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A DISSERTATION

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BY

LEWIS LLOYD EUBANKS

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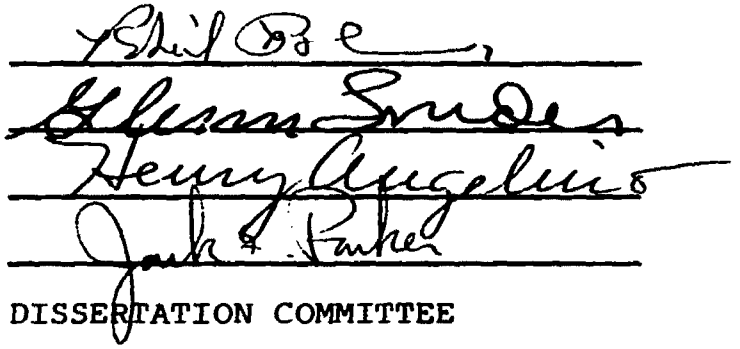
1969

A STUDY OF SLOW LEARNING CHILDREN IN REGULAR AND SPECIALLY DESIGNED CLASSES

APPROVED BY



DISSERTATION COMMITTEE

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CHAPTER I

THE PROBLEM: ITS BACKGROUND AND SCOPE

Introduction

A unique characteristic of the American democracy has been a concern for the education of all children. This concern has been based upon the philosophy that all individuals have an equal right to achieve and an equal right to learn. The Educational Policies Commission reaffirmed this philosophy in its statement in 1962 that one of the major responsibilities of American education is ". . . to foster the development of individual capacities which will enable each human being to become the best person he is capable of becoming."[1]

Curriculums of schools have been constructed to offer children equal opportunity, but this equality too often means that all children are expected to perform the same tasks and

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[1]National Education Association, The Purposes of Education in American Democracy. A Statement Prepared by the Educational Policies Commission. (Washington, D.C., 1961), p. 2.

to acquire identical skills. This concept of opportunity disregards the fact that the capacity of each individual to learn is not equal.

Definite agreement has long been reached that there are many children in any unselected school population who cannot benefit by the organization and curriculum of the American school system. The problem of how best to provide maximum educational opportunity for all children within a wide range of intellectual ability has stimulated numerous curricular innovations at all levels of instruction. The introduction of homogeneous and heterogeneous grouping, ungraded primary, multi-track programs, levels program, and special classes for children identified as mentally deficient, emotionally disturbed, physically handicapped, and gifted are examples of the schools' efforts to meet the needs and abilities of children.

The State Department of Education of Oklahoma has provided for the establishment of special classes for children identified as "special education" pupils. Approval for the establishment of "honors" classes in specific courses has also been given for the intellectually superior pupils in many schools in which small numbers of selected pupils receive accelerated instruction. To date, however, no state program has been approved for that large group of children who learn more slowly than their more fortunate peers.

Research of professional literature revealed no evidence of public school academic programs established specifically for slow learners as identified in this study.

Need for the Study

Need for a study of those children who possess below normal intellectual ability but are not special education pupils, assumed importance when findings revealed the numbers of children who are identified as falling in the slow learner category. Johnson and Kirk wrote that fifteen to seventeen percent of the total population of our nation were slow learning children who were unable to "keep up" and who usually did the poorest work in the classroom.[2]

In 1960, a study of the pupil population of the fourteen largest cities of our nation revealed that slow learners constituted one third of the school population.[3] The same study stated that in some urban centers, these children might make up one half of the total population.[4] Samoff stated that below average mental ability children were found to be unable to profit from regular classes in normal grade level steps and yet were not retarded enough to be in need of special education as defined in the various

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[2]Orville Johnson and Samuel Kirk, The Education of Mentally Handicapped Children, (Boston: Houghton-Mifflin Company, 1951), p. 190.

[3]Philadelphia Bulletin, "The Slow Learners," May 4, 1960.

[4]Ibid.

states.[5] These findings provided relevancy to a long known fact that exceptional children simply do not fit into the patterns of education that have been constructed for the normal ability child.

If large numbers of children have been found incapable of success in the established academic programs, it becomes vital that realistic, meaningful programs of study be devised and implemented. A basic principle salient to innovative instruction was given by Torrance, who wrote:

> Different kinds of children learn best when given opportunities to learn in ways best suited to their motivations and abilities. Whenever teachers change their ways of teaching in significant ways, a different group of learners become the stars or achievers. This advance has far reaching implications for educating a larger number of people to a higher level of dignity and mental health in our society.[6]

Research on pupil failure has shown that when children are confronted with repeated failure, many of them become discouraged and terminate their education prematurely. Otto and Estes reported that the majority of dropouts in the secondary school had experienced grade or subject failure somewhere in their school careers.[7]

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[5]Zelda Samoff, "Curriculum for Slow Learners," in The Subject Curriculum, Grades K-12, Morton Alpren, ed. (Columbus, Ohio: Charles E. Merrill Books, Inc., 1967), p. 418.

[6]E. P. Torrance, Rewarding Creative Behavior, (Englewood Cliffs: Prentice Hall, 1965), p. 678.

[7]Henry J. Otto and Dwaine Estes, "Elimination From Schools," Encyclopedia of Educational Research, (New York: Macmillan Company, 1960), pp. 8-9.

There remains little doubt among educators that if the retention power of the school is to increase, then continued experimentation in individualized programs of instruction is needed. If one of the major objectives of education is achievement, then educators must be made more cognizant that in this technological era those least prepared to function effectively are the ever increasing numbers of children who learn more slowly than their classmates.

Perhaps an evaluation of such factors as social behavior, self concept, attendance, and academic achievement may contribute a great deal to the research related to the slow learning child. Such evaluations can contribute significantly as guidelines for innovative and meaningful curriculum changes at both the elementary and secondary levels of instruction.

Purpose of the Study

It was the purpose of this study to evaluate the results of a program designed specially for elementary age pupils who had been identified as slow learners. The study was further concerned with isolating factors and conditions that it was felt contributed to pupil failure and loss of interest in the school program.

Two basic questions which the study attempted to answer were:

Will a specially designed program fitted to the intellectual abilities of pupils provide motivation toward greater academic achievement?

What are the common reasons for unsatisfactory progress among elementary school children?

Additional purposes of the study were to determine if a meaningful relationship existed between academic achievement and specific factors such as school attendance, social behavior, and social acceptance and rejection.

It was believed that this study would contribute valuable insight toward making the public school years of the slow learning child a personally rewarding experience and in encouraging the child to become a worthy, productive citizen. Results of the study could be useful to school administrators in planning a program that would better meet the needs of the students at all levels of instruction.

Statement of the Problem

This study was designed to measure changes in academic achievement, social behavior and self concept of slow learning children in regular and specially designed classes.

Specific questions concerning the slow learners in these classes were:

What was the change in academic achievement of slow learning children in specially designed classes as compared to that of slow learning children in regular classes?

What was the change in social behavior of slow learning children in specially designed classes as compared to that of slow learning children in regular classes?

What was the change in the self concept of slow learning children in specially designed classes as compared to that of slow learning children in regular classes?

Did slow learning children in regular classes experience a higher degree of social rejection by their classmates than did slow learning children in specially designed classes?

Did slow learning children in specially designed classes experience a higher degree of social acceptance by their classmates than did slow learning children in regular classes?

What was the change in daily attendance of slow learning children in specially designed classes as compared to that of slow learning children in regular classes?

Population

The population for the study was composed of selected pupils in grades 3, 4, 5, and 6 of the Midwest City Independent School District #52 for the 1968-69 school year who had been identified as slow learning children. The children were identified as possessing an intelligence quotient within a range of 75-89 as determined by an individually administered intelligence scale. The chronological ages of the pupils ranged from eight to thirteen years.

Delimitations

The study was designed to include only selected pupils in grades 3, 4, 5, and 6 who had been identified as slow learners. Cumulative records of these children revealed a history of unsatisfactory progress or failing work.

Due to the experimental nature of the study, as well as the expense involved in providing materials and equipment,

the number of specially designed classes was limited to three classes of combined third and fourth grade children and two classes of combined fifth and sixth grade children.

However, because of the nature of this study this limitation was considered to be an asset to the study rather than a weakness. It was felt that to deal with a limited number of subjects in small sized classes would yield reliable data that would be representative of the total population of similarly identified children.

Definition of Terms

Considerable variation was found to exist in the terminology employed in the area of low average intelligence. For the purpose of this study, however, and for the sake of clarity the following definitions were used:

Slow learners. Those children whose mental ability falls in the range between the average and the special education pupils, according them in general an intelligence quotient of 75-89.

Normal. Those children whose intellectual ability exceeds that of the slow learning children.

Rejectee. The child in a classroom sociometric situation who is chosen for negative roles so much that the existence of social forces of rejection is confirmed.

Acceptee. The child in a classroom sociometric situation who is chosen for positive roles so much that the existence of social forces of acceptance is confirmed.

Hypotheses To Be Tested

For the purposes of this study the following null hypotheses will be tested:

Ho_1: There is no significant difference between the academic achievement of slow learning children in specially designed classes and the academic achievement of slow learning children in regular classes as measured by the Iowa Tests of Basic Skills.

Ho_2: There is no significant difference between the social behavior of slow learning children in specially designed classes and the social behavior of slow learning children in regular classes as measured by the Haring-Phillips Behavior Rating Scale.

Ho_3: There is no significant difference between the self concept of slow learning children in specially designed classes and the self concept of slow learning children in regular classes as measured by the Bills Adapted Self Concept Test.

Ho_4: There is no significant difference between the mean rejection score made on the Bower Sociometric Device by slow learning children in specially designed classes and the mean rejection score made on the Bower Sociometric Device by slow learning children in regular classes.

Ho_5: There is no significant difference between the total daily attendance of slow learning pupils in specially

designed classes and the total daily attendance of slow learning pupils in regular classes.

Ho_6: There is no significant difference between the mean acceptance score made on the Bower Sociometric Device by slow learning children in specially designed classes and the mean acceptance score made on the Bower Sociometric Device by slow learning children in regular classes.

Collection of Data

The Iowa Tests of Basic Skills were administered in the fall and again in the spring to each child selected for placement in the specially designed classes and the regular classes.

In order to explain the purpose and the method of administering the three data collection instruments, orientation meetings were held with the participating teachers of the regular and specially designed classes. Many of the younger children were unable to write the names of their classmates, as required on the Sociometric Device; others were unable to understand the meaning of various adjectives on the Self Concept Test. In such cases, the teachers were requested to write the names of all children in the class on the blackboard to facilitate correct identification of classmates. Teachers were also permitted to substitute appropriate synonyms for those trait adjectives that proved to be difficult for some children.

The Behavior Rating Scale was completed for each child by the child's teacher. The Behavior Scale, the Sociometric Device, and the Self Concept Test were given to each child in the fall and again in the spring.

The Behavior Rating Scale measured the gain or loss in positive behavioral traits. The Sociometric Device measured the extent to which individual children were accepted by classmates. The Self Concept Test measured the amount of change in each child's opinion of self.

Attendance reports for each child were collected from the records at the school sites at the end of the study and a comparison was made of those reports for children in the experimental and the control classes.

A more detailed discussion of data collection and data collecting techniques may be found in Chapter III.

Treatment of Data

The Statistical Procedures utilized in this study were: (1) group matching and sample description, (2) analysis of the Iowa Tests of Basic Skills data, (3) analysis of the Bills Adapted Self Concept Test data, (4) analysis of the Sociometric Device data, (5) analysis of the Behavioral Rating Scale data, and (6) analysis of attendance data.

The matching of slow learning children in the regular and specially designed classes was treated in two steps: first, quantifying the data and second, comparing the data

via mean scores. Comparison of the two groups employed the t-test as a measure of the similarity or difference between the means of each set of data.[8]

Organization of the Study

This study is presented in five chapters. The background and problem of the study is presented in Chapter I. Chapter II is devoted to a review of pertinent literature related to the problem. A detailed description of the design of the study and the data collection instruments is presented in Chapter III. The analysis and interpretation of the collected data are contained in Chapter IV. The analysis of data includes the statistical treatment and acceptance or rejection of the hypotheses. Chapter V contains a summary, conclusions based on the findings of the study, recommendations, and suggestions for further research.

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[8]Fred N. Kerlinger, Foundations of Behavioral Research, (New York: Holt, Rinehart and Winston, Inc., 1964), pp. 258-259.

CHAPTER II

RELATED RESEARCH

Introduction

Studies of ability grouping, or classification of pupils for instructional purposes so that a relatively high degree of homogeneity exists within the group, has had a long and provocative history. These studies have not all been concerned with curriculum innovation at the elementary level, but have questioned consistently the relative advantages and disadvantages of grouping for increased achievement at all levels of instruction.

The review of literature as presented in this study was intended to deal more directly with studies related to individualized programs of instruction in the elementary school. Research of the literature revealed many conflicts in relation to programs designed specifically for the slow learning child. The review of literature, therefore, was organized into different categories to correspond to the various major aspects of this study and to present findings of past research in terms of the degree to which those studies were perceived to be related to the present investigation.

Selected Reviews and Evaluations

Hillson, in a volume of readings, compiled an outstanding review and evaluation of studies related to innovation and change in elementary school programs. The selection covered the most popular suggestions for reorganization during the decade 1950-1960 as well as programs in operation in the early 1960s. Hillson found that individual differences in children and the need for individualization of instruction are still among the most serious problems facing educators.[1]

A survey of the professional literature revealed that the history of American education is replete with proposed reforms and innovations aimed at altering or modifying established and traditional practices and methods of instruction. Shane listed thirty-five plans of grouping and pointed out that the list was not exhaustive nor even comprehensive.[2]

A bulletin of the National Education Association summarized the findings and conclusions from fifty research studies published since 1960 which concerned the relative merits of organizational grouping as they affected

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[1]Maurie Hillson, Change and Innovation in Elementary School Organization, (New York: Holt, Rinehart and Winston, 1965).

[2]Harold G. Shane, "Grouping in the Elementary School," Phi Delta Kappan, Col. 41 (April, 1960), pp. 313-319.

achievement.[3] The bulletin concluded that the studies disclosed nothing definite or conclusive.

Eldred and Hillson criticized the structure of the elementary program and stated that the whole organizational structure was inimical to individual differences.[4] With respect to the learning situation, Hillson wrote:

> . . . much thought has been given to how we might provide a plan in which, ideally, each child would receive individualized instruction. If the ideal could not be achieved, at least our schools could be organized so that small groups of children are taught at a level appropriate to their ability, desire, intent, and learning skill.[5]

Johnson wrote that in spite of the large amount of emphasis which had been devoted to individual differences, no real program geared to the special group of needs of the slow learning child had emerged.[6] Jewett and Hull, however, reported on a sampling of twelve hundred secondary schools that indicated that schools are making more provisions for slow learners than they are making for rapid learners.[7]

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[3]"Ability Grouping," National Education Association Bulletin, Vol. 46, No. 3, (October, 1968), pp. 74-76.

[4]Hillson, op. cit., pp. 373.

[5]Ibid., p. 370.

[6]G. Orville Johnson, Education for the Slow Learner, (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1963), pp. 12-17.

[7]Arno Jewett and J. Dan Hull, Teaching Rapid and Slow Learners in High Schools, U.S. Department of Health, Education and Welfare Bulletin, Vol. 39, No. 4, (December, 1961), p. 107.

Class Size

The relationship of class size to pupil achievement drew a great deal of attention in the literature. The National Education Association Research Division made a study of teachers' and principals' experience relative to class size and concluded that although research on the best size of class for effective teaching was inconclusive, the majority of both elementary teachers and principals agreed that a class of 20-24 pupils was best.[8] McLaughlin[9] and McKenna[10] both reported advantages in having small classes for low average ability pupils.

Early studies on this subject were interested chiefly in the achievement and promotion factors relative to class size. In measuring factors other than scholastic achievement, McKenna cited guidelines with the understanding that no one rule existed and that no absolute decision could be made upon the appropriate range of class sizes without considering other related policies.[11]

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[8]"Best Class Size," National Education Association Research Division, National Education Association Research Bulletin, Vol. 39, No. 4 (December, 1961), p. 107.

[9]W. P. McLaughlin, "Class Size Affects Learning Ability," School Executive, Vol. 75 (March, 1956), pp. 91-93.

[10]Bernard H. McKenna, "Greater Learning in Smaller Classes," National Education Association Journal, (October, 1957), pp. 437-38.

[11]Bernard H. McKenna, "What About Class Size?" New York State Education, Vol. XLV, No. 2 (November, 1957), pp. 100-101.

Historical Review of Ability Grouping Programs

Although the practice of grouping students reached its peak in the 1920s and 1930s, the origins of grouping go back into the nineteenth century. Passow wrote that W. T. Harris initiated the first recorded attempt at homogeneous grouping in St. Louis in 1867 in which selected groups of bright students, chosen on achievement as determined by the teachers, were promoted rapidly through the elementary grades.[12] The same author reported on a program which began in 1891 in Cambridge, Massachusetts, which divided pupils into groups so that the brightest might complete grades 4-9 in four years, while the slowest took seven to eight years.[13]

It was not until the 1920s, however, that research revealed more than isolated attempts at homogeneous grouping with intelligence quotients as one considered factor. In 1929 a critical analysis of research evidence was done by Rock who considered only those experiments he viewed as scientific. Rock concluded that:

> The experimental studies of grouping which have been considered, fail to show consistent, statistically or educationally significant differences between the achievement of pupils in homogeneous groups and pupils of equal ability in heterogeneous groups. This failure to realize one of the

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[12] A. Henry Passow, "Enrichment of Education for the Gifted," in Nelson Henry, ed., Education for the Gifted, Fifty-seventh Yearbook of the National Society for the Study of Education, Part II (Chicago: University of Chicago Press, 1958), pp. 193-221.

[13] Ibid.

> important advantages claimed for ability grouping is not, however, evidence that homogeneous grouping cannot result in increased academic achievement.[14]

Billett reported on one hundred eight experimental studies that were implemented in the period 1917-1928. He classified one hundred two of the studies as "uncontrolled," two "partly controlled," and four as "thoroughly controlled." He concluded that of the "uncontrolled" studies, eighty-eight were favorable to grouping, one of the "partly controlled" was favorable to grouping, and two of the four "thoroughly controlled" favored grouping.[15] In 1930 Miller and Otto criticized both the methodology and experimental design of twenty studies and stated that homogeneous classification might be effective if accompanied by proper adaptation in methods and materials.[16]

The following year Turney analyzed available research pertinent to grouping and wrote that most of the studies offered no new evidence of any significance.[17] Perhaps the most comprehensive study of homogeneous grouping programs in the 1930s was reported by Cornell who wrote:

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[14]Robert T. Rock, Jr., "A Critical Study of Current Practices in Ability Grouping," Educational Research Bulletin, Catholic University of America, No. 5 and 6, 1929, p. 252.

[15]Roy O. Billett, The Administration and Supervision of Homogeneous Grouping, (Columbia: Ohio State University Press, 1932), p. 6.

[16]W. S. Miller and Henry J. Otto, "Analysis of Experimental Studies in Homogeneous Grouping," Journal of Educational Research, 21 (January-May, 1930), pp. 95-102.

> The results of ability grouping seem to depend less upon the fact of grouping itself then upon the philosophy behind the grouping, the accuracy with which grouping is made for the purposes intended, the differentiations in content, method, and speed, and the technique of the teacher, as well as upon more general environmental influences. Experimental studies have, in general, been too piecemeal to afford a true evaluation of the results; but when attitudes, methods, and curricula are well adapted to further adjustment of the school to the child, results, both objective and subjective, seem favorable to grouping.[18]

Two decades later, in 1959, Ekstrom wrote that she found no consistent pattern for the effectiveness of homogeneous grouping related to age, ability, course content or instructional method, but suggested that experiments which specifically provided for differentiation of teaching methods and materials tended to favor homogeneously grouped students.[19] Passow proposed that failure to employ multiple criteria in the selection for grouping and the exclusion of study in the behavioral areas led to the lack of results in many programs.[20]

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[18]Ethel L. Cornell, "Effects of Ability Grouping Determinable from Published Studies," in Guy M. Whipple, ed., "The Ability Grouping of Pupils," Thirty-fifth Yearbook of the National Society for the Study of Education, Part I, (Bloomington, Ill.: Public Schools Publishing Company, 1936), pp. 289-302.

[19]Ruth B. Ekstrom, Experimental Studies of Homogeneous Grouping (Princeton, N.J.: Educational Testing Service, April, 1959).

[20]Passow, op. cit., pp. 193-221.

Evidence to date revealed little unanimity among researchers concerning ability grouping. Roberts,[21] Houston,[22] and Lawson[23] reported successful experimental results, while Russell wrote that ability grouping for reading showed no significant gains in achievement.[24]

Review of Experimental Programs

Experimental programs at the elementary level, for the most part have been conducted in the areas of reading and arithmetic. One notable exception, however, was a study conducted by Jones upon the adaptation of instruction to individual needs in the areas of arithmetic, reading, and spelling. The study involved 288 students in Grade IV in equated experimental and control groups with a range of ability from slow learning to superior. Individualization of instruction was found to be more beneficial to the slow and average students than to the superior students.[25]

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[21]I. L. Roberts, "Homogeneous Grouping: An Experiment," Chicago School Journal, Vol. 29 (September, 1947), pp. 30-32.

[22]J. E. Houston, "We Separate Beginners Into Three Progress Levels," Nations' Schools, Vol. 45 (April, 1950), pp. 42-43.

[23]Anna F. Lawson, "Track School: Its Pupils Move On Six Ability Paths," Clearing House, Vol. 25 (May, 1951), pp. 515-20.

[24]David H. Russell, "Inter-Class Grouping for Reading Instruction in the Intermediate Grades," Journal of Educational Research, Vol. 39 (February, 1946), pp. 462-70.

[25]Daisy M. Jones, "Experiments in Adaptation in Individual Differences," Journal of Educational Psychology, Vol. 39 (May, 1948, pp. 268-269.

That more than one variable is necessary for successful grouping was divulged by Goldberg in a study of 2,200 pupils, organized into eighty-six classes and fifteen grouping patterns, through the fifth and sixth grades in forty-five New York City elementary schools. The pupils were divided into five ability levels with intelligence quotients from seventy-six to one hundred eighty-one. The study reported that ability grouping, by itself, had no positive effect on academic achievement.[26]

A report of the National Education Associations' Project on Instruction rendered support to Goldberg's study when it stated that grouping on the basis of ability without accompanying curricular and instructional provisions did not assure increased achievement. It probably restrained some other significant learning.[27]

Similar findings were reported by Koontz in a study of fourth grade pupils. The author theorized, however, that educational experiences could be more meaningful for classes with a narrower range of differences.[28] In a study based on

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[26]Miriam L. Goldberg, "Ability Grouping in Elementary School," School and Society, Vol. 90 (April 21, 1962), pp. 186-187.

[27]"Schools for the Sixties," A Report of the Project on Instruction, National Education Association (New York: McGraw Hill, 1963), p. 115.

[28]William F. Koontz, "A Study of Achievement as a Function of Homogeneous Grouping," Journal of Experimental Education, Vol. 30 (December, 1961), pp. 249-53.

achievement in mathematics in twelve countries, Postlethwaite wrote that the practice of differentiation in only one subject matter exacerbated the plight of the lower ability child. The study concluded that motivation and achievement tended to deteriorate.[29] West, however, compared test results of homogeneously grouped slow learners in special classes in one school with heterogeneously grouped slow learners in another school and reported greater scholastic achievement for the homogeneously grouped pupils.[30] Eisman found that when slow learners were grouped selectively, they improved most noticeably in the area of socialization, but tests revealed little perceptible assimilation of organized knowledge.[31] In a study of seventh and eighth grade slow learners grouped in a three hour block program, Edwards found the most significant outcome to be improvement in mental discipline and attitude toward school.[32] An investigation by Dodds of a program for the sub-average ability pupil showed that the pupils were

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[29]Neville Postlethwaite, School Organization and Student Achievement (Stockholm: Almquist and Wiksell, 1967), p. 82.

[30]Jeff West, "Grouping Slow Learners," Education, Vol. 81 (February, 1961), p. 345.

[31]Louis Eisman, "The Slow Learner Is Here To Stay," High Points, Vol. 35, No. 1 (January, 1953), p. 14.

[32]Rosalind M. Edwards, "A Slow Learner Program," National Association of Secondary School Principals' Bulletin, Vol. 42, No. 235 (February, 1958), pp. 130-132.

decidedly limited in dealing with studies involving reading and mathematical symbols.[33]

Edmiston and Benfer reported an experimental study of the relation between achievement and ranges of ability within groups. The study involved 426 fifth and sixth grade pupils in a school grouping based upon intelligence test scores and variation in the range of I.Q!s. It reported better reading achievement was indicated in groups with an average I.Q. range of forty points than in groups with an average range of thirty points.[34]

Effects of Poor Achievement Upon Behavior

Behaviorally, educators have held slow learners in poor esteem. They have long been considered to be discipline problems, truants, inattentive, and lazy. The accuracy of these observations was borne out by Liddle's study of adolescents who created problems in the school and community. He found that the school failure, drop-out, discipline problem, and delinquent youth were often non-achievers with I.Q's. between 75 and 89.[35] Featherstone recorded that a history

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[33]B. L. Dodds, "The Slow Learner," National Association of Secondary School Principals' Bulletin, Vol. 36, No. 185 (March, 1951), pp. 329-333.

[34]R. W. Edmisten and J. G. Benfer, "The Relationship Between Group Achievement and Range of Abilities Within the Groups," Journal of Educational Research, XLII (March, 1949), pp. 547-548.

[35]Gordon P. Liddle, "An Experimental Program for Slow Learning Adolescents," Educational Leadership, Vol. 17, No. 3, (December, 1959), p. 214.

of failure, rejection, frustration and condemnation by teachers, parents or peers developed a deep seated feeling of insecurity in slow learners who compensated for this by isolating themselves from the classroom activities or over-compensated by overt antisocial behavior.[36]

The role played by the school occupied a great deal of the literature upon the behavior of children. Newlun felt that the problem of pupil failure emerged out of the grade system of organization of public schools and stated:

> With the grade system came a number of characteristic problems and administrative headaches. Age-grade Tables constantly revealed too many average pupils in school, too many failures, too much waste of money on repeaters and too many pupils dropping out of school . . . In the United States, one major educational problem of the first third of this century was the problem of reducing or eliminating failures in the grades.[37]

Most of the studies which attempted to determine the effect which failure in school had on the child reported results which were detrimental to the welfare of the child. Arkola and Jensen concluded that school failure was a threat to total life adjustment.[38] Davis discussed the correlation of failure to motivation and reported, "Teachers have urged

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[36]W. B. Featherstone, Teaching the Slow Learner (New York: Bureau of Publication, Teachers' College, Columbia University, 1951), p. 95.

[37]Chester D. Newlun, "Who Fails in Your Schools?" American School Board Journal, CXXII (August, 1951), p. 13.

[38]Audrey Arkola and Reynold A. Jensen, "The Cost of Failure," Educational Leadership, VI (May, 1949), p. 495.

the necessity of failure as a means of stimulating greater effort and higher achievement. The results have not justified the method."[39] Davis further wrote that repeated failure for the slow child who faces tasks beyond his capacity gradually caused a loss of self confidence, initiative, and reduced the will to try.[40] Jacobson, Reavis, and Logsdon concurred that the child who failed inevitably learned to dread school and reacted against it in whatever way was open to him.[41] Blair said that neglect on the part of teachers and administrative failure to adapt school programs to the child's needs resulted too frequently in the formation of a puzzled state of mind and feelings of inferiority in the child.[42] Abraham agreed with Blair's thesis by reporting that failure to achieve created attitudes of indifference and resentment,[43] and Johnson proposed that the attitudes of slow learners were

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[39]Frank G. Davis, Pupil Personnel Service (Scranton, Penn.: The International Textbook Company, 1948), pp. 205.

[40]Ibid., p. 224.

[41]Paul B. Jacobson, William C. Reavis, and James D. Logsdon, The Effective High School Principal (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1963), p. 183.

[42]Glenn Myers Blair, "Mentally Superior and Inferior Children in the Junior and Senior High School," (New York: Bureau of Publication, Teachers College, Columbia University, 1938), p. 208.

[43]Willard Abraham, "The Slow Learner," The Library of Education (New York: Center for Applied Research in Education, Inc., 1964), p. 24.

largely the result of past experiences of a negative or unsatisfactory nature.[44]

The literature revealed conflicting opinions concerning the effect of environment upon behavior. Most of the research, however, emphasized the responsibility of the school as being a contributing factor to undesirable behavior.

Factors Related to Peer Acceptance

Most of the studies on peer relationship within groups concerned themselves with the factors of intelligence and behavior. In general, the literature showed that acceptance and rejection were significantly related to the actual behavior of pupils, to teachers' judgments of pupils' social acceptance, to the reputations pupils hold among their peers, to specific problems of social adjustment and to problems of personal adjustment.

Johnson and Kirk reported on the acceptance of low ability pupils in the elementary grades and found that approximately two thirds of the children were rejected by their classmates.[45] A study of the social acceptance of pupils at the other end of the intelligence scale was conducted by Gallagher and Crowder. The study investigated the sociometric status of thirty gifted pupils in the elementary

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[44] Johnson, op. cit., p. 53.

[45] G. Orville Johnson and S. A. Kirk, "Are Mentally Handicapped Children Segregated in the Regular Grades?" Journal of Exceptional Children, 1950, pp. 65-68.

grades and found that over eighty percent of them had above average status and fifty-three percent of them were placed in the top quartile of their classroom groups.[46]

The relationship of intelligence and social standing with peers occupied a large segment of the literature on sociometry. Gronlund found a low positive correlation when the social status of individuals was correlated with intelligence test scores.[47] The majority of the findings agreed that the relationship between intelligence and peer acceptance was similar to that between intelligence and achievement. Low intelligence was predictive of low achievement; but high intelligence did not assure high achievement, since factors such as motivation and study habits entered into achievement.

Several studies revealed that intelligence entered into mutual relationships among children. Those children who chose each other on a sociometric test tended to be more alike in intelligence than those who did not choose each other. Potashin[48] and Bonney[49] both reported this finding, based on

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[46]J. J. Gallagher and T. Crowder, "The Adjustment of Gifted Children in the Regular Classroom," Exceptional Children, 1957, p. 317.

[47]Norman E. Gronlund, Sociometry in the Classroom (New York: Harper and Brothers, 1959), p. 190.

[48]Robert Potashin, "A Sociometric Study of Children's Friendships," Sociometry, 1946, Vol. 17, pp. 48-70.

[49]M. E. Bonney, "A Sociometric Study of the Relationships of Some Factors to Mutual Friendships in the Elementary, Secondary, and College Levels," Sociometry, 1946, Vol. 9, pp. 21-47.

their studies of mutual choices among elementary school children. Thus, the extent to which intelligence influenced peer choices depended upon the level of intelligence of the chooser as well as that of the chosen. Confirmation of this fact was brought out in a study by Barbe, who analyzed the choice process of 244 elementary school children with I.Q's. ranging from 65 to 140. The results of the study indicated that slow learning children tended to choose friends of below average intelligence, while the bright children were inclined to choose associates with above average intelligence. Approximately 62 percent of the slow learning children chose friends from the below average group. None of them chose pupils with I.Q's. over 120 as friends.[50]

Other studies of intelligence and peer-choice revealed that pupils tended to choose as companions those similar to themselves in intelligence. Gronlund found that too great a deviation in intelligence from the group in either direction resulted in low acceptance status.[51] Thus a low ability child tended to experience isolation and lack of mutual friendships if he were placed in a group of children with average or above average intelligence. Grossman and

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[50]W. B. Barbe, "Peer Relationships of Children of Different Intelligence Levels," School and Society, 1954, Vol. 80, pp. 60-62.

[51]Gronlund, op. cit., p. 193.

Wrighter,[52] Buswell,[53] and Brown[54] reported findings that showed that the relationship between social status and intelligence followed the same pattern as that of social status and achievement reported in other studies.

Summary of Review of Literature

A review of the professional literature revealed that the philosophy of "mass education" had monopolized the attention of public school educators. Because of the effort to educate all youth, there has been a tendency to stereotype students and to disregard differences among individuals. There was evidence that instruction and evaluation methods were inconsistent with the philosophy of meeting individual needs and the recognition of individual differences among pupils with low ability.

The literature further revealed that although numerous innovations and experimental programs have been implemented, conflict still exists among educators upon the advantages and and disadvantages of grouping children homogeneously or

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[52] B. Grossman and J. Wrighter, "The Relationship Between Selection-Rejection and Intelligence, Social Status, and Personality Among Sixth Grade Children," Sociometry, 1948, Vol. 11, pp. 346-355.

[53] M. M. Buswell, "The Relationship Between the Social Structure of the Classroom and the Academic Success of the Pupils," Journal of Experimental Education, 1953, Vol. 22, pp. 37-52.

[54] D. Brown, "Factors Affecting Social Acceptance of High School Students," School Review, 1954, Vol. 42, pp. 151-155.

placing them in special classes for purposes of achievement. Disagreement was also found among studies that investigated ability grouping and individualized instructional methods.

Agreement was reached, however, that repeated failure in class work resulted in behavioral problems, the development of antisocial attitudes, and loss of self confidence and initiative. Sociometric studies reported that low ability children suffered social rejection by their classmates which intensified feelings of failure and dislike for school. Research further supported the findings that rejection coupled with failure were perhaps the two factors most responsible for maladjustment in children and premature termination from the school program.

CHAPTER III

DESIGN AND PROCEDURE

Design of the Study

This study was designed to measure changes in academic achievement, social behavior, self concept, and social acceptance of slow learning children in specially designed classes and regular classes and to compare those changes between the two groups. It was believed that a study of this nature would contribute, at least in a minor degree, to an understanding of how to better meet the needs of children with below normal intellectual ability.

As revealed by the review of professional literature regarding ability grouping and special programs of individualized instruction, there has been a pronounced interest in the problem of poor achievement among low ability children. Reorganization and modification of the curriculum and class structure have been implemented in experimental programs designed to provide more appropriate learning conditions. However, it has been most obvious to all concerned that too many children are unable to achieve at a normal pace and there continues to be a need for exploring the problem of individualized instructional methods.

A major consideration in the design of the study was that of determining the nature of the data to be gathered. It was believed that for the study to be contributive, it would need to gather data from five sources: the pupils, the pupils' classmates, the teachers, individual achievement tests, and cumulative records of the pupils.

Consequently, the study was designed to secure information from the pupils to determine how they viewed themselves and from the classmates and teachers of the pupils in order to see how those with whom the pupils in the study associated viewed them. Too, in order to secure a measure of academic progress, individual achievement test results were considered to be invaluable for the study's purpose.

A second consideration regarding the design of the study involved a decision affecting the delimitations of the study and the method of selecting the pupils to be involved. The population of the Midwest City School District in grades 3, 4, 5, and 6 was 5,760. An examination of the individual cumulative folders of these children revealed that 1,650 of the above total possessed intelligence quotients of one hundred or less. Group testing of the latter number of children revealed that 468 had intelligence quotients within the 75-89 range specified for the study.

Two additional problems merited consideration in view of the large number of children who were identified as slow learners. One, it was deemed advisable that the children

selected for the study not be moved from their school site. Two, specially designed classes could be established only at those school sites where a sufficient number of eligible children were enrolled to justify the formation of a class.

With these two criteria in mind, classes were set up at five elementary schools. Two of the classes had seventeen children in each class, while the other three classes had memberships of fifteen, eighteen, and nineteen pupils.

The control group was composed of slow learning children who were in schools throughout the system, but in numbers so small at any one school that classes could not be financially justified.

The children in the regular classes (control group) were selected carefully to assure that the two groups were matched as closely as possible on the basis of intelligence, chronological age, grade level, social class position, and academic achievement level.

Instrumentation

The measurements of the basic variables of this study were accomplished through the use of four subtests of an achievement test battery, and four instruments: a Behavior Rating Scale, a Sociometric Device, a Self Concept Test, and an Occupational Scale.

Academic Achievement

The instrument used to gather data in the academic areas was the 1956 edition of the Iowa Tests of Basic Skills (Forms 1 and 2), prepared at the State University of Iowa under the direction of S. F. Lindquist and A. N. Hieronymus and published by Houghton Mifflin Company. This test reveals the functional skills of children in grades 3-9 in the areas of vocabulary, reading comprehension, language, work-study skills, and arithmetic skills. The reliability coefficient ranges from .84 to .96 and the battery of tests is regarded as extremely valuable in the area of curricular validation.

For the purpose of this study four subtests from the entire battery were selected. It was felt that those subtests covered the functional skills most basic to school achievement and adequate life adjustment. They were: Test V: Vocabulary; Test R: Reading Comprehension; Test L-1: Spelling; Test A-1: Arithmetic Concepts.

The composite of the scores in those areas was used for measuring academic progress of the children in both the specially designed classes and the regular classes.

Behavior Rating Scale

The Behavior Rating Scale was developed by Phillips and Haring[1] for use in measuring change in overt behavior of

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[1]Norris G. Haring and E. Lakin Phillips, Educating Emotionally Disturbed Children (New York: McGraw-Hill Book Company, Inc., 1962).

elementary children. The Scale is a seven point Likert-type scale consisting of twenty-six items. The teacher (judge) rated a child from one to seven on each item of descriptive behavior. The values of the items were averaged to yield a single score. In the design of the study the lower the total score, the better the behavior. (A copy of the Behavior Rating Scale may be found in Appendix C.)

Sociometric Questionnaire

The Sociometric Device, "A Class Play," was developed by Bower[2] for use with elementary age children. Six of the parts represent negative roles, and six parts represent positive roles.

A child received an acceptance score of "one" each time his name was given by a classmate in response to a positive question. Similarly, a child received a rejection score of "one" each time his name was given in response to a negative question.

Since there was no method of determining the extent of acceptance or rejection, there was no adequate basis on which to assign weights to the scores. To analyze the data, it was assumed that each child was accepted or rejected equally on each question. Test re-test reliability for one hundred eight children was reported to be .92 for this

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[2]E. M. Bower, Early Identification of Emotionally Handicapped Children in School (Springfield, Illinois: Charles C. Thomas, 1960).

instrument.[3] (A copy of the Bowers Sociometric Device may be found in Appendix D.)

TABLE 1

CLASSIFICATION OF ITEMS ON THE BOWERS SOCIOMETRIC DEVICE

Type of Item	Number of Item
Positive Role	1, 3, 5, 7, 9, 11
Negative Role	2, 4, 6, 8, 10, 12

Self Concept Test

The Bills Self Concept Test was developed by Bills, Vance, and McLean[4] and is known in the literature as the Bills Index. An adaptation was made by McAfee[5] who replaced some of the original forty-nine trait adjectives with synonyms which were at or below a third grade reading level. Only those adjectives which met this criterion were retained in the Adapted Bills Index.

The trait adjectives on the Adapted Bills Index were scored as follows:

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[3] Ibid.

[4] R. Bills, E. Vance, and O. McLean, "An Index of Adjustment and Values," Journal of Abnormal Social Psychology, 1955, Vol. 51, pp. 254-259.

[5] Ronald O. McAfee, "The Discrepancy Between Self Concept and Ideal-Self As A Measure of Psychological Adjustment in Educable Mentally Retarded Males," unpublished Ph.D. dissertation, University of Texas, Austin, Texas, 1964.

1. Assigned a score of 1 to each of the following negative trait adjectives when the child answered them with a "yes" response:

annoying	fearful	careless
cruel	meddlesome	sarcastic
faultfinding	nervous	stubborn

2. Assigned a score of 0 to the negative trait adjectives mentioned in number 1 when the child answered them with a "no" response.

3. Assigned a rating of 1 to each of the following positive trait adjectives when they were answered with a "no" response:

acceptable	competent	helpful	reasonable
accurate	competitive	intellectual	responsible
alert	confident	kind	sincere
ambitious	considerate	logical	stable
broadminded	democratic	mature	studious
businesslike	dependable	merry	successful
busy	economical	normal	tactful
calm	efficient	optimistic	teachable
charming	fashionable	poised	useful
clever	friendly	purposeful	worthy[6]

4. Assigned a rating of 0 to the positive trait adjectives mentioned in number 3 when they were answered with a "yes" response.

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[6] Ibid., p. 49.

TABLE 2

CLASSIFICATION OF ITEMS ON THE BILLS ADAPTED SELF CONCEPT TEST

Type of Item	Number of Item
Negative Trait Adjective	5, 16, 21, 22, 29, 32, 38, 40, 45
Positive Trait Adjective	1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 30, 31, 33, 34, 35, 36, 37, 39, 41, 42, 43, 44, 46, 47, 48, 49

Using the above scoring procedure, high total scores indicated a poor concept of self, and low total scores indicated a good concept of self. (A copy of the Bills Adapted Self Concept Test may be found in Appendix E.)

Additional data secured from school records which were included in the study consisted of: (1) number of days absent from school, and (2) occupational level of the children's parents.

The choice of an objective measure of family socio-economic status presented a problem rather difficult to handle. The manner of determining family socio-economic status has been almost as varied as the number of studies which have used such an index. However, for the purpose of this study an Occupational Scale described by Warner[7] in his Index of

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[7]W. L. Warner, Marsha Meeker, and Kenneth Ells, Social Class in America (Chicago: Science Research Associates, 1949), p. 274.

Status Characteristics was computed for each pupil. The Index was scaled from 1 through 7 with the lower rating assigned to parents in the professional ranks and the higher rating given to unskilled workers and jobs of a menial nature. (A copy of the Warner Index may be found in Appendix F.)

The data were collected and tabulated and treated statistically where this would contribute to a better understanding of the data. However, in many cases it was felt that a descriptive analysis of what was found would be more appropriate than a strictly statistical analysis.

The treatment of data consisted first of subtracting the mean composite score on the fall administration of the Iowa Tests of Basic Skills from the mean composite score on the second administration of the same tests in the spring for both the specially designed classes and the regular classes. A two sample t-test was employed to compare the mean composite score of the children in the experimental group with the mean composite score of the children in the control group. The critical t-values to which the obtained t-values were compared were based on one-tail probabilities at the .05 level of significance.

The same statistical procedure was followed for the data collected by the Behavior Scale, the Self Concept Test, and the Sociometric Device.

Procedure of the Study

The study was concerned only with those pupils in grades 3, 4, 5, and 6 of Midwest City School District #52 who were identified as having intelligence quotients within the range of 75-89 and whose records revealed unsatisfactory progress in school work.

Permission to conduct the study was granted by the central office administration staff and the Director of the Pupil Services Department of the Midwest City School District. The study was supported by the administrative personnel at the central office and the individual school sites. It was believed that the professional attitude and cooperation exemplified by the various site principals and classroom teachers involved in the conduct of the study was a contributing factor to the validity of the investigation.

The initial step in the study was the identification of the pupils for placement in the specially designed classes. It was thus necessary to secure a list of possible candidates from the classroom teachers in the fifteen elementary schools of the district. This list was compiled by the teachers and contained the names of pupils whose cumulative records revealed an intelligence quotient of one hundred or less. The list was submitted by the individual teachers to the site principal for evaluation and was then forwarded to the Pupil Services Department. The personnel of this department

examined the records of the children whose names were on the list and compiled an alphabetical listing of those students whose records showed an intelligence quotient within the 75-89 range.

This master list of screened eligible children was returned to the various site principals who were given the responsibility to contact the parents of the children who were in attendance at the school. This contact with the parent was for the following purposes:

1. To arrange a conference.
2. To explain the study in detail.
3. To obtain permission to determine the child's eligibility by further group and individual testing.
4. To pass out printed material to supplement the verbal explanation of the study. (See Appendix A.)
5. To schedule further testing for the child.

When parental permission was obtained, group tests using the California Short Form Test of Mental Maturity were administered in order to increase the validity of judgments based upon the information previously collected from cumulative records of the children. Group tests with no more than ten children in a group were administered and when test results indicated an intelligence quotient within the 75-89 range, the child was then scheduled for individual testing (Binet) as a final check. The revised list was again reviewed with the site principals and parents were again contacted to

obtain written consent for the child to be placed in the specially designed classes. When this permission was secured, classes were established at five sites where the number of identified children was large enough to justify the formation of a class.

The initial step in the collection of data involved the administration of research instruments that would yield information in academic achievement, behavior, self concept, and social acceptance. To measure academic progress, the four sub-tests of the Iowa Tests of Basic Skills were administered to each child in the experimental and control groups in the fall and again in the spring. The administration of these tests was performed by personnel in the Pupil Services Department with the cooperation of the classroom teachers.

Personal conferences were held at the different school sites with all teachers who taught pupils in either the five specially designed classes or the control classification. The conferences were held to explain the nature and purpose of the study and to solicit teacher cooperation in the administration of the data collection instruments. (See Appendix B.) As a result of personal contact with the teachers involved, a 100 percent return was realized on this aspect of the study.

The research instruments used in the measurement of behavior, self concept, and social status were administered in the fall and again in the spring in the specially designed

classes and the regular classes with the assistance of the classroom teacher.

The teachers of the specially designed classes completed the Behavior Scale for each pupil in the class, while the teachers of children in the control group rated the behavior of the children selected for the study who remained in the regular classes.

The Self Concept Test was administered on a group basis in both the specially designed classes and the regular classes. Teachers were encouraged to substitute equivalent synonyms for any trait adjective when the definition of the adjective proved to be beyond the child's comprehension.

The Sociometric Device was also administered on a group basis. In those cases when children were unable to spell the names of their classmates, the names of all the children in the class were written on the blackboard in the order in which they were seated in the class.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The problem of this study was to measure changes in academic achievement, social behavior and self concept of slow learning children in regular and specially designed classes. In agreement with the design and procedures outlined in Chapter III the data were collected and tabulated for presentation in this chapter. Data tables were utilized as a method of describing and presenting the treatments and results of the data. Raw data of the pupils' scores on the Iowa Tests of Basic Skills, Behavior Rating Scale, Sociometric Device, Self Concept Test, Socio-Economic Scale and attendance are presented in Appendix G. Each of the hypotheses used to test the findings of the study is used as a basis for discussion of the data contained in the study. Pertinent data to each hypothesis are presented in the various tables of the chapter.

The null hypothesis of no significant difference was used to test each stated hypothesis in the investigation. When it was felt that proof of significance would contribute to the study, the .05 level of significance was used.

As stated in Chapter III, five specially designed classes were established for the purposes of the study. The total membership of these classes was eighty-six children. A like number of similarly identified children who remained in their regular classes were selected and matched with those children in the experimental classes for comparison purposes. Thus, the number of students in the control experimental classes totaled 172. Data were collected and tabulated in the fall for those 172 pupils and those data were to be compared with data collected in the spring. During the year, however, six students in the specially designed classes moved from the school district and were not available for retesting. It was felt that to replace those six children after a lapse of time would have decreased the validity of the comparison study. Therefore, six students in the regular classes were removed from the study in order to keep the number in each class equal.

An examination of Tables 4 and 5 will show a discrepancy in the numbers of matched pupils at all four grade levels. This variation could not be avoided since an equal number of children in the different grade levels could not be identified as possessing intelligence quotients within the range specified in the design of the study.

Comparison of Groups

The presentation of these data is intended (1) to describe the matching of the slow learning children in the

specially designed classes and the regular classes and (2) to furnish an analysis of the data. The findings presented in the matching of the groups demonstrate the equality of the groups. The data analysis presents a description of the two groups.

The comparison of the groups on the variables of intelligence, grade level, social class, achievement level, and chronological age in months is presented in Table 3.

TABLE 3

COMPARISON OF THE GROUPS OF SLOW LEARNING CHILDREN IN REGULAR AND SPECIALLY DESIGNED CLASSES

Variable	Specially Designed Classes		Regular Classes		
	Mean	N	Mean	N	t
Intelligence Quotient	82.3	80	83.4	80	1.57
Grade Level	4.41	80	4.62	80	1.50
Age in Months	124.2	80	127.9	80	1.56
Achievement Level	3.16	80	3.44	80	.57
Socio-Economic Level	4.9	80	4.4	80	.83

As the findings in Table 3 indicate there were no significant differences at the .05 level of confidence between the two groups on the variables that were tested. On the basis of the t-test, it would seem that the slow learning

children in both the regular and specially designed classes came from the same population.

The comparison of the two groups at the third grade level is presented in Table 4. The same variables as shown in Table 3 were used for comparative purposes of the two groups. The variable, grade level, is omitted in Tables 4, 5, and 6 where the grade designation is shown in the title of the table.

TABLE 4

COMPARISON OF THIRD GRADE SLOW LEARNING CHILDREN IN REGULAR AND SPECIALLY DESIGNED CLASSES

Variable	Specially Designed Classes		Regular Classes	
	Mean	N	Mean	N
Intelligence Quotient	83.5	23	83.9	14
Age in Months[a]	107.0	23	109.8	14
Achievement Level	2.26	23	2.53	14
Socio-Economic Level	5.2	23	4.5	14

[a]Age in months is based upon the date of the start of the study.

The discrepancy in the number of third grade children in the two groups shown in Table 4 was the result of an insufficient number of children at this grade level who fell in the 75-89 I.Q. range.

Data in Table 4 revealed that the children in the specially designed classes were achieving at .74 below normal grade level. Further, the average chronological age was above the normative age for their grade placement. The children in the regular classes were achieving at .47 below normal grade level and also were above the normative age for their grade placement.

Although this study was designed to deal only with the composite score of selected subtests of the test battery, it might be safe to surmise that the pupils' reading ability exerted a decidedly negative influence upon the composite score at all grade levels. Children with low average mental ability are placed at a disadvantage when confronted with any standardized test which requires a certain level of reading ability for understanding.

The data presented in Table 5 revealed similar results as were evidenced in Table 4. Statistical testing disclosed no significant difference at the .05 level on the variables employed in measurement of groups at the 4th, 5th, and 6th grade levels.

The fourth grade children in the specially designed classes were found to be achieving at 1.2 below grade level as compared to 1.1 below normal for children in the regular classes. Both groups of fifth grade pupils were performing below grade level with the control group measured at -1.38 as compared to -1.34 for the experimental group. Data for

the sixth grade groups revealed that those children were farther below grade level in achievement than the other three age groups. The sixth grade children in the specially designed classes were measured to be achieving on approximately the fourth grade level, being 1.84 below normal achievement level, while those in the regular classes were achieving at 1.60 below grade level.

TABLE 5

COMPARISON OF SLOW LEARNING CHILDREN IN REGULAR AND SPECIALLY DESIGNED CLASSES

Variable	Specially Designed Classes		Regular Classes	
	Mean	N	Mean	N
Fourth Grade				
Intelligence Quotient	81.4	22	84.1	24
Age in Months	118.9	22	119.7	24
Achievement Level	2.8	22	2.9	24
Socio-Economic Level	4.3	22	5.2	24
Fifth Grade				
Intelligence Quotient	83.5	14	82.6	20
Age in Months	132.5	14	132.05	20
Achievement Level	3.62	14	3.66	20
Socio-Economic Level	4.4	14	5.1	20
Sixth Grade				
Intelligence Quotient	80.5	21	84.8	22
Age in Months	142.2	21	146.02	22
Achievement Level	4.16	21	4.40	22
Socio-Economic Level	4.0	21	4.2	22

Description of Total Population

The data for both groups are presented in Table 6 and shows the mean scores for the five variables selected for comparison.

TABLE 6

DESCRIPTION OF TOTAL POPULATION OF SLOW LEARNING CHILDREN[a]

Variable	S. D. Classes		Regular Classes			
	Mean	N	Mean	N	Total	Group
Intelligence Quotient	82.3	80	83.4	80	82.8	160
Grade Level	4.41	80	4.62	80	4.51	160
Achievement Level	3.16	80	3.49	80	3.32	160
Age in Months	124.3	80	127.9	80	126.1	160
Socio-Economic Level	4.9	80	4.3	80	4.4	160

[a]Appendix G contains the scores on variables for each child in the study.

The more salient points concerning the sample of slow learning children as evidenced by data in Tables 3, 4, 5, and 6 are summarized as follows:

1. The children in the two groups were from homes which were similar in socio-economic level.

2. The children in both groups were achieving below grade level. The children in the specially designed classes

were more retarded in achievement performance than their counterparts in the regular classes at all four grade levels. The mean sub-normal achievement for the combined four grades in the specially designed group was found to be -1.29, compared to -1.13 for the four grades in regular classes. These findings provide relevancy to the results of studies in Chapter II which showed slow learning children to be one to two grades below normal in academic endeavors at most grade levels.

3. The mean chronological age for the slow learning children in both groups was above the normative age at all four grade levels. The greatest deviation above normative age was found among the fifth and sixth grade pupils in both groups. Some fifth and sixth grade children were 12-14 months above the normal for their grade level. This study was not designed to investigate the factors of retention or failure, but perhaps the greater variation above age level norms in the upper grades could be attributed to either failure or retention in the lower grades of some of the pupils in the study.

4. The findings revealed that the sixth grade children in the experimental group possessed the lowest mean intelligence quotient, 80.5, a figure 4.3 points below the mean of the slow learning sixth grade children in the control group.

Analysis of Sociometric Results

The sociometric device was administered in the fall and again in the spring in order to distinguish any change in the social position of slow learning children. A comparison was made between the two testings by a t-test in order to determine the similarity or difference of scores. The results of acceptance and rejection scores on the fall testing are presented in Table 7. The data presents the mean acceptance and rejection scores of the specially designed and regular groups. This table represents the number of pupils in the two groups, specially designed classes (SDC), regular classes (RC), the number of children in each group (N), the mean scores, the difference between the means (D), and the statistical test (t).

The results revealed that the slow learning children who were placed in the specially designed classes were better accepted within their classes than were those slow learning children who remained in the regular classes. The mean acceptance score of the specially designed classes was higher than the mean of the regular classes. The difference between the mean acceptance score was not statistically significant at the .05 level.

A comparison of the rejection scores revealed that the children in the specially designed classes were less rejected by their classmates than were those children in the regular classes. The mean rejection score of the specially

designed classes was smaller than that of the regular classes. The difference between the scores, however, was not significant at the .05 level.

TABLE 7

COMPARISON OF ACCEPTANCE AND REJECTION SCORES OF SLOW LEARNING CHILDREN IN SPECIALLY DESIGNED CLASSES (SDC) AND REGULAR CLASSES (RC) (FALL)

	N		Mean		Diff.	t
	SDC	RC	SDC	RC		
Acceptance Score	80	80	5.31	3.00	2.31	1.02
Rejection Score	80	80	5.71	6.34	.63	.20

Table 8 presents the results of acceptance and rejection scores on the spring administration of the sociometric questionnaire.

TABLE 8

COMPARISON OF ACCEPTANCE AND REJECTION SCORES OF SLOW LEARNING CHILDREN IN SPECIALLY DESIGNED CLASSES (SDC) AND REGULAR CLASSES (RC) (SPRING)

	N		Mean		Diff.	t
	SDC	RC	SDC	RC		
Acceptance Score	80	80	5.55	2.74	2.81	1.34
Rejection Score	80	80	5.15	6.39	1.24	1.31

The results of the acceptance and rejection scores as shown in Table 8 reveal that the members of the specially designed classes were more accepted by their classmates in the spring than in the fall with the mean score increasing from 5.31 (Table 7) to 5.55, a gain of .24 points, while the mean score for the pupils in the regular classes showed a slight decrease from 3.00 to 2.74, a loss of .26 points. In order for significance to be obtained, a t score of 1.54 was necessary. The t score was 1.34, therefore no statistical significance was found between the mean scores.

In comparing the rejection scores, the pupils in the regular classes were found to be more rejected by their classmates than were those in the specially designed classes, but the difference in the mean scores between the two groups was not significant.

Analysis of Academic Results

In the design of this study the composite score for four sub-tests of the Iowa Test of Basic Skills was computed for each pupil. An analysis of the individual scores disclosed that 17 of the 80 pupils in the control group showed a loss in achievement and 5 pupils made no appreciable gain on the spring administration of the test. Of the 17 pupils who showed no gain in achievement 3 were in the third grade, 1 was in the fourth grade, 4 were fifth graders, and 9 were in the sixth grade. Two of the five pupils who made no

measurable academic gain during the year were in the third grade, while three were in the fourth grade.

An analysis of the specially designed group showed that 11 pupils showed a decline in achievement from the first testing until the last testing, while 2 pupils made no measurable gain. Four of the 11 pupils were in the sixth grade, 2 were in the fifth grade, 2 were fourth graders, and 1 was in the third grade. One fourth grade pupil and one sixth grade pupil stayed at the same level.

A comparison of the data pertinent to the two groups in achievement is presented in Table 9.

TABLE 9

COMPARISON OF MEAN ACHIEVEMENT SCORES FOR SPECIALLY DESIGNED CLASSES AND REGULAR CLASSES

	Fall Test		Spring Test				
	N	Mean	N	Mean	Mean Gain	Diff.	t
SDC	80	3.20	80	3.90	.70	.42	2.83[a]
RC	80	3.44	80	3.72	.28		

[a]Significant at .05 level.

The mean composite score showed that the specially designed classes scored almost one-half grade higher (.45) than the regular classes. The *t* value between the two groups was significant at the .05 level. This suggested that the achievement gains made by the pupils in the experimental

classes exceeded those made by the pupils in the control classes to the degree that chance alone could not account for the difference.

Analysis of Behavior Scale Results

The data presented in Table 10 contains the t values derived from the mean gain scores of the slow learning children in the regular and specially designed classes. The t value between the two groups was significant at the .05 level. The analysis of the results indicated that gains made by the pupils in the specially designed classes exceeded those made by the members of the regular classes to the extent that some factor was responsible for the difference, and not chance alone.

TABLE 10

COMPARISON OF MEAN BEHAVIOR SCORES FOR SPECIALLY DESIGNED CLASSES AND REGULAR CLASSES

	Fall Test		Spring Test				
	N	Mean	N	Mean	Mean Gain	Diff.	t
SDC	80	4.47	80	4.13	.34	.61	2.76[a]
RC	80	4.42	80	4.69	-.27		

[a]Significant at .05 level.

An analysis of the twenty-six items on the Behavior Scale revealed that pupils in the specially designed classes

showed the greatest improvement on Items 3, 4, 13, 16, 19, and 23, while the pupils in the regular classes showed the least improvement in these same areas of behavior.

These items described behavior in the following areas:

Item 3--Ability to Get Along With Peers

Item 4--Ability to Comply With Adult Direction

Item 13--Ability to Face Own Failures and Shortcomings

Item 16--Ability to Accept Constructive Criticism

Item 19--Demonstrates Self-Confidence

Item 23--Display of Anxiety/Apprehension

Analysis of Self-Concept Results

To determine whether a significant difference existed between the specially designed classes' self-concept and the regular classes' self-concept, a mean score for both groups was calculated based upon the data collected in the fall and in the spring. The mean scores for the groups are presented in Table 11.

TABLE 11

COMPARISON OF MEAN SELF-CONCEPT SCORES FOR SPECIALLY DESIGNED CLASSES AND REGULAR CLASSES

	Fall Test		Spring Test				
	N	Mean	N	Mean	Mean Gain	Diff.	t
SDC	80	12.3	80	12.8	-.5	.4	.41[a]
RC	80	14.1	80	14.0	-.1		

[a]Not significant at .05 level.

As stated in the design of the study, high self-concept scores indicated a low opinion of self and low self-concept scores implied a high opinion of self. Analysis of the data for the first administration of the test found the regular classes to have a higher mean score than the mean score of the specially designed classes.

Retesting in the spring disclosed that the relationship between mean scores of the two groups remained the same, i.e., the specially designed classes still showed a lower mean score. However, the mean score for the specially designed class increased .5 points, signifying a lower opinion of self while the regular classes showed a gain of .1 points.

The t test revealed no significant difference in the mean gain scores at the .05 level of confidence.

Analysis of Attendance Data

The attendance records revealed that pupils in the specially designed classes attended class more regularly than those in the regular classes. There was no record of extended illness on the part of individuals in either group. Thus, for the purpose of this study the absences were conceded to be the result of normal illness peculiar to elementary age children.

A study of the data reveals that pupils in the regular classes were absent from school a total of one hundred fourteen days more than those pupils in the specially designed classes.

Absenteeism in the regular classes was found to be highest among fourth and sixth grade pupils, while in the specially designed classes the fifth grade group showed the greater absenteeism.

Table 12 presents attendance data categorized into total days absent, total absences by grade level, and average absences per grade level.

TABLE 12

ATTENDANCE DATA FOR REGULAR CLASSES (RC) AND SPECIALLY DESIGNED CLASSES (SDC)

	Total Days Absent	Grade				Average Absences by Grade			
		3rd	4th	5th	6th	3rd	4th	5th	6th
RC	450	59	157	97	137	4.2	6.8	4.8	6.2
SDC	336	111	75	67	83	4.8	4.1	5.1	4.3

Testing the Hypotheses

Data pertinent to mental ability, chronological age, socio-economic status, absentees, academic achievement, self-concept, behavior, and social acceptance and rejection were tabulated for all students comprising the sample of pupils included in the study. The data were prepared for statistical treatment and the hypotheses were tested as shown below:

Hypothesis 1 stated: There is no significant difference between the academic achievement of slow learning

children in specially designed classes and the academic achievement of slow learning children in regular classes as measured by the Iowa Tests of Basic Skills. The data regarding academic progress were organized in an appropriate manner to be tested by employing the t-test for determining the similarity or difference between the mean scores of the data. To be significant at the .05 level of confidence a t value of 1.64 was necessary. An analysis of the results of the data presented in Table 9 revealed a t value of 2.83 at the .05 level of confidence. The hypothesis was therefore rejected. The analysis of the results indicated that gains in achievement made by the slow learning children in the specially designed classes exceeded those made by the slow learning children in the regular classes to the extent that chance alone could not account for the difference. It was concluded that such factors as smaller class size, instructional techniques adapted to the ability level of each child, and the recognition by the child of the teacher's concern for elimination of learning deficiencies contributed significantly to pupil achievement.

Hypothesis 2 stated: There is no significant difference between the social behavior of slow learning children in specially designed classes and the social behavior of slow learning children in regular classes as measured by the Haring-Phillips Behavior Rating Scale. On the basis of results presented in Table 10, this hypothesis was rejected. For a

difference in the mean behavior score to be significant at the .05 level, a t value of 1.64 was necessary. Testing of the data established a value of 2.76,, making the difference significant. The study was designed to measure only positive and negative changes in pupil conduct and attitude within the classroom. Therefore, it can be concluded that change in attitude and conduct in work and play activities within the school environment accompanied like changes in academic achievement and acceptance or rejection by classmates. Sixty-one of the eighty pupils in the specially designed classes were found to have improved in behavior compared with sixty in the regular classes. However, the mean gain score for the experimental group was a positive gain, while the control group was found to have a negative mean gain score.

Hypothesis 3 stated: There is no significant difference between the self-concept of slow learning children in regular classes as measured by the Bills Adapted Self-Concept Test. On the basis of the results presented in Table 11 it was found that the t value of .41 was not sufficient at the .05 level of confidence to justify rejection of the hypothesis. Therefore, for the population studied, the self-concept of pupils in the specially designed classes did not differ significantly from that of the pupils in the regular classes and the hypothesis was accepted. It was concluded that factors other than those investigated in the study contribute to a low opinion of self. Since the self-concept

scores of the two groups of slow learning children did not differ significantly, it is suggested that peers with average or above average intelligence react in a negative manner to accomplishments and gains of low ability children.

Hypothesis 4 stated: There is no significant difference between the mean rejection score made on the Bower Sociometric Device by slow learning children in specially designed classes and the mean rejection score made on the Bower Sociometric Device by slow learning children in regular classes. The results of the data presented in Tables 7 and 8 indicated that the mean rejection score of the children in regular classes in the fall was larger than that of the specially designed classes. The same finding was revealed in an analysis of the administration of the sociometric instrument in the spring. A comparison of the mean rejection scores of the two groups, however, revealed that the difference was not statistically significant at the .05 level of confidence to justify rejection of the hypothesis. The hypothesis was therefore accepted.

Hypothesis 5 stated: There is no significant difference between the total daily attendance of slow learning pupils in specially designed classes and the total daily attendance of slow learning pupils in regular classes. The number of days that each pupil was absent from school was obtained from official school records at the various sites. The hypothesis was postulated upon the concept that a

relationship existed between absenteeism and the ability of the school to provide a realistic and attractive program for the slow learning child. The data revealed that four percent of the pupils in the specially designed classes were absent 10 or more days as compared to eighteen percent in the regular classes. Data for the two groups revealed that pupils in the regular classes were absent 5.6 days per child while pupils in the specially designed classes averaged 4.2 absences per child. The hypothesis of no difference in total daily attendance was therefore rejected.

Hypothesis 6 stated: There is no significant difference between the mean acceptance score made on the Bower Sociometric Device by slow learning children in specially designed classes and the mean acceptance score made on the Bower Sociometric Device by slow learning children in regular classes. The mean acceptance score for both groups remained relatively stable from the fall testing through retesting in the spring. Mean score for the regular classes declined indicating less acceptance, while the mean score for the specially designed classes increased indicating greater acceptance. The t value for the specially designed classes failed to attain the 1.64 value necessary for statistical significance, however, and the hypothesis of no significant difference was accepted.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to evaluate the results of a program designed specifically for elementary age children who had been identified as slow learners. This identification stipulated that all children involved in the study possessed an intelligence quotient within a range of 75-89. Numerous studies have investigated innovative programs designed to measure pupil achievement and other similar factors relevant to the cognitive growth of pupils, but these studies have been concerned mainly with children categorized as mentally retarded, emotionally disturbed, or possessing average or above average intellectual ability. It was believed that research should be devoted to study of children with low average ability who were experiencing failure in their school program.

Consequently, the study was designed to secure information from pupils and teachers regarding the results of class programs established specifically for slow learning children. The study was conducted in the elementary schools of one large school district and utilized one hundred sixty

children, thirty-seven teachers and thirteen different schools. Five specially designed classes, with a total membership of eighty low-average ability children were established as the experimental group. The control group was composed of eighty children who were selected from the regular classrooms. The children in the two groups were matched on the following variables: (1) grade placement, (2) intelligence quotient, (3) chronological age, and (4) achievement level. Data gathered from the pupils in the specially designed classes concerning academic progress, behavior, social class standing, and self-concept were used to make comparisons with the regular class group.

Relationships between academic achievement, pupil self-concept, and behavior were sought. In addition to those relationships, the study sought to determine the extent to which individualized instruction affected the academic and personal growth of the pupils.

A review of the literature revealed no available studies which endeavored to measure the variables of academic achievement, changes in overt behavior, self-concept, and social class standing of slow learning children in classes designed specially for their range of intelligence. The present investigation sought to evaluate and measure those variables.

Findings of the Study

Data for the combined groups at the beginning of the study revealed the following information: (1) the children were achieving below grade level, (2) their average chronological age was above the normative age for the grade placement, (3) their self-concept was in need of improvement, (4) a large number were rejected by their peers in classroom activities, and (5) poor behavior was evidenced by all but a few pupils.

Retesting at the end of the study found the following:

1. The pupils in the experimental group made greater statistically significant gains in achievement than did those pupils in the control group.

2. The change in overt behavior of the children in the specially designed classes was significantly superior to the change in behavior of those in the regular classes.

3. The mean self-concept score of pupils in the experimental group did not improve significantly over the mean score of those in the control group.

4. Children in the specially designed classes suffered less rejection and greater acceptance within the classroom than did those in the regular classes, but the difference was not significant at the .05 level.

5. The total daily attendance of the specially designed classes was superior to the total attendance of the regular classes.

Conclusions

From the findings of the study the following conclusions were formulated:

1. Children of low average ability can achieve at near normal rate when instructional programs are designed to provide for their individual differences and needs. Slow learning children can make significant gains in achievement if educators accept the fact that such children assimilate information but at a much slower rate than normal children.

2. A significant contributing factor to positive gains in academic achievement could be attributed to the presence of close personal rapport between the pupils and the teacher. The factor of small class size was concluded to be significant in this area. Teachers in the specially designed classes were acutely aware of the capability of the pupils and were thus able to adjust instruction to the individual needs of each pupil.

3. It was concluded that any effort to eliminate the rate of pupil failure in school work must first be directed at the development of a set of conditions wherein pupils are cognizant of their inherited potential and are permitted to experience progress on a level equivalent with their ability.

4. It was finally concluded that a pupil's concept of self and attitude toward society can be positively developed only when the individual worth of each child is recognized as the vital factor in development of a curriculum. This philosophy must be developed within the total framework of the school system.

Recommendations

As a result of the findings of the study, the following recommendations are made:

1. It is recommended that before a decision regarding the most effective placement of slow learning children in an elementary school setting can be made, a number of similar studies should be implemented.

2. In duplicating the study, researchers should make provisions for a larger number of children and a longer interval of time for evaluating the individual children.

3. A follow up study should be made of the children in this study in order to determine the effects upon the subjects, if the program is not continued.

4. Studies of a similar design should employ achievement tests in which the ability to read well is not so vital a factor, especially among the younger children.

5. Similar experimental programs should be established on the secondary level. At this level, a valid measurement of the effectiveness of such a program among

potential dropouts can be made. A study on this level should incorporate the variables of success-failure in elective subjects compared to success-failure in required subjects.

6. A comprehensive counseling service should be established in the elementary schools where the initial symptoms of failure can be recognized and dealt with.

7. An inservice program should be implemented to insure faculty participation and awareness of the need for adjusting instruction and evaluation measures to the needs of individual pupils.

8. Further, research is needed to determine what specific teaching techniques will yield the greatest results within specially designed classes for the slow learning child.

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APPENDIX A

EXPLANATION OF PROGRAM

I. WHAT IS THE PROGRAM?

The Program is an educational program designed to aid the child who is experiencing difficulty in his current school placement because he learns more slowly than the majority of his classmates. He needs more time, more individual help and more visual aids to supplement his ability to learn. He needs more support from his parents and teachers. This program is designed to aid the child who needs this extra help. The principal purpose of this proposed program is to make the public school years of the slower learning child a personally rewarding experience and to encourage him to become a worthy, productive citizen.

This extra help program is needed because some ten percent of our school population is having some difficulty succeeding in their current placement. Many of these will become school dropouts when they reach the Junior High or High School level. These children cannot hope to catch up or do average work because they do not have average ability. They need a curriculum designed for their ability. They need to participate on an equal basis in non-academic activities of the school and they need a school environment which encourages self respect.

In the program they will be working with a completely new curriculum that will include the required subjects presented to all children at this level. The classroom teacher will be selected on the basis of her interest in children who need extra help and her special ability and training in teaching children who learn more slowly than the average child. This teacher will be warm and accepting in temperament and will support the child's need to feel good about himself and his environmental world.

II. WHY WAS MY CHILD CONSIDERED FOR SUCH A PROGRAM?

The children being screened as possible candidates for the program were referred by the classroom teacher and site principal because they need more individual help to do their best in school. With smaller classes (no more than twenty) and special teaching aids, the students eligible for this program should learn more than they are now learning. Once they have learned a concept well, the slow learner is no more apt to forget it than the bright child. When a child can feel he's learned something well, he feels successful. This will motivate him to try harder and therefore, do better than he might in a group where unfair competition doomed him to failure. This program will not be separated from the other school program in any way, but will be an integrated part of the total program presented at his school site.

III. IS THE PROGRAM AN ACADEMIC PROGRAM?

Every child will be presented instruction in the basic tool subject required at his grade level. His need for learning mathematical concepts, developing reading skills and mastery of writing techniques will not be neglected. He will receive adequate instruction in all areas. The advantage of being chosen to participate in this program will be the smaller group setting, more tools to aid learning, a special curriculum designed for his ability, and more individual help from his classroom teacher. The children in the program will participate in all other school activities such as Music and Physical Education just as they have been. They will not be apart, in any manner, from the rest of the school's organization. With these advantages it is believed the child will learn more and learn better than in his current placement. The individual help he will receive should almost double. With every success the child will feel better about himself.

IV. WHAT WILL MY CHILD DO IF THIS PROGRAM IS NOT CONTINUED OR IF HE SHOULD MOVE TO A LOCATION WHERE SUCH A PROGRAM IS NOT AVAILABLE?

If this program is not expanded next year or if your child should not continue in this program it should still have been an advantage to have participated in an extra help program. This program should not be viewed as a "cure all" however. It will not make a child below average in ability able to perform beyond his ability range. He will not learn

less in this program than in his current placement--he should learn more. If he has been screened properly, and evaluated correctly, he will always learn more slowly than the average child because he has less ability to learn. If a child is placed in a setting where he must compete with much brighter students, naturally he will again experience difficulty. However, it is believed that having participated, even for a short time, in the program will make him a stronger student than he possibly would have been had he not had this extra help.

No child will be placed in this program without the parents consent. No fewer than three tests will be used to determine the eligible candidates for the program. The class size will be limited to twenty students and the teachers will be specialists in the teaching of children who learn more slowly. With all of these advantages, school should become a rewarding and successful experience for the eligible participants.

The purpose of this program is simply to make it possible for the slow learning child to go to school, learn what he's capable of learning, continue to view himself as a worthy citizen, and be rewarded for his effort. No child deserves less.

Your Site Principal

PARENT AUTHORIZATION FOR RELEASE OF INFORMATION

DIRECTIONS: This form should be completed for each source of information. The information secured is for the confidential use of the school personnel who are directly concerned with helping your child.

I hereby authorize_____
(Name of Source)

_____

to release any information concerning

_____

which may be of value in formulating the best plans for the education and treatment of my child.

_____ _____
Relationship to child Signature

_____
Date

REFERRED TO PUPIL SERVICES DEPARTMENT

DATE_____NAME_____BIRTHDATE_____

GRADE_____SCHOOL_____TEACHER_____

ABILITY LEVEL (Check one) High ( ), Average ( ), Low ( )

REASON FOR REFERRAL:

ACADEMIC PERFORMANCE: (Grade Level)

CLASSROOM BEHAVIOR:

SOCIAL OR EMOTIONAL ADJUSTMENT:

PREVIOUS ACADEMIC PERFORMANCE: (Test Results in Cumulative Folder and report card grades.)

CMM_____DATE_____

ITED_____DATE_____

REPORT CARD GRADES_____

OTHER COMMENTS:

PARENTAL PERMISSION FOR PLACEMENT
IN A PUPIL SERVICES PROGRAM

A testing conference was held by the Pupil Services Department with my son/daughter _____. On the basis of the test results, _____'s behavior in this conference, together with the recommendations of his/her teacher and principal, and his/her school history, the counselor has made the following recommendation:

I concur with this recommendation and will support the school in their effort to provide a more suitable learning environment for my child.

_____ Father

_____ Mother

CONFIDENTIAL CONFIDENTIAL

REPORT OF INDIVIDUAL EVALUATION
Midwest City Public Schools
Midwest City, Oklahoma

Name_____School_____Grade_____Sex_____

Referred by_____Date Tested_____
Year Month Day

Reason for Referral_____Birthdate:_____
Year Month Day

_____Exact Age:_____
Year Month Day

Teacher's Appraisal:_____

_____

SPECIAL INFORMATION:
Stanford-Binet Intelligence Scale (Form LM) C. A._____

MA_____F. S. IQ_____

Wechsler Intelligence Scale for Children: Verbal IQ_____

Performance IQ_____F. S. IQ_____

Other Tests:_____

Test Behavior:_____
_____
_____

RECOMMENDATIONS:_____
_____
_____

Previous Testing:_____

Approved by_____Tested by:_____
Herschel Melton
Director of Special Services
Midwest City Public Schools

EVALUATION/STUDY SHEET

ELIGIBLE CANDIDATE_____GRADE_____

DATE OF BIRTH_____SCHOOL_____

PREVIOUS RECORDED INTELLIGENCE QUOTIENT_____

GUARDIAN_____

ADDRESS_____TEL. NO._____

PRINCIPAL CONFERENCE NOTES_____DATE_____

PARENT CONFERENCE NOTES_____DATE_____

TESTING SCHEDULE GROUP TEST_____

TESTING SCHEDULE INDIVIDUAL TEST_____

TEST RESULTS GROUP TEST_____

TEST RESULTS INDIVIDUAL TEST_____

ELIGIBLE FOR PLACEMENT IN PROGRAM_____

COMMENTS:

March 12, 1969

Mr. Roy Poe, Vice President
McGraw-Hill Book Company
330 W. 42d Street
New York, New York

Dear Mr. Poe:

I am presently engaged in developing a doctoral dissertation under the direction of Dr. Robert F. Bibens at the University of Oklahoma. I am writing to request permission to use an evaluation instrument developed by N. G. Haring and E. L. Phillips, A Behavior Rating Scale, in the publication, EDUCATING EMOTIONALLY DISTURBED CHILDREN.

I would appreciate your approval for the use of this instrument in this study.

Sincerely,

Lewis L. Eubanks
2009 South Post Road
Midwest City, Oklahoma

LLE/pc

McGRAW-HILL BOOK COMPANY
330 West 42nd Street
New York, N.Y. 10036

A Division of McGraw-Hill, Inc.

March 21, 1969

Mr. Lewis L. Eubanks
Carl Albert Jr.-Sr. High School
2009 S. Post Rd.
Midwest City, Oklahoma 73130

Dear Mr. Eubanks:

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Haring & Phillips: EDUCATING EMOTIONALLY DISTURBED CHILDREN

"Behavior Rating Scale" from pp. 304-311 for restricted use in your dissertation.

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APPENDIX B

CORRESPONDENCE WITH PRINCIPALS

October 4, 1968

Dear Principal:

Mr. Eubanks' study of the "Slow Learner" Program will be of great interest and value to this office and Midwest City School District.

Please loan Mr. Eubanks the summary sheet on the Iowa Test of Basic Skills. The information he needs on his control group is included in this summary. Also, please solicit the cooperation of your teachers for Mr. Eubanks in the implementation of the research instruments necessary in gathering data from the classes.

Sincerely,

Herschel Melton
Director, Pupil Services

APPENDIX C

BEHAVIOR RATING SCALE[1] FOR MEASURING CHANGES IN OVERT BEHAVIOR

Directions for Scoring

Read the following twenty-six items and score each item carefully. Each item is structured on a seven-point scale, and varies from a high positive position at one side to an extreme negative position at the other side. The items may be pictured as varying from a score of one (1) through seven (7), with a score of one (1) as the best positive behavior and seven (7) as the least desirable behavior.

Judge every child independently for each item. Make every effort to recall an instance for each judgment.

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[1]From Educating Emotionally Disturbed Children by G. Haring and E. Lakin Phillips, 1962. Used by permission of McGraw-Hill Book Company.

NAME_____

1. Child's ability to stay with group activities and remain integral to them.

Impervious to group.	Hardly knows others are near.	Sees others but is indifferent to them.	Some response to others on occasion.	Takes others into consideration when he wants to.	Usually takes one or many others into regard.	Amenable to and ready to consider others at any time.

2. Child's ability to concentrate on and finish (follow through on) tasks given him.

Fine ability to concentrate and stick with requirements.	Stays with tasks very well even against will.	Can stay with task on own to some extent.	Stays with task if supervised some.	May or may not stay with task; not dependable.	Flighty most of the time.	Extremely flighty.

3. Child's ability to get along with peers.

Fights or in conflict almost all the time.	In conflict often or most of the time.	Usually has too much conflict for his and others' welfare.	Conflicts coming under some control.	Makes an effort to control discord.	Gets along well nearly all the time; controls self well.	Little or no conflict at all; under good self control.

4. Child's ability to comply with adult direction.

Seldom or never uncooperative.	Usually cooperative and dependable.	Cooperative if he feels you mean business.	Some cooperation under some conditions.	Defiant and cooperative in random ways.	Usually defiant and uncooperative.	Defies adult at all turns.

5. Child's ability to change to new activity under guidance or direction.

Won't change except under strong pressure.	Usually very reluctant to change; opposes it.	May or may not change depends on "whim."	Changes with some effort not willing.	Changes slowly but with some willingness.	Changes reasonably well and willingly in most cases.	Changes and complies well in all or nearly all instances.

6. Child's ability to meet and adjust to new situations.

Relishes new demands and copes readily and well.	Usually faces them and readily.	Can face and cope with several new situations.	Meets and faces some new situations.	Faces them only with specific adult help.	Faces them with great difficulty.	Can't face or meet them.

7. Child's ability to act fairly and take his turn in appropriate settings.

Always wants to be first; demands it.	Rushes in to be first but can be stopped.	Will take turns if reminded in advance.	Goes first no more often than others.	Goes first only if asked or chosen.	Suggests taking turns; is cooperative and pliable.	Very mature; takes normal charge in play terms; very reliable.

8. Child's pleasant and courteous attitude toward others.

Very considerate, but not artificial or insincere.	Usually considerate; a dependable person in this way.	Considerate if situation is clear to him.	Somewhat considerate of others.	Rude or not in random, unpredictable ways and at unpredictable times.	Usually rude and discourteous.	Very rude and indifferent. Seems to do so with intention.

9. Child's attitude toward those less capable, younger or handicapped.

Very rude and indifferent; seems to intend it.	Usually rude and discourteous.	May or may not be rude; is unpredictable.	Considerate of others at times.	Considerate if he is in tune with the circumstances.	Usually considerate and dependable.	Very considerate; highly courteous without falseness.

10. Child's ability to share materials and equipment with others.

Shares and takes responsibility for others readily and always.	Can be depended upon to share in nearly all instances.	Usually shares well.	Shares in some ways or at some times.	Shares only if cautioned in advance.	Is hard to get him to share.	Wants all for himself always or nearly always.

11. Child's ability and willingness to help others.

Never helps others.	Helps others only under pressure.	Sometimes helps others.	Helps others if he likes them or what they are doing.	Helps others in many instances.	Usually readily helpful in attitude and action.	An excellent help to others; readily and cheerfully helpful always.

12. Child's care of school property.

Excellent carefulness; points out caution to others.	Quite careful and dependable.	Often careful and saving.	Fairly careful in most ways.	Destructive now and then, more by accident and carelessness.	Usually destructive.	Seems to destroy willfully and gleefully.

13. Child's ability to face own failures and shortcomings.

A very bad loser; always makes excuses.	Usually a bad loser and excuse maker.	Loses badly now and then; may face it well sometimes.	Usually a fairly good loser.	Faces losses and short-comings on most occa-sions.	A really good loser; faces short-comings well.	Excellent loser but not indifferently, seeks correc-tion of weak-nesses.

14. Child's willingness to abide by general rules.

Excellent; very depend-able and willing.	Generally follows rules well.	Can be de-pended upon in many ways to follow rules.	Abides by rules if held up to him.	Breaks rules and follows them in seemingly random ways.	Generally breaks rules.	Breaks rules right and left.

15. Child's ability to accept disagreement.

Can't accept dis-agreement ever.	Accepts disagreement badly.	May accept it on occasion.	Accepts disagreement if well presented.	Can accept it fairly well.	Accepts if readily.	Accepts it with open-ness; ready to improve or change.

16. Child's ability to accept constructive criticism.

Accepts it readily asks for it.	Takes it in good faith most of the time.	Accepts it usually.	Accepts it under some circum-stances.	Accepts it or not in some incon-sistent ways.	Hates it but is passive.	Fights it bitterly.

17. Child's concern for the welfare of the group as a whole.

Hostile to group and its welfare.	Often opposes and is hostile to group.	Unpredictably hostile and cooperative.	May accept group welfare, objectives at times.	Accepts group welfare on many occasions.	Takes group welfare as important.	Can be depended upon faithfully to do this.

18. Child's willingness to credit other members of group.

Very fair and reliable this way.	Gives others credit most of the time.	Willing to give credit to others.	Gives credit to others in some ways.	May give credit or not.	Opposes credit to others.	Hostile to credit given others.

19. Demonstrates self-confidence.

Utterly lacking.	Lacks it most of the time.	Shows it now and then; lacks it at random times.	Shows self-confidence in some ways.	Shows self-confidence in many ways.	Comfortably confident in most ways.	Very confident without bravado in all situations.

20. Child's acceptance of his share of responsibility.

A model of acceptance.	Very accepting.	Accepts it in many ways.	Accepts it in some ways.	Shows it or not in unpredictable ways.	Very lacking in responsibility.	Utterly irresponsible.

21. Child's refraining from violent outbursts.

In a temper all the time it seems.	Frequent temper displays.	Shows temper in unpredictable situations.	Controls temper on some occasions.	Usually hard to provoke.	Very fine self-control.	Never see temper; solves problems effectively.

22. Child's restraint from show-off behavior.

Always under healthy self-control.	Shows good control most of the time.	Usually controls self pretty well.	Avoids show-off behavior on some occasions.	Shows off and is restrained in random ways.	A bit show-off usually.	Shows off all the time.

23. Child's display of anxiety-apprehension.

Under constant anxiety.	Shows anxiety much of the time.	Is anxious now and then.	No anxiety on some occasions.	Anxious on a few occasions.	Rarely shows anxiety or apprehension.	No anxiety notices at all.

24. Child's dependency on teacher for help-attention.

Very independent and resourceful.	Very resourceful, usually on own.	Gets along on own much of the time.	Able to get along on own on some occasions.	Seeks both in random ways.	Often seeks one or both.	Always seeks help or attention.

25. Child's popularity with other children.

Very unpopular.	Unpopular in most respects.	Popular-unpopular in hard-to-tell ways.	Popular with others in limited ways.	Fairly popular with others.	Very popular.	Probably most liked and popular.

26. Child's ascendency in meeting others, contacting others.

Most able and responsible here.	Very ascendent.	Fairly ascendent and resourceful.	Somewhat ascendent at times.	Some ascendence in odd ways and times.	Usually retiring and shy.	Most retiring and shy.

APPENDIX D

"A Class Play" for Measuring Student Social Position in a Classroom Setting

Directions:

1. Have the children in your class number one (1) through twelve (12) on a sheet of paper.

2. Suggest that you are considering having a play and you would like to know who in the room they think could play each role best. Have each child write the name of one classmate he thinks would play each part best. The same child can be listed for more than one part. Read each part slowly and aloud to the class.

A Class Play

1. The hero--someone who is good in sports and in school work.

2. Someone who is often mean and gets into fights a great deal.

3. Some who gets along well with other boys and girls and with the teacher.

4. Someone who is always getting angry about little things.

5. Someone who could be the hero's friend--a kind, helpful boy or girl.

6. Someone who could play the part of a bully--picks on boys and girls smaller and weaker than himself.

7. Someone who has a good sense of humor, but is always careful not to disturb the teacher or the class.

8. Someone who could play the part of a person who doesn't ever say anything.

9. Someone who is never mean and always friendly.

10. Someone who could act like the laziest person in the world--never does anything.

11. A boy or girl you would choose to be in charge when the teacher left the room.

12. This person knows all the answers and usually works alone.

APPENDIX E

Name_____

SELF-CONCEPT TEST

Directions

I am going to read some sentences to you. I want you to check YES if a sentence is true of you most of the time. I want you to check NO if a sentence is not true of you most of the time. The YES or the NO should be circled. Remember that each sentence I read is checked YES if it is true of you most of the time and it is checked NO if it is not true of you most of the time. You may read along with me if you wish to. We will start at the top of each page and work down to the bottom.

Before you start answering the questions we will work out three examples.

1. I am a tall person . . . . . YES NO
2. I am a short person . . . . . YES NO
3. I am a person who runs fast . . . . . YES NO

1. I am a person who is liked . . . . . YES NO
2. I am a person who is right . . . . . YES NO
3. I am an alert person . . . . . YES NO
4. I am an eager person . . . . . YES NO
5. I am an understanding person . . . . . YES NO
6. I am a person who accepts ideas different from my own . . . . . YES NO
7. I am a serious person . . . . . YES NO
8. I am a busy person . . . . . YES NO
9. I am a calm person . . . . . YES NO
10. I am a pleasant person . . . . . YES NO
11. I am a clever person . . . . . YES NO
12. I am an able person . . . . . YES NO
13. I am a person who likes to play against others YES NO
14. I am a person who is sure of himself . . . . . YES NO
15. I am a nice person . . . . . YES NO
16. I am a cruel person . . . . . YES NO
17. I am a person who considers the wishes of others . . . . . YES NO
18. I am a faithful person . . . . . YES NO
19. I am a person who saves money . . . . . YES NO
20. I am a person who doesn't waste time . . . . . YES NO
21. I am a person who finds faults in others . . . YES NO
22. I am a worried person . . . . . YES NO
23. I am a friendly person . . . . . YES NO
24. I am a person who dresses in the expected way YES NO
25. I am a helpful person . . . . . YES NO
26. I am a smart person . . . . . YES NO

27. I am a kind person . . . . . YES NO

28. I am a person who has a reason for what I do . YES NO

29. I am a nosy person . . . . . YES NO

30. I am a merry person . . . . . YES NO

31. I am a person who acts his age . . . . . YES NO

32. I am a nervous person . . . . . YES NO

33. I am a normal person . . . . . YES NO

34. I am a person who is full of hope . . . . . YES NO

35. I am a steady person . . . . . YES NO

36. I am a person who works toward goals . . . . . YES NO

37. I am a fair person . . . . . YES NO

38. I am a careless person . . . . . YES NO

39. I am a person who does what he is supposed to YES NO

40. I am a person who makes fun of people . . . . YES NO

41. I am an honest person . . . . . YES NO

42. I am a stable person . . . . . YES NO

43. I am a person who works hard . . . . . YES NO

44. I am a successful person . . . . . YES NO

45. I am a person who doesn't give in easily . . . YES NO

46. I am a person who considers the feelings of people . . . . . YES NO

47. I am a person who is able to learn . . . . . YES NO

48. I am a useful person . . . . . YES NO

49. I am a worthy person . . . . . YES NO

_____

Name

APPENDIX F

OCCUPATIONAL SCALE FOR MEASURING
SOCIAL POSITION IN CLASS

Rate Assigned to Occupation	Professionals	Owners and Managers	Business Men
1	Lawyers, Doctors, Dentists, Engineers, Judges, School Administrators, Ministers (grade from divinity school), Chemists, Architects	Businesses valued at $75,000 and up	Regional and Divisional Managers of large enterprises
2	High school Teachers, Nurses, Undertakers, Ministers (some training), Chiro-practors, Newspaper Editors	Businesses valued at $20,000 to $75,000	Assistant Managers and Office Managers of large depts. Executive Assistants
3	Social Workers, Grade-school Teachers, Ministers (no training)	Businesses valued at $5,000 to $20,000	All minor officials of business
4		Businesses valued at $2,000 to $5,000	
5		Businesses valued at $500 to $2,000	
6		Businesses valued at less than $500	
7			

APPENDIX F--Continued

Rate Assigned to Occupation	Clerks and Related Workers	Manual Workers	Protective and Service Workers	Farmers
1	C.P.A.			Gentlemen Farmers
2	Accountants, Salesmen of Real Estate, Insurance, Postmasters			Large Farm Owners
3	Auto Salesmen, Bank Clerks, Postal Clerks, Secretaries to Executives, Railroad Supv. etc.	Contractors		
4	Stenographers, Bookkeepers, R.R. Ticket Agents, Salespeople in stores, etc.	Factory Foreman, Electrician, Plumbers, Carpenters, Jewelers (Own Business)	Dry Cleaners, Butchers, Sheriffs, R.R. Engineers and Conductors	
5	Beauty operators, Telephone operators, Dime Store Clerks	Carpenters, Plumbers, Radio Repairmen, linemen, Telephone or Telegraph	Barbers, Firemen, Practical Nurses, Cooks, Seamstress, Bartender	Tenant Farmer
6		Assistant to Carpenter, Moulders, Semi-skilled workers, etc.	Watchmen, Taxi and Truck driver Waitresses, Gas Station Attendant	Small Tenant Farmer
7		Heavy Labor, Odd-job Men, Migrant Work	Janitors, Newsboys, Scrubwoman	Migrant Farm Laborers

APPENDIX G

A DESCRIPTION OF EACH SLOW LEARNING CHILD IN THE REGULAR (RC) AND SPECIALLY DESIGNED CLASSES (SDC) ON THE DIFFERENT VARIABLES

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
RC	3	82	117	6	0	2.8	3.0	8	24	4.15	4.11	1-17	1-16
RC	3	86	96	5	1	1.9	2.2	12	13	5.11	4.61	2-4	0-4
RC	3	88	111	4	1	2.7	2.9	13	11	5.62	5.61	2-1	1-2
RC	3	76	104	2	2	2.9	2.7	9	10	5.42	5.61	1-3	2-4
RC	3	84	119	6	6	2.5	2.8	7	6	3.88	3.57	1-0	2-3
RC	3	75	115	5	8	2.6	2.6	22	18	2.45	2.45	0-33	2-21
RC	3	89	98	6	0	2.4	2.6	15	14	4.10	4.72	1-11	2-9
RC	3	87	110	5	0	2.7	2.9	13	14	4.9	4.88	0-0	0-2
RC	3	86	107	5	2	2.4	2.5	13	14	4.53	4.42	2-9	3-6
RC	3	89	112	5	10	2.3	2.8	14	13	6.34	6.38	11-4	8-2
RC	3	81	114	4	12	2.3	2.4	8	8	4.24	4.54	1-9	2-7
RC	3	75	107	3	5	2.2	2.7	12	17	4.11	4.11	0-8	0-21
RC	3	89	108	4	12	3.8	3.6	5	7	5.0	4.97	4-5	3-4
RC	3	87	111	3	0	2.9	2.1	18	37	3.92	3.92	0-1	3-3
RC	4	85	127	5	2	2.9	3.1	28	25	4.38	4.54	0-8	1-6
RC	4	89	128	4	14	2.9	3.5	17	15	4.07	5.73	0-0	2-3
RC	4	85	135	5	4	3.2	3.2	9	13	5.10	5.10	14-5	3-1
RC	4	81	117	4	2	2.7	2.7	15	12	4.15	4.54	1-10	2-8
RC	4	81	116	6	4	3.0	3.9	6	11	5.0	5.11	7-2	6-9
RC	4	86	113	4	9	3.1	3.1	15	18	3.26	4.53	3-8	4-11
RC	4	81	119	4	1	3.0	3.9	10	12	5.11	4.84	2-2	1-0
RC	4	89	119	4	0	4.2	4.5	14	9	4.8	4.8	1-7	2-4
RC	4	86	126	5	18	2.8	3.2	17	7	3.19	3.34	7-14	7-15
RC	4	85	120	5	11	2.9	3.1	12	11	2.96	4.24	0-4	1-11

APPENDIX G -- Continued

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
RC	4	82	119	5	15	3.8	4.6	9	11	4.38	4.38	1-1	1-2
RC	4	77	115	2	6	3.0	4.2	7	5	5.11	5.11	3-8	5-9
RC	4	89	124	5	3	2.7	4.1	3	5	4.67	4.72	5-0	4-1
RC	4	77	119	4	0	3.7	4.1	18	11	5.25	5.25	4-3	3-2
RC	4	89	111	4	6	2.9	3.3	11	10	4.05	4.05	0-0	0-0
RC	4	87	116	6	3	3.1	2.5	8	9	4.50	4.11	0-6	1-4
RC	4	84	123	4	6	3.0	3.2	17	16	5.92	5.62	6-2	6-1
RC	4	82	119	5	8	2.9	3.3	25	20	2.92	2.92	2-13	3-10
RC	4	86	119	2	24	2.1	3.6	10	12	5.35	5.10	2-4	1-3
RC	4	81	116	4	2	3.3	3.4	5	4	6.15	6.15	2-7	2-3
RC	4	86	116	3	1	3.4	3.4	20	21	5.23	5.46	5-7	0-0
RC	4	81	123	3	1	1.8	2.0	24	23	4.23	4.11	2-5	2-4
RC	4	89	114	5	2	2.3	2.5	15	15	4.11	5.92	1-3	0-6
RC	4	83	126	6	2	2.5	2.7	13	12	4.80	5.65	0-0	3-3
RC	4	89	117	3	3	2.4	2.6	16	17	4.12	4.54	0-0	2-2
RC	5	82	139	4	0	4.3	4.5	25	29	3.54	5.15	0-31	0-27
RC	5	75	132	6	0	2.8	3.4	26	20	4.70	5.23	7-1	3-2
RC	5	75	119	4	2	2.7	3.0	12	9	4.23	4.23	1-2	1-4
RC	5	75	133	6	2	2.9	3.3	13	14	4.12	5.97	1-8	1-6
RC	5	84	129	6	2	4.1	4.3	12	13	4.45	6.34	3-6	0-0
RC	5	76	127	3	7	3.4	3.7	17	14	4.65	6.23	2-2	3-1
RC	5	85	131	6	21	3.2	3.4	16	15	5.27	5.27	8-8	8-6
RC	5	84	133	5	7	3.9	4.2	19	19	4.08	4.08	1-5	2-2
RC	5	82	125	4	8	3.9	4.4	16	12	5.23	5.23	21-4	9-9
RC	5	87	127	6	13	3.3	4.0	8	7	5.00	5.00	0-0	2-3
RC	5	82	142	5	8	3.3	4.2	13	10	3.92	3.92	0-2	2-7
RC	5	86	122	4	4	4.5	3.8	14	10	4.88	4.88	7-1	2-0
RC	5	84	134	2	6	4.0	4.1	15	12	4.84	4.88	1-3	3-3

APPENDIX G -- Continued

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
RC	5	89	125	6	1	3.4	3.3	7	18	3.57	3.34	6-6	0-6
RC	5	76	138	4	2	3.5	3.3	21	29	4.09	4.12	7-3	6-2
RC	5	78	140	4	0	4.5	4.7	14	12	4.07	4.15	13-37	10-28
RC	5	89	135	5	1	4.0	4.7	19	19	3.57	3.29	1-9	2-17
RC	5	89	129	5	7	3.1	4.0	10	12	5.09	5.09	0-4	0-3
RC	5	89	134	6	3	3.9	3.7	10	7	4.72	4.70	2-3	0-0
RC	5	82	135	6	8	2.9	3.4	18	12	4.15	4.15	1-5	2-6
RC	6	75	149	5	17	4.2	4.1	19	17	3.84	3.92	1-7	2-6
RC	6	86	140	5	7	4.9	4.1	22	15	4.11	4.11	9-5	6-0
RC	6	80	146	4	12	3.8	4.2	18	13	3.54	3.84	1-9	1-6
RC	6	84	150	2	0	4.3	4.2	16	9	4.20	4.20	7-1	7-0
RC	6	80	137	4	3	4.2	4.5	14	13	4.24	4.45	1-8	10-21
RC	6	88	150	3	1	3.5	3.8	9	7	5.15	5.15	7-2	3-12
RC	6	82	160	2	0	4.1	3.4	16	22	3.20	3.84	7-9	6-4
RC	6	89	145	2	3	4.6	4.7	9	14	3.84	3.70	0-0	0-3
RC	6	75	159	5	0	3.9	4.6	20	21	3.15	3.15	2-21	1-17
RC	6	81	144	5	5	5.8	5.3	19	16	3.50	3.42	4-7	3-4
RC	6	87	133	5	1	4.2	4.5	14	11	5.97	5.72	1-1	1-1
RC	6	89	150	4	2	4.5	4.2	12	12	4.70	4.74	2-16	3-12
RC	6	75	132	6	1	4.3	4.8	11	7	4.92	4.50	2-3	4-5
RC	6	87	142	6	7	4.7	5.1	12	8	4.50	5.46	0-11	4-16
RC	6	85	153	2	3	4.5	4.8	14	23	4.39	4.00	1-5	4-1
RC	6	75	146	4	6	5.0	5.1	24	22	5.73	5.73	1-0	0-0
RC	6	88	140	4	10	4.4	4.6	6	5	3.46	3.46	2-1	1-0
RC	6	87	142	5	11	3.4	4.0	13	13	3.27	4.39	1-5	1-8
RC	6	87	151	5	8	4.3	3.9	29	39	3.96	4.92	2-1	3-3
RC	6	81	150	5	5	5.3	5.8	4	1	4.88	4.88	9-23	7-29

APPENDIX G -- Continued

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
RC	6	86	144	5	21	4.6	4.4	16	12	5.46	5.34	4-1	3-4
RC	6	87	144	1	19	4.7	4.4	9	15	3.54	3.70	3-14	3-12
SDC	3	83	118	4	3	2.6	3.1	20	11	3.03	2.11	3-2	11-2
SDC	3	87	116	7	35	1.7	2.2	7	11	2.31	2.46	0-8	3-6
SDC	3	84	111	5	4	2.0	2.6	11	10	2.81	3.96	1-2	2-5
SDC	3	78	99	7	33	1.6	1.9	14	8	2.69	2.61	6-2	3-6
SDC	3	78	106	5	5	1.4	2.4	20	22	2.81	2.68	6-1	4-8
SDC	3	76	99	5	35	3.2	2.5	19	9	3.34	4.53	1-7	1-6
SDC	3	88	96	7	3	2.6	2.6	11	1	3.70	2.80	1-8	2-7
SDC	3	82	105	6	12	3.3	2.5	10	9	5.60	5.34	2-1	3-4
SDC	3	83	107	5	9	3.0	1.7	10	4	2.88	3.70	1-8	0-8
SDC	3	89	109	7	9	2.4	2.7	8	14	5.0	4.90	2-1	0-4
SDC	3	75	113	6	1	2.9	2.5	12	13	5.0	3.70	12-8	18-4
SDC	3	89	108	4	2	3.0	4.0	5	3	6.23	5.94	10-6	8-4
SDC	3	77	112	6	4	2.1	2.4	9	3	2.81	2.65	2-1	2-1
SDC	3	75	102	4	4	1.6	2.8	11	12	4.22	4.11	8-3	6-3
SDC	3	76	107	5	6	2.4	3.1	14	15	4.90	4.20	9-6	8-2
SDC	3	89	109	5	2	2.3	2.8	14	12	3.76	3.70	5-3	1-1
SDC	3	87	108	6	5	1.6	2.3	10	12	3.40	3.40	5-2	3-1
SDC	3	89	107	4	2	2.4	3.0	18	15	3.81	3.69	6-2	3-1
SDC	3	89	105	6	4	2.1	3.0	18	15	2.26	2.84	0-5	0-2
SDC	3	86	112	4	7	2.1	3.0	23	25	2.84	2.42	1-11	2-2
SDC	3	83	102	4	1	2.8	3.3	8	7	4.80	4.50	27-12	40-16
SDC	3	89	115	2	12	2.3	3.2	27	15	2.08	2.00	4-10	1-4
SDC	3	89	97	6	3	1.8	2.3	8	14	1.84	2.26	0-8	1-12
SDC	4	80	124	7	6	2.7	3.1	15	14	3.81	3.04	6-12	5-10
SDC	4	75	114	5	10	2.6	2.6	17	11	5.1	4.8	3-5	2-4

APPENDIX G -- Continued

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
SDC	4	76	112	5	10	2.9	3.2	13	8	5.81	4.11	7-9	7-3
SDC	4	76	122	4	4	3.1	3.0	16	14	5.96	4.80	6-2	8-0
SDC	4	81	110	6	5	2.9	2.6	8	2	4.96	3.4	3-2	4-4
SDC	4	88	114	6	3	2.6	2.4	12	18	3.7	4.11	5-2	3-5
SDC	4	80	112	5	2	2.6	2.7	14	14	5.73	5.00	9-1	10-5
SDC	4	89	115	6	5	2.1	2.2	17	20	1.84	2.65	2-10	2-7
SDC	4	80	115	2	0	3.5	4.0	11	11	2.07	3.26	1-5	3-4
SDC	4	75	128	4	5	2.9	3.2	20	18	2.42	2.29	8-7	6-5
SDC	4	82	106	5	2	3.5	4.7	4	7	5.84	3.07	15-8	16-10
SDC	4	81	129	7	1	3.0	4.0	11	10	2.65	2.07	6-7	11-3
SDC	4	84	128	4	1	2.4	3.0	19	20	2.84	2.69	7-7	7-3
SDC	4	81	114	5	2	2.6	3.1	20	21	4.07	3.7	5-5	6-3
SDC	4	85	120	7	2	3.6	4.1	16	18	3.69	1.76	4-3	9-5
SDC	4	79	123	5	7	3.3	3.6	20	21	2.26	2.96	2-14	4-17
SDC	4	87	122	4	2	2.5	2.6	15	15	3.00	4.11	10-12	4-7
SDC	4	85	121	6	4	2.6	3.5	7	4	3.84	3.69	7-0	3-1
SDC	4	86	115	5	0	2.3	3.0	19	24	2.05	2.23	1-13	2-32
SDC	4	88	134	5	0	3.1	3.3	19	11	2.05	2.61	0-13	5-5
SDC	4	75	117	6	1	1.8	3.6	8	14	4.11	4.07	9-2	4-3
SDC	4	79	132	5	3	3.5	3.9	12	6	5.40	5.40	11-6	17-9
SDC	5	89	132	4	1	4.0	4.8	10	9	5.64	4.64	19-4	18-3
SDC	5	80	133	6	9	3.1	3.6	10	18	3.76	3.50	0-6	3-7
SDC	5	84	128	5	1	3.2	3.5	12	12	5.25	5.25	4-3	2-0
SDC	5	85	132	6	7	4.0	3.7	11	17	3.42	3.42	0-19	0-4
SDC	5	84	139	5	4	3.0	3.4	3	3	4.61	4.80	0-7	0-13
SDC	5	86	142	5	2	3.0	3.6	7	14	4.07	4.07	2-5	0-8
SDC	5	86	130	5	5	3.6	3.4	6	10	4.76	3.54	2-2	3-0
SDC	5	75	136	5	1	2.9	3.4	22	23	4.07	4.07	5-4	6-3

APPENDIX G -- Continued

Group	Grade Level	Binet Score	Age in Months	Social Class	Days Absent	ITBS Scores Fall	ITBS Scores Spring	Self Concept Fall	Self Concept Spring	Behavior Fall	Behavior Spring	Sociometric Fall	Sociometric Spring
SDC	5	87	138	6	0	5.0	3.3	14	15	2.23	2.92	1-13	4-15
SDC	5	87	140	4	3	4.0	4.0	8	6	3.76	3.42	5-4	4-4
SDC	5	85	128	6	6	3.7	3.6	6	7	2.80	2.26	5-1	4-2
SDC	5	89	120	4	7	3.6	4.0	21	17	5.42	4.76	8-6	7-7
SDC	5	77	129	5	12	4.3	5.4	18	13	3.81	3.42	3-0	3-0
SDC	5	75	129	5	9	3.4	3.8	12	9	5.42	4.11	13-7	11-5
SDC	6	75	142	2	1	4.0	5.0	13	17	3.84	3.42	0-0	1-1
SDC	6	75	147	4	4	3.5	4.8	11	9	3.81	2.26	8-4	7-3
SDC	6	77	138	5	8	4.6	4.7	7	7	2.23	2.21	2-1	2-1
SDC	6	77	145	5	5	4.5	4.6	8	6	5.03	4.61	6-5	5-2
SDC	6	76	146	4	4	4.2	4.0	8	9	4.11	3.50	1-3	1-2
SDC	6	84	138	5	1	4.7	5.2	8	6	5.96	4.65	17-4	18-2
SDC	6	78	134	4	0	4.6	4.9	13	11	5.64	5.96	8-4	8-5
SDC	6	89	149	6	10	3.9	4.7	9	8	2.26	2.26	1-26	3-18
SDC	6	75	150	5	6	4.2	4.5	11	12	5.15	4.75	4-1	1-0
SDC	6	81	152	5	1	3.8	3.7	14	18	5.11	4.07	5-1	0-0
SDC	6	76	134	7	4	5.0	4.4	8	10	5.23	3.84	2-0	5-2
SDC	6	89	144	3	2	4.0	4.2	6	12	4.11	3.76	1-1	1-2
SDC	6	79	150	6	11	4.1	4.4	7	14	4.69	4.07	8-5	4-10
SDC	6	76	147	4	5	4.0	4.0	19	23	4.92	4.11	10-11	12-12
SDC	6	88	145	3	3	3.5	3.5	11	9	4.65	4.90	2-19	3-3
SDC	6	83	134	6	11	3.6	4.3	7	10	4.0	3.42	7-4	1-1
SDC	6	88	146	4	1	4.4	5.1	11	23	5.34	3.74	12-5	39-9
SDC	6	78	130	4	0	4.8	4.4	12	15	4.5	3.81	20-5	1-3
SDC	6	88	147	5	2	4.3	4.9	8	3	4.23	4.61	0-1	2-5
SDC	6	86	144	5	3	3.7	4.8	4	4	4.92	4.11	3-2	0-0
SDC	6	86	133	1	1	4.0	4.2	10	15	3.36	2.26	2-7	4-1

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