

THE DIFFERENCES IN ACADEMIC ACHIEVEMENT OF
PUPILS ATTENDING NONGRADED SCHOOLS AS
COMPARED WITH THAT OF PUPILS
ATTENDING GRADED SCHOOLS

by

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Chapter I

INTRODUCTION

The American system of education has in the past often been based on a firm determination that school children should be alike. That is, many educators expected all pupils to study from the same book at the same given grade and to achieve at the same level. In this situation students are failed or passed on the basis of their successes or failures. Consequently, there are many who fail.

Unlike the past system, it is the intent of the modern school system to recognize each individual child's achievement and potentiality. For many years, teachers have talked about individual differences of their students and various teaching methods have been employed to selectively develop these differences. Some methods have produced a degree of success and others have not. It should be the concern of every educator to detect insofar as possible students' individual differences and to teach them on these bases.

According to Dean (1964) the tradition of all students being taught the same skills or concepts in the same manner is being changed to one whereby pupils work at a determined pace toward self-determined goals and even on self-chosen topics.

Educational institutions and publishers, as well as the public, have developed a new approach to school organization. A disregard of grading suggests that our schools may be entering an

era of extensive organizational change. Although innovations and experimentation with school organization are not entirely new in this country, the present movement toward the nongraded approach assumes dimension of greater seriousness and deeper significance than have previous efforts for improvement.

The nongraded plan of school organization is an innovation designed to implement a theory of continuous pupil progress. This enables the pupil to move forward only as rapidly as his abilities will allow. Such progressive movement is not dictated by a previously set time section but by actual intellectual development and pupils' innate rate of learning.

Most authorities in the field of education feel that if properly implemented the nongraded curricula necessitate greater planning, more educational materials, and fuller awareness of the changing needs of pupils. It is believed that the nongraded program can help to meet more effectively the needs of students.

It was the purpose of the writer to investigate the differences, if any, in academic achievement of pupils attending schools in which the nongraded plan was employed as compared with the academic achievement of pupils attending schools in which the graded plan was used.

Statement of the Problem

The purpose of this study was to investigate the differences in academic achievement of pupils attending nongraded schools as compared with pupils attending graded schools.

The research for this study was guided by the following

question: Do pupils who are exposed to nongraded programs of instruction achieve academically to a significantly higher level than pupils who follow the traditional graded approach?

Procedure

After the problem was formulated, relevant literature was researched using as guides the Educational Index, Encyclopedia of Educational Research, Eric Readers Guide, Card Catalog, and Master's reports. This literature was abstracted and organized to provide answers to the research problem.

Definition of Terms

Nongraded School - Dean (1964) defined the nongraded school as a school which has eliminated formal grade-barriers. Nongrading is a plan of continuous progress based on the needs and achievement of the individual pupil, thus it is a way of guaranteeing that the learning process shall be a continuous one.

Graded School - Goodlad and Anderson (1930) referred to a graded school program as one in which the courses of study are organized into units with definite time restrictions for each unit. A child does not normally move into the units of the next grade until he is chronologically the correct age for that grade.

Academic Achievement - Engel and Copper (1971) defined academic achievement as the achievement of pupils in the so-called academic subjects such as reading, arithmetic, and history as contrasted with skills developed in such areas as industrial arts and physical education.

Chapter II

REVIEW OF RELATED LITERATURE

Literature Describing the Graded School

The graded school pattern as created by Quincy Grammar School of Boston in 1848, contributed to free, public, and universal programs of education for all children. When James Philbrick established Quincy Grammar School he was striving to improve the operational structure of the school, as well as to facilitate instruction. He was faced with the necessity for creating an administrative framework to provide for the handling of large numbers of children whereby children were classified primarily on the number of years in which they had been enrolled in school.

A child's history in the school was a by-product of his age at the time of admission. Basic to this reasoning was the assumption that since all or most pupils in a grade were on the same accomplishment level, this plan should assume more effective instruction. A fifth grader according to this reasoning was a child who was in the fifth year in school. Presumably, he had progressed at a fixed and prescribed rate of achievement during each of his previous years. It was assumed that he had been able to learn and to achieve at a predictable and measurable degree of exactitude. It was further assumed that each child's level of progress was constant and that he had made comparable progress in each subject areas. The graded plan may not recognize that this

fifth grade child may be reading at an eighth-grade level or a second-grade level while at the same time be on a fourth- or seventh-grade level in arithmetic.

Pupils who did not meet the achievement standard set for each grade often had no alternative other than to repeat that year's work. It remains true today that almost universally the graded school concept prevails.

The graded schools have become notable and have made successful contributions on one facet of school organization. Errors and abuses have crept in not because of a distortion of the relative rules and purposes of school organization and the ability to devise ways of meeting individual differences.

The majority of schools in the nation are organized under a graded-type plan. Graded schools have been attacked mainly because of the program is established first and pupils are then expected to adjust to the program. Critics of Graded Schools contend that grade labels restrict teachers from teaching above and below their particular grade.

The graded structure, which has existed since 1870 in both elementary and secondary schools, has proven to be an orderly system of classifying the many students who have flooded the American schools during the past 100 years. By 1870 most schools were made up of graded classes, graded textbooks, and content, and even graded teachers.

Tewksbury (1967) described a graded school as a program divided into grades. The work to be accomplished in each grade is clearly designated and usually consists of specific skills,

topics, and textbooks to be covered. All of the boys and girls in a given grade are expected to do only the work reserved for that grade and complete it in a year's time. If they do not complete it they are retained for a year to repeat all of the work.

Tewksbury further stated that pupils are not helped to progress beyond the designated work for the grade because they are not expected to do this until the following year when they are in the next higher grade. If pupils were permitted to go beyond designated work, this would interfere with the program conducted by the teacher in the next higher grade. Similarly, a pupil would not be given work equivalent to that of a lower grade because each child in the next grade is expected to do that which is specified for the grade. If he cannot, he does not belong there and should have been retained in a lower grade wherein the program is at his level.

Many educators realize the folly of expecting that all children in a given grade should do only the work of that grade. Some of the children are capable of a more challenging program; others would find their school efforts more successful if they could progress more slowly, and deal with less complicated materials. The theory of the graded school however ignores these realities.

There are few, if any, elementary schools in which the graded plan has been modified somewhat: leaning more towards the nongraded side. Most teachers usually try to make some adaptations in their instructional program for children of different abilities, but if the graded approach really prevails in the school

systems when the teacher is employed, he is limited in the adaptations he can make. He is expected to give failing marks to the children who cannot do grade-level work, despite the progress they may have made at their level.

Beggs and Buffie (1969) emphasised the fact that the development of the graded elementary school in the nineteenth century was a significant creative effort appropriate for its time. It permitted the convenient classification of unprecedented number of pupils pouring onto the schools during the second half of the century. It encouraged the division of knowledge into segments to be taught at the various grade levels. It simplified the task of preparing needed teachers quickly. Teachers were taught what they were to teach in a given grade.

Beggs and Buffie further stated that within a short period of approximately twenty years the graded elementary school organization had spun the nation. But soon a few rumblings were heard, and it became clear that not all educators agreed completely on the merits of the graded system. Some educational system which glorified in its new-found efficiency also gave rise to an inhibiting form of regimentation.

Beggs and Buffie (1969) stated that the graded school then, as now, simply was not in harmony with the basic purpose of American education; namely every child should have an opportunity to develop his talents to the fullest extent possible. With programs geared to the mythical average student, graded school organization has, for the most part, simply ignored the variety in human capabilities by the very nature of its lockstep pattern and rigidity of structure.

Goodlad and Anderson (1963) stated that educators became vocal in their questioning of graded schools. In 1868, W. T. Harris introduced into St. Louis a plan of frequent promotion and reclassification. He thus maintained graded structure but reduced tension by regrouping at six-weeks intervals those pupils who varied markedly from the rest of the groups. Anderson and Goodlad further reported that by the 1870's Francis W. Parker was attacking the grade-to-grade organization of textbooks. At the turn of the century President Charles W. Eliot, Harvard University and William R. Harper, University of Chicago, lamented the neglect of personal and social needs. In calling for flexible school organization to support unique abilities, they stated that the stereotyped pattern of the graded-school system demands a stereotyped individual as the learner.

Literature Describing the Nongraded School

A wide assumption in recent years has been that the learning experiences of children can be affected by reorganizing the school's curriculum. The focus of the nongraded curriculum is the improvement of the pupil's experiences by changing the school environment within which he is expected to learn.

Gore (1962) described the nongraded primary unit as one that follows a design or plan of organization which disregards grade-level designations and expectations. Such a plan places children in flexible groups and allows each child to progress at his own optional rate.

Thompson (1958) explained that the ungraded unit is an organizational pattern adopted primarily to provide continuity

in learning. He felt that it recognizes the sequential development of skills and the importance of success or mastery at each progressive stage. Brinkman (1961) stated that the essence of the nongraded school curriculum is a plan to group youngsters on the basis of age, certain abilities, and other related factors and thus enabling them to move ahead at their own rate of learning. Such a human flexibility enables a youngster to work with another class of diggerent subject matter that may be a challenge for his or her capacity.

The goal of every nongraded curriculum is the sequential progression of each pupil toward outcomes uniquely appropriate for him. A curriculum that takes cognizance of this goal has to be elastic enough to provide a high threshold and ceiling for the rapid achiever, and a lower one for the slower learning student. Each child in such a learning scheme, theoretically starts and ends at different achievement levels. Inlow (1966) stated that an organizational arrangement, such as nongrading, which relies almost for its very existence on keeping learning and readiness closely attuned, has special appeal for teachers of children where this affinity conceivable is of great importance.

The nongraded elementary school appears to be one of the most discussed topics in the field of education today. Keppel (1966) stated that the spread has been rapid, even dramatic, and that it is probably the fastest-moving innovation on the American elementary school scene.

The Pubelo plan (Boston), instigated by Superintendent Preston W. Search in 1888, encouraged individual progress; that

is each pupil following a differentiated channel of a multiple track system. The Batava Plan (New York) introduced by John P. Kennedy employed additional teachers to give special assistance to slow learners so that they might not become unduly retarded. The Winelka and Dalton Plan used individualized task approach.

Beggs and Buffie (1969) reported that the state of Wisconsin in January, 1942, initiated a nongraded system that is still in operation. In 1960 it was in operation on a voluntary basis in 114 of the 116 Milwaukee schools. Appleton, Wisconsin embarked on the new plan in 1947, and Coffee County in the state of Georgia did so in 1950.

Tewksbuty (1967) reported that as far back as 1956 several pilot schools in the Diocese of Pittsburgh had begin experimenting in nongradedness. Many success stories worked to make continuous progress a reality. One of the first steps toward making this dream a reality was the continuous progress program, in reading and mathematics, which were initiated in September 1969 in all elementary schools of the Diocese. The aim of the program was to provide a unique type of school structure in which the needs of all students would be assured. Since every child is different, the plan called for teaching and evaluating each student on the basis of his own potential and his own achievement. Progress had to be made and judged in terms of the student's own learning rate and in terms of his own abilities. To do this effectively all grade levels and grade barriers had to be eliminated.

Two years after the continuous program went into effect, most schools changed dramatically. Some principals and faculty

members showed themselves to be more courageous and more creative, while some admittedly had a continuous progress program in name only.

The most frequently mention problems relative to the nongraded program are centered around the areas of communication and reporting pupil progress. It seems the most needs are more frequent and more effective explanations of the school programs--its philosophy, horizontal and vertical structure, evaluation and procedures.

It was reported that the adjustment to the continuous progress program has been gradual though satisfying. The majority of the teachers were experiencing success, but the degree of enthusiasm varied.

It was further emphasized that individual differences are not only recognized, but accepted and planned for, as basic tenets of the "continuous progress philosophy".

The overall view of the comments imply that teachers feel they have made a good start. Most teachers are beginning to feel comfortable with the program. Great laboriousness has been in planning for individual differences and providing for each student's continuous progress.

Cisco (1971) cited that as the dream of recognizing, accepting, and planning for the needs of each student continues to unfold, it is good to reflect on the words of L. J. Cardinal Sueness, "Happy are those who dream and are ready to pay the price to make them become true." Cisco further stated that the continuous progress program has begun to materialize in the Diocese because

superintendents, supervisors, administrators, teachers, students and parents have been willing not only to dream but also to work so that the dream becomes a reality.

Dean (1964: 218-220) made an extensive study of the nongraded movement. A review of literature, visits to, and observations of the programs in action, conversations with persons engaged in programs, and discussions with leaders of the movement have all contributed to the following statements of the cases for and against nongradedness.

FOR NONGRADED SCHOOLS

1. Recognition of and provisions for individual differences among children
2. Flexibility in administrative structure
3. Abolition of artificial barriers of grades and promotion
4. Respect for the continuity and interrelatedness of learning
5. Student's progress commensurate with ability
6. Improved mental health for both teacher and students
7. Stimulations for major curricular revision
8. Harmony with the educational objectives of an democratic society
9. Administrative feasibility for all levels and age groups
10. School's program oriented rather than operationally controlled

AGAINST NONGRADED SCHOOLS

1. Soft pedagogy, lacking fixed standards and requirements
2. Impossible burden on teachers
3. Replacement of grade requirements by reading level.
4. Lack of pupil-progress information to parents
5. Inadequacy and insufficiency of teacher preparation
6. Absence of minimal standards and expectations
7. Lack of specificity and order in curriculum sequence
8. "An improved means to an unimproved end"
9. Uncertainty that improved teaching will result
10. Widespread misuse and abuse of the terminology non-gradedness

Dean further stated that these statements lie in the realm of claim and subjective argument; they are not necessarily invalid or conclusive. He emphasized that progress in the non-graded subject area is based on levels that allow for sequential and continuous learning. The levels are comprised of concepts and skills which promote growth consistent with each child's ability.

Levels are set up specifically to provide more adequately for the growth patterns of individual pupils. In no way should they become barriers to continuous progress. The flexible framework of the level is evidence that skills in themselves are not geared to any kind of learner.

The attempt to individualize instruction within class-

rooms has been one of the main reasons for the emergence of nongraded schools. Most educational authorities in elementary schools realize that learning can best be accomplished by recognized differences within an individual and among pupils. Nongrading, according to its preponents, maximizes individual instruction, since it is designed to provide for continuous pupil progress within a flexible situation and a permissive climate.

Johnson (1968) reports investigation concerning the extent to which instruction was individualized in a selected number of nongraded schools. The classroom related activities were viewed from three different perspectives (1) the teacher's preception (2) the observer's perception and (3) the pupil's preception. Among advantages discussed of the nongraded approach were: this approach enabled pupils to progress at their own rate and level, and it built a more personal relationship among the pupils and the teachers. It also encouraged teachers to focus on the needs of the pupils and offered more freedom and responsibility to the pupil.

The classes differed markedly in the extent of flexibility, scope of pupil incidences of individualized instruction, percent of total time each classroom devoted to individualized instruction, and in patterns of learning allocations.

The findings did not indicate a relationship between patterns of time allocation and the extent of individualized instruction, nor did they indicate a relationship between the classroom climate and the extent of individualized instruction. There did not seem to be a consistency between the extent of

individualized instruction for a specific content area and the degree of direct or indirect teacher-influence revealed during observations of specific content areas.

In a nongraded school, the program is not divided into grades and is presented so that children at any given grade are not limited only to work designated for their grade. There is no such thing as grades which constitutes a uniform program of instruction that all children in a given classroom must accomplish in a year's time. Instead of grading, an attempt is made to help each child work at his present level. This, then, is the essence of the nongraded program.

If one pupil in a class is ready to study more advanced skills, he is assisted in doing so, even if this work in a graded school had previously been reserved for the next higher grade. If another pupil in the same classroom needs to devote his efforts to less complicated tasks in reading or arithmetic he is helped to do so even if this means working on skills which were in the domain of a lower class.

In a nongraded program expectations differ for individual children. It is expected that some children will accomplish more than others; the teacher attempts to help each child work at the level where he is and then, through instruction that is adjusted so that he will have reasonable success, in order to progress as best as he can.

Advocates of nongrading believed that there are a number of advantages of this type of program. Each child is helped to work at his own level or readiness. In a graded classroom,

students of lower achievement are often forced to advance to new work with the rest of the class even though they have only vague understanding of the previously presented knowledge.

After an extended exposure of this practice many pupils become confused and discouraged.

-----Goodlad and Anderson (1963), have conducted studies regarding various aspects of nongrading and both have contributed many publications explaining and advocating their suggested approach to curriculum and instruction. They stated that children are not designated as failures simply because they cannot do work at a certain level nor are they expected to perform tasks for which they are not prepared. Because of the greater opportunity for children to have success experience with their work, the pupils may develop a more favorable attitude toward learning and toward educational institutions and teachers.

Children who progress slowly are not failed and then forced to repeat a year's work in the basic skills. Failure and repetition experiences of this type are considered detrimental to the development of constructive attitudes in children. The nongraded program provides for differences in the individual child's performance from one subject to the next.

Because the philosophy of the nongraded school accepts the child with his individual learning patterns, some children may require more time than others to master the basic reading skills and concepts.

Durrell (1969) stated that in the nongraded program there are no specified numbers of levels that a child must complete at any given period of his school life. It is con-

ceivable that the reading level could be completed by most children in eight years. Although some children may need nine years, a very few need even seven years. Durrell further emphasized that one of the desired outcomes of the nongraded program is to help pupils develop behavior characteristics that reflect christian social principles, social habits, together which are indicative of the child's personality development during the course of the school day.

Nongraded schools represent an attempt at organizational plans which embrace the scientific findings about the learner and how he learns. They are attempts to deal with the problems of inflexibility in the education of the child.

Goodlad and Anderson (1963) reported that literature relative to programming and curricula have shown that the nongraded school gears the school's administrative structure to the intellectual development of the child. It is a practical means for making it possible for teachers to personalize instruction for every youngster.

The nongraded school is an organizational plan, rather than a method of teaching per se. It is not an administrative or teaching panacea; it does create a framework in which better methods can be used fluidly and flexibly, and allow for the exploration of various activities which further learning. Literature has shown that the nongraded elementary school allows for concentration on the individual pupil and his needs. During these years, the activities, grouping, teaching, and learning more nearly reflect the research on human growth and development.

The nongraded school is not for those educators who would use present-day insights into individual differences, curriculum, and theories of personality, and who would commit themselves comprehensive revision of education.

Few propositions for educational change have generated and sustained as much interest as the nongraded school. Literature shows it is discussed at nearly major educational conference, and symposia that the nongraded school is increasing in popularity. The body of available literature on the nongraded school is increasing rapidly and most leading professional journals have published several articles on this topic. Through these and other means, educators have learned more of the promises of the nongraded school than they have of its accomplishments.

Goodlad (1959) reported that less than one percent of the schools in the country were nongraded. He felt that there were probably fewer than 125 schools to be found with truly nongraded programs by 1961.

McLaughlin (1971) described nongraded schools as schools that recognize each child as an individual who has a personal distinct learning time-table which guides his progress through the school's curriculum at a pace most efficient and effective for him. Thus, nongraded schools design instruction to fit the child and his present learning needs rather than try to force him into an inappropriate learning mold.

In 1958 the National Education Association reported that 26.3 percent of the respondents to its survey said they intended to nongrade their schools. Five years later this estimate divided to 3.2 percent. The U. S. O. E.'s pollings reverses this trend. In 1958 the U. S. O. E. found only 13.4 percent of the schools surveyed expected to become nongraded. Two years later this estimate doubled and 26.3 percent of the respondents were reported considering nongrading their schools. With these conflicting findings it is difficult to know if the nongraded school is coming into its own or passing out of existence.

McLaughlin stated that better student achievement is not the only claim put forth for the nongraded school. Its advocate maintain, implicitly or explicitly, that superior student adjustment is attained in the nongraded school. Student adjustment and personality development are signal concerns of educators and, quite reasonably, they are interested in developing learning settings which foster this goal.

Research has shown that too often on close inspection, one finds that schools credited with operating nongraded and semi-departmentalization of instruction in reading and arithmetic are frequently passed off as nongraded programs. These techniques should be recognized for what they are. They are administrative experiences developed to make the graded schools work. They are not nongraded instructional programs.

McLaughlin (1971) stated that nongrading begins with significant alterations in instructional, not organizational, procedures. As long as schools seek practices designed to group away differences they are not nongraded. The nongraded school never held this as a goal, for it is impossible. Rather, nongrading says, accepting children as they are with all their differences. Don't try to eradicate them! Until schools develop instructional programs that will meet this challenge they are not nongraded. They are simply mastering their old egg-crate schools with a new facade.

Klausmeier (1971) stated that the nongraded replaces self-contained classrooms, in an attempt to produce higher education achievements. It was established to implement an individually guided education system. He reported these features, as provided by the nongraded classes, were the attention focused on the individual learner as a person with unique characteristics, concerns, and motivations. The basic organizational units are small enough to allow every person to be known and treated as an individual and large enough to permit role differentiation. Provision for staff training and continuing development are essential parts of the approach.

Effectiveness of the Nongraded School as Compared with the Graded School

Most of the studies to date have attempted to evaluate children's performance in the skills subjects, especially reading. There are few attempt to investigate such important factors as children's self-concepts, attitudes toward learning, and level of self-reliance.

Advocates of nongrading believe that this approach to curriculum organization and instruction holds more promise than does a graded program for creating an atmosphere to which boys and girls may develop more positive attitudes toward themselves, as well as toward teachers, educational institutions, and learning.

The evaluative literature on true nongraded plans has been distorted because many nongraded plans have tampered more with labels than with actual procedures.

McLaughlin (1971) completed an evaluation of the nongraded schools in New York. He stated that nongrading appears to be preached more than practiced and practiced more than appraised. He further stated that few dependable estimates on the present status and anticipated growth of the nongraded school are currently available and sound studies on its accomplishments are difficult to come by.

McLaughlin (1971) reported that thirty-three empirical studies of the influence of nongrading on student academic achievement have been identified. About half of them assessed the influence of nongrading on reading achievement and another 25 percent looked at its influence on arithmetic performance. Only 11 percent of the studies questioned the impact nongrading had on the student's development in language arts, while nine percent reported on the total achievement scores of children. His findings showed that academic development of children hardly suffers from attending a nongraded school. Children from graded classes seldom do better on these measures than children from nongraded classes. More commonly children from nongraded classes excel their contemporaries from graded classes.

Kennedy (1963), in her survey of nongraded schools, gave some attention to the advantages for bright children. She found greater encouragement for those children to move forward vertically with more stimulating tasks. Teachers had no fear of encroaching on subject material reserved for the next grade.

Goodlad and Anderson (1963) reported on a study made of nongraded schools in the state of Milwaukee and those of the city of Appleton, Wisconsin. Limited comparisons of test data in regard to their nongraded schools were collected. In Milwaukee, children of the sixth or last semester of the primary unit in four nongraded schools were compared with children of the last semester of the third grade in four graded schools. Ninety-nine nongraded and 123 graded children comprised the samples. Test data in reading and personality adjustment, the only area reported, slightly favored the nongraded group.

A nongraded plan, initiated in Milwaukee in 1942, is now the oldest nongraded system in operation. Carbone's (1961) study reported that a 1952 comparison was made of 99 nongraded students with a control group of 123 students. It was found that reading achievement and personality adjustments were slightly better for nongraded students even though the nongraded students were slightly lower on mental maturity.

Goodlad (1963) made a survey of the Appleton, Wisconsin Public Schools. Eleven fifth-grade rooms were compared with three nongraded intermediate groups of similar mental and chronological ages. The results favored the nongraded pupils in both reading and spelling.

Halliwell (1963) made a study of nongraded schools in the Mansfield, Ohio Public Schools. A comparison of achievement scores showed the average grade placements scores were .29 higher following nongrading. Apparently, the nongraded plan consisted of regrouping pupils in ungraded classes and comparing their achievement after one year under the new plan.

A study was made by Carbone (1961) of a comparison of two nongraded classes with two graded classes in Bellevue, Washington. This comparison which was made at the end of a three year period, indicated that nongraded pupils showed greater achievement in reading.

Anderson and Goodlad (1963) reported a study made on the city of St. Louis, Missouri's parochial schools. The reading achievement scores of 5,169 pupils who had attended graded schools for three years were compared with the scores of 8,281 pupils who had attended nongraded schools. The results indicated significantly greater reading achievement for the nongraded students.

Ingram (1966) reported a study from Flint, Michigan where 68 nongraded students were compared with 337 students in the same school prior to initiating the nongraded plan. Her results revealed a significantly higher mean score for the nongraded school.

Carbone (1961) reported a study where students in the fourth, fifth, and sixth year of a nongraded school were compared to those of a graded school. The sampling procedure employed resulted in the selection of 122 nongraded pupils, who were matched for age and sex with 122 graded pupils. Analysis of covariance was used to compensate for the difference in the mean intelligence quotient of the two groups. The results indicated that the graded students

scored significantly higher in one of the five mental health factors and in all six areas of achievement.

Buffie (1969) matched 117 students from a nongraded school with the same number from a graded school in a different community. He found that nongraded children made the greater gains in the areas of achievement and mental health than did the graded children.

In Hillson's (1964) study, one group of children was assigned to experimental nongraded classes while others composed the control groups. The performance of the nongraded students was significantly higher than the control group on reading, word meaning, and paragraph meaning at the end of three years.

Two groups each of 146 students, one of which was nongraded and the other graded were studied by Halliwell (1963). The nongraded group scored slightly higher, but the difference was statistically significant except in third grade spelling.

Gilbert (1963) compared the nongraded classes with the graded classes in Telsa, a school in Chicago. Nine percent of the students required a period of four years in the primary classes under the nongraded plan, as compared to thirty percent before the nongraded plan went into effect. Telsa, which enrolls mostly disadvantaged youth, raised its reading from eleventh in its district in 1960 to fifth in 1963.

Gilbert (1963) made a comparative study of 62 high school seniors attending a nongraded class in Melbourne, Florida. The purpose of the study was to determine whether this sample differed significantly from a matched sample of seniors from graded classes of another school. The Melbourne seniors outperformed their

matched pairs at .05 percentile level of significance in English and mathematics, and at the .01 level in science and on attitudes of students toward their school. In addition the middle range of seniors from Melbourne out performed significantly their matched pairs on the critical thinking appraisal.

Goodlad and Anderson (1963) reported a study of a comparison made of a first year nongraded school as compared to a control high school in the same Nevada city. Sixty-three hypotheses, based on the assumption that the type of vertical and horizontal organization of the nongraded school would significantly influence students' achievement attitudes and critical thinking ability, were tested. Only one proved to be significant from the pattern expected. The gain in mathematics reasoning in one sub-group of graded students was significantly greater than that of the nongraded students.

Beggs and Buffie (1969) reported a study made on a suburban school in Pennsylvania in which fifty-seven children progressed through a graded plan and fifty-seven other children were assigned to an experimental group and progressed through the same school under a nongraded organization. Both groups had mean I. Q.'s of approximately 115. The children moved from group to group within the class or were assigned to another class as needed to insure proper learning conditions. Stage two of the study involved the same students in a past experimental period (grades four and five) in which both groups were exposed to similar instructional procedures. The research found that the absence of grade barriers resulted in significantly better achievement during the primary grades and during grades four and five.

Hillson (1964) gathered data on two groups of children through the first three years of schooling. One group was assigned to nongraded classes and the other to graded classes. The performance of the nongraded group was significantly higher than that of the graded group on the standardized achievement test.

Carbone (1961) tested matched pairs of children; one child attended a nongraded school and one attended a graded school. The graded student received higher test scores in six areas of achievement and rated higher in social participation, and there was no difference between the groups on the test of emotional stability and feelings on inadequacy.

Halliwel (1963) studied two large groups of pupils, one from each type of school, and found very few differences between the groups on any of the test scores used.

These three studies are illustrative of the range of evaluation results obtained from comparisons of graded and non-graded programs. McLaughlin (1967) made a critical analysis of all of these studies. This analysis discovered that of fifteen systematic studies of reading achievement, seven found no significant differences in the general reading performance of children from graded and nongraded classes; six found slight advantages in favor of the nongraded classes. Five studies of arithmetic achievement found that graded children do slightly better, three studies found that nongraded children do better, and two studies found no differences in the two. Among eight studies of student adjustment, no difference in the adjustment of graded and nongraded students were found in six studies, while the other two showed

conflicting results. When differences in age, years in school, and students' abilities are taken into account, this same pattern of results is found. From this analysis McLaughlin concluded that in the majority of cases the differences in attainment of children from graded and nongraded classes were negligible on the basis of objective test results and test of adjustment. Nongrading does not appear to make any difference in the performance of children of any level of ability, who are at any level of school experience in any subject area.

Moser (1972) reported a study made at St. Agnes Parish School on Milwaukee's north side to determine the effectiveness of a nongraded system. The important thing was that this program gave each child the opportunity to progress at the pace which suited him best. This system also encouraged teachers and students alike to work on many levels.

Moser emphasized the fact that, in working at their own levels, children develop a sense of responsibility. They decide how much they could accomplish and then proceed to work toward that goal.

Dawson and Holston (1966) reported a study made of the nongraded approach in an institution in Hampton, Virginia. The study was made to see for whom the nongraded approach would be of value. The laboratory school provided an opportunity to observe in a nongraded desegregated classroom. The training took place in 1966 with a follow-up phase in 1967. Dawson and Holston reported that as a result of the experiences in the institute, the participants felt that the nongraded school would be of value in

educating the disadvantaged. The participants stated that the nongraded approach reduced the fear of failure and eased the tensions which are inherent in the disadvantaged. The approach helped the disadvantaged to build concepts and have faith in himself.

Bloom (194) and others made a study on the nongraded approach in an attempt to discover its value in desegregated schools. They reported that the nongraded approach makes an easier task of establishing a self-image which is very important to a child's progress and sense of security. It gives the white pupil a better understanding of the Negro child because of the close relationship in a nongraded school. The pupil gains self-confidence because he doesn't have to compete with others. The nongraded approach would reduce his failure and give him a better understanding in accepting his own limitations. It was felt that these students in tomorrow's society will be far advanced because of their ability to adjust and their knowledge of races. These pupils, it is felt, will grow to appreciate the worth of the human being. Negro students will have a better chance of adjusting in a changed sociological situation. Bloom stated that the absence of suppression in the classroom atmosphere will enhance the learning potential of students.

The deficiencies of graded schooling have been well documented by Goodlad (1963: 21). These deficiencies may be generally stated as follows:

First, the practice of equating chronological ages with stages of learning readiness does not work. Second, yearly sequence of curriculum material for all students to receive instruction in scholastic skill at the time when they are

most ready and able to learn these skills. Finally, the use of the graded structure introduces the concept of failure, which has no rightful place in the progress of education.

These deficiencies center upon the practice of placing children in grades according to age. This implies that most children of any given age must be similar in terms of ability and prior achievement level. The curriculum demanded by a graded organization requires this similarity. I. Q. and achievement test data gathered by Goodlad and Anderson (1963), demonstrate the following: children entering the first grade may differ in mental age by approximately four full years, and shortly thereafter their achievement range begins to approximate this spread of abilities. As these children progress through the grades, the ability and achievement ranges become wider and wider. The range in specific achievement skills, rather than overall achievement is even greater and spreads even more rapidly. These authors further emphasized the fact that only 15 percent of fourth graders are doing fourth grade work at midyear; the others are achieving at less than 4.0 or more than 4.9. Thus, there is really no such thing as a fourth grade class. The graded structure simply does not combine students into groups which are ready to learn the same thing at the same time. Ability grouping is not a solution, for the greater variations are found in the upper and lower portions of the distribution.

The second deficiency concerns the year-by-year progression through the curriculum. Flarell (1963) demonstrates that intellectual growth seems to follow a course of sequential stages. The

student can only interact with a learning environment at his present stage of development. If new ideas or concepts are presented to him when he is not at the proper sequential stage, he will have great difficulty understanding them. These stages do follow in orderly sequence but not highly correlated with age.

Goodlad's (1963) findings that individual children's achievement patterns markedly differ from one subject to another, adds another complication to the graded system. Any child may be at a higher stage in one area than he is in others. This means that within any give grade most of the students will differ in readiness to learn what the teacher is presenting to the whole class. Gradedness has been termed a lock step approach to education, in which all students must move together in order for any of them to make rapid progress. But students simply are not made that way; they cannot all move together.

The third deficiency of graded education is found in the promotion-failure concept. The graded approach assumes that all children must move through their learing environment at a constant pace, as reflected in the yearly promition from one grade to the next. At any given point some children will be undergoing rapid changes in mental maturity, physical growth, and interest patterns, while others will not be changing at all. What can a graded school do with a third grade child, who in two months time is suddenly ready to learn the things which are taught in the fifth grade?

Yearly promotion is accompanied by yearly failure. Goodlad (1963) has estimated that approximately one-fourth of the school

children experiences, and the graded system has only one alternative for children who are not keeping up, to retain them in the same grade for another year. This experience is known as failure and in a long run its results are negative. Children who are not promoted are found to be less well adjusted personally and socially. Goodlad (1963) stated that the nonpromoted children begin to actively dislike school and to seek to discontinue their schooling as soon as possible.

The graded plan of school organization appears to be efficient in terms of administration and curriculum planning for large numbers of students. This efficiency may be more apparent than real. Given the documented deficiencies of the graded type of operation, it may not really be doing the job for which it was designed.

Proponents of nongrading have claimed that their approach is more correct than the above-mentioned deficiencies. Tewksbury (1967: 167-8) summarized these claimed advantages of nongrading:

1. Each child is helped to work at his own level of readiness. In nongraded programs a child does not move on to more difficult topics until he has had reasonable success with the preliminary work.

2. Children are not designated as failures simply because they are not ready to work at a certain level. They are not expected to perform tasks for which they are not ready.

3. Because of the greater opportunity for children to have successful experiences with their work, they may develop a more favorable attitude toward learning.

4. When a child has an extended absence, he would not have to miss important work in skill subjects. He could pick up his studies at the point where he left off before his absence.

5. There are fewer gaps in instruction for especially bright students. Even though they progress more rapidly they do not skip the work in given grades. They are helped to skip progress to work which is more commensurate with their ability. They find school a more challenging experience.

6. Provision is made for the wide range of differences which exist among children. In addition provision is made for the fact that a child's rate of learning varies from one period to the next.

7. Children may develop more self-reliance. Students are expected to do much on their own or in small groups.

8. Since the children are not competing against a uniform standard it is possible that less emphasis would be placed on the comparing of how well children measure up to such a standard. Instead more emphasis can be placed on the progress and effort shown by each child regardless of his level.

9. Teachers feel less compelled to push children through graded-level work regardless of their lack of readiness.

Goodlad and Anderson (1963) pointed out that perhaps one would be closer to the truth if he were to say that there is no evidence to suggest anything. We have little more than inadequate first-hand impressions to go on. Goodlad in his survey of sixteen educational institutions conducting nongraded plans was able

to collect only information that had to do with school atmosphere not pupil accomplishment. The centers surveyed reported reduced tensions in children, increased teacher awareness of pupil individuality, and increased parental understanding of the school.

Chapter III

SUMMARY AND CONCLUSION

SUMMARY

The purpose of this study was to investigate the differences in academic achievement of pupils attending nongraded schools compared with that of pupils attending graded schools.

The research for this study was guided by the following question: Do pupils who are exposed to nongraded programs of instruction achieve academically to a significantly higher level than pupils who follow the traditional graded approach?

With the outset of mass education, graded school organization became the standard format because it allowed for easier administration of large student bodies and easier standardization of curriculum. It is the graded school which has been the experimental form. It is felt that the graded operations have been the norm only during the twentieth century.

In history of education many schools and programs have been nongraded. If the more vocal proponents of nongrading are correct, the graded school experiment has not been a success.

One cannot be sure that the advocates of nongradedness are correct. They have clearly documented many of the inadequacies of the graded classroom. The claims which have been for nongrading are impressive, even extravagant. These results, however have failed to demonstrate conclusive support.

Of the twenty-two research studies comparing the academic achievement of the graded and the nongraded groups reported in

this study sixteen indicated differences in various areas of achievement that favored the nongraded group; four studies favored the graded group, and only two revealed no differences between the two groups.

Evaluators who observe the process of education and the classroom atmosphere of nongraded programs are in agreement that the nongraded approach appears to be much better with regard to most of their observational criteria. Evaluators who gather achievement data lack such consensus. An empirical evaluation can either find that nongraded students do better, or that graded students do better, or there is no difference, although the differences tend to favor the nongraded students to a greater extent. It has been found that nongraded schools tend to produce happier, more independent, and better informed students in an atmosphere which is more conducive to learning and maturation, but it is extremely difficult to demonstrate emphatically that this is in fact the case.

There are many first-person accounts written by principals, teachers, or consultants who have had some experience with specific nongraded programs, and the reporting tend to be selective. A series of surveys found that the vast majority of educators who have worked with nongrading are enthusiastic about it. Most educators reported greater achievement among their pupils, a reduction of discipline problems, greater challenges for gifted students, more enthusiasm on the part of a slower student, and more positive classroom atmosphere. Observational procedures

found that teachers and staff members became more professional in their orientations and much more involved working to ensure that their program met its objectives.

CONCLUSIONS

Given that the graded approach to education contains inherent disadvantages which are well documented, and given that the nongraded appears to surmount these disadvantages and adds a few advantages of its own, it should be consistently found that the nongraded approach is superior in many ways. Observational and descriptive reports of nongraded programs tend to confirm that this is indeed the case.

The conclusive findings indicated that of the studies reported significant differences were found in achievement that favored the nongraded over graded groups.

Advocates of nongrading believe that this approach to curriculum organization and instruction holds more promise than does a graded program for creating an atmosphere in which boys and girls may develop more positive attitudes toward themselves, as well as toward teachers, educational institutions, and learning.

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THE DIFFERENCES IN ACADEMIC ACHIEVEMENTS OF
PUPILS ATTENDING NONGRADED SCHOOLS AS
COMPARED WITH THAT OF PUPILS
ATTENDING GRADED SCHOOLS

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ABSTRACT

The pupose of this study was to investigate the differences in academic achievement of pupils attending nongraded schools as compared with that of pupils attending graded schools.

The research for this study was guided by the following question: Do pupils who are exposed to nongraded programs of instruction achieve academically to a significantly higher level than pupils who follow the traditional graded approach?

After the problem was formulated, relevant literature was researched using as guides the Educational Index, Encyclopedia of Educational Research, Eric Readers Guide, Card Catalog, and Master's reports. This literature was abstracted and organized to provide answers to the research problem.

Most of the studies to date have attempted to evaluate children's performance in the skill subjects, especially reading. There have been some attempts to investigate such important factors as children's self-concepts, attitudes toward learning, and levels of self-reliance.

Of the twenty-two research studies comparing the academic achievement of the graded and the nongraded groups reported in this study, sixteen indicated differences in various areas of achievement that favored the nongraded group; four studies favored

the graded group; and only two revealed no differences between the two groups.

Findings revealed that evaluators who observe the process of education and the classroom atmosphere of nongraded programs are in agreement that the nongraded approach appears to be much better with regard to most of their observational criteria. It has been found that nongraded schools tend to produce happier, more independent, and better informed students in an atmosphere which is more conducive to learning and maturation.

A series of surveys found that the vast majority of educators who have worked with nongrading are enthusiastic about it. Most of the educators reported greater achievement among their pupils, a reduction of discipline problems, greater challenges for gifted students, more enthusiasm on the part of a slower student, and more positive classroom atmosphere.

Overall, it was concluded that a significant difference was found in achievement that favored the nongraded over the graded group.