalegram analysis of the original 16 pretest questions was .91 when repeated, with conclusions that self-concept of academic ability could be measured by a paper and pencil test. A study of 1,050 seventh grade students during the fall of 1960 concluded that when the scale was repeated coefficients were .95 for males and .96 for females and that the scoring method was a total score for the eight items. Reliability of general self-concept total score was .82 for males and .77 for females. When grade point average (GPA) and self-concept of ability were compared, the correlation was .57 for each sex (Brookover, Shailer, & Paterson, 1964). Brookover's scale, listed as Michigan State Self-Concept of Ability Scale (SCA), was determined to possess reliability high enough to provide study of individual differences, a one-year stability, and a point in time ranking of persons (Shavelson et al., 1976).

Reading difficulty level of vocabulary was measured by the Thorndike-Lorge word list in The Teacher's Word Book of 30,000 Words (Thorndike & Lorge, 1944) at third
grade level except for 10 words. Seven were at fourth grade, and 3 were at sixth and seventh grade level (Towne & Joiner, 1966). The scale is titled "The Self-Concept of Academic Ability Scale" (Brookover et al., 1962). The scale has been cited in over 175 publications and used by over 200 researchers (Brookover, 1989).

These findings indicated that the Self-Concept of Academic Ability Scale was an appropriate instrument for this study.

Data Gathering Procedures

Letters requesting permission to gather information were sent to the superintendent; director of planning, research, and pupil services; director of food services; permission's editor for California Achievement Tests; and the supervisor of the Michigan Educational Assessment Office. Permission for use of information and administration of the Self-Concept of Academic Ability Scale was requested of and granted by Brookover, the principal investigator of Project 845. This correspondence and the positive responses are in Appendix A.

A letter, consent form (see Appendix A, pp. 91-92), and return addressed, metered envelope were sent to parents of the surviving students. These were mailed upon approval from the Western Michigan University Human Subjects Institutional Review Board (see Appendix A, p. 90).
Phone calls were made to nonrespondents and a second set of information was sent. Home visits were also made to obtain signed parent consent forms. After consents were received, arrangements were made at the schools of attendance for administration of the Self-Concept of Academic Ability Scale.

The research team gathered information from computer sheets, pupil personnel files, student files, and report cards. Part of the research team recorded the pertinent data and other team members double checked the recordings for accuracy before the next step was encountered.

Students from the 1983-1984 kindergarten class who were in the system on October 17, 1990, remained enrolled through May 17, 1991, the administration of the scale and data collection, and whose parents submitted a signed consent form became the base pool of subjects for this study. Since no convenient sample existed, the 459 survivors were the pool.

Data categories were developed to gather existing student information for this study. The data entry information sheet was developed with two parts. Part I included: name, address, parent, phone, birth date, consent, and numerical code. Part II included: numerical code, gender, school, recommended placement, actual placement, birth month, half-days absent, hot lunch status, present grade, grades retained, mathematics and
reading totals on CAT, category of achievement on the MEAP, GPA, group placement, and total score for the Self-Concept of Academic Ability Scale. A code number designated the groups and insured confidentiality of the data: Group F-F (101, 102), Group JF-JF (301,302), Group JF-F (501-502), and Group B-F (701,702). Before data were entered into a computer, Part I was destroyed to maintain confidentiality.

Number of Junior First Graders in the State

A state-wide survey obtaining the number of public school districts in Michigan that operated junior first grades was completed the same year that the subjects of this study were in kindergarten (1983-1984). A study by Riley et al. (1984) listed 88 districts responding as operating junior first grades. The number of students involved was unavailable.

Child accounting forms for the state of Michigan list developmental kindergarten, kindergarten, then first grade. There is no column for junior first grade (see Appendix B, p. 103). The number of junior first graders in Michigan was unknown.

The overriding question of how many students experienced junior first grade remained. During January 1991, this researcher directed a survey to public school superintendents throughout Michigan asking the number of
junior first graders included in that district's Fourth Friday count for the 1990-1991 school year. Public school districts listed in Michigan Educational Directory, 1991 (Michigan Department of Education, 1991) were contacted. Districts that did not return the postcard were phoned. All 559 public elementary school districts were contacted. On February 1, 1991, 125 districts operated junior first grades with a total of 3,828 students retained in junior first grade. Assuming cost for educating one junior first grade student is $2,000, the cost for operating junior first grades in Michigan for the 1990-1991 school year was $7,656,000.

Data Analysis Procedure

Each hypothesis was tested to determine whether the groups were homogeneous or different on the variables and the degree that the variables were the same or different across the groups. The data were entered into an IBM personal computer. The software titled The Survey System (Creative Research Systems, 1987b) was used to list the information and to provide analysis and printed reports.

Chi square with contingency coefficient or analysis of variance with the Scheffé method were the tests for significance. The level of significance was .05.

The nonparametric test of chi square ($\chi^2$) distribution was applied to dependent variables with nominal or
less than interval data. This test was appropriate for data in a $k \times c$ contingency table. Observed and theoretical frequencies were compared in order to calculate the value of chi square and test for independence. When the value of chi square exceeded the critical value, the null hypothesis was rejected. If rejection of the null hypothesis occurred, a contingency coefficient ($C$) was calculated to determine the degree of association. The greater the $C$ value, the stronger the relationship between the variables. Chi square was inappropriate when more than 20% of the expected frequencies were less than five or when any cell was less than one.

Analysis of variance (ANOVA) was used to test equality of several means and the null hypothesis. Within-group and between-group variations were calculated. When the value of the probability was equal to or less than alpha = .05, the null hypothesis was rejected. The Scheffé method was applied when the null hypothesis was rejected. This post hoc multiple comparisons procedure can test complex contrasts and equal or unequal group sizes and investigates which group differs in terms of variance or means. A difference table, which presents the differences between means of the four groups, was essential in determining whether the differences were significant using the Scheffé method.
Summary

This chapter contains a discussion of the design and methodology used in the study. The subjects, sampling plan, design and instrumentation, data gathering procedures, and data analysis procedures were outlined. Chapter IV contains the findings. This study concludes in Chapter V with a discussion of the findings and implication for future research.
CHAPTER IV

FINDINGS

Introduction

The data analysis results and research findings based on the hypotheses are presented in this chapter. Seven hypotheses were developed to determine whether junior first grade enhanced the academic achievement and self-concept of academic ability of students.

Review of Design and Methodology

This study was expanded through a state-wide postcard and phone call survey to 559, or 100%, of the Michigan public elementary school districts (Michigan Education Directory, 1991 (Michigan Department of Education, 1991) to obtain the number of 1990-1991 junior first graders in the state. On February 1, 1991, there were 3,828 placed junior first graders in 125 Michigan public school districts. Detroit, the largest state public school district, does not operate an extra year between kindergarten and first grade. Kindergartners are retained in only extreme cases; however, students are retained in first grade. Approximately half of the Detroit elementary schools operate full-day kindergartens for
children who may have academic difficulty.

Focus of this study was on students recommended for junior first and placed in junior first grade (JF-JF). Location was a public school district in central Michigan. The subjects were sixth and seventh graders during the 1990-1991 school year.

Students enrolled in the 1983-1984 kindergarten class (785) were tested in the spring of 1984 and assigned a recommended placement for fall 1984. These spring 1984 recommended placements of first grade (F), junior first grade (JF), borderline (B), and absent were reduced in the fall to first, junior first, and kindergarten.

Attrition accounted for 279 students who left the district or attended parochial schools in the area. Eliminated from the study were students in fifth or ninth grades, retained in kindergarten, and parent refusal (47). A total of 326 students left by attrition or were eliminated from this study. Parents of the surviving students (459) enrolled in the district on October 17, 1990, were sent consent forms.

The total number of surviving students with signed parent consent forms and a completed Self-Concept of Academic Ability Scale on file on May 17, 1991, became the pool of subjects (306 of 459, or 66.6%). Student names were alphabetized in four groups based on the
recommended placement of spring 1984 testing. A Table of Random Numbers was used to select 120 subjects, or 30 per group.

Data were double checked before the next step in this study was undertaken. Part of the research team recorded the information and the other part verified the recordings.

Independent Variables

Subjects for this study were the surviving students from the 1983-1984 kindergarten classes who were sixth and seventh graders in 1990-1991. The four groups of students in this study were: (1) those recommended for first and placed in first grade (F-F), (1) those recommended for junior first and placed in junior first grade (JF-JF), (3) those recommended for junior first and placed in first grade (JF-F), and (4) those borderline between junior first and kindergarten, but placed in first grade (B-F).

Dependent Variables

The four groups were compared on gender, birth month, retention, absences, and hot lunch status. Academic ability was compared in mathematics and reading (class placement, grade point average, scores on the California Achievement Tests, and category of achievement.
on the Michigan Educational Assessment Program). These data were obtained from existing pupil personal, individual student, and food service department files, report cards, and counselors. The Self-Concept of Academic Ability was administered to the students and the total score was used for comparisons. The statistical computer program, The Survey System (Creative Research Systems, 1987b), was used in this study to list the information, provide analysis, and print reports.

Hypotheses

The study addressed the question of whether junior first grade placement enhanced academic achievement and self-concept of academic ability. Seven hypotheses were developed to compare four groups of students. Chi square with contingency coefficient or ANOVA with the Scheffé method was used for the test of significance. Each hypothesis and the statistical results from this study follow.

Gender in 1984-1985 According to Group

Hypothesis 1: The number of males placed in first grade (F-F) will be less than those recommended and placed in junior first grade (JF-JF), which will be less than those recommended and not placed in junior first grade (JF-F), which will be less than those at borderline
and placed in first grade (B-F).

Chi square was used to compare the frequency of females and males. Review of Table 1 indicated the null hypothesis was not rejected. The analysis showed the proportion of students enrolled by gender was not significantly different in the four groups.

Table 1
Number of Students Enrolled by Gender According to Group

<table>
<thead>
<tr>
<th>Gender</th>
<th>F-F</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>20</td>
<td>14</td>
<td>14</td>
<td>66</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>10</td>
<td>16</td>
<td>16</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

Note. \( \alpha = .05. \ p = .304, \chi^2 = 3.64. \ C = .169. \) There were no significant findings.

The literature review stated that a greater number of males than females were retained in junior first grade programs. The findings of this study were consistent with the literature review. The observed frequency for males versus females listed twice the number of males in the junior first grade program with 20 males and 10 females recorded. Group F-F compared closely with JF-JF by
enrolling 18 males and 12 females. However, when gender in JF-F and B-F was compared, the groups were identical at 14 males and 16 females each. The comparisons resulted in insignificant findings.

Birth Month in 1977-1978 According to Group

Hypothesis 2: The number of students with July 1977 through May 1978 birthdays placed in first grade (F-F) will be higher than those recommended and placed in junior first grade (JF-JF), which will be higher than those recommended and not placed in junior first grade (JF-F), which will be higher than those at borderline and placed in first grade (B-F).

Chi square was used to compare the frequency of birth month according to group. Review of Table 2 indicated the null hypothesis was not rejected. The proportion of students enrolled by birth month was not significantly different in the four groups.

The literature review stated that the majority of the younger students would be placed in junior first grade. The findings of this study were inconsistent with the literature review. Group JF-JF had 15 older students and 15 younger students. The observed frequency ranged from 11 to 19, with Group B-F recording both extreme frequencies. The comparisons resulted in insignificant findings.
Table 2

Number of Students Enrolled by Birth Month According to Group

<table>
<thead>
<tr>
<th>Birth month</th>
<th>F-F</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/77-11/77</td>
<td>18</td>
<td>15</td>
<td>14</td>
<td>19</td>
<td>66</td>
</tr>
<tr>
<td>12/77-5/78</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>11</td>
<td>54</td>
</tr>
<tr>
<td>6/78-11/78</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>11</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

Note. \( \alpha = .05 \). \( p = .515 \). \( \chi^2 = 2.29 \). \( C = .136 \). There were no significant findings.

Retained 1984-1990 According to Group

**Hypothesis 3:** The number of students retained in a grade for those placed in first grade (F-F) will be less than those recommended and placed in junior first grade (JF-JF), which will be less than those recommended and not placed in junior first grade (JF-F), which will be less than those at borderline and placed in first grade (B-F).

Chi square with contingency coefficient were used to compare retention of the groups. Review of Table 3 indicated the null hypothesis was rejected. The analysis
showed the proportion of students retained was significantly different in the four groups.

Table 3
Number of Students Retained According to Group

<table>
<thead>
<tr>
<th>Status</th>
<th>F-F</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained</td>
<td>5</td>
<td>30</td>
<td>16</td>
<td>8</td>
<td>59</td>
</tr>
<tr>
<td>Passed</td>
<td>25</td>
<td>0</td>
<td>14</td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

Note. \( \alpha = .05 \). \( \ast p = .001 \). \( \chi^2 = 49.98 \). \( \gamma = .542 \). *There were significant findings.

The literature review stated that students in special programs were more likely to be retained. The findings of this study were consistent with the literature review. Since junior first grade was a retention year in this study, 30 (100%) JF-JF subjects were retained. Observed frequencies recorded JF-F second with 16 (53.3%), B-F third with 8 (26.6%), and F-F with 5 (16.6%) of each group retained. These comparisons indicated that a large number of this sample was retained (49.1%). The comparisons resulted in significant findings.
Half-Day Absences in 1989-1990 According to Group

**Hypothesis 4:** The number of half-day absences for students placed in first grade (F-F) will be less than those recommended and placed in junior first grade (JF-JF), which will be less than those recommended and not placed in junior first grade (JF-F), which will be less than those at borderline and placed in first grade (B-F).

ANOVA was used to test half-day absences according to group. Table 4 indicated the means of the four groups were not significantly different from each other.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-F</td>
<td>12.67</td>
<td>4.50</td>
<td>4.03</td>
<td>2.06</td>
</tr>
<tr>
<td>JF-JF</td>
<td>17.17</td>
<td>-0.47</td>
<td>-2.44</td>
<td></td>
</tr>
<tr>
<td>JF-F</td>
<td>16.70</td>
<td>-1.97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** \( \alpha = .05. \) \( df = 3, 116, 119. \) \( F = .690. \) \( p = .563. \) \( \bar{n} = 120. \) There were no significant findings.

The literature review stated more absences among students placed in junior first programs. The findings
of this study were inconsistent with the literature review. Reasons this inconsistency may have occurred are the district's guidelines, actual practice, and detailed consequences regarding absences. Parents, in this district, desire a quality education for their children as evidenced from conversations with them. This desire, too, may positively affect attendance. There were no significant findings for this variable.

**Hot Lunch Needy Status in 1989-1990 According to Group**

*Hypothesis 5*: The hot lunch needy status for students placed in first grade (F-F) will be lower than those recommended and placed in junior first grade (JF-JF), which will be lower than those recommended and not placed in junior first grade (JF-F), which will be lower than those at borderline and placed in first grade (B-F).

Data for analysis for this hypothesis were recorded by the Food Services Department and only included totals for each group rather than the individual student.

Chi square with contingency coefficient were used to compare hot lunch status with group. Table 5 indicated that the proportion of needy students was significantly different in the four groups.

The literature review stated that a greater number of needy students were placed in junior first grade programs. The findings of this study were consistent with
Table 5

Number of Students With Needy Hot Lunch Status According to Group

<table>
<thead>
<tr>
<th>Lunch status</th>
<th>F-F</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needy</td>
<td>4</td>
<td>14</td>
<td>9</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>Not needy</td>
<td>26</td>
<td>16</td>
<td>21</td>
<td>24</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

Note. $a = .05$. $p = .023$. $x^2 = 9.49$. $C = .271$. *There were significant findings.

the literature review. The observed frequency was 14 for Group JF-JF. The next closest frequency was 9 for JF-F, 6 for B-F, and 4 for F-F. The comparisons resulted in significant findings.

Hypotheses 6 through 13 test academic achievement.

Academic Achievement According to Group

**Hypotheses 6 through 13:** The academic achievement for students placed in first grade (F-F) will be higher than those recommended and placed in junior first grade (JF-JF), which will be higher than those recommended and not placed in junior first grade (JF-F), which will be higher than those at borderline and placed in first grade (B-F).
Mathematics: Class Placement in 1990-1991
According to Group

Hypothesis 6: Chi square with contingency coefficient were used to compare mathematics class placement according to group. Review of Table 6 indicated the null hypothesis was rejected. The direction of the analysis showed the proportion of students in each mathematics class was significantly different in the four groups.

Table 6
Number of Students in Each Mathematics Class
According to Group

<table>
<thead>
<tr>
<th>Mathematics: Class placement</th>
<th>Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-F</td>
<td>JF-JF</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Middle</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>High</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Note. \( \alpha = .05 \). \( *p = .004 \). \( \chi^2 = 19.32 \). \( C = .372 \). *There were significant findings.

The literature review stated students in junior first programs remained in the lower academic groups. The findings of this study were consistent with the literature review. Students placed in the middle level of
the mathematics class were similar across the four groups.

The extremes of high and low showed dissimilarity. The JF-JF and JF-F groups were more alike at the high mathematics levels with only 6 students per group placed there. The other frequencies were F-F 16 and B-F 17. At the low mathematics level, JF-F recorded 11, while JF-JF recorded 10 frequencies with 5 for B-F and 2 for F-F. The JF-JF and JF-F groups comprised 75.0% of the students in the low level. The comparisons resulted in significant findings.

Mathematics: Grade Point Average in 1989-1990 According to Group

Hypothesis 7: ANOVA was used to test grade point average according to group. Table 7 indicated the means of the four groups were not significantly different from each other. The analysis was approaching the level of significance since probability was .062 with alpha at .05.

The literature review stated grade point average was lower for students in junior first programs. The findings of this study were inconsistent with the literature review. The district's school improvement project resorts to grades of A, B, and I. When calculating grade point average, the higher numerical conversions would
Table 7
Difference Table for Mathematics: Grade Point Average According to Group

<table>
<thead>
<tr>
<th>Group and mean</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-F</td>
<td>3.00</td>
<td>-0.41</td>
<td>-0.49</td>
</tr>
<tr>
<td>JF-JF</td>
<td>2.59</td>
<td>-0.08</td>
<td>0.27</td>
</tr>
<tr>
<td>JF-F</td>
<td>2.51</td>
<td>0.35</td>
<td></td>
</tr>
</tbody>
</table>

Note. $\alpha = .05$. $df = 3, 116, 119$. $F = 2.492$. $p = .062$. $n = 120$. There were no significant findings, although probability was approaching significance.

result in higher averages. Perhaps, the students are proficient in mathematics. The findings were not significant.

Mathematics: California Achievement Tests Total in Spring 1990 According to Group

Hypothesis 8: ANOVA with the Scheffé method were used to test mathematics California Achievement Tests total according to group. Table 8 indicated the means of the four groups were significantly different from each other.

The literature review stated students in junior first programs continued to score lower on standardized
Table 8

Difference Table for Mathematics: California Achievement Tests Total According to Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48.87</td>
<td>52.00</td>
<td>63.48</td>
<td></td>
</tr>
<tr>
<td>F-F</td>
<td>61.00</td>
<td>-12.13</td>
<td>-9.00</td>
<td>2.48</td>
</tr>
<tr>
<td>JF-JF</td>
<td>48.87</td>
<td>3.13</td>
<td>14.61*</td>
<td></td>
</tr>
<tr>
<td>JF-F</td>
<td>52.00</td>
<td></td>
<td></td>
<td>11.48</td>
</tr>
</tbody>
</table>

Note. \( a = .05. \) df = 3, 111, 114. \( F = 4.875. \) \( p = .004. \) \( n = 115. \) *There were significant findings.

tests. The findings of this study were consistent with the literature. The B-F group had higher mathematics CAT totals than the JF-JF group. There were significant findings.

Mathematics: Grade 4 MEAP Category of Achievement According to Group

Hypothesis 9: This hypothesis was unable to be tested because the expected frequencies did not meet the requirements of chi square. The cells would have to be collapsed in Category of Achievement 3. However, when cells were collapsed, no meaningful question could be answered. The combined expected cells' frequencies of
less than 5 in 20% or more of the cells and, thus, chi square was inappropriate. This hypothesis was, therefore, not tested.

Review of Table 9 indicated that Category 4, the highest category, recorded 90.1% of the frequencies with all Category 4 cells listing 2-digit frequencies. There were no responses for Category 1 (0-25% mastery) or Category 2 (25-50% mastery) since all subjects merited placement in Category 3 or 4 (50-75% and 75-100% mastery). Caution must be taken because no special education students are included since they are excused from taking the MEAP mathematics tests. In general, these were positive recordings for the district.

Reading: Class Placement in 1990-1991 According to Group

Hypothesis 10: Chi square with contingency coefficient were used to compare class placement according to group. Review of Table 10 indicated the null hypothesis was rejected. The analysis showed the proportion of students in each reading class was significantly different in the four groups.

The literature review stated students in junior first programs remained in the lower academic achievement classes. The findings of this study were consistent with the literature review. Students placed in the high,
Table 9
Number of Students Receiving Category 3 or 4 on the MEAP Mathematics According to Group

<table>
<thead>
<tr>
<th>Mathematics: MEAP category</th>
<th>Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-F</td>
<td>JF-JF</td>
</tr>
<tr>
<td>Category 3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Category 4</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>23</td>
</tr>
</tbody>
</table>

Note. This variable was unable to be tested since the test results of chi square are meaningless when more than 20% of the cells have less than 5 as the expected frequency. Cells can be combined; however, the results must be meaningful. These data do not lend themselves to meaningful combinations.

Table 10
Number of Students in Each Reading Class According to Group

<table>
<thead>
<tr>
<th>Reading: Class placement</th>
<th>Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-F</td>
<td>JF-JF</td>
</tr>
<tr>
<td>Low</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Middle</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>High</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Note. $\alpha = .05$. *$p = .001$. $\chi^2 = 30.79$. $C = .451$. *There were significant findings.
middle, and low levels of the reading class were dissimilar across the groups. Placement was most similar at the high level with an observed frequency of 21 for both first grade (F-F) and borderline placed in first (B-F). The frequency decreased to 13 for recommended junior first and placed first (JF-F), then to 6 for recommended junior first and placed junior first (JF-JF). The low frequency of 6 for placed junior first graders (JF-JF) was 9.8% of the total number of students in the high level.

At the middle level, the highest observed frequency was 12 for recommended junior first and placed first (JF-F) to 8 for recommended junior first and placed junior first (JF-JF) to 7 for borderline and placed first (B-F) and 4 for placed first (F-F). The lowest frequency of 4 for placed first (F-F) was 12.9% of the total number of students in the middle level.

At the low level, the highest observed frequency was 16 for recommended junior first and placed junior first (JF-JF) to a decreased 5 for both placed first (F-F) and recommended junior first and placed first (JF-F), then to 2 for borderline, placed first (B-F). The lowest frequency of 2 was 7.1% for borderline, placed first (B-F). The observed frequency of 16 was 57.1% for recommended junior first and placed junior first graders (JF-JF). There were significant findings.
According to Group Hypothesis 11: ANOVA with the Scheffé method was used to test grade point average according to group. Table 11 indicated the means of the four groups were significantly different from each other.

<table>
<thead>
<tr>
<th>Group and Mean</th>
<th>Group and mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td></td>
<td>F-F</td>
</tr>
<tr>
<td></td>
<td>JF-JF</td>
</tr>
<tr>
<td></td>
<td>JF-F</td>
</tr>
</tbody>
</table>

Note. $a = .05$. $df = 3, 116, 119$. $F = 7.414$. $*p = .000$. $n = 120$. *There were significant findings.

The literature review stated that grade point average was lower for students in alternative programs. The findings of this study were consistent with the literature review. Groups JF-JF and JF-F had lower grade point averages than the F-F group. There were significant findings.
Reading: California Achievement Tests Total in Spring 1990 According to Group

Hypothesis 12: ANOVA with the Scheffé method was used to test reading California Achievement Tests total according to group. Table 12 indicated the means of the four groups were significantly different from each other.

Table 12
Difference Table for Reading: California Achievement Tests Total According to Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-F</td>
<td>62.76</td>
<td>-16.83*</td>
<td>-10.34</td>
<td>-3.38</td>
</tr>
<tr>
<td>JF-JF</td>
<td>45.93</td>
<td>6.49</td>
<td>13.45*</td>
<td></td>
</tr>
<tr>
<td>JF-F</td>
<td>52.42</td>
<td></td>
<td></td>
<td>6.96</td>
</tr>
</tbody>
</table>

Note. \( \alpha = .05. \) \( df = 3, 109, 112. \) \( F = 5.637. \) \( *p = .002. \) \( n = 113. \) *There were significant findings.

The literature review stated that students in alternative programs continue to score lower on standardized tests. The findings of this study were consistent with the literature. Table 12 shows Group JF-JF scored lower than F-F and that JF-F scored lower than B-F. There were significant findings.
Reading: Grade 4 MEAP Category of Achievement
According to Group

Hypothesis 13: This hypothesis was unable to be tested because the expected frequencies did not meet the requirements of chi square. In order to test with chi square, the cells would have to be collapsed in Categories 1 and 2. However, when cells were collapsed, no meaningful question could be answered. This hypothesis was, therefore, not tested.

Review of Table 13 indicated that Category 4, the highest category, recorded 88.2% of the frequencies with all Category 4 cells listing 2-digit frequencies. Categories 1, 2, and 3 recorded 12 observed frequencies, which was 11.7% of the total. Caution must be taken because no special education students' scores are included since they are excused from taking the MEAP reading tests. In general, these were positive recordings for the district.

Self-Concept of Academic Ability in 1990-1991
According to Group

Hypothesis 14: The self-concept of academic ability for students placed in first grade (F-F) will be higher than those recommended and placed in junior first grade (JF-JF), which will be higher than those recommended and not placed in junior first grade (JF-F), which will be
Table 13

Number of Students Receiving Category 1, 2, 3, or 4 on MEAP Reading According to Group

<table>
<thead>
<tr>
<th>MEAP category</th>
<th>F-F</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories 1, 2, and 3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Category 4</td>
<td>27</td>
<td>19</td>
<td>22</td>
<td>22</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>29</td>
<td>23</td>
<td>25</td>
<td>25</td>
<td>102</td>
</tr>
</tbody>
</table>

Note. This variable was unable to be tested since the test results of chi square are meaningless when more than 20% of the cells have less than 5 as the expected frequency. Cells can be combined; however, the results must be meaningful. These data do not lend themselves to meaningful combinations.

higher than those at borderline and placed in first grade (B-F).

ANOVA and the Scheffé method were used to test self-concept of academic ability according to group. Table 14 indicated the means of the four groups were significantly different from each other. Total scores for the scale were used in this study. A higher score translated into having a lower self-concept of academic ability.

The literature review stated that needy students and those who experienced junior first programs have a lower
Table 14
Difference Table for Self-Concept of Academic Ability According to Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>JF-JF</th>
<th>JF-F</th>
<th>B-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-F</td>
<td>15.20</td>
<td>4.03*</td>
<td>2.13</td>
<td>2.03</td>
</tr>
<tr>
<td>JF-JF</td>
<td>19.23</td>
<td>-1.90</td>
<td>-2.00</td>
<td></td>
</tr>
<tr>
<td>JF-F</td>
<td>17.33</td>
<td></td>
<td></td>
<td>-0.10</td>
</tr>
</tbody>
</table>

Note. α = .05. df = 3, 116, 119. F = 5.859. *p = .001. n = 120. *There were significant findings.

The findings of this study were consistent with the literature review. The JF-JF group had a lower self-concept of academic ability than the F-F group. There were significant findings.

Summary of Findings

Chi square followed by contingency coefficient was used to test four hypotheses which resulted in significant findings. Only chi square was applied to test four others which did not result in significant findings. Analysis of variance (ANOVA) followed by the Scheffé method was used to test four hypotheses which resulted in significant findings. Only ANOVA was applied to two
others which did not result in significant findings. The eight hypotheses with significant findings were retention, hot lunch needy status, placement in the low mathematics class, low mathematics CAT totals, placement in low reading class, low reading GPA, low reading CAT totals, and low self-concept of academic ability. Since junior first graders received the impact of these negative findings, the extra year did not enhance academic achievement or self-concept of academic ability.

Overview

Chapter I provided an introduction to the research problem and defined operational terms. Information concerning the purpose of the study, conceptual framework, and limitations were included. Seven research hypotheses were stated. Chapter II contained a review of literature. Chapter III contained the research hypotheses and a discussion of the design, procedures, and methodology used in this study. Chapter IV contained the findings. This study concludes in Chapter V with a discussion of the findings and implication for future research.
CHAPTER V

REVIEW OF THE STUDY, SUMMARY, AND RECOMMENDATIONS

The study will be reviewed in this chapter, implications for practice of this study will be stated, and further action for research will be recommended.

Review of the Study

The purpose of this study was to compare the academic achievement and self-concept of academic ability of four groups of students: (1) those recommended for first and placed in first grade (F-F), (2) those recommended for junior first and placed in junior first grade (JF-JF), (3) those recommended for junior first and placed in first grade (JF-F), and (4) those at borderline between junior first grade and kindergarten, but placed in first grade (B-F). The groups were compared on gender, birth month, retention, absences, and lunch status, as well as academic achievement (class placement, grade point average, totals on the California Achievement Tests [CAT, CTB/McGraw-Hill, 1987], and category of achievement on the Michigan Educational Assessment Program [MEAP, Michigan Department of Education, 1988]) in mathematics and reading. The research groups were also compared on the
total score of the Self-Concept of Academic Ability Scale (Brookover et al., 1962).

The random sample for this study consisted of 120 surviving sixth and seventh graders in 1990-1991 who were kindergartners in 1983-1984. Students registered in the district on October 17, 1990, became the base pool of subjects. Consent forms were sent to parents and phone calls or home visits made to nonrespondents. Students with a signed consent form and completed Self-Concept of Academic Ability Scale on May 17, 1991, became the pool of subjects for the groups. Names were alphabetized within the four groups and a Table of Random Numbers was used to select the students in the study.

Chi square with contingency coefficient or ANOVA with the Scheffé method were used to test the hypotheses. Eight hypotheses recorded significant findings: retention, needy lunch status, mathematics class placement, reading class placement, mathematics CAT test total, reading GPA, reading CAT test total, and self-concept of academic ability. These significant findings are supported by the review of literature.

The study was extended through a state-wide survey to count the 1990-1991 students in Michigan experiencing junior first grade. There were 125 districts operating junior first grade programs and 3,828 students participating at this level on February 1, 1991.
Summary

Since 1911 the philosophy of Dr. Arnold Gesell and his staff at the Yale University Clinic of Child Development, New Haven, Connecticut, centered on the belief that humans develop in predictable ways. Norms for child behavior yielded developmental ages which remained consistent among children and cultures.

The Gesell Institute of Child Development was founded in 1951 by Dr. Gesell's staff. Developmental age was applied to school grade placement. The importance of students being fully ready for the grade became the focus of grade placement. The claim that school problems could be remediated or prevented by correct placement flourished. Grade placement was based on the developmental age obtained from the Gesell School Readiness Test. Since maximum academic and intellectual growth would result for the student, this approach had a direct impact on thinking in education. Junior first grade, a year to grow, was a palatable means of retaining, failing, and flunking students.

The work of Dr. Gesell's staff influenced the promulgation of a retention year known as junior first grade. The goal of this year was to permit students to "catch up" and, thereby, enable them to become successful learners. Effective academic achievement and positive
self-concept of academic ability were the primary goals (Carll & Richard, 1977).

A longitudinal study (Ferguson, 1991) investigated the candidates for a transitional first grade and compared the placed students with not placed students at the second grade. Although the time span of this longitudinal study was not as extensive as this dissertation, the findings further support the findings of this study.

The subjects were matched on chronological age and sex when they started kindergarten. Measures used at the end of the second grade were SRA Achievement Series, behavioral domain evaluation by teachers, and confidential questionnaires by parents. Ferguson (1991) found no difference in academic and social-behavior domains, except aggressiveness for the placed students as recorded by teacher ratings.

Ferguson (1991) concluded that the readiness delay adjusts whether the child is placed in a marking-time program or placed in the next grade. He concluded, further, that the "dumbed-down" curriculum negatively affects students because they have been taught to sit back and coast. He maintained that children are aware they have failed kindergarten. His study also indicated no statistical significance in education, occupation, or value of education on the part of mothers and fathers.
The theory-in-practice was tested by this study. Evidence presented in this dissertation and throughout the literature tested this theory and showed negative results. Several reasons may account for the discrepancy. Among the reasons are:

1. There was a genuine desire to assist the student who could not meet the demands of the curriculum. However, the student was viewed as deficient and in need of repair rather than implementation of an adjusted curriculum to insure school success.

2. Numerous studies of past research regarding the negative impact of retention were disregarded.

3. Cumulative results of yearly and daily reminders of being a failure were not considered. A retained student is constantly reminded of that fact because the original school peer group is maintained one or more years ahead in the sequence of grade levels.

4. Financial stability for the Gesell Institute may have been a factor. Material, test, and workshop costs benefited the organization.

Conclusions of past research studies and significant findings in this study lead to future educational implications.
Implications of This Study for Future Educational Practices

Implications for future educational practices were based on significant findings of this study and conclusions of other studies reviewed. These implications were:

1. There is a need at the state level for a department or division with a department, staffed by adequate personnel, to investigate present practices. This department or division must have authority to execute changes which directly impact positive student learning. A variety of agencies, organizations, and citizens must be active educational decision makers. Perhaps, this suggestion could be incorporated into Public Act 25.

2. School districts must eliminate the additional year between kindergarten and first grade. The goals of positive academic achievement and self-concept of academic ability are not realized. A phase-in timeline would allow preparation of staff and alleviation of teacher fears. A 2-year deadline should be sufficient.

3. Retention, in the form of an additional year of instruction, must be eliminated. Students must be assisted in learning through guided help for shorter durations. The individual, varied, erratic yet normal learning patterns of the young child must be considered in all educational and curricular decisions.
4. Dissemination of research findings regarding junior first grade, retention in an alternate program or in grade, the foundations of child development, and the influence of educator expectations on the degree of student learning must reach the general practitioner. These findings are unknown to the majority of educators. Intermediate School Districts could aid in gathering and publicizing this information.

5. The results of the Self-Concept of Academic Ability Scale indicated that students should be kept with their classmates and their expectations for success heightened. These research findings need to be shared with classroom teachers and become district policy.

6. Educational practices of tracking or maintaining students at the lower levels throughout their elementary and intermediate years must be eliminated. Educating for increased knowledge at the fastest rate a child can learn, without frustration, must be the goal.

7. Each student's perspective and desire to learn must be included as a factor when educational goals are decided. The best approach might be to present the sequence of learning, then ask the child about his goals for that year. Numerous times, the adult estimates are much lower than the students are capable of learning. The grade level lock-step approach and limitation of textbook contents provide superficial planning by the
adults while suppressing the child's desire to learn. The "learning ceiling" to accomplishments that these practices perpetuate must be eliminated.

8. There must be avenues for students labeled "low" to break out of the track to move to higher levels.

These implications for educational practices result in recommendations for future research in the next section.

**Recommendations for Further Research**

1. Research on retention resulted in negative findings, therefore, research must be undertaken with considerable caution.

2. Practices designed to aid students must be continually researched in the form of longitudinal studies with dissemination of results to all educators at frequent intervals. The major goals of the junior first grade program were unmet, yet, the residual practices impact the philosophy of today's educational leaders. Future research should focus on which practices produce positive learning results. These findings must be disseminated.

3. Student impressions, experiences, and thoughts must be included in further research. All students can express opinions on ways educational practices affect them. They can offer suggestions for improvement.
4. Future topics for research are ways to vary the grouping of students, increase the influence of adult expectation and encouragement on student learning, speed the change process regarding educators, dispel educator myths regarding the needy and students possessing challenging behaviors, and provide flexibility in classroom environment and curriculum to meet the findings of early childhood education and child development.

A single study cannot cover the multitude of questions related to junior first grades and retention. This is a single contribution to the body of research regarding an early childhood practice at a public school district level.
APPENDICES
Appendix A

Authorization to Conduct Study and
Use Information in This Study
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February 7, 1990

Mary A. Boettger  
Assistant Principal  
MacGregor/Whittier Schools

Dear Mary:

I am in receipt of your letter containing two requests:

- Use of Existing Data
- Administer "Self-Concept of Academic Ability Scale"

You wish to use data obtained through your study of students presently in fifth or sixth grade who were kindergarteners in the Bay City School District during the 1983-84 school year as research for your doctoral program.

As I indicated to you in our meeting on Wednesday morning, February 7, 1990, you have approval on the condition that you secure Letters of Permission of Informed Consent from parents of the students involved in your research project.

Mary, I commend you for your efforts in this endeavor and offer my Best Wishes.

Sincerely,

Dale F. Martin  
Superintendent

DFM:ef

cc: Board of Education  
Files
February 9, 1990

Ms. Mary A. Boettger
505 Harold Street
Bay City, MI 48708

Dear Ms. Boettger:

I have your letter concerning the use of our Self Concept of Academic Ability Scale. You certainly have permission to use it and reproduce it for your study.

I am enclosing a copy of a recent paper that gives information about the scale.

Best wishes.

Wilbur B. Brookover
Professor Emeritus

WBB/ff
Enclosure
February 16, 1990

Mrs. Mary A. Boettger, Assistant Principal
MacGregor Elementary School
1012 Fremont
Bay City, Michigan 48708

Dear Mrs. Boettger:

The Food Service Department is able to assist with the data collection for your research: A Study of Junior First Grade. We will expect to receive lists of three groups of students from you. Please include on the lists the name of each student and his or her street address. The street address will allow us to be certain we are checking the correct student record.

Shelly Ouellette, Food Service Secretary, will review our files for each of the students on your three lists. We will then furnish you with the number and percent of students on each list qualifying for free or reduced meal benefits during the 1989-90 school year.

Please share the time table for your data collection with us in the near future, so that we may plan for the time required to complete this task.

Sincerely,

Janet K. Gaffke, M.S., R.D.
Director of Food Service

JKG/smo
Ms. Mary A. Boettger
505 Harold Street
Bay City, MI 48708

Dear Ms. Boettger:

Thank you for your note requesting permission to reprint all or part of the MEAP Technical Report (Volumes I and II) in your dissertation. This document is a public document and is not copyrighted, so you do not need my permission in order to reprint it. However, for the record, I am giving you permission to do so.

I hope that this letter will suffice for your needs. If not, please feel free to contact me again. Good luck with your dissertation!

Sincerely,

Edward D. Roeber
Supervisor
Michigan Educational Assessment Program
MEMORANDUM

To: Mary Boettger

From: Jim Griffiths, Director
Planning, Research & Pupil Services

Date: September 27, 1990

Re: Research and Information Requests for Doctoral Topic

Your request to use data from the designated students' records and to administer or have administered the "Self-Concept of Academic Ability Scale" is approved.

Your request for a list of students enrolled at the sixth and seventh grade is approved.

These approvals are with the understanding that the use of a numerical coding system will be used to prevent the release of any personally identifiable student information.

Please contact this office for assistance in scheduling the testing. We are genuinely interested in your topic, A Study of Junior First Grade, and would be pleased to assist you in any way possible.

:JAG

cc: Dr. Martin
Dr. Link
Mr. LaVictor
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( ) Hardcover, ( ) Paperback, ( ) Trade, ( ) Photocopy, ( ) Research

No. of pages: 100, First printing: , No. of photocopies: __________


Acknowledgment required: yes x, no

Acknowledgment:


For additional rights contact: Carol Hemingway

PAYMENT DUE: Gratis (Payment due upon signing)

ACCEPTED BY:

Applicant: Mary A. Baettger

Permission Granted by:

Date: October 1, 1990

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Date: October 11, 1990
To: Mary A. Boettger
From: Mary Anne Bunda, Chair
Re: HSIRB Project Number: 90-10-02

We have received the changes to your protocol as requested in our October 3. This letter will serve as confirmation that your research protocol, "Self-Concept of Academic Ability and Academic Achievement of Junior First Grade," has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

xc: James Sanders, Educational Leadership

Approval Termination: October 11, 1991
Dear Parents,

Your school system is interested in knowing how well we are assisting students in their education.

Your child has been chosen to participate in a study that will take place this fall. Dr. Dale F. Martin, Superintendent, has granted approval for this study which will involve several students across the district. Participation is voluntary and a code number will be assigned to the student's information to protect confidentiality. The information will be gathered by January 1991.

We would like to know how well our students think they can do their school work. In order to gain this information, we will have to ask them. The "Self-Concept of Academic Ability Scale" was developed in 1962 by a professor at Michigan State University and would be used in the study. The Scale takes about twenty (20) minutes to answer eight (8) questions. This would take place during the normal school day.

Some of the information will be from records, i.e. CAT and MEAP reading and math scores, sex, birthdate, grade point average and attendance.

An approval for your child to participate is required. Please fill in the consent form and mail as soon as possible.

If you have any questions or concerns, please call me at MacGregor Elementary School, Monday - Friday, 9:00 a.m. - 3:30 p.m. at 892-1558.

Thank you for helping us complete this study.

Sincerely,

Mary A. Boettger
Assistant Principal
CONSENT FORM

Your child has been chosen to participate in a study that will take place this fall. Dr. Dale F. Martin, Superintendent, has granted approval for this study which will involve several students across the district. Participation is voluntary and a code number will be assigned to the student's information to protect confidentiality. A parent may withdraw his or her child from the study at any time without penalty. The information will be gathered by January 1991.

We would like to know how well our students think they can do their school work. In order to gain this information, we will have to ask them. The "Self-Concept of Academic Ability Scale" was developed in 1962 by a professor at Michigan State University and would be used in the study. The Scale takes about twenty (20) minutes to answer eight (8) questions. This would take place during the normal school day.

Please complete the following approval so your child can participate in this study. Place this Consent Form in the enclosed addressed envelope and mail as soon as possible.

I GIVE PERMISSION FOR MY CHILD, ______________________________
_______________________________, TO PARTICIPATE IN THIS STUDY.

________________________________________
PARENT/GUARDIAN SIGNATURE    DATE

________________________________________
STREET ADDRESS    PHONE

________________________________________
CITY    STATE    ZIP CODE

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REMINDER
(Copied on back of original parent letter for second mailing)

We have not heard from you and are looking forward to your response.

The enclosed information was sent and as of Monday, November 5, 1990 we have not received your Consent Form. Perhaps further information would be helpful:

---------all students chosen for the study were kindergarteners in this district during the spring 1984
---------506 parents were asked to permit their child to participate
---------students will have a copy of the questions that will be read to them and they will circle their response
---------there are no right or wrong answers since an opinion is being requested
---------a numberical code will be used so student responses remain confidential

If you have further questions, please call Mary Boettger at MacGregor School 892-1558.

Please complete the Consent Form and drop it in the mail tonight so we can finish plans for the study at your child's Intermediate School.
Appendix B

Forms Used in Data Collection
# Appendix B—Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
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<td>96</td>
</tr>
<tr>
<td>Guidelines for Lunch Status (State)</td>
<td>97</td>
</tr>
<tr>
<td>Guidelines for Lunch Status (District)</td>
<td>98</td>
</tr>
<tr>
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<td>101</td>
</tr>
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<td>Local District Summary: 1990 Fourth Friday Report Sent to Michigan Department of Education</td>
<td>103</td>
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<td>Letter to Superintendents and Postal Card Survey Form</td>
<td>104</td>
</tr>
</tbody>
</table>
A Study of Junior First Grade
Data Entry Sheet - Part I

Student Name ___________________________ Birthdate __________
Street Address ________________________________________________
Parent Name ___________________________ Phone __________
Consent received? ______
Numerical Code __________

A Study of Junior First Grade
Data Entry Sheet - Part II

Numerical Code __________
Sex _______ Group _______
Recommended Placement ___________ Actual Placement ___________
Birth Quadrant _____ 1/2 Days Absent _____ Lunch Status ______
Present Grade _______ Grade(s) Retained ______
MATH: CAT ______ MEAP ______ GPA ______ Group ______
READING: CAT ______ MEAP ______ GPA ______ Group ______
SELF-CONCEPT OF ACADEMIC ABILITY:
Q1 ___ Q2 ___ Q3 ___ Q4 ___ Q5 ___ Q6 ___ Q7 ___ Q8 ___
Family income criteria to be used for 1989-90 school year for School Lunch, School Breakfast, and Special Milk Programs.

<table>
<thead>
<tr>
<th>TOTAL FAMILY SIZE</th>
<th>A. SCALE FOR FREE MEALS OR FREE MILK</th>
<th>B. SCALE FOR REDUCED PRICE MEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YEAR</td>
<td>MONTH</td>
</tr>
<tr>
<td>1</td>
<td>7,774</td>
<td>648</td>
</tr>
<tr>
<td>2</td>
<td>10,426</td>
<td>869</td>
</tr>
<tr>
<td>3</td>
<td>13,078</td>
<td>1,090</td>
</tr>
<tr>
<td>4</td>
<td>15,730</td>
<td>1,311</td>
</tr>
<tr>
<td>5</td>
<td>18,382</td>
<td>1,532</td>
</tr>
<tr>
<td>6</td>
<td>21,034</td>
<td>1,753</td>
</tr>
<tr>
<td>7</td>
<td>23,686</td>
<td>1,974</td>
</tr>
<tr>
<td>8</td>
<td>26,338</td>
<td>2,195</td>
</tr>
<tr>
<td>Each additional family member</td>
<td>+2,652</td>
<td>+221</td>
</tr>
</tbody>
</table>

All children from families at or below the income levels in Column A are eligible to receive meals or one-half pint of milk at no cost*, if available, (Special Milk Program). Column A is used for the School Lunch, Breakfast, or Special Milk Program.

In addition, Federal PL-94-105 makes mandatory the service of reduced-price meals to those children from families within the range of incomes in Column B. These children must be provided with lunches at a price not exceeding 40 cents. If the Breakfast Program is available, all children qualifying for free and reduced-price lunches will also qualify for free and reduced-price breakfasts. The charge for a reduced-price breakfast may not be more than 30 cents.

Column B must therefore be used in providing reduced-price meals.

*Service of free milk is optional.
Dear Parent or Guardian:

The Bay City Public Schools serve nutritious meals every school day to students in your school. Students may buy lunch for $1.20.

Children from families whose income falls within the levels shown in the scale below are eligible for either free meals or reduced-price meals at $0.40 for lunch and $0.30 for breakfast. To apply for free or reduced-price meals, please fill out the attached application as soon as possible, sign it and return it to your child’s school.

**FOOD STAMP/AFD HOUSEHOLDS:** If you currently receive Food Stamps or “Aid to Families with Dependent Children” for your child, you only have to list your child’s name and food stamp or AFD case number, print your name, and sign the application. Since you have already given information to the welfare office, the school can confirm your eligibility.

<table>
<thead>
<tr>
<th>TOTAL FAMILY SIZE</th>
<th>INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YEARLY</td>
</tr>
<tr>
<td>1</td>
<td>11,083</td>
</tr>
<tr>
<td>2</td>
<td>14,037</td>
</tr>
<tr>
<td>3</td>
<td>18,611</td>
</tr>
<tr>
<td>4</td>
<td>22,385</td>
</tr>
<tr>
<td>5</td>
<td>28,159</td>
</tr>
<tr>
<td>6</td>
<td>29,993</td>
</tr>
<tr>
<td>7</td>
<td>33,707</td>
</tr>
<tr>
<td>8</td>
<td>37,481</td>
</tr>
</tbody>
</table>

**ALL OTHER HOUSEHOLDS:** To apply for meal benefits, you must provide the following information or your application cannot be processed by the school.

1. the total monthly household income AND the amount of income received by each household member (such as wages, child support, etc.). Multiply weekly income by 4.33 to get monthly income. Multiply bi-weekly income by 2.16 to get monthly income.

2. names of all household members;

3. social security numbers of all household members 21 years of age or older or the word “NONE” for any adult household member who does not have a social security number;

4. the signature of an adult household member.

**VERIFICATION:** The information on the applications may be verified by the school or other officials at any time during the year.

**REPORTING CHANGES:** If your child is approved for meal benefits, you must tell the school when your household income increases by more than $50 per month ($600 per year) or when your household size decreases. If you list a food stamp case number or AFD case number, you must tell the school when you no longer receive food stamps or AFD for your child.

**REAPPLICATION:** You may apply for benefits at any time during the school year. If you are not now eligible, but have a decrease in household income, become unemployed or have an increase in household size, fill out an application at that time.

**FOSTER CHILDREN:** If you have foster children living with you, they may be eligible for these benefits regardless of your household’s income. If you wish to apply for these benefits for them, please contact the Director of Food Service and she will help you complete the application.

**MISDEMEANOR:** Children who receive free or reduced-price meal benefits are treated the same as children who pay for their meals. In the operation of child feeding programs, no child will be discriminated against because of race, color, national origin, age, sex, or handicap. If you believe you have been discriminated against, write immediately to the Secretary of Agriculture, Washington, D.C. 20250.

**FAIR HEARING:** If you do not agree with the school’s decision on your application or the result of verification, you may wish to discuss it with the Director of Food Service. You also have the right to a fair hearing. This can be done by calling or writing the following official: Dr. Elmer R. Hallenbeck, 910 N. Walnut Street, Bay City, MI 48706, 686-9700.

**CONFIDENTIALITY:** The information you provide will be treated confidentially and will be used only for eligibility determination and verification of data.

**HELP WITH APPLICATION:** If you have questions or need help in filling out the application form, please contact Janet Gaffka, Director of Food Service at 686-9700. You will be notified when the application is approved or denied.

Sincerely,

Janet K. Gaffka, M.S., R.D.
Director of Food Service

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APPLICATION FOR FREE AND REDUCED PRICE SCHOOL MEALS

To apply for free and reduced-price meals for your child, carefully complete, sign and return this application to the school. If you need help with this form, please call this telephone number: 686-9700

**PART 1 - HOUSEHOLDS RECEIVING FOOD STAMPS OR AID TO FAMILIES WITH DEPENDENT CHILDREN**

If you are NOW receiving food stamps or AFDC for THIS child, write your food stamp case number or AFDC number. DO NOT COMPLETE PART 2, BUT GO ON TO PART 3. The application MUST have the printed name and signature of an adult.

□ YES, I received food stamps or AFDC for this child this month and want school meals.

**FOOD STAMP CASE NUMBER**

**AFDC CASE NUMBER**

**PART 2 - ALL OTHER HOUSEHOLDS**

If you did not give a food stamp case number or AFDC number, you MUST complete the following information and sign the application or your application cannot be approved.

**HOUSEHOLD MEMBERS:** List the names of everyone living in your household; include yourself and the child listed above. If you need more space, use a separate sheet of paper.

**SOCIAL SECURITY NUMBER:** Print the social security number of each adult age 21 or older. If an adult does not have a social security number, print "none" next to their name.

**INCOME:** List all income received last month on the same line with the person who received it. You must list gross income BEFORE deductions for taxes, social security, etc. List each amount under the correct title and list total monthly income.

**LIST ALL HOUSEHOLD MEMBERS**

<table>
<thead>
<tr>
<th>Name (Last, First)</th>
<th>Social Security Number</th>
<th>Monthly Exempt from Work (Unemployment)</th>
<th>Monthly Welfare Payments from Dependent</th>
<th>Monthly Payments from Parent(s)</th>
<th>All Other Income Earned Last Month</th>
</tr>
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</tbody>
</table>

**TOTAL MONTHLY INCOME:**

**PART 3 - ALL HOUSEHOLDS**

**PENALTIES FOR MISREPRESENTATION:** I certify that all of the above information is true and correct and that all income is reported. I understand that this information is being given for the receipt of Federal funds; that school officials may verify the information on the application; and that deliberate misrepresentation of the information may subject me to prosecution under applicable State and Federal laws. An adult must sign the application before it can be approved.

Signature

Signature of Adult

Home Address

Praised Name of Adult

Date Signed

Home Telephone

Week Telephone

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PART 4 - FOSTER CHILDREN

In most cases foster children are eligible for free or reduced price meals regardless of your household income. These children are considered to be a household of one. If your child is a foster child as described in Category A OR B below, place a check in the proper box.

- A. The welfare agency or court is legally responsible for the child and the foster home is, in fact, an extension of the welfare agency or court.
- B. The child is a resident of a licensed "Group Foster" home or a residential institution.

Only the foster child's spending money is counted as income on this application. Spending money is: money received in hand for the personal use of the child from a welfare agency, the child's family, a trust account, earnings from regular employment and so on. Do not include money from occasional or part-time jobs like paper routes and babysitting.

List this child's spending money per month $__________________________.

If you have any questions or if you have a foster child who does not fit under category A or B, as described above, please contact Janet Gaffke, Director of Food Service, 686-9700.

OPTIONAL

RACE: Please check your child's racial or ethnic group. You are not required to answer this question. We need this information to be sure everyone receives benefits on a fair basis.

- White, not of Hispanic Origin
- Black, not of Hispanic Origin
- Hispanic
- Asian or Pacific Islander
- American Indian or Alaskan Native

No child will be discriminated against because of race, color, handicap, national origin, sex or age.

FOR SCHOOL USE ONLY - DO NOT WRITE BELOW THIS LINE

Eligibility Determination: □ Approved Free □ Approved Reduced Price □ Denied

Reason for Denial: □ Income Too High □ Incomplete Application □ Other (Reason)____________________

Date Notice Sent: ______________________

Signature of Determining Official: ______________________ Date: ______________________

Verification Result: □ No Change □ Ineligible □ Free to Reduced Price □ Reduced Price to Free

Reason for □ Income □ Household Size Eligibility Change: □ Refused to Cooperate □ Other

Date Adverse Notice Sent: ______________________

Verifying Official: ______________________ (signature) Date: ______________________

Space for notes about the Eligibility/Verification below
GOOD MORNING
WELCOME AND RELAX BECAUSE THE QUESTIONS ARE EASY AND YOU WILL HAVE NO DIFFICULTY ANSWERING THEM.

YOU SHOULD HAVE A PENCIL AND AN ORANGE SHEET IN FRONT OF YOU. PLEASE DO NOT ANSWER THE QUESTIONS AHEAD OF WHERE I AM READING. PLEASE STAY WITH US.

WE WILL BEGIN WITH THE SIDE THAT HAS 8 QUESTIONS ON IT. PRINT YOUR FIRST AND LAST NAME ON THE TOP LINE. WHEN YOUR NAME IS CROSSED OFF THE LIST SO WE KNOW YOU HAVE ANSWERED THE QUESTIONS, WE WILL CUT YOUR NAME OFF AND BURN IT. THIS MEANS NO ONE WILL KNOW WHO ANSWERED THE QUESTIONS.
WRITE THE GRADE YOU ARE IN NOW.
PLEASE BE HONEST WITH YOUR ANSWERS.

AFTER I READ THE QUESTION, CIRCLE THE NUMBER 1, 2, 3, 4, or 5 THAT TELLS WHAT YOU THINK. ONLY CIRCLE ONE NUMBER FOR EACH QUESTION. I WILL TELL YOU WHEN TO CIRCLE THE ANSWER.

(Read questions 1-8 and the 5 responses exactly as printed. Allow time for students to circle an answer.)

TURN THE PAPER OVER TO THE SIDE WITH 4 QUESTIONS. ANSWER EACH QUESTION AFTER I READ IT. IF YOU ARE NOT SURE OF THE ANSWER, MAKE A QUESTION MARK.

(Read questions 1-4 as printed. Allow time for students to write their answers.)

HAND IN THE PAPER WITH YOUR NAME SHOWING. YOU MAY TAKE THE NEW PENCIL WITH YOU.
THANK YOU FOR YOUR HELP. RETURN CAREFULLY, SAFELY AND QUIETLY TO YOUR CLASSROOM.

(Dismiss students.)
## SELF-CONCEPT OF ACADEMIC ABILITY SCALE
### ELEMENTARY FORM

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Think of your friends. Do you think you can do school work better, the</td>
<td>Better than all of them .......................... 1</td>
</tr>
<tr>
<td>same or poorer than your friends?</td>
<td>Better than most of them .......................... 2</td>
</tr>
<tr>
<td></td>
<td>About the same ...................................... 3</td>
</tr>
<tr>
<td></td>
<td>Poorer than most of them ............................ 4</td>
</tr>
<tr>
<td></td>
<td>Poorer than all of them ............................ 5</td>
</tr>
<tr>
<td>2. Think of the students in your class. Do you think you can do school</td>
<td>Better than all of them .......................... 1</td>
</tr>
<tr>
<td>work better, the same or poorer than the students in your class?</td>
<td>Better than most of them .......................... 2</td>
</tr>
<tr>
<td></td>
<td>About the same ...................................... 3</td>
</tr>
<tr>
<td></td>
<td>Poorer than most of them ............................ 4</td>
</tr>
<tr>
<td></td>
<td>Poorer than all of them ............................ 5</td>
</tr>
<tr>
<td>3. When you finish high school, do you think you will be one of the best</td>
<td>One of the best ...................................... 1</td>
</tr>
<tr>
<td>students, about the same as most or below most of the students?</td>
<td>Better than most of the students ..................... 2</td>
</tr>
<tr>
<td></td>
<td>Same as most of the students ........................ 3</td>
</tr>
<tr>
<td></td>
<td>Below most of the students ........................... 4</td>
</tr>
<tr>
<td></td>
<td>One of the worst ..................................... 5</td>
</tr>
<tr>
<td>4. Do you think you could finish college?</td>
<td>Yes, for sure ........................................ 1</td>
</tr>
<tr>
<td></td>
<td>Yes, probably ......................................... 2</td>
</tr>
<tr>
<td></td>
<td>Maybe .................................................. 3</td>
</tr>
<tr>
<td></td>
<td>No, probably not ...................................... 4</td>
</tr>
<tr>
<td></td>
<td>No, for sure ........................................... 5</td>
</tr>
<tr>
<td>5. If you went to college, do you think you would be one of the best</td>
<td>One of the best ...................................... 1</td>
</tr>
<tr>
<td>students, same as most or below most of the students?</td>
<td>Better than most of the students ..................... 2</td>
</tr>
<tr>
<td></td>
<td>Same as most of the students ........................ 3</td>
</tr>
<tr>
<td></td>
<td>Below most of the students ........................... 4</td>
</tr>
<tr>
<td></td>
<td>One of the worst ..................................... 5</td>
</tr>
<tr>
<td>6. If you want to be a doctor or a teacher, you need more than four years</td>
<td>Yes, for sure ........................................ 1</td>
</tr>
<tr>
<td>of college. Do you think you could do that?</td>
<td>Yes, probably ......................................... 2</td>
</tr>
<tr>
<td></td>
<td>Maybe .................................................. 3</td>
</tr>
<tr>
<td></td>
<td>No, probably not ...................................... 4</td>
</tr>
<tr>
<td></td>
<td>No, for sure ........................................... 5</td>
</tr>
<tr>
<td>7. Forget how your teachers mark your work. How good do you think your</td>
<td>Excellent ............................................. 1</td>
</tr>
<tr>
<td>own work is?</td>
<td>Good .................................................... 2</td>
</tr>
<tr>
<td></td>
<td>Same as most of the students ........................ 3</td>
</tr>
<tr>
<td></td>
<td>Below most of the students ........................... 4</td>
</tr>
<tr>
<td></td>
<td>Poor .................................................... 5</td>
</tr>
<tr>
<td>8. How good of a student do you think you can be in this school?</td>
<td>One of the best ...................................... 1</td>
</tr>
<tr>
<td></td>
<td>Better than most of the students ..................... 2</td>
</tr>
<tr>
<td></td>
<td>Same as most of the students ........................ 3</td>
</tr>
<tr>
<td></td>
<td>Below most of the students ........................... 4</td>
</tr>
<tr>
<td></td>
<td>One of the worst ..................................... 5</td>
</tr>
</tbody>
</table>
## LOCAL DISTRICT SUMMARY:
### 1990 FOURTH FRIDAY REPORT

### MAILING INSTRUCTIONS:
- **DISTRICT**: Return ORIGINAL and ONE copy by OCTOBER 19 to the INTERMEDIATE DISTRICT. Retain ONE copy.
- **INTERMEDIATE DISTRICT**: Return the ORIGINAL by NOVEMBER 2 to the STATE address indicated above. Retain ONE copy.


#### A. FULL-TIME AND FULL-TIME EQUIVALENCY STUDENT COUNTS.

**Please read instructions on back side of this page.**

- **Special Education FTE's** to nearest tenths:
- **All other Part Time FTE's** to nearest hundredths

<table>
<thead>
<tr>
<th>Grade or Program</th>
<th>Resident Nonresident</th>
<th>Special Education in General Education</th>
<th>Membership (Column 2 plus Column 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L N E</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
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<tr>
<td>1 PRE-K</td>
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<td>2 K</td>
<td>11</td>
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<td>3 1</td>
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<td>4 2</td>
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<td>5 3</td>
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<td>13 11</td>
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<td>14 12</td>
<td>71</td>
<td></td>
<td></td>
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<tr>
<td>15 Special Education</td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 TOTAL STUDENTS IN FTE</td>
<td>(Add Lines 2 thru 14)</td>
<td>(Add Lines 2 thru 15)</td>
<td>(Add Lines 2 thru 15)</td>
</tr>
</tbody>
</table>

### SUMMARY OF PARTS 1.4, AND 1.8

- **FULL-TIME STUDENTS IN FTE**
- **PART-TIME STUDENTS IN FTE**
- **TOTAL**

(See back side of this page for instructions.)

### ADJUSTMENTS (Report Student Counts in F.T.E.)

<table>
<thead>
<tr>
<th>SECTION 111 (1) or (2)</th>
<th>SECT. 111 (4)</th>
<th>SECT. 24 (2)</th>
<th>SECTION 51 (4) (D)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident District</td>
<td>Enrolling District</td>
<td>Center Program</td>
<td>(Col. 7 Plus Col. 8)Minus Columns 9, 10, 11 &amp; 12</td>
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<td>(1)</td>
<td>(2)</td>
<td>(11)</td>
<td>(12)</td>
<td>(13)</td>
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</tbody>
</table>

### CERTIFICATION:

I certify that the information submitted on this report is true and correct to the best of my knowledge.

Date

Superintendent or Authorized Official (Signature)

Contact Person

Telephone

Area Code:Local Number

NOTE: You are receiving only one copy of this form. Please make copies for the ISD and your files.

---

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Dear Superintendent,

I am working on a dissertation titled "Self-Concept of Academic Ability and Academic Achievement of Junior First Grade".

Please complete the information on the enclosed postcard and send it by return mail. If you have any questions or concerns, please contact Mary Boettger at MacGregor Elementary School at 892-1558, Monday through Friday between 10:00 a.m. and 3:00 p.m.

Thank you for your time, consideration of this request, and quick response.

Sincerely,

Mary Boettger, Doctoral Candidate
Western Michigan University

MB/JS
BIBLIOGRAPHY

Bay City Board of Education Manual of 1904. (1904). Bay City, MI: Bay City Public Schools.


Coffield, W. H., & Blommers, P. (1954). Effects of non-promotion on educational achievements in the
elementary school. *Journal of Educational Psychology*, 47, 235-250.


Hollenbeck, E. R. (Director of Finance and Accounting, Bay City Public Schools, Bay City, MI). (1990, August). [Personal communication.]


