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ABSTRACT

Thesis

Andrews University

Department of Education

Title: AN ANALYSIS OF THE IMPLEMENTATION OF THE NONGRADED PROGRAM AT
THE NEW PORT RICHEY SEVENTH-DAY ADVENTIST ELEMENTARY SCHOOL

Name of researcher: Erik S. Vetne

Name and title of faculty adviser: Wilfred W. Liske, Ph.D.

Date Completed: August 11, 1974

Problem

Seventh-day Adventist schools have long been dissatisfied with the graded school as an answer to educational organization which would be in harmony with the writing of one of the founders of the church, Ellen G. White. Nongraded teaching seems to incorporate many of the ideas presented in her writings as a guideline for Seventh-day Adventist schools. It was the purpose of the present study to determine the attitudes of parents, students, and board members before and after implementation of a nongraded program.

Method

The parents and school board members completed the attitude questionnaires constructed by Gumper (1971, p. 253-257) at the beginning and end of the school year. The students' attitudes were tested with the Piers-Harris Self-Concept Scale. The results of both of these surveys were tested using a t-test for differences between the beginning score and the end score.

The total enrollment in the school for the study year was 33, and a total of 19 parents were involved in the study. Though not all of the parents and students completed their respective forms, the vast majority in each group returned their survey questionnaires.

Results

There were no statistical differences between the spring and fall results with any of the groups tested. There were slight increases, though, that were not significant.

Conclusions

The attitudes of parents, school board members, and students at the New Port Richey Seventh-day Adventist School were very positive at the beginning of the school year and did not decline during the year. It seems evident that the attitudes toward nongraded teaching expressed here show that nongraded teaching can be utilized to a much greater degree in Seventh-day Adventist schools.

Andrews University
School of Graduate Studies

AN ANALYSIS OF THE IMPLEMENTATION
OF THE NONGRADED PROGRAM AT THE
NEW PORT RICHEY SEVENTH-DAY ADVENTIST ELEMENTARY SCHOOL

A Thesis
Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Erik S. Vetne
August 1974

Approval _____

 

PREFACE

"The education I propose includes all that is proper for a man, and is one in which all men who are born into this world should share. . . . Our first wish is that all men should be educated fully to full humanity. . . so that at last the whole of the human race may become educated, men of all ages, all conditions, both sexes and all nations. Our second wish is that every man should be wholly educated, rightly formed not only in one single matter or in a few or even in many, but in all things which perfect human nature. . ."

---John Amos Comenius
The Great Didactic, 1632

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CHAPTER I

THE PROBLEM

Statement of the Problem

Seventh-day Adventist schools have long been dissatisfied with the graded school as an answer to educational organization which would be in harmony with the writing of one of the founders of the church, Ellen G. White. Typical of the statements made by her is that "each is to improve his talents to the utmost. . . in God's plan there is no place for selfish rivalry" (Ed, 1903, p. 226). Another statement shows that "Cooperation should be the spirit of the schoolroom, the law of its life" (Ed, 1903, p. 285).

The nongraded school seems to provide a better setting philosophically and educationally, but there seems to be an inadequate volume of literature on implementation of such programs into small, multiage, multi-grade, Seventh-day Adventist elementary schools. The purpose of this study was to prepare such a model.

Some Basic Problems

Melody sat quietly in her seat as the other children entered the room. She ignored the talking and social contentment of her peers. Being the first day of school for the teacher, and the first day of the new school year for Melody, both seemed somewhat lost. Yet, the teacher had a chance for recovery; Melody did not. In the teachers' lounge, the teacher was later informed that Melody had been retained in the first and again in the

third grades. Now she was in the sixth grade. Her lifeless, listless school behavior forever answered her former teacher's questions as to the value of retention. Failure was now her way of life.

Jim and John were twin brothers in the same class as Melody, but their behavior presented a different problem. As they entered class, pushing and punching one another, the teacher noticed that these boys seem to have exceptional ability. But as the day and year wore on, brilliance appeared only in the areas that appealed to them most, creating problems and general mischief. With very little effort academically, their report cards showed average and above work. They, too, had learned their lesson well: do only what you really have to do.

These examples show some of the basic problems that appear in the typical graded school. Ellen White (CT, 1913, p. 177) counseled long ago that the graded school may constitute a real hindrance to the pupil's progress. Goodlad and Anderson (1963) and others have identified certain basic problems that the graded school encounters. These problems arise because the graded school is based on invalid assumptions. These include:

- (1) That all children of a given chronological age are able to perform at about the same level of competency. (Sowers, 1968, p. 2). Intelligence and achievement test data gathered by Goodlad and Anderson (1963, p. 4-29) show that children entering the first grade may differ in mental age by four years, and after enrollment in the first grade the achievement spread begins to approximate this mental age spread. "As these children progress through the grades, the ability and achievement ranges become wider and wider. There is a four-year spread in overall achievement in the fourth grade, . . . 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 label is meaningless."

(Gumper, 1971, p. 31; Goodlad, 1963, p. 274, 275)

- (2) Students progress through a series of developmental and maturation stages that are alike and fall at the same time with all children. Piaget (Flavell, 1963, p. 261-266) demonstrates that intellectual growth follows a sequential growth pattern that is very much alike in all children, but children arrive at these stages at various times in their lives. Certain ideas or concepts can only be understood when the child is at the stage that is proper for that kind of learning. Therefore, when students are "lockstep" promoted into the next grade, many will not be ready for the material presented, and others will be past the developmental stage where the material could be presented with optimum efficiency.
- (3) Students learn all material at the same rates. Goodlad (1963, p. 276) stated that children in fact, learn material at differing rates. Some children progress at greatly different rates, so that one might be a math whiz and reading flunkie.
- (4) Some students will fail at school. The concept of failure is a built-in one with the graded school. Schools subject the child to the knowledge rather than letting the knowledge be subjected to the child. The subject matter in the graded school, must be learned. Any child not able to cope with this is "retained" in grade or "lifted" at the discretion of the teacher. It has been estimated that close to twenty percent of all children in schools in the United States expect to experience failure (retention) at some time in their school prior to graduation, (Thomas, 1965,

p. 92; Clark, 1959). At a rate of \$450 per year to educate the student, this costs 450 million dollars per year for the approximately one million children who are retained in grade each year (Dispasquale, 1964, p. 130). Numerous articles document the fact that the practice of nonpromotion is almost entirely negative in its result (Humphreys, 1965; Thomas, 1965; Noval, 1965; Goodlad and Anderson, 1963). There is also evidence to indicate that there is a detrimental effect on promoted students in areas where nonpromotion is practiced heavily (Boyd, 1965, p. 96). This list of the effects of nonpromotion is by no means definitive. A quick check of educational indexes reveal that there are numerous articles criticizing this practice.

- (5) Knowledge is easily packaged and delivered through the graded system. The truth lies in the realm of continuity. Knowledge is always continuous, ever having additions and deletions through man's ever-abiding search for new knowledge.
- (6) Children must be made to learn in order to learn anything. After a child has gone through babyhood, learned to do some of the most difficult tasks of his entire life, specifically that of communication and coordination of his bodily activities, educators feel that he comes to a point where he no longer wants to learn anything that will be for his best interest. Schools then utilize a system that forces the child to compete with his peers for artificial merit rewards that many times have no bearing on what the child really needs to cope with the world outside of the school building.

The purpose of this study is to seek solutions to some of the

problems inherent in the graded school. Nongraded education proposes that these problems can be overcome, in part at least, by adoption of its methods and philosophy of education. The small, church-affiliated school seems to be a natural choice for this type of education. Generally, the student-teacher ratio is less than in larger systems where teachers have only one age group to a room. Teachers in smaller situations seem to be more independent of the education "establishment" and its education policy-regulating machinery. Therefore teachers in this kind of situation are more apt and ready to attempt such methods of teaching in order to better meet the varied needs of their students.

With this approach, teaching in Seventh-day Adventist schools would more closely approximate the counsel given by Ellen White.

The system of grading is sometimes a hindrance to the pupil's real progress. Some pupils are slow at first, and the teacher of these youth needs to exercise great patience. But these pupils may after a short time learn so rapidly as to astonish him. Others may appear to be brilliant, but time may show that they have blossomed too suddenly. The system of confining children rigidly to grades is not wise. (White (CT), 1913, p. 177)

Before the student there is opened a path of continual progress. He has an object to achieve, a standard to attain, that includes everything good, pure, and noble. He will advance as fast and as far as possible in every branch of true knowledge. (White (Ed), 1903, p. 18)

So long as the great purpose of education is kept in view, the youth should be encouraged to advance just as far as their capabilities permit. But before taking up the higher branches of study, let him master the lower. (White (Ed), 1903, p. 234)

Definition of Terms

Graded School: A school plan that refers to a course of study that is organized into units having one-year (ten month) time restrictions on each "grade" unit. A child does not normally move into that unit until he is the correct chronological age for that unit as established by law. Each child is expected to complete one unit each year, and failure to gain

the knowledge essential for that unit may result in retention in the unit, and repetitition of all unit material for all subject areas.

Nongraded School: There are many varieties of nongraded schools. Goodlad and Anderson (1963, p. 44-101) spend many pages describing the various types of nongraded programs available. For the purpose of this study, nongradness refers to a school plan that has a course of study organized into levels having flexible completion schedules for each of the children working within any given level. A child may move into the next level at any time during the academic year. Ideally, all forms of grade labels are removed from the school, but for the first years in operation, this will be difficult to achieve.

Elementary Grades: For the purpose of this study, these will be thought of as grades 1 - 8. There are numerous other arrangements in effect today, but this is the typical arrangement for the small Seventh-day Adventist elementary school, so that will be the definition for this study.

Level: This is a learning segment within a subject area which must be mastered at a set minimal competence in order to progress to the next level. These contain many segments of the same subject area, and are covered and further defined in Chapter III of this study.

Objectives

It was the purpose of this study to (1) formulate a model program for small, multiage Seventh-day Adventist elementary schools, (2) formulate a set of objectives in the various areas congruent with SDA education and the nongraded concept, (3) implement such a program for use at the New Port Richey Seventh-day Adventist Elementary School, New Port Richey, Florida, and (4) evaluate the implementation and measure the acceptance by students, parents, school board, teachers, and Florida Conference Depart-

ment of Education after one year of operation. Achievement test results for the beginning and end of the school year are presented, but achievement gains are not the prime criteria for evaluation.

Experimental Development

Behavioral Objectives were adopted for an unspecified number of levels of learning within each of the subject areas. These were adapted from Flanagan's Behavioral Objectives: A Guide to Individualizing Learning by comparison with other programs, conference policies, and the counsels of Ellen White. The specific competence within each level of learning was determined with the aid of a Behavioral Objective guide (Flanagan, 1971), and identified, some with the use of units, and others with assignment sheets using standard texts. There was some flexibility and student choice within each of these types of levels. Each unit was composed of basic new materials with review and drill material for concepts already introduced. Additional activities for individual development and creativity were given as a part of the regular school program. The reporting methods used were determined in counsel with the school board and the Florida Conference, and will be discussed later.

Attitude questionnaires were given to parents, Conference Educational Personnel, and students at the New Port Richey Seventh-day Adventist Elementary School at the beginning and at the end of the implementation year. Students enrolled in the New Port Richey S.D.A. Elementary School were given the Stanford Achievement and the Otis-Lennon Mental Abilities Test at the beginning and at the end of the school year. Also given at these times was the Piers-Harris Children's Self-Concept Scale. A comparison was then made for each student as to achievement and self-concept changes.

A direct evaluation of student work was made by use of checklists and

comparison of work with the behavioral objectives that applies to the work that was being done by the student. This was then used in connection with the parent-teacher conference. No report cards were issued during the year, but parent-teacher conferences were held at intervals five times during the year. A year-end descriptive analysis of the student's progress for the year was presented to the parents and a copy filed in the cumulative folder. The stated hypothesis in each case was that there was no difference between the fall score and the spring score.

Limitations of Study

For the purpose of this study, only Language Arts, Science, Mathematics, Social Studies, and Bible were used. These were not the only things that were studied in the school during an average day. A music program involving most of the students in a choral situation was conducted through the church. An active art program utilized the use of experiences in many forms to make school and learning something to look forward to each day. Art was often interwoven with other academic areas, helping to make that subject more interesting and fun. Physical education was conducted on the basis of a fitness and game-activity program.

Another limitation in the results of this study occurs as a result of the Hawthorne effect. This states that any group that knows it is involved in an experimental program or a special program will have a direct bearing on the results.

The last limitation is the small number of students used in the study. With such a small number of students, the results of a study such as this cannot have as great a significance as one that would involve much greater numbers of students or schools.

Organization of the Study

Chapter I - This chapter deals with the basic reasons for the study. The purpose and rationale of the study are presented. The objectives and program development are stated briefly, together with the limitations of this study and the organizational outline.

Chapter II - The Second Chapter deals with the research that has been done in the field of nongraded teaching under the title, "Review of Literature". Within this section, history, advantages, curriculum change, implementation of change, curriculum pitfalls, and current adaptations of nongraded teaching are dealt with.

Chapter III - This part of the study deals with the design used. This includes the goals and objectives for subject areas, methods, and instruments used in evaluation.

Chapter IV - Here is presented the program as it was implemented in the New Port Richey Seventh-day Adventist School with a description of the school and a short history. A brief implementation log with evaluation data and annotations explains the time factors for implementation at this school.

Chapter V - This final aspect of the study is an analysis of the program as to operation, implementation, and future possibilities for this kind of a program in Seventh-day Adventist education. Definite suggestions are given for ease of implementation and pitfalls as discovered in the study program are shown. Also presented is a summary of the study.

CHAPTER II

REVIEW OF LITERATURE

A Short History of the Nongraded School

Some educators today feel that the nongraded school is a new approach to the education of the young. It is, in fact, the graded school that is the new idea in education, being less than 100 years old. Nongraded education has existed as long as there have been students. Throughout the ages, teachers have taught to the needs of the students and have tried to make teaching relevant to what students could learn at their developmental stage. But with the graded innovations in school organization that took over this country's education, learning began to have time and age limitations that had the effect of making the child conform to the curriculum rather than shaping the curriculum to the needs of the child.

Later, as a reaction to the graded school, progressive education came into being. Then as a reaction to progressive education, graded schools again began to flourish. Now graded schools are again being questioned severely (as documented earlier) and nongrading has taken hold on the imagination of many educators. According to Steere (1972, p. 709), this movement reached its highest excitability stage around 1965. Yet with the continual emergence of new research on nongradedness, one is left with the impression that nongradedness may not be discarded as quickly as many other innovations that have been in the field of education over the last

century. (McLoughlin, 1968, p. 250).

Goodlad and Anderson (1959) probably were the authors most responsible for the new emergence of nongradedness in America's schools. Prior to this time, there seems to be a smattering of literature available, but there was no unified study into the nongraded approach, or into the reasons that the graded system should be abolished in favor of the nongraded. With the research done by Goodlad and Anderson (1963) in the area of achievement, I.Q., and discipline in the graded school, documentation of the effects of the graded school upon the mental health and academic achievement of the student is shown.

Modern nongraded schools, as thought of now, are really quite recent. Milwaukee has the oldest nongraded system in operation, with that being established in 1942 (Steere, 1972, p. 709). The analysis of this and other nongraded programs is far from exhaustive. Hopkins (1965, p. 207), McLoughlin (1968, p. 248), and others have decried the lack of good evaluations of nongraded plans. Of the plans that have been studied, the writer found that there was a lack of conformity in definitions and methodology from one program to another, so it was difficult to make valid comparisons of programs. Many nongraded plans are little more than graded programs with a change in labels (Morris, 1971, p. 622).

Vogel and Bowers (1968, p. 13-33), in reporting the general results of other studies found eight investigators with evaluations that favored the nongraded school -- Backroth (1959), Buffie (1962), Halliwell (1963), Hart (1962), Hickey (1962), Hillson (1964), Ingram (1960), and Skapski (1960). Four reported advantages for pupils in graded programs -- Carbone (1961), Enevoldsen (1961), Hopkins (1965), and Moore (1963). Others have reported since that time and show that there may be little, if any academic difference, with no evidence favoring either of these two educational plans --

Jones (1967), McLoughlin (1969), and Thompson and Thompson (1965).

Advantages of the Nongraded School

Ever since its inception, the nongraded school has shown certain tendencies toward more humane education. Its proponents have given many qualities to nongradedness, some of which are summarized below:

(1) Each child is helped to work at his own level of readiness. Therefore he is more likely to have success experiences with his work. 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 a vague understanding of the previous skills. After an extended exposure to this practice, many become discouraged and confused. In a nongraded program, a child does not move on to more difficult topics until he has had reasonable success with the preliminary work. Thus there are fewer gaps in his learning and less reason to become confused.

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

(3) Because of greater opportunity for children to have success experiences with their work, the pupils may develop a more favorable attitude towards learning, and toward educational institutions and teachers.

(4) There are fewer gaps in instruction for especially bright children; even though they progress more rapidly, they do not skip the work of a given grade. Because these children are helped to progress to work commensurate with their ability, they may find school a challenging experience.

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

(6) 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.

(7) The program provides for the wide range of differences which exist between children, and also for differences in an individual child's performance from one subject to another. In addition, it provides for the fact that the child's rate of learning varies from one period to the next as he is growing. At some times, he may make rapid progress whereas at other times he may progress more slowly or remain temporarily on a plateau.

(8) Children may develop more self-reliance. Since instruction

is conducted at different levels for different children in the same classroom, the teacher will be unable to work directly with all of the children all of the time. While he works with a few, the rest must proceed on their own with various activities. More responsibility is placed on the learner, and there is reason to believe that this may foster the development of self-reliance.

(9) Since the children are not all competing against a uniform standard, it is possible that less emphasis will be placed on comparing how well children measure up to such a standard. Instead, more emphasis can be placed on the progress and effort which an individual child shows regardless of his level.

(10) Since none of the work in the skill subjects is reserved for a particular year or time, teachers should feel less compelled to push slower children through grade-level work regardless of their lack or readiness. For the same reason, teachers would have no reason to fear that the most capable students, by doing advanced work, would encroach on material reserved for the next teacher.

(11) Any serious attempt at nongrading will necessitate a reappraisal of what should be taught and what methods of instruction should be employed. Hopefully, such a reappraisal would result in an improved educational program.

(Tewksbury, 1967, p. 23-25)

In addition to these, Dipasquale (1964, p. 130), as stated earlier, cites the advantages that nongrading would save money because of the reduced number of retentions due to failure at a given grade level.

Curriculum Change

Whatever the advantages of any educational curriculum philosophy, there are many factors that effect how changes might take place within the realm of the educational world. Oliver (1965, p. 199) acknowledges some of these when he states:

Decisions about a functioning curriculum are not made in the Ivory Tower of Curriculum Theory but are pounded out on the Forge of Give-and-Take. Laws and regulation state what must or must not be included in the program. Voluntary association memberships and "suggested" outlines, while not laws, have the effect of laws. Broad social movements, desires of groups, and demands of influential individuals in the community mold the curriculum. Many factors from within the education profession itself will be curriculum determinants.

Another author in the curriculum field, Lowell Keith (with Blake

and Tiedt, 1968) generally identify that the three great areas that affect change in the curriculum are: environment, people, and educational movements. Within the context, these authors divide these into influences that can be more easily delineated: historical, psychological, sociological, physiological, economic, and ethnic.

A problem that one often encounters in working with groups that are engaged in curriculum change is that curriculum, as Kimball Wiles put it (1963, p. vi), means different things to different people. It is an abstraction, a vague term that may or may not include much of what schools are actually engaged in.

Yet, even with this inherent problem, many groups of people effect the state of the curriculum. Teachers, parents, community leaders, politicians, get concerned over what is happening in schools and raise their voices in laude or condemnation. The business community states that they want products that they can use as a result of school "training". Society makes its own demands upon the curriculum, with survival of the individual and society itself being the ultimate resultant goals. And lastly, the accumulation of new knowledge affects the curriculum that is present in our schools. Whether this new knowledge is in the form of subject matter or in the methods of teaching, each has its own effect.

Implementation of Change

Granted that a school has decided that a change is in order, the school then must decide what is necessary to achieve that change with the least number of problems. Gumper, Meyer, and Kaufman (1971, p. 233-242) identified the basic ingredients for change. They could be summarized as follows:

Leadership Qualities. A school would need someone who would know

where to go and how to get there, someone inspired and with the necessary expertise. A school would also need the supportive noninterference of the school board for the duration of the implementation period.

Teacher Qualities. Teachers would have to be competent to handle the changed organization. Non-qualified teachers would have to be screened and eliminated if detrimental to the program. Teachers that are unable to adjust to the new program should be transferred to a graded organization.

Intensive In-Service Education. This must become a permanent, planned, and routinely utilized part of the program. Within the Seventh-day Adventist school system, this should be allowed and accomplished at the state or regional level, since in most cases schools are just too small to organize something of this nature themselves.

Planning and Evaluation. This is a must to any program that is to be successful, but is especially necessary to nongraded teaching. The work of the student must constantly be analyzed and planned for. Program goals must be formulated and articulated. The evaluation of the program and the student must be objective, setting aside all bias. Then with the evaluation in hand, one must have the means of implementing the improvements that the evaluation demands.

Sufficient Time to Mature. To judge any program as to effectiveness after just one or two years of operation is not justifiable in most cases. Any program that is truly innovative in nature will develop problems that take time to iron out, so it seems

essential that the program be permitted to operate for at least three to probably five years before it can be fairly evaluated. The supportive noninterference in a program of this type is many times difficult to obtain, but with patience, this appears to be warranted.

Resources. A school must first have sufficient personnel to implement any program. Finances will of course be a factor, but with nongraded teaching, this does not need to be much additional (Gumper, 1971, p. 261-266). Then, in the final analysis, and probably one of the most important, parental and community support is a definite necessary condition for rational change in the curriculum of an educational unit.

Pitfalls to Avoid

There are problems that come up with any program, but it is best to avoid as many of these as possible. Pitfalls can be seen quickly when one studies the ingredients for change as listed in the previous section. One could enumerate the following listing as possible areas of danger:

1. Lack of knowledge of nongradedness and its implications.
2. Lack of adequate model to follow.
3. Lack of sufficient planning.
4. Lack of community and parent involvement.
5. Lack of available literature on nongradedness.
6. Lack of a visitation program to successful nongraded schools.
7. Lack of proper In-Service training for teachers.

This list is by no means a complete enumeration of the problem areas, but it is a guide. This study, hopefully, illuminates further

in the area of the problems of implementation and how some of these can be avoided.

Whither Now?

Research shows that there is a great area of diversification in nongraded approaches as well as in graded approaches. Many programs have adopted the best of the two systems and have tried to make them work together in a meaningful way by going to nongradedness in some of the subject areas, yet remaining with the graded program in other areas. Gradedness and nongradedness in their true forms may have certain characteristics, but to contain either within the narrow confines of a specific definition is impossible. A reasonable way to visualize these concepts is to say that they are the opposites on a continuum, with the area between them containing various degrees of both, and few programs, if any, completely at either end.

This study purports to construct a model for Seventh-day Adventist multigrade schools that lies somewhere in the middle of the two extremes on the nongraded continuum. Within the scope of literature in this field there is ample groundwork laid to set the stage for a Seventh-day Adventist model that is in harmony with the educational concepts of the church and the educational community.

CHAPTER III

EXPERIMENTAL DESIGN

Goals

As the New Port Richey Seventh-day Adventist School ventured into a nongraded program, it became apparent from the beginning that definite direction was needed. The educational goals for the school were set up in the following manner:

1. Behavioral Objectives were adapted from Flanagan (1971, Vol. I-IV) (see appendix) and used as a basis for the general academic program.
2. Program was written up in proposal form and presented to governing organizations for approval. Approval was obtained readily.
3. Behavioral Objectives were interpreted in terms of specific levels with regard to specific skills at a given level. This was done by comparison of graded textual material available and what was required at any specific level. Samples of these appear in the appendix.
4. Assignment sheets and skill checklists were constructed from the information given in the skill level goals. Because of the complexity of the program, only those levels in actual use were constructed as a need was presented.
5. Students were tested and grouped into their skill achievement

levels according to results showing their skill mastery.

6. Students were allowed to progress at an independent rate with mastery of the material of the level as the goal.

Program Evaluation

For evaluation of the overall acceptance of the program, testing and questionnaires were used with the groups that were involved in the school program. The following describes the evaluation techniques used for each group:

A. Student Acceptance

The acceptance of the students was measured in the following ways:

1. Achievement was measured at the beginning and the end of the school year with the Stanford Achievement Tests.
2. The self-concept of each student was measured with the Piers-Harris Children's Self-Concept Scale at the beginning and end of the school year. The total net gain or loss in terms of total positive score was measured. A T-test comparison was made and the rejection level was set at 0.05. An hypothesis was presented that there should be no change in the fall and spring scores.

B. Parental Acceptance

The acceptance of the parents of the school children was measured by the use of an instrument designed by Gumper, et. al. (1971) (see appendix). This questionnaire was used at the beginning and at the end of the school year, and a question by question comparison was made of the results at the beginning and the end of the school year. These questionnaires were kept anonymous, so only an analysis of the number

of responses to any single question was possible. A T-test was used to compare these results with rejection level at 0.05. Again the hypothesis was stated that there would be no change in the scores.

C. Acceptance of the Governing Organizations

The governing organizations for the New Port Richey Seventh-day Adventist Elementary School denoted their acceptance of the program in the following manner:

1. The school board filled out the same questionnaires used by the parents at the beginning and at the end of the school year. The analysis of the results were done in the same manner, using the same hypothesis and rejection level as with the parents group.
2. The Office of Education, Florida Conference, submitted a written analysis (see appendix) of the program as outlined and implemented for New Port Richey.

Overall Evaluation

The total program was evaluated by comparison with the results that were presented by the Institute for Research on Human Resources, Pennsylvania State University (Gumper, et. al., 1971).

CHAPTER IV

MODEL SCHOOL AND PROGRAM RESULTS

School Description

New Port Richey is a growing community located about forty miles north of St. Petersburg, Florida. The community is experiencing growing pains in all areas. The population has doubled twice in the last ten years, and it appears it probably will do so again soon. The Seventh-day Adventist Church serving the area is also experiencing similar growth. In 1968 when this church was just starting, the membership was about 35, but at the end of 1972, the membership had grown to 166. Though some of this was in the form of new converts, the most was as a result of Adventists moving into the area.

Likewise the school started as a one-teacher school operating out of one of the church Sabbath School rooms. This soon grew to two teachers and a separate school plant was built adjacent to the church. As the school is relatively new, equipment available for instructional purposes had been limited. With the start of this nongraded project, the school board authorized the purchasing of additional equipment so that the following was available at the beginning of the school year: two record players, two cassette recorders (one portable), spirit duplicator, Thermo-fax copier, filmstrip projector, reel tape recorder, 16mm movie projector, and outdoor play equipment. The school plant itself, though relatively new, should have been larger. The rooms were designed to accommodate about

fifteen students each, but enrollment was such that there were sixteen or seventeen in each room. Each room was equipped with adequate storage facilities and a sink. Carpeting was on the floors in each room. The general appearance of the school and the rooms was a pleasant one. The outdoor facilities included a swing set, a merry-go-round, and a large monkey bar set. Through the efforts of the school board chairman and the church as a whole, the entire back yard of the school was seeded about the middle of the year. This then provided an adequate area for baseball, football, soccer, or other field activities. A cement slab with one basketball goal was also added during the year and put to good use by the school children.

The New Port Richey Seventh-day Adventist Church has had strong attitudes towards Christian Education for a long time as expressed in their early establishment of a "church school." The founders of this church elected to start a school about the same time that the church started with the belief that a church will grow only as it educates its own children. Strong fundamentalistic attitudes have also guided the school in its search for educational programs.

The establishment of the nongraded program at New Port Richey was accomplished in the following sequence:

Implementation Log

Five Months Before -	1. School visited and initial talks with school board and officials concerning school program. 2. Inventory of school equipment and materials.
Three Months Before -	3. Initial presentation of program of nongraded teaching given to School Board and Conference Office of Education and Andrews University Department of Education.

4. Started setting up budget for the coming year (school had not operated with a budget until 1972-73).
 5. Ordered or purchased additional equipment as authorized by School Board for use for the next year.
- Two Months Before -
6. Final approval given by School Board, Office of Education, and Andrews University.
 7. Set up the academic program as to the levels of achievement.
 8. Double-checked textbook order list as left by previous teacher.
 9. School Board approved budget.
- One Month Before -
10. Approval given by Office of Education for oral Parent-Teacher Conferences in lieu of report cards.
 11. Home and School Association meeting arranged for to introduce the nongraded plan to New Port Richey parents -- to be held during the first week of school.
- Two Weeks Before -
12. Teachers arrive at school, prepare classrooms, etc.
 13. Visit parents of children enrolled in school.
- First Week of School -
14. Testing to determine the level to place a student in.
 15. Home and School meeting to explain the total nongraded program as was adopted at New Port Richey (this had already been presented during parent visitation, so for most of our parents, this came as a good forum to voice their fears, and thus allow the teachers insight into possible problem areas).
- Second Week of School -
16. First implementation of the use of levels with students.
 17. School Board meeting with program and budget the major issues.
- Third Week of School -
18. Parent-Teacher Conference to explain program and levels.

Fifth Week of School -	19. Standardized Testing Program.
Ninth Week of School -	20. Parent-Teacher Conference (all parents).
Eighteenth Week of School -	21. Second Parent-Teacher Conference. (for all parents)
27th Week of School -	22. Third Parent-Teacher Conference. (voluntary for parents that wanted to come, but all showed up.)
35th Week of School -	23. End-of-year testing program.
36th Week of School -	24. Last Parent-Teacher Conference. (Written report given to parents stating results of Standardized testing and the overall gains made during the year.)

Implementation of the Nongraded Program

As has been outlined in the implementation log, the steps that were followed allowed the program to gain acceptance by the groups that were involved with the school. The presentation of this concept at this school was one that involved a thorough philosophical preparation through the educational literature and the literature of the denomination, with particular attention to the teachings of Ellen White. Thus prepared, approval for the nongraded program was easily granted.

After presentation to the governing organizations, the parents yet had to be convinced, so as indicated in the log, a visitation program and an informational Home and School Association meeting gave parents an understanding of the program to be implemented. These two approaches resulted in almost complete support for the program. By the end of the year, there were no parents that expressed disapproval of the program, and the questionnaires verified this.

As indicated in the previous chapter, the time before school was also spent in constructing the levels that were to be used with the students. This was a very time-consuming job, and so only rough construction was done

before school. After the testing program, and children had been placed at appropriate levels, then these levels were refined into usable material.

The School Year

The actual learning levels, and the material associated with each one of these, were constructed after the placement tests were given. Then each one that was needed was constructed, and during the year, new levels were added as needed.

The learning levels were constructed in such a way that students may be on a different level for one subject than another. Each child was independent to other children in the classroom, but in practice, children tended to stay together in their work. In this way, they helped each other with their work and advanced with their friends to new levels.

Parent Conferences

The final parental conference was the only conference that presented the parents with a written report, and that being a summary of the child's growth for the school year. This included a report on final testing results and the growth patterns that showed up, the levels done and the recommendations for the coming year.

Reporting Student Progress

Regular conferences were held four times during the school year at nine week intervals starting with the second week of school. This first conference was to report on the testing done during the first week and the level at which the child would be placed. The reaction to this kind of conference was very favorable, and even though many children were placed at a level below their supposed grade level, there were no unfavorable responses by parents.

The other conferences took the format of an oral conference with some of the student's work being presented, his work at his level being reviewed, and recommendations for change being instituted where necessary. In some cases, students were changed from one level to the next at these conferences, or in a special conference with the parents of that child. Whenever a child had to be changed from one level to another due to incorrect placement, the parent was called in for consultation so that he would be aware of the status of his child. For regular progression, at the end of a level up to the next level, a notice was sent home that the child had completed one level and would be starting the next one.

With the preceeding outline of parental conferences, it can be seen that one essential element of the program at the New Port Richey School was that of constant parental contact. The school was operated with the realization that parents had the right to as much information as possible about their children. There was little that was sacred, including the results of Standardized testing. Though the actual scores were not given for Standardized tests, the results were discussed and compared with national averages for children of a comparable age.

Financial Considerations

With any new program, the needs of that program needed to be studied in relation to what the school had currently available. With the New Port Richey school, the writer undertook a study of the facilities of the school about five months before the school year. After study of the prospective needs of the program, as well as the general needs that should be met for any school, suggestions were presented to the school board to purchase additional supplies and equipment. These consisted of a thermal copier, a spirit duplicator, an overhead projector,

and two cassette tape recorders. This equipment, with supplies for operation for the school year totaled a little over five hundred dollars. Any of these would have been a blessing to any school program, but were essential to the smooth operation of a student-need centered program such as the nongraded program as operated at New Port Richey.

Program Evaluation

For evaluation of the overall success of the program, two basic methods were used, testing and survey questionnaires. The primary purpose of this study was to observe the degree of acceptance or nonacceptance of the nongraded program by the various groups associated with the school. The following describes the evaluation techniques used with each group and the results obtained:

A. Student Acceptance

The acceptance of the students at the New Port Richey School was measured indirectly with the following tests:

- (1) The Piers-Harris Children's Self-Concept Scale
- (2) The Stanford Achievement Test

The results obtained from the Piers-Harris Scale are shown on Table 1. This test can be used to measure attitudes in several specific areas, but for this study, only a total score was recorded and used. This score reflects how the child feels about himself and how he relates with others or the situation in which he finds himself. As was shown by Gumper (et. al. 1971, p. 215, 216), a decrease in self-concept is expected during the school year, and that is also what the New Port Richey School experienced. Yet this decrease was not statistically significant.

The Stanford Achievement Test was given also at the end and beginning of the school year even though achievement was not a criteria of this

Table 1

Changes in Attitudes Toward Self

Total Average Scores				
Fall	Spring	Average Change	t	p.
47.45	45.85	-1.60	0.25	NS
N = 29	N = 26			

(Significance Level 0.05)

Table 2

Parental Attitudes Towards Nongraded Education

Total Average Scores				
Fall	Spring	Average Change	t	p.
87.5	92.3	+4.8	1.28	NS
N = 17	N = 15			

(Significance Level 0.05)

Table 3

School Board Attitudes Towards Nongraded Education

Total Average Scores				
Fall	Spring	Average Change	t	p.
88.9	91.7	+ 2.8	.97	NS
N = 7	N = 6			

project. The average growth as measured by these tests over the period of the school year was 1.2 years. This is also not statistically significant. But it does seem to show that the methods and teaching used during the experimental year did not impair the learning process when compared to normal growth of students on a national average.

B. Parental Acceptance

Parental Acceptance was measured by the use of a questionnaire developed by Gumper (et. al. 1971, p. 253-257) and used by permission. The results of this questionnaire are presented on table 2. A total score of 120 was possible with a neutral point being 60. Though there was a slight gain over the period of a year, statistical analysis shows this to not be significant.

Before the questionnaire was dispersed to the parents in the spring, they were visited and had been present at a Home and School Association program where the entire nongraded program was discussed. It is probable that parent awareness at the beginning of the year contributed greatly to the high scores on the questionnaires at the beginning and thus blocking any noticeable gain in scores over the year.

C. Acceptance of the Governing Bodies

Acceptance of the nongraded program at New Port Richey by the local school board was measured in the same way as the parental acceptance. The same questionnaire was used because most of the questions could be answered by the school board with the attitude that all of the children in the school were under their jurisdiction. The scores of the school board averaged higher and the range of scores was much narrower, indicating that the general opinion of the board as a whole was more unified than that of the parents.

The average of the fall scores was 88.9 and in the spring, 91.7. The t value was thus considerably less than that of the parents score, showing a nonsignificant value for a change in attitude over the year toward the nongraded program. In both fall and spring, the figure was considerably more positive than the neutral of 60.

The evaluation of the program by the Florida Conference Office of Education was in the form of a written evaluation that is included in the appendix of this study. Again, the evaluation shows that the Office of Education was pleased with the implementation of the program that was witnessed at the New Port Richey Seventh-day Adventist School.

Summary

In the evaluation of the program at New Port Richey, the measurement instruments used showed no significant differences in any of the fall and spring results. With the students, the expected gains were made in achievement. The attitudes of the parents and school board were favorable to the nongraded program before school, and after one year of operation, the attitudes were still very favorable, being just slightly more favorable than in the fall. But these results were statistically not significant. The Florida Conference Office of Education also expressed approval of the program as instituted at New Port Richey after one year of operation.

CHAPTER V

PROGRAM ANALYSIS

Summary

The introduction of the nongraded program at the New Port Richey Seventh-day Adventist School, and the reaction of parents, students, and governing bodies, was the subject of this study. The people connected with the school were told early in the summer that their school would be using a nongraded approach the following school year, and a program of positive education was begun. Attitude questionnaires were given at the beginning and the end of the school year.

The results of the questionnaires showed that there was no significant difference at a significance level of 0.05 between the results of the information taken at the beginning and end of the school year in any category. The achievement tests showed that the students involved in the study achieved at a level considered normal for a school, with 1.2 years growth being the mean growth for the 29 students tested. School enrollment was 33, but considering transfer students, and absentees that were unable to make up tests, the number of students with reliable results was 29.

Conclusions

The first conclusion that can be drawn from the data is that the groups of people associated with the school had been well prepared for

the nongraded approach prior to the opening of school. The data showed good acceptance of the program both before and after implementation, indicating also that there was satisfaction with the job that was done as well as the program approach.

Because of the overall acceptance of the ideas of nongraded teaching, it might also be concluded that the constituents of the school were "ripe" for such a program. Together with the background information provided, the people involved were themselves somewhat dissatisfied with education as it existed, and thus were ready for the change psychologically.

The time schedule as used for program at New Port Richey proved to be too close. As a result, the following schedule seems to be one that could be used effectively in a program to implement nongrading into a school:

One Year Before -

1. Proposal presented to local school board
2. Proposal presented to Department of Education for Conference approval

6 - 8 Months Before -

3. Parents and Board Committees set up to study and refine the proposal
4. Budget Committee established to work out school budget for coming year

Five Months Before -

5. Budget studied and approved by local school board
6. Committee study physical plant of school to recommendations of equipment or improvement of facility with special emphasis on how the facility relates to the new innovation
7. Full approval should now have been worked out from the School Board and the Department of Education at the Conference level

3 - 4 Months Before

8. Plan special work for remedial or problem students
9. Instigate a parent education program to help them to accept the innovation
10. Start making specific plans as to the academics of the approach used in each of the subject areas
11. Set up budgetary records and reporting procedures to be used
12. Determine the pupil progress reporting procedures to be used
13. Start parent information meetings

2 Months Before -

14. Make sure materials have been ordered (texts, workbooks, paper, art, supplies, etc.)
15. Continue academic planning
16. Review plans with Educational Department of local conference
17. Present final plans to School Board

1 Month Before -

18. Make sure material has arrived
19. Visit prospective and returning students
20. Finish planning of academic program as to procedures to be used

1 Week Before -

21. Get school ready for students
22. Have meeting with parents and allow time for questions and answers (hopefully)
23. Have all material in readiness for students to make the start of school as smooth as possible

1 - 2 Weeks After Start of School

24. Have Home and School Association Meeting to discuss the new program and how it will affect the parents with a question and answer period at the end of the program

Implications

The nongraded or continuous progress program is one answer that seems to fulfill the educational objectives that have been given Adventist schools. It has, with proper groundwork, the ease of structure that allows it to be implemented with minimal problems and opposition. It allows for individual differences that the current graded programs do not, and thus it is easier to convince parents of its worth.

Though it represents more work on the part of the teacher, it also gives greater satisfaction in knowing that he has done the best that he knows how; he has given the child what is needed most by that child, and he has given the parent what they are paying for. The increased work load on the part of teachers is not one that is just for the present, but for the future. The continuous progress program will continue to demand more time, more effort, and greater personal professionalism. Teachers can no longer view themselves as guides through specific textbooks and workbooks, but as guides through the whole educational experience of each child. Theirs becomes the responsibility to determine the future, to a large extent, of that child in their care, for now he is being treated as an individual person, with learning differences, likes and dislikes, and vast potential yet untapped. Undoubtedly the teacher may have greater work and responsibilities under a nongraded program, but he also has far greater rewards.

The parent, also will have greater opportunities with their child going to a nongraded school. He will have greater knowledge of the child's capability and achievement, and thus will be better able to guide with proper stimulation at home.

For the school, the implications are a little more obscure. Though the advantages of the nongraded program may be laid out carefully, if the school is operating a successful graded program, the school may be reticent to change. In cases where the school has not been operating successfully, change would come more easily, because the parents and school board are ripe for change for the better. It has been said that a school in this condition can only change for the better.

The average school with an average program would find that the nongraded program would be an asset in the total curriculum of the school, but may not wish to change for fear of doing something that would not be successful. There seems to be a greater fear of the unknown on the part of schools that operate an average program, than ones that operate a highly successful or highly unsuccessful one. Thus schools that would be apt to try a new program would fall into one of these two categories, but both for different reasons. The successful school would try a new program simply because it is successful, constantly striving for better methods and approaches to education. The unsuccessful school would try a new approach in hopes of finding one that will turn it into a successful school.

The possibilities for small, Seventh-day Adventist, multiage, multi-grade schools in using the nongraded approach are limitless. With classrooms that have several ages of children in one room, ideal situations for nongraded teaching exist. In this kind of atmosphere, children can be grouped according to ability in each of the subject areas regardless of grade level. The artificial grade barriers would come down and each child would be free to learn at his own rate and level.

APPENDIX A

BEHAVIORAL OBJECTIVES

Behavioral Objectives - Bible

(Primary)

History

Knows basic historical events of the Bible
Understands the Creation Story

Sociology

Understands the interdependence of the members of a Biblical family
Understands some of the customs of Israel
Realizes some of the reasons for the fall of Israel as a nation
Understands differences in Israel as an oligarchy and as a monarchy
Understands some of the basic reasons behind historical events studies (ei. the flood, the exodus, etc.)

Economics

Understands some of the trades of the Bible Times
Knows the trades of the people presented as part of the Bible study program
Understands Biblical teaching on tithing and offerings
Understands that tithing and spiritual prosperity go hand in hand

Geography

Demonstrates ability to locate basic biblical places on an appropriate map
Uses map symbols and judges distance on maps
Uses physical features to relate to climate
Understands general effects of relationships between environmental resources and human activities
Demonstrates a knowledge of the general physical features of biblical lands

Philosophy

Understands basic aspects of communication with God and man
Accepts certain behavior patterns as part of his own spiritual commitment (obedience, honesty, etc.)
Makes choices on the basis of needs, resources, and especially on the basis of spiritual commitment

Inquiry Skills

Makes lists of questions to find out information
Uses information to make short, simple oral reports in pictures and in writing
Uses maps, globes, atlases, and encyclopedias to locate Bible information efficiently
Understands the steps involved in problem solving and applies them in dealing with personal problems

Behavioral Objectives - Bible

(Intermediate)

History

- Discusses reasons for Jewish traveling and the problems they encountered as related in the Biblical record
- Understands cultural and economic aspects of life in the old and new testaments
- Makes judgments on the basis of human needs and goals about the events of Jewish history from Jewish and Gentile viewpoints
- Studies a topic of his own choosing concerning an event in Biblical history

Sociology

- Understands the makeup of a Jewish family and how that relates to their history
- Understands the differences between Jew and Gentile and the changes that took place in both as they lived together

Political Science

- Understands the background to the place of the rabbi in Jewish Society
- Compares biblical conflicts with contemporary conflicts
- Understands how the laws of Israel met the needs of the people
- Analyzes all sides of issues that come up in Bible class study

Geography

- Uses maps and globes to find information
- Demonstrates ability to locate biblical places on appropriate maps, charts, and globes
- Understands climate conditions and how they have affected Jewish history
- Uses knowledge of physical features of Bible lands to make historical evaluation of events

Economics

- Discusses the problems and historical events of Israel in economic terms
- Adopts the tithing and offering system of church support actively as part of his own life

Philosophy

- Accepts certain behavior patterns as part of his spiritual commitment (obedience, honesty, etc.)

Behavioral Objectives - Language Arts

(Primary)

Listening Skills

Follows oral directions
Differentiates between sounds
Remembers information from an oral presentation

Speaking Skills

Presents ideas orally
Presents descriptions or personal experiences
Presents ideas effectively to an audience
Participates in group discussions

Reading Skills

Understands relationships by classifying objects according to size, shape, and number
Knows how to follow a left-to-right sequence
Knows letters of the alphabet
Understands similarities and differences among sounds
Understands similarities and differences among visual symbols
Understands application of a sound to written symbol to read new words
Demonstrates a knowledge of analysis of word structure to read new words
Recognizes and uses given aspects of words
Shows understanding of word forms and sentence patterns by reading orally
Follows written directions
Applies various techniques for reading new words independently

Writing Skills

Makes visually distinct patterns
Knows the letters of the alphabet
Communicates thoughts in complete sentences

Grammar Skills

Understands basic elements of sentence structure
Understands common nouns, proper nouns, and pronouns in sentences
Recognizes and uses correct verb forms in sentences
Correctly applies periods, question marks, capital letters, and indentation

Study Skills

Demonstrates ability with instructional materials available
Shows good use and care for equipment in the classroom
Uses reference sources to locate and use information

Personal and Communicative Development Skills

Uses the telephone properly
Writes friendly letters

History and Dialectology

Understands language usage by recognizing varieties of expression

Analysis of Literary Forms

Understands and differentiates between fact and fantasy in literature
Understands a literary selection at the proper level at 75-90 percent comprehension
Recognizes and understands contextual clues
Applies reading to personal experiences

Original Writing

Shows use of descriptive words and phrases
Demonstrates ability to combine concepts, principles, and generalizations by writing original stories and poems
Organizes factual material logically

Oral and Dramatic Interpretation

Demonstrates ability to dramatize ideas, emotions, and characters

Behavioral Objectives - Language Arts

(Intermediate)

Listening Skills

Understands information presented orally by summarizing and interpreting the content
Judges techniques used by the speaker in an oral presentation

Speaking Skills

Plans and conducts personal interviews
Makes informal oral presentations
Uses techniques for preparing an organized oral report
Presents an organized oral report
Participates in achieving the goals of a discussion group
Applies techniques of leading a discussion

Reading Skills

Understands the meaning of words and phrases by relating them to contextual clues
Demonstrates ability to use structural analysis to recognize and use the correct forms of words
Applies skills of phonetic and structural analysis to improve spelling and reading

Writing Skills

Shows ability to present ideas in logical form and sequence
Demonstrates ability to combine concepts, principles, and generalizations by organizing sentences to develop a topic

Grammar Skills

Demonstrates ability to apply:

1. transformational rules of grammar
2. fundamental rules of grammar
3. inflectional morphology rules of grammar
4. derivational morphology rules of grammar
5. rules of punctuation and capitalization

Shows ability to write sentences using the basic parts of speech and various sentence structure types

Study Skills

Shows ability to select reading material suitable to reading level
 Adjusts reading rate to purpose and type of material
 Applies reading techniques to take notes
 Recognizes and uses all the parts of a book
 Demonstrates good use of a dictionary in locating words and identifying their meaning and structure
 Finds information in the library
 Uses reference material to find information
 Finds information for the purpose of summarizing, making generalizations, and identifying conclusions
 Prepares various types of outlines
 Demonstrates ability to combine concepts, principles, and generalizations by producing a factual report from notes and an outline

Personal Communication and Development Skills

Shows understanding of appropriate and inappropriate forms of conversation
 Demonstrates ability to write friendly and business letters using correct format
 Uses skill in non-verbal communication

History and Dialectology

Understands Latin and Greek prefixes by deriving the meaning of words
 Traces the linguistic forms of words
 Understands regional differences in vocabulary, grammar, and punctuation

Analysis of Literary Forms

Understands genre by classifying literary selections
 Understands:

1. main and supporting ideas in literary selections
2. personality traits in literary characters
3. inferential details in literary selections
4. cause and effect relationships
5. the setting of the selection
6. plot development in literary selections
7. literary devices in given selections

Demonstrates ability to perceive author's intent and/or point of view in literary selections
 Demonstrates ability to perceive mood and tone in literary selections
 Makes judgments involving the comparison of reading selections to personal experiences

Original Writing

Uses techniques of creative writing
Demonstrates ability to combine concepts, principles, and
generalizations by writing original compositions

Oral and Dramatic Interpretation

Demonstrates ability to combine concepts, principles, and
generalizations
Makes a variety of oral presentations

Critical Analysis of Media

Understands the importance of mass media to individuals and
to large populations
Demonstrates ability to perceive effects of television
Differentiates among statements of fact, fiction, and opinion
Perceives techniques and effects of advertising
Produces a school newspaper analogous to a regular newspaper
in basic types of articles

Behavioral Objectives - Mathematics

(Primary)

Analysis of Number and System

Uses arabic numerals to count objects and words
Uses place value to 9999
Understands relationship of roman to arabic numerals

Operations: Numeral and Algebraic

Uses addition with 4 - digit numbers
Uses subtraction with 4 - digit numbers
Demonstrates ability with multiplication skills
Uses division with 1 - digit divisors
Uses addition with like fractions

Operations: Graphics

Understands given patterns and reproduces them
Makes and understands basic graphs

Geometry

Understands and recognizes geometric figures

Measurement and Probability

Demonstrates ability to handle money values
Understands time and telling of time to the minute
Measures linear measurement to 1/4 inch
Understands temperature readings
Shows ability to use weight and liquid measure

Sets and Logic

Uses facts pertaining to elements of a set
Uses set notation to solve simple problems

Problem Solving

Writes number sentences (equations)
Solves simple word problems
Writes and solves number sentences for simple word problems

Behavioral Objectives - Mathematics

(Intermediate)

Analysis of Number and System

Demonstrates ability in use of early number systems
Uses place value to 10 digits
Identifies properties of whole numbers and applies these properties to problems
Applies techniques necessary to write mathematical expressions in simplest form
Shows understanding of proper and improper fractions
Understands concept of prime and composite numbers
Understands absolute values
Understands rational and irrational numbers
Uses exponential notation, expanded and scientific notation

Operations: Numerical and Algebraic

Uses addition and subtraction of 4 - digit numbers
Solves multiplication problems with at least 2 - digit numbers
Solves division problems with at least 2 - digit divisors
Understands estimating of answers to problems
Completes operations on integers
Adds and subtracts fractions
Uses conversion methods for fractions and decimals
Multiplies and divides fractions
Adds, subtracts, multiplies, and divides decimals
Solves ratio problems
Solves problems in percentage
Finds square root and performs square-root operations
Works mathematical problems in bases other than 10
Applies elements of finite and non-finite mathematical systems

Operations: Graphics

Prepares flow charts to solve given algorithms
Explains and constructs graphs to summarize ideas
Understands graph relations and functions

Geometry

Shows understanding of points, lines, angles, and planes
Understands the properties and classifications of geometric figures
Constructs and measures geometric figures and models
Finds perimeter, area, and volume of geometric models
Applies the Pythagorean Relationship

Measurement and Probability

Demonstrates exactness of measurement
Converts from one system of measurement to another
Uses addition and subtraction with measure of time, weight,
and capacity
Demonstrates ability to use the theory of probability
Applies measures of frequency and central tendency

Sets and Logic

Uses sets and set notion
Uses rudiments of logic as it pertains to mathematics

Problem Solving

Writes and solves equations for word problems
Solves word problems relating to consumer needs and consumer
living
Applies mathematical operations to problems dealing with sports
Applies mathematical operations to problems dealing with occupa-
tions and future education

Behavioral Objectives - Science

(Primary)

Life Science

Understands properties of a given plant or animal
Knows structure and function of the ear, eye, nose, and tongue
Understands the senses and classifies objects according to touch, smell, taste, sight, and sound
Understands differences in animal reproduction
Shows knowledge of interaction of organisms with their environment

Physical Science

Demonstrates knowledge of simple machines by identifying them in groups of pictures or examples
Understands objects by classifying them according to type, form, and properties
Understands forms of energy
Understands interactions in the physical world
Understands relationships of objects and interactions in systems

Earth Science

Understands solar system in terms of rotation and revolution of the earth, and in terms of properties of the sun and earth
Knows the basic process involved in soil-making
Demonstrates a knowledge of the main tenets of the creation of the world, and the evolutionary theories

Science Inquiry Skills

Demonstrates ability to collect information about the interaction of organisms with their environment
Keeps records of observation, reading, and interviewing in the form of lists, notes, or pictures
Conducts simple experiments, makes observations, keeps records, and relates the results to a given hypothesis

Behavioral Objectives - Science

(Intermediate)

Life Science

- Knows about body systems and body parts and functions of each
- Understands basic human needs to maintain a healthy existence
- Understands the characteristics of organisms harmful to man
- Collects information about and discusses the effects of tobacco, alcohol, drugs, etc., on the human body using reliable reports of research
- Uses selected diagrams, pictures, or models to demonstrate the adaptive powers of plants and animals
- Understands characteristics and functions of plant and animal cells
- Shows ability to use scientific classification for plants and animals
- Demonstrates ability to combine concepts, principles, and generalizations by designing an investigation of a biological problem that involves the use of the microscope and other tools of the modern biologist
- Understands reproductive process in plants, insects, and animals
- Discusses the human aspects of reproduction rationally
- Reports on ecological changes in the world with discussion of implications to human life

Physical Science

- Understands relative positions of stationary and moving objects
- Demonstrates ability to combine concepts, principles, and generalizations by designing experiments in velocity and rate change
- Demonstrates understanding of: force, inertia, energy, work, friction
- Shows understanding of atoms, molecules, compounds, and mixtures
- Constructs a model of an element showing the difference between atomic number and number of electrons
- Demonstrates and understands the three phases of matter
- Understands the effects of heat on matter
- Understands physical and chemical property changes
- Designs experiments in chemical and physical change
- Understands the internal combustion engine in energy terms
- Demonstrates understanding of mechanical advantages in simple machines
- Uses Newton's basic laws to design experiments in their application
- Demonstrates ability by producing an electric motor
- Explains electricity in terms of: watts, voltage, resistance, kilowatt hours, and electron movement
- Understands mass, volume, density
- Shows ability to work with relationships of magnetic force and electricity
- Interprets the principles of sound
- Designs and presents a demonstration of the nature and behavior of light
- Understands the process by which nuclear energy is produced

Understands basic computer concepts

Earth Science

Understands observational data used by meteorologists in predicting weather

Shows knowledge of earth origination theories and is able to defend personal convictions

Science Inquiry Skills

Demonstrates ability to work within the scientific method by designing experiments

Develops efficiency in achieving objectives through the use of effective study skills

Understands individual differences in people

Uses effectively science equipment including (1) simple microscope, (2) bunsen burner, (3) chemicals, (4) test tubes and other glassware, and (5) thermometers

Uses a taxonomic system in scientific classification

Makes use of scientific information to make a model or conduct an experiment that demonstrates a scientific principle

Behavioral Objectives - Social Studies

(Primary)

History

Shows understanding of changes in communities and reasons for them

Sociology and Anthropology

Understands the interdependency of people in families

Understands types of neighborhoods

Understands types of communities and their characteristic customs

Understands interdependence of people in communities

Realizes the interdependence of communities, areas, and nations

Political Science

Knows some facts involved in the process of government

Geography

Demonstrates ability to locate places, climatic regions and physical features on maps and globes

Uses map symbols and judges distance on maps

Relates physical features to climatic regions on maps and globes

Understands relationship between physical environment and human activities in communities: local community, mountain region grassland area, desert community, arctic region

Understands general effects of relationships between environmental resources and human activities

Economics

Expresses a knowledge of basic human needs

Understands human dietary needs and activities concerned with meeting these needs

Knows about various aspects of food processing

Knows various aspects of clothing and its production

Understands human needs for shelter and special adaptations to various environmental conditions

Understands some aspects of building construction

Grasps concepts of trading and the use of money

Demonstrates a knowledge of community service work

Knows about workers and occupations that affect the community

Understands various aspects of merchandising

Identifies and uses types of communication services efficiently

Understands the various transportation services in use

Shows understanding of various types of industrial production in factories

Knows about farm production

Psychology and Philosophy

- Understands basic aspects of human communication
- Uses problem-solving skills in situations involving personal problems
- Makes choices on the basis of needs, resources, and desires

Social Studies Inquiry Skills

- Makes lists of questions to find out information
- Uses information to make short, simple oral reports in pictures and in writing
- Uses maps, globes, atlases, and encyclopedias to locate social studies information efficiently
- Understands the steps involved in problem solving and applies them to dealing with personal problems

Behavioral Objectives - Social Studies

(Intermediate)

History

- Discusses reasons that Europeans, and later people from other parts of the world settled in North America and the problems they encountered
- Understands cultural and economic aspects of life in early America
- Makes judgments on the basis of human needs and goals about the events of the American revolution from both American and English viewpoints
- Understands basic aspects of state's history with reference to human needs and goals
- Studies a topic of his own choosing concerning the War Between the States
- Discusses growing urban problems
- Shows understanding of urban settlement patterns and growth
- Understands later settlements in Latin America and problems encountered

Sociology and Anthropology

- Understands the changing character of rural life
- Understands the changes that technology has made in human society and predicts some of the changes that technology may bring about in the near future
- Perceives changing attitudes toward education and leisure time and the resultant problems in communities
- Predicts growth and changes in the American family in relation to traditional attitudes toward family functions, social values, and other social institutions
- Makes judgments about the progress of the United States has made in solving problems of ethnic groups
- Discusses the relationship between ecological problems or the world and the current focus on population control
- Notices the important contributions made by ethnic groups to American culture

Political Science

- Understands the background to the Declaration of Independence and the American Constitution
- Compares early and contemporary conflicts in America
- Shows understanding of the problems of civil rights
- Demonstrates ability to perceive relationships between political problems and legislative action
- Understands the basic needs that should be met by laws and rules of a society
- Develops a set of political values based on information analyzed
- Shows a willingness to look on both sides of an issue, looking at advantages and disadvantages of each (or more) sides

Discusses the political features of a country
Understands the relationship of problems of individuals to their form of government

Geography

Uses maps and globes to find information
Understands weather conditions and methods of predicting, measuring and recording weather conditions
Understands climate conditions and their causes
Understands the influence efficiently to collect information
Makes judgments of effectiveness of programs in ecology that have recently been proposed

Economics

Discusses the problems encountered in an economy when natural resources, human resources, and means of production are not all located in one place
Uses economic concepts and terms in discussing current events
Uses mathematic skills in solving personal economic problems

Psychology and Philosophy

Recognizes personal problems and applies problem-solving skills and human resources skills to their solutions
Understands importance of intra-personal relationships in solving social problems
Perceives problems of teenagers
Shows understanding of aspects of careers in the following occupational areas: Industrial trade, business, commercial service, health service
Demonstrates ability to combine concepts, principles, and generalizations by developing a project that illustrates how cultures and/or religions affect the daily life
Develops a set of social values that can be defended

Social Studies Inquiry Skills

Analyzes statements on the basis of clarity, bias, assumptions, generalizations and conclusions
Demonstrates skills in social studies research by choosing a topic, using appropriate sources of information, organizing the information and writing or presenting a report
Demonstrates ability to plan an extended trip to another part of the country or world

Makes choices on the basis of needs, resources, and spiritual commitment

Inquiry Skills

Analyzes statements on the basis of clarity, bias, assumptions, generalizations and conclusions

Demonstrates skill in Bible research by choosing a topic, using appropriate sources of information, organizing the information and writing or presenting a report

APPENDIX B

NONGRADED SUBJECT ORIENTATION

Level Designations

Grade 1 -	A.	B.	C.
Grade 2 -	D.	E.	F.
Grade 3 -	G.	H.	I.
Grade 4 -	J.	K.	L.
Grade 5 -	M.	N.	O.
Grade 6 -	P.	Q.	R.
Grade 7 -	S.	T.	U.
Grade 8 -	V.	W.	X.

MATHEMATICS

BEHAVIORAL OBJECTIVES - LEVEL P

(Approximate beginning 6th grade)

Demonstrates ability to use number systems: Chinese, Egyptian, Roman, Base-five, base-seven, base-two.

Applies techniques necessary to write mathematical expressions in simplest form.

Solves multiplication problems with at least 2-digit multipliers.

Understands estimating of answers to problems in addition and multiplication.

Shows an understanding of proper and improper fractions.

LEVEL - P MATHEMATICS

P - ASSIGNMENTS DUPLICATED FOR LEVEL P IN FILE

(READY-MADE AND TEACHER-MADE)

LL6 - LAIDLAW MATHEMATICS 6

SOURCE	SUBJECT	SCORE	DONE OVER
LL6 - 5	Non Positional Numeration		
LL6 - 6,7	Egyptian Numeration		
P-1	" "		
P-2	" "		
P-3	" "		
LL6 - 8,9	Roman Numeration		
P-4	" "		
P-5	" "		
LL6 - 12,13	Positional Numeration		
P-6	" "		
LL6 - 14,15	Base-Five Numeration		
P-7	" "		
LL6 - 16,17	" "		
LL6 - 313 (2)	" "		
P-8	" "		
LL6 - 18,19	Base-Seven Numeration		
P-9	" "		
P-10	" "		
LL6 - 20,21	Base-Two Numeration		
P-11	" "		

SOURCE	SUBJECT	SCORE	DONE OVER
LL6 - 314 (1)	Base-Two Numeration		
P-12	Test I - Number Systems		
P-13	Addition, Subtraction Review		
P-14	" " "		
P-15	" " "		
P-16	" " "		
P-17	Multiplication Review		
P-18	" "		
P-19	" "		
P-20	Division Review		
P-21	" "		
P-22	" "		
LL6 - 58,59	Multiplication		
LL6 - 60,61	"		
LL6 - 62,63	"		
LL6 - 318 (2)	"		
P-23	"		
P-24	"		
LL6 - 64,65	"		
LL6- 168,169	Multiplication - Decimals		
P-25	"		
P-26	"		
P-27	"		
P-28	"		
P-29	Test II - Multiplication		
LL6 - 66,67	Substitution		

SOURCE	SUBJECT	SCORE	DONE OVER
P-30	Substitution		
P-31	"		
P-32	Rewrite Expressions		
P-33	" "		
P-34	" "		
P-35	" "		
LL6 - 116,117	Factors		
LL6 - 322 (2)	"		
P-36	"		
LL6 - 118,119	Fractions (Simplest Form)		
P-37	"		
P-38	"		
LL6 - 122,123	Addition of Fractions		
P-39	" " "		
P-40	" " "		
P-41	Estimating in Multiplication		
P-42	" " "		
P-43	" " "		
P-44	" " "		
P-45	Level P - Test		

CHECKLIST - LEVEL P

- _____ Can I use Roman, Chinese and Egyptian numbers?
- _____ Can I do problems in bases two, five, and seven?
- _____ Can I find equivalent numbers in base ten from the bases and number systems that I have studied in Level P?
- _____ Do I know my multiplication table by heart?
- _____ Can I do multiplication with any number of digits in the multiplier?
- _____ Can I add, subtract, and multiply decimal numbers?
- _____ Can I add and subtract fractions?
- _____ Can I find simplest forms of fractions?
- _____ Can I make common denominators to add or subtract properly?
- _____ Can I find answers by substitution of numbers for symbols?
- _____ Can I estimate problems in addition?
- _____ Can I estimate problems in multiplication?
- _____ Do I feel that I KNOW how to do all the material presented in Level P?

APPENDIX C

ATTITUDE QUESTIONNAIRES

PARENTS' QUESTIONNAIRE

- I. In this section of the questionnaire we are interested in how parents feel about the ideas behind a Continuous Progress Program for elementary schools. The following questions refer to Continuous Progress Programs in general, not to any specific school.

1. Many new ideas are being introduced into schools these days. Do you feel that the schools are changing too rapidly, or not rapidly enough?

- ☐ The schools are changing too rapidly.
☐ The schools are changing at a proper speed.
☐ The schools are not changing rapidly enough.

2. The basic idea behind a Continuous Progress Program is that children are assigned to different educational levels depending upon their educational and developmental needs, rather than being assigned to grades (first grade, second grade, etc.) on the basis of age. Do you think that this is a good idea?

- ☐ I think it is a very good idea.
☐ I think it a good idea.
☐ I am undecided.
☐ I think it is a poor idea.
☐ I think it is a very poor idea.

3. In a Continuous Progress Program children may move from one level to another whenever they are ready, rather than passing or failing at the end of a school year. Do you think this is a good idea?

- ☐ I think it is a very good idea.
☐ I think it is a good idea.
☐ I am undecided.
☐ I think it is a poor idea.
☐ I think it is a very poor idea.

4. In a Continuous Progress Program children may be assigned to different levels for different subjects (for example, one level for language arts and a different level for mathematics) instead of being in the same grade for all subjects. Do you think that this is a good idea?

- ☐ I think it is a very good idea.
☐ I think it is a good idea.
☐ I am undecided.
☐ I think it is a poor idea.
☐ I think that it is a very poor idea.

5. In a Continuous Progress Program children may sometimes be asked to work by themselves. Do you feel that children in elementary school are old enough for individual work?

- ☐ All elementary school children are old enough.
☐ Most elementary school children are old enough.
☐ Some elementary school children are old enough.
☐ Few elementary school children are old enough.
☐ No elementary school children are old enough.

At what age do you think that children are old enough for individual work? _____

6. Do you think that most children would be able to learn more in a Continuous Progress Program or in a regular (graded) school program?

_____ Children would learn more in a Continuous Progress Program.

_____ Children would learn more in a regular school program.

_____ The type of program would not make much difference in how much the children learn.

7. Do you think that children in a Continuous Progress Program would like school any more than children in a regular school program?

_____ Children in a Continuous Progress Program would like school more.

_____ Children in a regular school program would like school more.

_____ The type of program should not make much difference in how much children like school.

8. Do you think that children would get a better education in a regular school program or in a Continuous Progress Program?

_____ Children would get a better education in a regular school program.

_____ Children would get a better education in a Continuous Progress Program.

_____ It should not make much difference.

9a. Do you think that it would be difficult for children who have been attending a regular school program to change to a Continuous Progress Program?

_____ It would be difficult for almost all children.

_____ It would be difficult for most children.

_____ It would be difficult for about half of the children.

_____ It would be difficult for few children.

_____ It would be difficult for almost none of the children.

9b. Do you think it would be difficult for children who have been attending a Continuous Progress Program to change to a regular school program?

_____ It would be difficult for almost all children.

_____ It would be difficult for most children.

_____ It would be difficult for about half of the children.

_____ It would be difficult for few children.

_____ It would be difficult for almost none of the children.

II. In this section of the questionnaire we are interested in how parents feel about the education their children are receiving at the present time.

10. Do you feel that the school your child attends is attempting to introduce changes too rapidly, not rapidly enough, or at a proper rate?

_____ Attendance at children's performances or picnics.
_____ Field trip aide.
_____ Clerical aide.
_____ Instructional resources aide.
_____ Other:

III. Overall attitude toward the Continuous Progress idea.

To reflect your overall attitude, suppose that the line below represents a range of all possible attitudes toward this idea. The right end of the line indicates complete approval of this idea; the left end indicates complete disapproval. To show your own attitude, make an "X" at the place on the line that best indicates where your feelings about Continuous Progress lie.

Complete 1 2 3 4 5 6 7 Complete
 Disapproval Approval

IV. Overall attitude toward your child's elementary school.

To show your own attitude, make an "X" at the place on the line that best indicates where your feelings about your child's school lie.

Complete Disapproval 1 2 3 4 5 6 7 Complete Approval

V. Classification information.

Since this questionnaire is to be anonymous, we would like some simple information about the persons who completed it.

Age: _____ Sex: _____ Number of school-age children: _____

Occupation: _____ Spouse's Occupation: _____

Previous education:

less than high school diploma.

high school diploma.

more than high school diploma.

How long have you lived in New Port Richey? _____

Which elementary schools has your child attended?

School. _____ County. _____ State. _____

School.	County.	State.
---------	---------	--------

Did your child(ren) attend this school last year? _____yes
no

Have you received any information concerning the Continuous Progress Plan?

- ☐ Too rapidly.
☐ Not rapidly enough
☐ At a proper rate.

11. Do you feel that your child is getting a good education in this school?

- ☐ I feel that my child is getting a very good education.
☐ I feel that my child is getting a good education.
☐ I am not sure whether my child's education has been good or bad.
☐ I feel that my child is getting a poor education.
☐ I feel that my child is getting a very poor education.

12. Do you feel that your child is learning as much as others his own age?

- ☐ He is learning more than others his own age.
☐ He is learning as much as others his own age.
☐ He is learning less than others his own age.

13. Do you feel that your child likes school as much as others his own age?

- ☐ He likes school more than others his own age.
☐ He likes school as much as others his own age.
☐ He likes school less than others his own age.

14. Do you feel that your child is developing initiative and responsibility for his own education as rapidly as others his own age?

- ☐ He is developing initiative and responsibility more rapidly than others his own age.
☐ He is developing initiative and responsibility as rapidly as others his own age.
☐ He is developing initiative and responsibility less rapidly than others his own age.

15. Many people think that a school should keep parents informed about the school's educational plans. How do you feel your child's school compares with most other schools with regard to keeping parents informed?

- ☐ My child's school is better than most other schools.
☐ My child's school is about the same as most other schools.
☐ My child's school is not as good as most other schools.

16. It is also thought that a school should attempt to involve parents in the educational process and in the school's activities. During the past school year, how many times did you or your spouse become involved in activities at your child's school?

times.

In what types of school activities did you or your spouse become involved? (check as many as necessary.)

- ☐ Parent-teacher conferences.
☐ Home and School or other school-related meetings.
☐ Attendance at open house.

_____yes
_____no

If yes, How was this information received?

_____In a parents' meeting at the school.
_____In a discussion with a school official, principal, or teacher.
_____In a letter from the school.
_____In the newspaper.
_____In a discussion with friends.
_____Other: _____

Used by permission from:

Gumper, David C., Meyer, Joan., and Kaufman, Jacob J. Nongraded
Elementary Education. University Park, Pennsylvania: Institute
for Research on Human Resources, 1971.

APPENDIX D

ATTITUDE SURVEY DATA

SCORES ON SCHOOL BOARD ATTITUDES SURVEY

FALL AND SPRING

FALL			SPRING		
Score	X ₁	X ₂	Score	X ₁	X ₂
86	7396		84	7056	
86	7396		87	7569	
87	7569		92	8464	
88	7744		93	8649	
91	8281		95	9025	
91	8281		99	9801	
93	8649				
622	Total	55316	550	Total	50564
Mean	88.9		Mean	91.7	
N = 7			N = 6		

$$t = .97$$

SCORES ON PARENTAL ATTITUDE SURVEY

FALL AND SPRING

FALL			SPRING		
Score	$\sum X$	$\sum X^2$	Score	$\sum X$	$\sum X^2$
71	5041		74	5476	
72	5184		83	6889	
74	5476		83	6889	
75	5625		84	7056	
78	6084		86	7396	
81	6561		86	7396	
81	6561		92	8464	
84	7056		93	8649	
89	7921		93	8649	
91	8281		97	9409	
93	8649		98	9604	
96	9216		100	10000	
98	9604		101	10201	
98	9604		104	10816	
99	9801		110	12100	
101	10201				
107	11449				
1488	Total	132314	1384	Total	128994
87.5	Mean		92.3	Mean	
N = 17			N = 15		

$$t = 1.278968 \approx 1.28$$

STUDENTS SCORES ON PIERS-HARRIS SELF CONCEPT SCALE

FALL AND SPRING

FALL		SPRING	
Score	X_1^2	Score	X_1^2
10	100	13	169
11	121	15	225
11	121	27	729
13	169	27	729
24	576	29	841
30	900	29	841
33	1089	38	1444
36	1296	38	1444
37	1369	39	1521
37	1369	39	1521
43	1849	41	1681
51	2601	41	1681
53	2809	43	1849
57	3249	43	1849
57	3249	44	1936
59	3481	44	1936
63	3969	49	2041
63	3969	53	2809
64	4096	55	3025
65	4225	64	4096
65	4225	65	4225
65	4225	68	4624

STUDENTS SCORES ON PIERS-HARRIS SELF CONCEPT SCALE

Cont.

FALL			SPRING		
Score		$\sum X^2$	Score		$\sum X^2$
69		4761	69		4761
69		4761	72		5184
69		4761	73		5329
73		5329	74		5476
74		5476			
74		5476			
75		5625			
1376	Total	87455	1192	Total	61966
47.45	Mean		45.85	Mean	
$N_1 = 29$			$N_2 = 26$		

$$t = 0.25$$

APPENDIX E

FLORIDA CONFERENCE EVALUATION

FLORIDA CONFERENCE OF SEVENTH-DAY ADVENTISTS

The Florida Conference Office of Education was desirous of having a program of non-grading in one of its schools. We were most happy when Erik Vetne accepted our invitation to initiate such a school program at our New Port Richey School during the school year 1972-73. From my observation, the students were very happy. A cooperative spirit prevailed in the classroom. The students radiated with enthusiasm for learning. In the primary grades, the students were more anxious to continue with their lessons than to eat lunch. The students also began developing a responsibility for their own learning. Elder Griffith and I both felt that overall improved attitude of the students toward school and learning was a most important outcome of this program.

Signed: Elizabeth Hudak

Elizabeth Hudak
Curriculum Supervisor
Florida Conference of SDA

BIBLIOGRAPHY

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- Backroth, Sister M. Bernaedo. "An Evaluation of the Ungraded Primary as an Organizational Device for Improving Learning in St. Louis Archdiocesan Schools." Unpublished Ph.D. dissertation, St. Louis University, St. Louis, 1959.
- Boyd, Margaret. "School Standards in Promotion: Testing, Reporting, Grading." Theory into Practice, IV (June, 1965), 95-98.
- Buffie, Edward G. W. "A Comparison of Mental Health and Academic Achievement: The Nongraded School vs. the Graded School." Unpublished Ph.D. dissertation, Indiana University, Bloomington, 1962
- Carbone, Robert F. "Achievement, Mental Health, and Instruction in Graded and Nongraded Elementary Schools." Unpublished Ph.D. dissertation, University of Chicago, Chicago, 1961.
- Dipasquale, V. C. "The Relation Between Dropouts and the Graded School." Phi Delta Kappan, 46 (Nov., 1964), 129-133.
- Enevoldsen, Corwin L. "An Evaluation of the Ungraded Primary Program in Selected Schools in the Lincoln, Nebraska Public School System." Unpublished Ph.D. dissertation, University of Nebraska Teachers' College, Lincoln, Nebraska, 1961.
- Flanagan, John C., Mager, Robert F., and Shanner, William M. Behavioral Objectives: A Guide to Individualizing Learning. Palo Alto, California: Westinghouse Learning Press, 1971.
- Flavell, J. H. The Developmental Psychology of Jean Piaget. New York: Van Nostrand, 1963.
- Goodlad, John I. "Inadequacy of Graded Organization-What Then?" Childhood Education, 39 (February, 1963), 274-277.
- Goodlad, John I. and Anderson, R. H. The Nongraded Elementary School (rev. ed.) New York: Harcourt, Brace, & World, 1963.
- Goodlad, John I. and Anderson, R. H. The Nongraded Elementary School New York: Harcourt, Brace, & World, 1959.
- Gumper, David C., Meyer, Joan, and Kaufman, Jacob J. Nongraded Elementary Education. University Park, Pennsylvania: Institute for Research on Human Resources, 1971.

- Halliwell, J. W. "A Comparison of Pupil Achievement in Graded and Nongraded Primary Classroom." The Journal of Experimental Education, 32 (Fall, 1963), 59-63.
- Hart, Richard M. "The Non-graded Primary School and Arithmetic." Arithmetic Teacher, 9 (March, 1962), 130-131.
- Hickey, Sister M. P. "An Analysis and Evaluation of the Ungraded Primary Program of Pittsburgh." Unpublished Ph.D. dissertation, Fordham University, New York, 1962.
- Hillson, Maurie, et. al. "A Controlled Experiment Evaluating the Results of a Nongraded Organization on Pupil Achievement." Journal of Educational Research, 57 (July-August, 1964), 548-550.
- Hopkins, Kenneth D., et. al. "An Empirical Comparison of Pupil Achievement and Other Variables in Graded and Ungraded Classes." American Educational Research Journal, II (November, 1965), 207-215.
- Humphreys, Phila. "The School's Concern in Nonpromotion." Theory into Practice, 4 (June, 1965), 88-89.
- Ingram, Vivian. "Flint Evaluates Its Primary Cycle." Elementary School Journal, 61 (November, 1960), 76-80.
- Jones, J. Charles, Moore, J. William and Devender, Frank Van. "A Comparison of Pupil Achievement After One and One Half and Three Years in a Nongraded Program." The Journal of Educational Research, 61 (October, 1967), 75-77.
- Keith, Lowell, Blake, Paul, and Tiedt, Sidney. Contemporary Curriculum in the Elementary School. New York: Harper and Row, 1968.
- McLoughlin, William P. "Evaluation of the Nongraded Primary." New York State Education Department, Albany, Division of Research, April, 1969.
- McLoughlin, William P. "The Phantom Nongraded School." Phi Delta Kappan 49 (January, 1968), 248-250.
- Missionary Volunteer Society. Council Proceedings of the Joint Council of the Educational and Missionary Volunteer Departments of the North American Division Conference of Seventh-day Adventists. Washington, D.C.,: Review and Herald Publishing Association, 1915.
- Missionary Volunteer Society. Proceedings of Conference of Missionary Teachers. Battle Creek, Michigan: Review and Herald Publishing Association, July, 1900.

- Moore, D. I. "Pupil Achievement and Grouping Practices in Graded and Nongraded Schools." Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor, 1963.
- Morris, Vernon R., Proger, Barton B., and Merrell, James E. "Pupil Achievement in a Nongraded Primary Plan After Three and Five Years of Instruction." Educational Leadership, 28 (March, 1971), 621-625.
- Novak, Edward L. "Sharing Personal and Professional Experiences of Nonpromotion with an Elementary Principal." Theory into Practice, 4 (June, 1965), 114-116.
- Oliver, Albert I. Curriculum Improvement. New York: Dodd, Mead, & Co., 1965.
- Skapski, Mary King. "Ungraded Primary Reading Programs: An Objective Evaluation." Elementary School Journal, 61 (October, 1960), 41-45.
- Sowers, Paul G. Open-End Elementary Education. Flagstaff, Arizona: Northern Arizona Supplementary Education Center, April, 1968.
- Steere, Bob F. "Nongradedness: Relevant Research for Decision Making." Educational Leadership, 29 (May, 1972), 709-711.
- Tewksbury, John L. Nongrading in the Elementary School. Columbus, Ohio: Charles E. Merrill Publishing Co., 1967.
- Thomas, Shailer, and Knudsen, Dean D. "The Relationship Between Non-promotion and the Dropout Problem." Theory into Practice, 4 (June, 1965).
- Thompson, John F. and Thompson, Mrs. John F. The Nongraded Elementary School, New Mexico Western States Small Schools Project. Santa Fe, New Mexico: New Mexico Department of Education, November, 1965.
- Vogel, Francis X. and Bowers, Norman D. "Pupil Attitudes, Achievement and Behavior in a Multiage Nongraded School. Final Report," U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, April, 1968.
- White, Ellen G. Councils to Parents, Teachers, and Students. Mountain View, California: Pacific Press Publishing Association, 1913.
- White, Ellen G. Education. Mountain View, California: Pacific Press Publishing Association, 1903.
- Wiles, Kimball. The Changing Curriculum of the American High School. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.