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This paper discusses research findings applicable to the nongraded plan of school organization (also referred to as ungraded, continuous progress, multigraded, multiaged, and ungraded primary unit). The introduction notes a rapidly increasing movement toward nongrading and defines the concept. Part 1, presents the case for and against nongrading and includes a list of the researchers' concluding observations and questions suggested for group discussion. Part 2, the research review, reports three types of studies: (1) survey-questionnaire studies which report the perceptions of educators in communities which have adopted the nongraded plan, (2) studies related to grouping practice which have a bearing on nongraded organizations, and (3) studies which compare nongraded organization with the traditional self-contained classroom. This section concludes with a critique of the research, noting conflicting findings and problems which make it difficult to generalize results to other situations. Part 3, "An Approach," contains a position statement and a list of steps for implementing an organizational plan with suggestions regarding organization, grouping of pupils, curriculum revision, equipment and materials, scheduling, evaluation, the library (laboratory for learning) and reporting to parents. The "Bibliography and Selected References" includes 37 books and 75 periodicals. (JS)

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THE NONGRADED SCHOOL

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RESEARCH BULLETIN

THE NONGRADED SCHOOL

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PREFACE

The movement toward a nongraded school organization is increasing rapidly. This may be an indication of a desirable direction. However, professional people have a tendency to adopt innovations because they are becoming popular rather than because they have proven to be superior. Before moving from one type of organization to another we need to be familiar with the research that has been done in the field and the possibilities that the new direction has for improving education. Recognizing this need Florida Educational Research and Development Council authorized the publication of this *Research Bulletin* on the Nongraded School.

The basic material for this bulletin was assembled by Dr. Luther Rogers and published in mimeograph form for the Southeastern Education Laboratory. Dr. William Breivogel of the FERDC staff has taken this material and brought it up to date by including the most recent studies and comments on the nongraded school. In this manner the contributions of Dr. Rogers and Dr. Breivogel are equally important in the publication of this bulletin.

The Florida Educational Research and Development Council wishes to express its appreciation to both of them for the effective manner in which they have assembled the findings of the research studies and the opinions of authorities in the field on the nongraded school.

J. B. White
Executive Secretary
June, 1969

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THE NONGRADED SCHOOL

INTRODUCTION

In making decisions about school organization (how children are organized for instruction) educators are faced with the following questions:

1. Is there a significant relationship between school organization and the quality of instruction? If so then which organizational plan should be used: the self-contained classroom, nongraded, middle school, dual progress plan, or team teaching plan of organization?
2. Does the school's choice of an organizational plan have a major influence on instructional results? If so, which organizational pattern should be used?
3. Is the teacher able to determine what the pupil will learn whatever the organizational plan may be?

There is a great deal of disagreement in the research on these three questions. The purpose of this bulletin is to discuss some research findings as they apply to the nongraded plan—as it was compared to the traditional self-contained classroom organizational pattern.

There are a number of terms used interchangeably with nongraded; for example: ungraded, continuous progress, multi-graded, multi-aged, and ungraded primary unit. Whatever label is used the intent is the same—namely to eliminate formal grade barriers. The most commonly accepted term today is nongraded and this is the term which is used in this bulletin.

Rather than try to give a set definition of nongradedness we prefer to use Miller's (1967) three identifying characteristics: "The nongraded school is one without grade failure and/or retention in the conventional sense; it has individualized instruction with the purpose of permitting youngsters to progress as they individually show competence to do so, and it permits efficient flexibility in the instructional program to make instructional adjustments both in terms of intrapersonal variability (differences within an individual) and in terms of interpersonal variability (among individuals)." (p. 131)

The NEA Project on Instruction (1963) had this to say about nongrading:

The vertical organization of the school should provide for the continuous, unbroken, upward progression of all learners, with due recognition of the wide variability among learners in every aspect of their development. The school organization should, therefore, provide for differentiated rates and means of progression toward achievement of educational goals." (p. 132)

Although the nongraded concept was resisted at first by large segments of the teaching profession, the tide began to turn in the 1960's. The following developments occurred:

1. The Department of Elementary School Principals issued their yearbook favoring this plan—*Elementary School Organization* (1961)
2. The Project on Instruction of the National Education Association recommended serious consideration of this innovation in *Schools for the 60's*. (1963)
3. The National Commission on Teacher Education and Professional Standards (1967) recommended the desirability of alternatives to the self-contained classroom in *The Year of the Non-Conference*.
4. The interest in nongrading and the amount of material being published on it prompted the Department of Elementary School Principals, NEA, to devote two issues of *The National Elementary Principal* to the subject. (November, 1967, Vol. XLVII, No. 2, and January, 1968, Vol. XLVII, No. 3.)

Data on the number of schools employing this new plan of organization are scanty and unreliable. As of May, 1969, the latest data collected by the NEA Research Division (1967) was that in Table 1.

From Table 1 it should be evident that large systems were more frequent users of the nongraded organization than were the small systems. This was particularly true of programs for disadvantaged. The low level of federal support (less than one percent) indicates that this practice was not influenced by federal funding at the time of the survey. (p. 120)

From the graph—Nongraded Organization, 1966—it can be seen that the nongraded organization is most often used at the lower elementary level, and its use diminishes rapidly after third grade. However, most school systems operating a nongraded

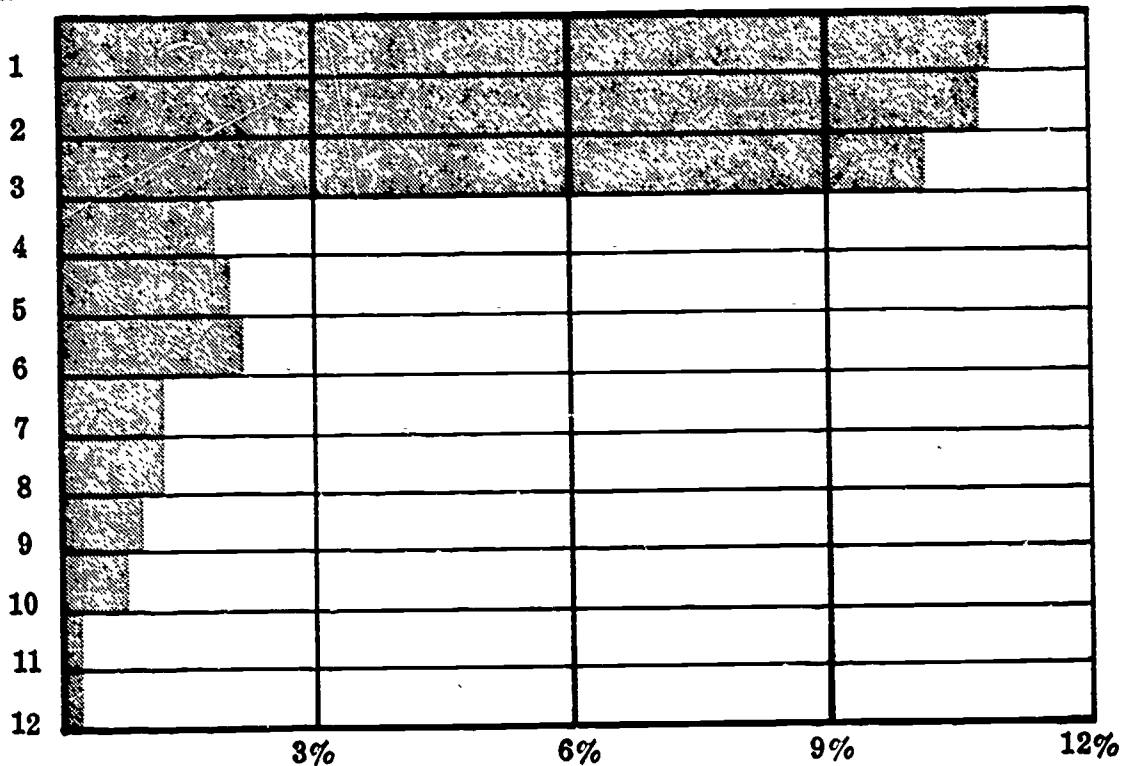
Table 1—NONGRADED ORGANIZATION

Nongraded organization	Estimated total, systems enrolling 300 or more pupils	Systems grouped by enrollment		
		25,000 and over	3,000-24,999	300-2,999
Program not provided	87.9%	64.0%	74.4%	92.2%
Program available to all eligible individuals	8.1	13.3	13.2	6.5
Program provided in some form				
Available to some.....	4.0	22.7	12.4	1.3
Available only to disadvantaged*	2.8	15.3	9.0	0.9
Financed wholly or partly by federal funds	0.4	2.0	0.0	0.4
Number of systems	12,130	150	234	232

*May include some programs which, because of the federal requirement for separate accounting, are not included in the programs reported above. NEA Research Bulletin December 1967 (p. 119)

Grade level in which plan is used

NONGRADED ORGANIZATION, 1966*
Percent of systems using nongrading



*NEA Research Bulletin Dec. 1967 (p. 119)

program include all three early elementary grades in the program. Beyond the lower elementary grades the graded structure of the school curriculum is still widely used (p. 120).

The one problem we have with data of this type is that discussed by Goodlad and Anderson (1962). They found in their survey that many schools calling themselves nongraded were confusing "homogeneous grouping" with continuous progress. Goodlad and Anderson (1963) made the important point that grouping practices are secondary considerations in nongraded programs. Nongrading applies strictly to the vertical problems underlying progression of pupils, while grouping applies to the horizontal organization of the school that brings pupils and teachers into relation. No pattern of grouping insures nongrading, though some grouping practices may facilitate it. (pp. 214-216). Grouping is discussed later in the bulletin.

Obviously there are many facets to a nongraded plan. This study is not intended to treat in depth all aspects of nongradedness. However, an effort has been made to include research studies, case studies, and a review of the current literature to help the reader find material on these points. The underlying purpose has been to present research materials that will provide school decision-makers with data to help them make better decisions about organizational structure, especially that called nongrading. The reader should be forewarned, however, that there is little experimental research available which provides conclusive results attesting to the effects of the nongraded organizational structure alone. Also, little research was found that went beyond comparison of achievement results of pupils on standardized tests. Following the "Review of Research" there is a section on the "Critique of the Research" which has been done in this field.

THE CASE FOR/AGAINST NONGRADING

The Problem—Grades and Grade Levels

Schools have not always been graded. Prior to the opening of the Quincy Grammar School—Boston, 1848—there were no grade classifications; instruction was given on an individual basis. Since then the graded pattern has undergone little redesigning until recently. There were some attempts to break the lockstep pattern of grading during the 19th and 20th century—the Pueblo, Dalton, Winnetka plans for example—but they did not have

wide acceptance. Many of these attempts were designed to facilitate continuous progress for learners of widely varying abilities. In the last 30 years there has been an increasing interest, especially at the elementary school level, to de-emphasize, or remove entirely, grade lines and the accompanying practices which are associated with this type of organizational plan.

Gaier (1966) discussed the problem of our modern grade-oriented society as one which starts with nursery school grades awarded for competency in sand-box and proficiency in napping, to finally become the teacher's war-cry, the child's Nirvana, and the parental symbol of correctly proportioned genes and child-rearing attitudes. He posed two vexing questions: (1) What purposes do grades actually serve for the teacher and the student? and (2) Do grades actually evaluate attainment and/or promote learning?

The advocates of nongrading see grades as arbitrary symbols assigned for the attainment of arbitrarily designated grade-level segments of the curriculum. The basic assumption of the nongraded organizational plan is that there should be individualized instruction. This implies no learning materials are tied to any specific grade level . . . the needs of the student determine the curriculum sequence.

For example, Gloagu (1965) pointed up the significance of nongrading as a means of overcoming the grade-oriented problem and meeting the individual needs of the pupils. The philosophy of the nongraded program forces the classroom teacher to note the differences among children in a way the graded structure does not. If we accept the nongraded philosophy, each child is seen as an individual with special needs, problems, hopes and learning rates. If the teacher recognizes and accepts these differences then she begins to make changes in her curriculum, her patterns of interacting with her pupils, her teaching techniques, her patterns of evaluation, and her instructional materials in order to accommodate these differences.

Chadwick (1966) emphasized the individualization of instruction philosophy and the importance of appropriate methods of evaluation in the nongraded school. The teacher is urged to view the child first and foremost in terms of his own ability. Evaluation must present to the child a realistic and acceptable picture of himself, a picture that gradually leads him to a realization of the person he is and may become.

Hunter (1966) discussed the problem of teacher adjustment to the nongraded school program and the problem of providing for the needs of each individual child. She pointed out that "nongrading does not necessarily assure a wider range of ability. It does inexorably force teachers to make educational provision for the range they have." She went on to say that, "the tailored education of nongrading does not mean a different lesson for each child, but rather an appropriate lesson for each. With practice, teachers develop skill and facility in modifying academic content and teaching strategies so that they will be in keeping with realistic but rigorous expectations for children."

Goodlad (1955) predicted that nongraded units would be a significant structure of the future for permitting teachers to accomplish the goals of individualized instruction. He said then that good teachers find a way of operating effectively in any setting but no setting guarantees good teaching.

The nongraded school seems to free the good teacher from some frustrating restrictions and facilitates bringing the total program into more harmonious relationship with the character of pupil growth and sound curriculum development. However, some persons lacking insight set-up within the framework of a nongraded structure a rigidity as restrictive as that previously abandoned. To avoid this Goodlad pointed out the necessity for conducting a continuous in-service education program to acquaint teachers with what they should do and should not do in a nongraded program. Some of the results he observed from watching the new curriculum pattern of nongrading develop are:

1. Tensions in children are reduced as the concept of individual adequacy replaces that of personal rivalry.
2. There is increased teacher awareness of pupil individuality.
3. There is increased parental understanding of the school, its organization, its purposes, and its problems. A sympathetic attitude develops.
4. More teamwork on the part of faculty members brings the teachers a sense of shared accomplishment and united purpose. Teamwork thus generated pays off rich dividends in the form of other projects successfully accomplished.

However, Goodlad (1963) warned against preoccupation with

organizational form as an end in itself. School structure stands or falls on the basis of its perceived relationship to the school function, to the extent to which it fosters curricular and instructional practices that correlate with the educational objective sought. He noted, "Nongrading is a significant factor in school improvement only as it is seen and used by teachers as means to significant ends they wish to achieve." If we agree with this reasoning school structure is but a shell and does not guarantee quality education for children.

Nongrading—Advantages and Disadvantages

The Research Division of the National Education Association (1965) identified the major advantages and disadvantages of the nongraded school organization as reported by respondents to their survey. The advantages are:

1. Nongrading offers a solution to the dilemma of whether to promote a pupil who has fallen behind the others in his grade.
2. Nongrading can save money, fewer children will spend four years in the primary unit.
3. Nongrading takes the pressure off children and results in fewer emotional problems and less trouble with pupil behavior.
4. Nongrading is compatible with what has been demonstrated in programmed learning sequences; that sound learning is cumulative and that pupils learn better when they do not skip over or repeat what is misunderstood.

The disadvantages are:

1. School personnel sometimes have trouble getting parents to understand the nongraded arrangement.
2. Some older teachers find it difficult to change their thinking from rigid grade expectations.
3. Nongrading requires close attention to record keeping, particularly so that reports to parents on pupil progress can be understood.
4. The teacher has difficulty when various members of one class are at too many levels in their various subjects.

The chief advantages of the nongraded pattern of organization most frequently mentioned in the literature are:

1. Children's progress in learning is greater and more continuous.
2. Flexibility in grouping has succeeded in fitting the educational program more closely to the needs and maturity of the individual child.
3. Fewer children are retained.
4. Pressures for achievement and maintaining standards are eliminated or markedly reduced.
5. Teacher-parent rapport is improved.
6. The slower children are identified earlier.
7. There is high pupil-teacher morale.
8. There is increased teamwork between teachers, and between parents and teachers.
9. Curriculum takes on a new meaning.

Some general disadvantages noted :

1. The nongraded organization requires more work of the teachers.
2. Articulation becomes a major problem.
3. Orientation and adjustment are sometimes a problem for new teachers to the program.
4. Poor teachers may use the absence of grade levels as an excuse for indifferent performance.

DiLorenzo and Salter (1965) listed the essential characteristics or minimum conditions for nongrading as :

1. An adaptable curriculum, operationally defined.
2. Inventory and diagnosis for teaching.
3. Individualized instruction.
4. Non-forced and unobstructed learning.
5. A reporting system consistent with the philosophy.
6. A nongraded program in both reading and arithmetic.
7. The absence of grade levels and related machinery.

They pointed out that three aspects are considered subject to variation with the following alternatives :

1. Teacher utilization—team teaching, self contained classroom, the use of special teachers, and teacher cycling.
2. Pupil grouping—homogeneous, heterogeneous, interage.
3. Policies in inter-class transfers.

Halliwell (1963) wrote that champions of nongraded organizational patterns have certain convictions about how teachers

in graded organization behave. If teachers do the exact opposite then they have the characteristics of an ideal nongraded teacher.

1. Teachers in a graded organization have a fear of encroaching on the domain of the teacher in the next higher grade and therefore hesitate to teach advanced work to fast learners. To the nongraded teachers no material is limited to one grade level.
2. Teachers in a graded organization in their enthusiasm for preparing everyone for the next grade frequently push slow learners too rapidly for efficient learning and thus produce anxiety and frustration on the part of the teacher and the pupils. The nongraded teacher avoids this if she can and accepts the nongraded philosophy.
3. Teachers have to create so many groups in order to provide for individual differences that a great deal of seat work activity is necessary to keep groups busy, thus lessening the opportunity for immediate feedback, and permitting reinforcement of incorrect responses.
4. Although teachers are not too reluctant to provide grade materials on lower grade levels for slow learners, the wide range of ability in a typical classroom would involve several below-grade-level groups.

Summary

A review of research and literature on the subject of the nongraded organization leads the writers to make the following observations:

1. The use of the nongraded organizational plan is increasing steadily.
2. The nongraded organizational plan appears to be a promising approach to alleviating the problems of rigidity in the graded organizational structure.
3. Research evidence is not conclusive in support of a nongraded organizational plan over other types of school organization. Controlled experimental studies should continue in this area.
4. Researchers have been unable to isolate the factors of school organization for testing. There are a large number of uncontrolled factors. In many instances strengths and weaknesses are attributed to an organizational plan that are not necessarily characteristic of that plan but rather

indicative of lack of orientation, understanding, and implementation.

5. There are widely varying ideas concerning the structure and implementation of the nongraded plan. Therefore, there are many types of nongrading. Those who aspire to the use of the nongraded organization plan should give careful study to the characteristics and philosophy.
6. Several major strengths were attributed to the nongraded organizational plan. The child's progress in learning is greater and more continuous. Flexibility in groupings has succeeded in fitting the educational program more closely to the needs and maturity of the individual child. Pressures for achievement and maintaining standards have been eliminated or markedly reduced; teacher-parent rapport is improved; slower children are identified earlier; there is higher teacher and pupil morale; and there is increased teamwork among teachers and between teachers and parents. Curriculum takes on a new meaning and evaluation is much more meaningful.
7. Some disadvantages were noted for the nongraded plan. These include: the difficulty in changing attitudes and accepting change, the difficulty of orientating parents and community to a new structure and the increased time and effort on the part of teachers and administrators in initiating and maintaining a nongraded organization.
8. It is recognized that the nongraded plan is: (a) an organizational structure only and does not alone guarantee quality education in the school; (b) the nongraded organizational structure, with its lack of artificial barriers and rigidity, makes possible improvements within the school; (c) the teacher who does not recognize the potential of the structure will teach no differently than the teacher in a graded organization.
9. Nongrading of the curriculum and materials and revision of records, reports and procedures are necessary to the successful implementation of a nongraded organizational plan.
10. Some type of pupil classification-index is needed for nongraded organizations. The removal of grade designations has created problems in central office pupil-accounting and

statistics departments, and the problem of transfer into and out of the nongraded school must be considered.

11. The nongraded organizational plan is not a panacea to alleviate all educational problems. No organizational plan can guarantee or prohibit good teaching. It can only enhance or deter good teaching.

The successful implementation of a nongraded organizational plan rests in the acceptance of the philosophy and on the understanding, capabilities, and efforts of administrators and teachers.

In moving toward implementation of this organizational plan the following questions raised by Carbone (1962) would be good material for a discussion group to consider :

1. Do we have clear statements of our instructional objectives organized in a realistic sequence and covering the entire span of our program? (Objectives)
2. Do we have a sufficient variety of instructional materials on different levels of sophistication so that each teacher can adjust instruction to range of ability found in each classroom? (Instructional Materials)
3. Are we able to move toward greater individualization of instruction so that pupils can actually progress at individual rates? (Individualized instruction)
4. Are we willing to use grouping practices that are flexible enough to allow easy movement from group to group within a class, or from class to class within a school?
5. Do we have evaluation devices based on our instructional objectives that will provide clear evidence of pupil attainments and facilitate our decisions on grouping and progress? (Evaluation devices)
6. Are we sufficiently committed to that educational shibboleth—recognizing individual differences—to do something about the differences we have so long “recognized”? (p. 50 in Miller, 1967)

Unless we consider these basic questions it is difficult to see how nongrading or any other form of organization for that matter can realize its potential.

REVIEW OF THE RESEARCH

In 1958 Goodlad wrote, “Non-grading is supported by some plausible-sounding claims and theories rather than research.” In

1959 with Anderson he wrote with regard to comparative achievement of pupils in graded and nongraded schools, "There is no evidence to suggest anything. We have little more than inadequate first-hand impressions to go on."

Since these statements were written a number of research studies have been done. However, at this point in time there are not any clear cut answers to be derived from the research—findings differ.

Three types of studies are reported in the following pages: (1) Survey-questionnaire type studies which report the perceptions of educators in communities which have adopted the nongraded plan, (2) studies related to grouping practices which have a bearing on nongraded organizations, and (3) comparative studies which compare the nongraded organizational plan with the traditional self-contained classroom.

Survey Studies

Austin (1957) gathered information concerning the development, objectives, operations, professional staff, and public relations of the nongraded primary schools. The data on which the study was based were obtained from a questionnaire distributed to schools throughout the U. S. which were known to have ungraded primary units. Among the findings were: (1) social maturity, reading readiness, chronological age, physical maturity, mental age, emotional maturity, and intelligence are the factors used for placement, (2) all schools allowed additional time in the nongraded primary units for slower and less mature students (3) most schools reported flexible assignment policies where a pupil could be moved from one classroom to another, (4) Parent-teacher conference was the most frequent method used to inform parents, and (5) a majority of schools had a parent orientation to the program. The study concluded and recommended the following: (1) Thorough study, planning, and discussion should precede starting an ungraded program. (2) Continuous analysis is needed to assure every child the advantages of ungradedness. (3) Ungradedness should be recognized as an organizational scheme, not an instructional device. (4) Both parents and teachers must continually be helped to understand and support ungradedness.

Blackstock (1961) studied schools that have successfully inaugurated ungraded primary units to determine their common

elements. She distributed a questionnaire nationally. Her findings were:

1. The ungraded program has been successfully inaugurated in many schools;
2. There is no evidence that school size, or community complexity has any bearing on its success;
3. Initiation of the idea may come from any level of the school staff or within the community;
4. Understanding and acceptance of the program by teachers are necessary prerequisites;
5. Informing and convincing parents and the board of education of the merits of the ungraded plan is an important step;
6. One school or all schools in a system may be ungraded with comparable success;
7. Teachers may remain with a group of students one or more years as decided by each individual unit;
8. The parent-teacher conference is the preferred method of reporting pupil progress;
9. Ungraded programs have wholly or partially accomplished the following objectives: a) eliminated unnecessary retardation, b) insured continuous pupil progress, c) pupils progressed according to their individual needs, d) children challenged to work at their capacity at their own rate of growth, e) academic standards determined by the needs of the children rather than the traditional grades, f) lessened emotional blocking and frustration in pupils, g) encouraged flexibility in pupil grouping, h) helped relieve teacher tensions and frustrations, i) increased academic achievement.

Rehwoldt (1957) analyzed some of the effects of interage and intergrade grouping in an elementary school. He evaluated the multigrade plan, which is similar to the nongraded in many respects. Interage and intergrade classes of primary and intermediate levels were established. Studies of learning in reading, arithmetic, language, personal adjustment, social achievement, behavior characteristics, and attitudes towards school were made.

The purpose of Dufay's (1963) study was to develop procedures for the implementation of a nongraded primary school. One

part of the investigation dealt with a study of the literature on the topic. Additional information was obtained from selected nongraded schools through the issuance of a questionnaire. Through this instrument, the problems, failures, and successes of the participating communities were identified. Finally, the local school district was examined in terms of its suitability as a setting for a nongraded primary school.

Ritzenhein's (1963) survey of the literature produced the following conclusions:

1. Nongraded programs in the United States were reported to be more similar than different.
2. In nongraded organizations, grouping for instructional purposes was more flexible and was not associated with chronological placement of learners. Nongraded grouping practices, based on planning for continuous, sequential growth, tend to encourage increased pupil achievement and improved pupil attitude.

Fifty-two teachers and eight principals responded to two perceptionnaires developed by the researcher which produced the following conclusions:

1. Teachers and principals reported the need for increased knowledge in the field of child growth and development.
2. Teachers and principals reported that indiscriminate transfer of teachers might handicap the nongraded program development.
3. Some type of pupil classification-index should be devised for nongraded organizations. The removal of grade designations has created problems in central departments that are concerned with statistics and pupil-accounting.

The main purpose of the Delgado-Marcano (1965) study was to find out how curriculum and instruction were organized and how they operated in 20 nongraded elementary schools of the United States; and to determine to what extent the actual curriculum and instructional practices were compatible with the model of nongradedness supported by two leading educators.

Delgado-Marcano's findings were:

1. Five schools were found to be completely nongraded and 15 were found to be partially nongraded under Goodlad and Anderson's criteria of nongradedness.

2. In all the 20 schools, a written nongraded philosophy was found to exist; however, in practice this philosophy was in different stages of fulfillment.
3. Different patterns of nongrading organization were found to exist among the 20 schools studied.
4. Nongradedness in the area of reading was common to the 20 schools.
5. In general, a trend to consider a child's progress according to his own standards of development was present in the 20 schools.
6. In the full nongraded schools, children were heterogeneously placed in large, multi-age groups, and provision for individualized and small group instruction was made according to the educational task.
7. In the fully nongraded schools major curriculum revision was stimulated in order to satisfy the needs of individual children.
8. In the fully nongraded schools children were encouraged to learn how to learn on their own through individualized instruction and independent study.
9. In the fully nongraded schools the shifting of children within instructional groups or between classrooms was the routine and not the exception.
10. In the fully nongraded schools team teaching permitted a greater depth in planning for instruction, which led to more efficient utilization of the teaching staff as well as to facilitation of the continuous progress of the learner.
11. In the fully nongraded schools the role of the teacher changed from a position of instructor to that of a guide, counselor, or helper.
12. In the partially nongraded schools children were most often placed in self-contained classrooms in groups of the same chronological age, and the tendency was to use the total class as an instructional group.
13. In some of the partially nongraded schools a graded approach was still used in the placement of children.
14. Some of the partially nongraded schools limited the program to the primary level.
15. In the partially nongraded schools individualization of instruction was scarcely used.

Her conclusions were:

1. All things considered, the philosophy of nongradedness has prospered and is becoming accepted by different school systems throughout the nation as one realistic approach toward the improvement of learning.
2. At present, the nongraded elementary school organization seems to be in a transitional stage of development from gradedness toward nongradedness.
3. An experimental attitude with different patterns of nongraded organization seems to be a general trend.
4. It seems that the operation of individualized instruction requires more teacher training to close the gap between theory and practice.
5. Learning in nongraded schools has changed from a restricted and formal receiving exercise to one of social interchange and direct participation.

Christian (1967) reported the following findings from her survey of 90 administrators and 240 teachers representative of 105 nongraded school systems in 32 states: [ten of her sixteen findings are reported]

1. The perceptions of nongrading indicated by the majority of participants appeared to be conflicting and often inconsistent with the philosophical concept of a nongraded school. The principles of flexibility, continuous progress, individualization, and a personalized curriculum, which are hallmarks of the nongraded concept, were not evidenced in the majority of nongraded programs.
2. Data relative to mobility of pupils reflected a change when compared to the common practice of moving pupils at the end of the school year. Sixty-six percent of the teachers indicated that pupils were moved from one classroom group to another when the teacher deemed it advisable. Ten percent, however, restricted movement to the end of the school year.
3. In the area of reading instruction, 50 percent of the teachers organized their classes into three groups, and 36 percent relied on one reading series.
4. In the area of mathematics, 45 percent of the teachers utilized one textbook; 61 percent used a developmental skills approach.

5. In the area of language arts, the teachers relied heavily on large group instruction. Forty-three percent indicated that instruction was given to the group as a whole, and 40 percent of the participants utilized one basic text. Approximately 4 percent individualized instruction and used the multitext approach in this area.
6. In the area of science, total group instruction was the dominant pattern. Fifty-eight percent indicated that science instruction was geared to the class as a whole; 8 percent of the respondents utilized three instructional groups in this area.
7. When reporting their practices in the area of social studies, 54 percent of the respondents indicated development of experience units. Thirty-seven percent of the teachers utilized the multi-text approach.
8. The greatest single problem, as indicated by 70 percent of the teachers, was grouping and subgrouping for instruction. Administrators felt the greatest difficulties experienced by teachers resulted from lack of understanding of the nongraded concept and "grade-mindedness" in classroom practices.
9. Courses and experiences recommended most frequently for inservice and/or preservice teachers were child development, individualized instruction, workshops on nongrading, and student teaching in nongraded schools.
10. The most frequently mentioned changes in school programs resulting from nongrading included the development of reading levels program and cooperative teaching. Administrators indicated continuance of the nongraded organization with plans for modification. Future plans included combining team teaching with nongrading, extending the nongraded structure to upper levels, developing the social studies program, increasing individualized procedures, and revising reporting systems.

Two of her recommendations were:

1. School systems should not move toward nongrading without a continuous and extensive program in retraining of administrators and teachers.
2. School systems, which are currently operating as nongraded, should take a critical look at the existing program

and engage in continuous inservice training designed to help teachers and administrators incorporate the concept of nongradedness in actual operational practices in the school.

Jones (1948) sought to determine through a controlled experiment the comparative amounts of growth attained by children at the intermediate level when taught on their individual levels of accomplishment, and children taught as a group the curriculum prescribed for their grade with only minor and incidental provisions for individual differences in ability and achievement.

Her findings were that:

1. Reading growth was consistently in favor of the experimental group. With one exception in favor of the control group, arithmetic differences were in favor of the experimental group. All spelling and all average growth favored the experimental group. The pattern of inverse ratio of differences to level of ability was noted in all areas except spelling.
2. The difference between experimental and control groups of measured superior intelligence was insignificant, but all differences for average and below average pupils were significant at the .01 level or at the .05 level in favor of the experimental group.

Based on statistical data, Jones concluded that :

1. Children taught on their individual levels regardless of grade placement make a greater amount of growth than comparable pupils taught as a group the curriculum prescribed for their grade with only minor and incidental provisions for individual differences.
2. This difference in amount of growth between the two groups was consistently true in reading, arithmetic, and spelling, and consequently true in total average.
3. The difference in growth was consistently true for superior, normal and dull children.
4. In reading, arithmetic, and spelling, the difference in amount of growth between the two groups was in inverse ratio to the level of ability of the pupils.
5. Differences in growth as a result of individualization

were more significant for normal and dull children than for superior children.

Her conclusions based on records kept or factors observed were that:

1. Children tend to make greater gains when they are aware of their own needs and abilities.
2. Superior children are less dependent on individualization of instruction and guidance from the teacher than are their less capable classmates.
3. Average and dull children benefit more from adaptation to their levels of ability and guidance from the teacher than their more capable classmates.
4. Grouping and adaptation to individual differences in a classroom are a matter of management of time and facilities rather than one of class size and administrative planning.
5. Growth in relation to a starting point and ability is more significant as a measure of accomplishment than is achievement of grade norms.
6. Challenging children to growth commensurate with their abilities tends to increase rather than decrease the spread of levels of achievement within a single classroom.

Koontz (1961) studied achievement as a function of grouping by comparing the achievement of fourth grade pupils enrolled in homogeneously and heterogeneously grouped classrooms. Strickly speaking, this is not a study of nongrading, but since the homogeneous groups were permitted to progress at their own rate, one of the basic premises of nongrading, the study has been included in this review. Utilizing a level analysis of variance design the investigator found that the heterogeneously grouped pupils were significantly superior to the homogeneously grouped pupils in the areas of reading and arithmetic. The difference in language was not significant.

Comparison Studies

Bockrath's (1958) study was concerned with three problems: (1) To determine whether or not the nongraded organizational plan resulted in better reading; (2) To report the specific findings of a three-year study of a group of children as they progressed through the ungraded primary unit; (3) To ascertain

through a survey of primary teachers if the program had contributed to an improved teaching-learning situation. A comparison of reading scores for fourth grade pupils in 1953—before nongraded organization—with those of 1956 showed a median increase of 5 months. The three-year study showed how the organization can function. The questionnaire answers revealed that an overwhelming majority of primary teachers favored the program and considered it a contribution to more effective learning and to teacher-growth.

Ingram's (1960) study compared the achievement of children in a nongraded primary with the achievement of children in a traditional graded program. She was quite explicit in pointing out that the nongraded program was an administrative device for organizing learning and that the curriculum and methodology were not altered. The achievement of 68 pupils in the experimental program was compared to the achievement of students who had completed the same grade the previous three years. Further, the scores of the 68 pupils in the primary cycle were compared with scores of all third-graders in the public schools of Flint, Michigan.

Her findings were that:

1. It was noted in all language arts and reading areas pupils in the primary cycle scored significantly higher than the pupils in the traditional graded program. This was significant at the 1 percent level or better.
2. In comparing the achievement of the third graders in the primary cycle with the 3,314 third graders in all the public schools of Flint, it was noted that differences in the four mean areas tested favored the pupils in the primary cycle over the pupils in normal grades at 1 percent level or better.

Ingram's conclusions were that:

1. Children in the primary cycle achieved better than children in the regular traditional graded program.
2. Ninety-seven percent of the parents favored the program.
3. Teachers were enthusiastic about the program.
4. The three year block of time provided in the primary cycle removed pressure from pupils and teachers allowing steady growth.

Skapski's (1960) study was designed to compare achievement when ample provisions were made for individual differences and when virtually no provisions were made.

Her findings were that:

1. Average arithmetic achievement, where all children regardless of ability were given graded instruction, was lower than the average reading achievement where children were presumably taught at the appropriate level of difficulty. Also, the spread of arithmetic scores was much more narrow than the spread of reading scores. The differences between reading and arithmetic achievement were found to be significant, the T-ratio being 5.4 for second year children and 7.5 for third year children. Third year children were achieving at a point further above their grade placement than second year children who had spent one year less in the nongraded situation.
2. In comparing the experimental school with the two control schools it was found that the children in the nongraded primary were achieving at a higher level than the children in the traditional primaries, significant at the 1 percent level of confidence. The nongraded reading program in the experimental school did not result in lowered achievement in other subject areas.
3. There was no statistically significant difference in reading achievement between the two control schools.
4. Children in the nongraded program at each level of ability benefited from the individualized program. The difference was greatest for children of very superior intelligence.

From her study she concluded that:

1. The nongraded primary benefits all the children.
2. The nongraded primary does not allow gifted children to underachieve nor slow learners to be frustrated by repeated failure.
3. Less than half as many children spend four years in the primary than would if the question of promotion came up at the end of the first year of school.

Provus (1960) studied the effects of nongrading in arithmetic on fourth, fifth and sixth grade students. Children were allowed to proceed through the arithmetic sequence at their own rate of

progress. His study yielded data significantly favoring the non-graded approach. Provus found that the superior students profited most from nongrading. The attitude of children toward math in the nongraded plan was not significantly different from the attitude toward math in the graded plan, but the teachers preferred the nongraded approach.

Morgan and Stucker (1960) compared the reading achievement of matched groups of 180 fifth and 226 sixth grade pupils assigned to self-contained and ability-grouped reading classes. At the end of one year the fifth grade classes grouped for reading on the basis of ability were superior in reading achievement to the self-contained classes at the .01 level of confidence. At the sixth grade level the ability groups were superior to the self-contained groups at the .05 level of confidence. The investigators felt that the advantages of this type of ability grouping for the bright pupil were obvious but they hypothesized that the advantage to the slow pupil was that he was permitted to function in a non-threatening group of children experiencing similar problems, and that maximum feed-back was possible.

Zerby's (1961) study was designed to determine whether the nongraded primary school organizational plan produced a more advanced academic achievement level and better social acceptance among pupils than did the graded school organizational plan.

His findings were that:

1. At the end of three years the nongraded primary school plan produced pupil achievement levels which averaged nearly eight months in advance of anticipated levels while the graded unit exceeded anticipated achievement by five months. Measures of intelligence favored the graded school but nongraded pupils' achievement level exceeded the graded pupils by an average of three and one-tenth months.
2. No significant differences were noted in sociometric comparison, except that fewer "isolates" were found in the nongraded school.

He concluded that children in the nongraded primary school plan exceeded the children in the graded plan in achievement, but both groups exceeded anticipated achievement.

Enevoldsen's (1961) study was concerned with the degree of success of the ungraded primary program in relation to pupil

achievement, and pupil attitude toward school. The sample selected was fourth grade children in three selected experimental schools and four selected control schools who had been in an ungraded or graded situation for three years. Pupils who had been in an ungraded or graded school for three years but who were still not in the fourth grade, were also tested. The sample had 210 pupils in each situation.

His findings were that:

1. Significant difference was found in favor of the graded program in arithmetic reasoning and arithmetic total.
2. Among high achievers no significant difference was noted.
3. Among low achievers significant differences were noted in favor of the graded program in reading, vocabulary, arithmetic reasoning, arithmetic total, total battery.
4. Among third grade retentions significant differences were noted in favor of the nongraded program in arithmetic fundamentals.
5. In attitude towards school with no attempt to control the intelligence factor, no significant difference was noted in the total group.

His conclusions were that:

1. Principals, teachers and parents favored the nongraded school program.
2. No significant differences were noted in academic achievement between the two plans in 33 of the 40 testing situations. The graded had the advantage in six cases, and the ungraded in one case.

Carbone (1961) reported that students achieved higher in a graded organization than in a nongraded organization. He found that pupils in the nongraded organization tended to view their teacher in more favorable light than pupils in the graded pattern. His findings were:

1. It is not realistic to expect improved academic and personal adjustment in pupils on the basis of a change in organizational structure,
2. High pupil achievement and good mental health are not unique results of nongrading,
3. The mental health of nongraded pupils was not significantly different than that of graded pupils. In fact, in

social participation graded pupils exhibited better adjustment.

4. Teachers in nongraded schools operated much the same as teachers in graded schools. Each appeared equally aware of pupil differences. However, teachers in nongraded school more frequently transferred pupils to other classes where instruction was more suited to the pupils' needs and appeared to make decisions leading to such transfers based on pupils' academic role while in graded schools the teacher gave more attention to how pupils compared with other pupils.

Carbone's (1961) conclusions and analyses of results were that:

1. Changes in organizational structure in this case did not produce major changes in the instructional practices teachers use.
2. Graded pupils exhibited higher achievement than nongraded pupils although both groups were achieving above national norms.
3. Evidence of this study strongly contradicts the notion that a change in school organizational structure alone will produce higher academic achievement or better mental health.
4. The establishment of nongraded structure in these schools did not produce sharp differences in the instructional practices of teachers.
5. Recognition of individual differences has a common meaning for teachers regardless of the organizational structure of the schools.

Buffie's (1962) study was concerned with whether differences in mental health and academic achievement as measured by tests between control groups (graded) and experimental groups (ungraded) were significant.

His findings were that :

1. In eleven areas of mental health and academic achievement tested results favor the nongraded group.
2. In three areas there were significant differences in academic achievement at the 1 percent level and in two of the mental health areas there were significant differences at the 5 percent level of confidence.

His conclusions were that:

1. Evidence supported claims by proponents of nongraded systems as to academic achievement and general adjustment.
2. Children attending under rationale of nongraded primary seemed to be clearly superior in all areas of language and work study skills as well as in over-all academic composite scores.
3. The trend is apparent to indicate better adjustment in nongraded primary.
4. No claim was made for having established causal effect.

Hickey's (1962) study analyzed and evaluated the ungraded primary program in four graded and four ungraded schools, involving 745 ungraded pupils and 603 graded pupils.

Her findings were that:

1. Nongraded scored significantly higher in reading achievement, arithmetic computation, and problem solving.
2. Those of high intellectual ability benefited most in arithmetic.
3. There was consistently higher correlation between achievement and IQ in the nongraded than in the graded.
4. No significant difference was noted in personal adjustment.
5. Large numbers of teachers expressed preferences for teaching in the nongraded program.

Her conclusions were that:

1. Nongraded pupils were achieving better than graded pupils.
2. Individual differences were provided for better in the nongraded program.
3. Personal adjustment did not seem to be affected.
4. Teachers believed that students achieve better in nongraded schools.
5. Parents thought nongraded schools were superior to graded schools.

Hart (1962) conducted a matched-study comparison of arithmetic achievement of pupils in graded classrooms with pupils in the nongraded primary school.

His findings were that:

1. The experimental group (nongraded) achieved a mean score of one-half year above the control group (graded). The differences in mean were significant at .02 level of confidence in favor of the experimental group.
2. Fourteen percent of the experimental group scored below grade level; whereas twenty-six percent of the control group fell below grade level.

His conclusions were that:

1. Achievement of pupils in arithmetic was significantly higher in the nongraded primary which gave pupils self-confidence and made the learning experience more interesting.
2. A graded system tends to foster unrealistic standards and to be inflexible in meeting the needs of all pupils.
3. A nongraded system can be flexible, fostering standards that challenge and interest the able learner without frustrating the slow learner.
4. Teachers in a nongraded school find that they can be more effective and comprehensive in their teaching.
5. Children appear happier and more secure without fear of retention and with competition controlled so that all pupils have a reasonable opportunity to succeed without grades.

Halliwell (1963) reported a study to determine whether or not there would be significant gain in achievement of primary grade pupils after a variation of the nongraded primary unit was adopted.

His findings were that:

1. The nongraded pupils in first grade obtained significantly higher achievement scores on word knowledge and reading comprehension than did the graded pupils. The differences were significant at the 1 percent level of confidence.
2. At the second grade level the data were in favor of the nongraded pupils on every subject area but word discrimination, but only in the area of arithmetic was the difference significant. The difference favored the nongraded pupils at the .05 level of confidence.

3. The data at the third grade level revealed that the non-graded students achieved higher mean achievement scores than did the graded pupils in every subject area tested, with three of these differences being statistically significant.
4. The differences favoring the nongraded group in arithmetic computation and spelling were significant at the 1 percent level of confidence and the difference in arithmetic problem solving favored the nongraded group at the 5 percent level.

His conclusions were that:

1. Whereas the nongraded approach brought about gains in reading and spelling, the gains in arithmetic were even greater than those in reading and spelling. Teachers indicated that the teachers in the nongraded school program spent a great deal less time in reading enabling them to devote more time to arithmetic, social studies and language arts instruction.
2. In light of the findings of this investigation it would seem that a nongraded approach to the teaching of reading and spelling was quite effective and worthy of further consideration.

Hillson et. al. (1964) sought in a controlled, experimental situation to assess the effects of a nongraded program on the reading achievement of a group of elementary school pupils.

The findings were that:

1. The nongraded pupils performed at a higher academic level in the three areas tested.
2. Comparison of mean grade levels was significantly in favor of nongraded primary at the 1 percent level.
3. The mean grade level on word meaning was significantly greater in favor of the nongraded at the 1 percent level.
4. Paragraph meaning showed the same favor for the experimental group at the 6 percent level.

From this study the authors concluded that:

1. It can be inferred that the superior achievement of non-graded pupils was attributable to the organizational structure rather than to superior pupil ability and/or teaching methods.

2. Generally it can be concluded that pupils participating in a nongraded primary organization will achieve at a significantly higher level on measures of reading ability and related measures of reading than will pupils participating in a graded organization.
3. Increased achievement in nongraded primary is related to organizational structure when methods of teaching are held constant.

Moore (1965) reported an investigation to study the difference in achievement in reading and arithmetic between children in graded and ungraded organizations, and to study grouping practices of the teachers in the instructional program.

His findings were that:

1. The mean score in graded classes exceeded the mean score of pupils in nongraded classes in nearly all measures of achievement.
2. It appeared that greater flexibility was not a unique attribute of the nongraded organization.
3. It was noticeable that provision for variability of pupils could be met as adequately in the conventional graded organization as in the ungraded organization.
4. The nongraded organization appeared to be an attempt to provide for individual differences of pupils along a single dimension-rate of pupils' progress.

Moore's conclusions were that:

1. The graded organization was already nongraded in much of its operation in primary grades.
2. It was not reasonable to expect an improvement in academic achievement as a result of changing from a graded to a nongraded organization.

The major purpose of the Hopkins *et al.* (1965) study was to determine whether or not differences exist in reading vocabulary and comprehension between pupils in a graded program and pupils in an ungraded primary program. The groups were also compared with respect to (1) teachers' evaluations, (2) sociometric patterns, and (3) attendance. Forty-five primary classrooms were studied (20 ungraded and 25 graded). The results of this experiment indicated that the ungraded primary program

was neither inferior—or superior to the graded in any of the following respects: pupil achievement, teacher satisfaction, sociometric patterns, or pupil attendance. At the end of the four-year study, the participating school district decided to return to the conventional graded organization mainly because the pupils in the ungraded program, which posed more administrative problems, had achieved no more on the average than those in the graded classes.

Muck (1966) and Ross (1967) studied the ungraded primary school in the university setting. Muck's (1966) study was concerned with answering the question, "Are the academic achievements of children in a nongraded primary classroom more advanced than the academic achievements of children in a graded primary classroom in the Campus School of the State University College of Buffalo, New York?"

The plan provided that a teacher in the experimental classroom remain with a class of children through the first three years of primary work. Each child in the three experimental groups was matched with a child in a corresponding control group which proceeded through the regular first, second and third grade plan. Six classrooms were involved. At the end of the third year both groups had covered the same curriculum with the control classes following a definite graded sequence while the nongraded or experimental classes used any part of the three year sequence as it was needed. The unit approach was used by all teachers who also shared most of the teaching materials.

The hypothesis tested states, "The level of performance on a test of basic skills included in the curriculum goals of the Campus School is significantly more advanced in the nongraded classes than in the graded classes."

The data collected made it necessary to conclude that there is no support for the stated hypothesis. The nongraded classes did not achieve better than the graded classes in academic areas of the curriculum. On this basis one is led to question the many positive claims made for the nongraded programs.

Ross's (1967) study made a comparative analysis of the progress of pupils enrolled in the ungraded and graded primary programs of the University Elementary School at Indiana University. The study sought to determine whether the differences in academic achievement, mental health as measured by an anxiety scale, and social relationships of the children were significant

after test scores and sociometric data had been adjusted for intelligence.

Ross's conclusions were that:

1. The ungraded organizational plan alone does not contribute to greater academic achievement, better mental health, and improved social relationships.
2. Because of the ungraded school's philosophy which emphasizes the whole child, it is difficult to measure the effectiveness of the ungraded plan.

Parker's (1967) study was concerned with the status of certain organizational and instructional practices which are related to providing for individual pupil differences as found in the primary grades of six elementary schools. These schools were nominally graded or ungraded. Parker's findings were:

1. Nongraded schools were different from graded schools at statistically significant levels in that reading achievement, rather than grade or year, was the chief factor considered in assigning pupils to classes.
2. A greater number of teachers regrouped children among classes for arithmetic instruction. Other apparent differences, although not statistically significant, were more frequent differentiation of instruction within the classes for arithmetic and spelling, and a greater emphasis on individual ability and effort in the evaluation of pupil progress.
3. There was a tendency in all schools to follow graded practice in reassigning pupils to different teachers each year, limiting chronological age-span within classes, teaching spelling, art, physical education, handwriting, social studies and science to self-contained classes taught as a whole, using grade-designated texts for arithmetic, language, science and health, and prescribing a common curriculum for all children.
4. All schools were more closely aligned to nongrading in that retention and acceleration decisions were based on a variety of factors rather than on achievement alone.
5. Provisions for individual differences in reading and arithmetic were formally arranged in and among classes.
6. Texts of varying difficulty were used for reading, varia-

tions in rates of progress were generally accepted, and promotion decisions were made on an individual basis.

7. Teachers and principals saw the greatest potential for meeting individual differences in smaller classes, maintaining self-contained classes for most of the school day, and reducing the range of abilities within each class.
8. Despite nominal commitment either to grading or non-grading, the type and extent of provisions for individual differences tended to be similar among all of the schools.
9. The chief difference seemed to be that, in graded schools, such provisions for individual differences were informal, although generally accepted and understood. In non-graded schools, they were recognized in the formal plan of operation. Formal recognition did appear, however, to have resulted in an increase in flexible grouping practices and in greater emphasis on individual ability and effort in the evaluation of pupil progress.

Critique of Research

A review of the research on nongrading revealed conflicting findings. The findings of the experimental (comparison) studies were difficult to interpret for one or more of the following reasons:

1. From what we can gather from the research reports most, if not all of the studies did not randomly assign students and/or teachers to the graded and nongraded situations. Random assignment is a difficult if not almost impossible thing to do in public schools. However, when two or more groups are compared (in this case graded compared to nongraded) a basic problem which arises is the achievement of equality of groups prior to experimentation. There is a lack of faith among educational researchers today in the matching of groups. The major technique recommended is the equation of groups by chance through randomization.
2. In most of the studies it was found that such factors as the following tended to nullify attempts to study the factors of school organization alone:
 - a) grouping practices—homogeneous vs. heterogeneous
 - b) various forms of teaming teachers
 - c) various programs emphasizing individual differences

- d) differing attitudes and interests on the part of administrators, teachers, parents and pupils created by the way the nongraded program was planned and/or instituted. In other words, were these really nongraded studies or studies of grouping, team teaching, etc., or a combination of these?
3. In comparison studies a great deal of care must be taken to control for the process of teaching. For example, an item such as the amount of time a teacher spends on an area may be a crucial factor in whether the student scores improve more than those in the other group. The Halliwell (1963) study, quoted in this bulletin, found that nongraded students produced higher results in arithmetic—even though arithmetic had *not* been ungraded in the experimental situation. In seeking a satisfactory explanation it was learned that the nongraded teachers spent less time on reading than did the graded teachers. This enabled them to devote more attention to arithmetic.
4. Finally, Garvue (1967) said, "The most glaring research weaknesses are failure to include a large enough number of schools in the study, failure to do longitudinal studies of an adequate number of variables within the framework of a pre-test and post-test design, and failure to evaluate in terms of avowed goals. Valid generalizations and valid research are impossible without such provisions." (p. 97)

These are but a few of the problems which make it difficult to generalize results to other situations. A conscientious investigator typically cautions the reader against generalizing results beyond the particular experimental situation. A basic reason, in addition to those above for such caution against overgeneralization of the findings, is that neither the characteristics of the learner and the teacher nor the types and techniques of learning involved have been described—or adequately measured. Most of the measurement has been done with achievement-type tests.

With the above mentioned cautions and differences in research results, how can we make good decisions about nongrading? Garvue (1967) gave us an answer.

The validity of the nongraded movement will not be determined solely by experiments conducted by those with special research competencies but rather by the test of time and by the nation's collec-

tive professional competencies. The local school educator's judgment remains, and likely will remain for some time, the best basis for determining the value or lack of value of the nongraded school. (p. 106)

AN APPROACH

Position Statement

Goodlad (1962) indicated that nongrading as an organizational plan is supported by persons with differing conceptions of the purposes of a school. Some of the advocates of nongrading see a structure for more efficiently regulating the progress of learners through a relatively common set of subject matter prescriptions—they substitute reading and arithmetic levels for grade levels. Others see it as a structure within which individual needs, interests and abilities may be identified and used in fulfilling a more child-centered concept of school function. In analyzing the practice he reveals that much confusion is in the minds of those conducting nongraded school programs regarding the school programs which they serve. The school organization known as nongrading can serve either of the two points, but failure to clarify the function usually leads to confused practices, under the name of nongrading, and sometimes to disillusionment and subsequent return to grading. It is to the latter of these two approaches—a concern for individual needs, interests, and abilities—that this study is dedicated. The suggestions on the following pages are based on the assumption that the nongraded school organization is a structure in which individual needs, interests, and abilities may be identified and used in fulfilling a more child-centered concept of school function.

Preliminary Steps

Based on a review of literature, case studies, and personal experience of the writers in nongraded situations the following steps are recommended for implementing an organizational plan:

1. Develop as a staff a written philosophy, principles, and major objectives. Give careful attention to what each teacher individually and the staff collectively know and/or believe about children, about teaching-learning processes, about curriculum development, about other functions of the school, about community involvement, and many other areas. State the objectives of the school in behavioral terms. Constantly reassess your philosophy,

principles and objectives in view of changed attitudes and new findings.

2. Carefully assess your present school program in view of your stated philosophy and objectives. Identify major strengths and weaknesses of the program. Identify problems faced and assign priorities ranked in order of feasibility.
3. Inventory and evaluate the physical setting. Study the school plant, equipment and materials as well as financial resources in view of your stated philosophy and objectives, and the problems you have identified.
4. Review research and current thinking on elementary school organizational patterns. Compare the advantages and disadvantages of the different types of organizational patterns. Relate promising practices in the areas of teaming of teachers, cooperative teaching, individualization of instruction, grouping practices and procedures and methods of evaluating and reporting to the potential success in each of the organizational patterns.

At this point the staff is ready to make a selection of an organizational pattern commensurate with stated aims and objectives. If the nongraded organizational pattern is chosen, the following steps are recommended:

1. In view of your study of research and literature in the field of nongrading, devise a nongraded organizational pattern commensurate with your stated aims and objectives and in terms of its appropriateness for your school. Exercise care not to adopt a "package deal" tried elsewhere without carefully assessing the appropriateness of the model for your school and community.
2. Hold an orientation program for parents and interested community leaders. Be sure that your community understands the concept of the nongraded organization. Determine ways of involving community members in development of the program. Keep the community apprised of developments in the new program.
3. Organize the staff in such a way as to provide for continuous orientation for new members and for continuous involvement of staff members in the planning and development of the program.
4. Begin a meaningful continuous program of in-service ed-

ucation, formal and informal, for teachers. Seek consultative services of high quality and take steps to see that your faculty meetings are dynamic and meaningful to your program.

5. Formulate strategy for evaluation. Develop a research design and seek or devise instruments appropriate to assess various aspects of the new program.
6. Make plans for grouping procedures for children keeping in mind the importance of flexibility.
7. Revise and reorganize the curriculum in view of your philosophy and organizational pattern. Nongrading requires continuous revision of the curriculum and evaluation of the total program. Develop procedures for seeking and selecting wide varieties of new materials and media.
8. Provide for flexibility in the total program. Give careful attention to the use of special teachers, the development of the library into a laboratory for learning, and the use of community resources in the new program.
9. Revise records and reports in view of your purposes. Establish and maintain good channels of communication with your school parents, patrons, and community agencies. Anticipate what might appear to be small insignificant details becoming major battlefields which could distort the broad purposes. An example of this is the report card and its revision.
10. Develop a school-plant-use plan that will provide maximum utilization of existing facilities. Determine structural changes that will enhance the new program.
11. Provide for adequate time for teacher planning. There should be definite times away from the children for teams of teachers to plan and "dream."

Larmee (1967) suggested that one of the best ways to initiate a study of the nongraded school may be to consider a series of problems related to the operation of a graded school. Initiation or recognition of these problems may come from any point in the educational hierarchy.

The following list of problems are not new, but viewed in relation to the nongraded school, they offer points of attack for staff study and discussion.

1. How do we deal with the differences in readiness of children who are entering our schools each year?
2. In a graded school system, do we make any special provision for children who have had one or two years of nursery school prior to entering our school system?
3. Do the initial differences in the ability of children increase or decrease as they continue their formal education experience?
4. Is there a difference in a child's interest and achievement rate as he moves from one learning experience to another?
5. In what ways does the graded pattern of school organization restrict a student from a desirable, uninterrupted, sequential, educational experience?
6. Does homogeneous grouping of students for all educational experiences at a given age level provide a solution for some of the problems resident in a heterogeneous grouping arrangement?
7. How do we fit independent study programs into a graded or homogeneously grouped school organization?
8. Do these independent study programs present new problems within the graded structure of school organization?
9. How can our report to parents on pupil progress be made more meaningful? (pp. 78-79)

Organization

The philosophy of nongrading calls for an organizational pattern which will provide for continuous uninterrupted progress for each child regardless of ability, past performance, and experience. Grade barriers and preconceived standards of expectation should be replaced by an organizational pattern that will permit an individualized program. The key factors in this plan should be continuity and flexibility. The substitution of rigid reading levels or any rearrangement of standards, barriers, or expectations will not be conducive to the establishment of a non-graded program. A truly nongraded organizational pattern creates the setting wherein teaching-learning processes may be accomplished with quality and effectiveness.

Grouping of Pupils

The underlying philosophy of nongrading demands flexible grouping based upon the continuously changing needs of children. Care should be exercised to avoid grouping for administrative or

teaching convenience. Provision should be made to allow for large group instruction, small group instruction, and independent study. In grouping avoid labeling children with terminology that tends to become negative or fixed with usage. School-wide homogeneous grouping is *not* a requisite of a nongraded organization, though it has often been mistakenly attributed to it.

On the subject of grouping, Heathers (1966) stated that grouping practices in nongraded primary schools vary in the following ways: in some schools groups are set up on the usual age-level basis with nongraded instruction facilitated by inter-class grouping; in other schools multi-age grouping occurs with groups formed on the basis of achievement level.

Curriculum revision

In moving toward nongrading the staff will find it necessary to move from an emphasis on a particular body of content or subject matter to an emphasis on the development of skills, skills that are concerned with the vital aspects of living and have a relationship to the interest of the learner. The emphasis will have to move from bodies of content divided into the six appropriate grade levels to the development of skills and concepts significant to the child when he is ready for each development. This is not to indicate that content is unimportant. What we are saying is: content is not an end in itself but a means to the end of making possible for the child the development of skills for effective living. It should be understood that a correlated sequential program is superior to a segmented one; and that the entire staff should be involved in the development of the curriculum. It is recommended that the staff consider using problem-solving techniques to encourage critical and creative thinking.

Equipment and materials

A move toward nongrading is a move away from the comfort of having a textbook to follow day after day regardless of the ease and convenience of having complete teaching plans provided in the teachers' guide. Teachers will need to search for materials, materials suited to the particular needs of a particular child at a particular time. Under this plan no certain materials "belong" to a certain group solely because chronologically they have reached a certain grade. Teachers have to become more involved in the selection of materials and equipment and continuously and

carefully assess their value in terms of the school program. Special care should be exercised to avoid mass purchasing of materials and equipment because of administrative convenience or lack of time to be selective. It is very difficult and time-consuming to select materials child by child but very rewarding to find that the material you have selected has meaning and purpose for each child.

Scheduling

Flexibility in scheduling is important to success in non-grading the school. School-wide administrative scheduling has a tendency by its very nature to become rigid. It is recommended that large blocs of time within the school day be provided for teams of teachers to utilize in planning and providing day-to-day experiences for children. Once the concept of "one teacher, four walls of a classroom, and thirty children" is broken, many possibilities in flexible grouping and flexible scheduling are possible. Day-to-day decisions within the blocs of time should be left to the teaching team. Administrators and special personnel should be considered a part of each teaching team and should provide leadership and assistance wherever needed. It is imperative that sufficient time be provided for teams for planning. There should be time during the regular school day when teams of teachers can be freed from teaching duties to plan together. Daily planning is essential to a nongraded process.

Evaluation

In a nongraded situation much attention is given to testing and evaluation. Administering a standardized mental abilities test, and achievement tests, is not adequate for the accurate assessment of the capabilities and accomplishments of children. These tests measure only a small part of the growth process of children. This is especially significant in considering evaluation of progress of children who are significantly economically, culturally, and educationally disadvantaged. Instruments to measure attitudes and self-concept are just as important to the learning process as instruments to measure intelligence and achievement. Teachers will have to be more sure of what they are measuring, why they are measuring, what they are doing with the information, and how children can be positively helped by evaluation.

In many cases instruments for measuring significant growth

factors and for measuring curriculum practices and procedures will not be available. In those instances teachers must develop, with the assistance of qualified consultants in the field, quality instruments for themselves.

As the school moves toward nongrading, care should be taken to establish a research design which will carefully measure significant factors of the new organizational pattern which will provide feedback for modification change.

The Library, a laboratory for learning

With the exception of human resources—children, teachers and others—the library is perhaps the greatest asset to the non-graded school program. It is recommended that the staff plan, with the librarian as a member of the team, for an unscheduled library program. Provisions are made to permit children to go to the library at times significant to serve their needs and experiences. This will vary significantly from week to week. It is recommended that the library be continuously available to individuals and small groups of children throughout the school day, and that the library program become a laboratory for learning in which a wide variety of instructional materials, including films, film-strips, tapes, records and other media be available to the individual child and to small groups of children.

Reporting to parents

In moving toward nongrading it is of utmost importance to keep parents informed of the purposes of the program and of the progress of the children. However, the reporting process used by most graded systems, in which the child has been assigned a grade based on a nebulous assessment of his comparative achievement with grade standards and other children, is not compatible with a nongraded organizational pattern. To attempt to use such a reporting procedure in a nongraded organization can lead to cross purposes, disillusionment and deceit. It behooves the staff of the school to make the purposes of the experimental program clearly known to parents, and to solicit and enlist their cooperation and assistance in devising a reporting plan that is meaningful to them and to their children. Reporting procedures that cause children undue embarrassment and create pressures that lead to frustration should be avoided. It is recommended that the staff consider the use of parent-teacher conferences,

teacher-child conferences, and parent-teacher-child conferences as procedures for reporting progress.

Conclusion

Changing the organizational pattern of the school involves the changing of attitudes and practices of people. Change does not come easily; sometimes it comes about with great conflict. The selection of staff, is important. Frymier (1968) elaborated on this point:

Everything that we know about the nature of the human personality suggests that people vary in terms of their openness to experience. Some are more open and some are more closed. [For indepth information on these points he referred the reader to Adams (1950), Fromm (1964), Frymier (1965), and Combs and Syngg (1957).] Statistically, most persons probably fall somewhere in between. If we are seriously concerned about encouraging rational, effective change in education, then it is imperative that we face up to the problem of the change capabilities of the professional persons who work to make the educational enterprise go. Stated another way, unless those who are called upon to implement educational innovations are psychologically able to entertain such innovations, significant change simply will not—in fact, cannot—occur. We would hypothesize that the extent of meaningful, and effective change which takes place would occur in direct proportion to the "openness" of the professional staff involved. (pp. 2.3)

The NEA Research Memo (1965) reported their findings on the same subject:

The biggest drawback to a successful nongraded program is reputed to be the difficulty in getting teachers concerned to change their way of thinking away from graded concepts. A long period of preparation—perhaps as long as two years—is needed. (pp. 172-173)

In conclusion, the statement by McLaughlin (1967) regarding the problem of whether to grade or not to grade is worth considering:

The practitioner must make a crucial decision: to grade or not to grade his school? The answer does not come easily and research's contribution to the solution is indeed spotty. At best it may provide the practitioner with a motto to apply to the available empirical studies on the nongraded school—*caveat emptor*, let the buyer beware. (p. 44)

BIBLIOGRAPHY AND SELECTED REFERENCES

Books and Research Studies

- Adams, T. W., et. al., *The Authoritarian Personality*. (New York: Harper and Bros.), 1950.
- American Educational Research Association, National Education Association, "Classroom Organization." *Encyclopedia of Educational Research*, (New York: The MacMillan Company), 1960.
- Austin, Kent. *The Upgraded Primary Unit in Schools of the U. S.*, unpublished Doctoral Dissertation, University of Colorado, 1967.
- Barbe, Walter B., *Educator's Guide to Personalized Reading Instruction*. (Englewood Cliffs, N. J.: Prentice Hall, Inc.), 1961.
- Beggs, David W. III and Buffie, Edward G. *Nongraded School In Action—Bold New Venture*. (Bloomington and London: Indiana University Press), 1967.
- Blackstock, Cecilia R. "A Field Study to Initiate An Ungraded Primary School in Brazosport," Doctoral dissertation, University of Houston, 1961.
- Bockrath, Sister M. Bernards, C.P.P.S. "An Evaluation of the Ungraded Primary as an Organizational Device for Improving Learning in St. Louis Archdiocesan Schools," Doctoral Dissertation, St. Louis University, St. Louis, 1958.
- Brown, B. Frank, *The Appropriate Placement School: A Sophisticated Nongraded Curriculum*. New York: Parker Publishing Co.), 1965.
- Combs, Arthur W., and Snygg, Donald, *Individual Behavior*. (New York: Harper and Bros.), 1957.
- Dufay, Frank R., *The Development of Procedures for the Implementation of the Nongraded Primary School in Central School District No. 4, Plainview-Old Bethpage, New York*, Doctoral Dissertation, New York University, 1963.
- Franklin, Marian Pope ed., *School Organization: Theory and Practice*. (Chicago: Rand McNally & Co.), 1957.
- Fromm, Erick. *The Heart of Man*. (New York: Harper and Bros.), 1964.
- Frymier, Jack R., *The Nature of Educational Method*. (Columbus: Charles E. Merrill Books, Inc.), 1965, Chapter Two.
- Garvue, Robert J. "Research and Evaluation of the Nongraded School," in Beggs, David W. III and Buffie, Edward G. *Nongraded Schools in Action: Bold New Venture*. (Bloomington and London: Indiana University Press), 1967.
- Glogau, Lillian and Fessel, Murray. *The Nongraded Primary School, A Case Study*. (New York: Parker Publishing Co., Inc.), 1967.
- Goodlad, John I. and Robert A. Anderson, *The Nongraded Elementary School*. (New York: Harcourt, Brace and World, Inc.), 1963.
- Hass, Glen, and Kimball Wiles, *Readings in Curriculum*. Boston, Massachusetts: Allyn and Bacon, Inc., 1965.
- Heather, G., "School Organization: Nongrading, Dual Progress, and Team Teaching." *National Society for Study of Education Yearbook*, (Chicago: University of Chicago Press), 1966.

- Individualizing Instruction*. National Society for the Study of Education, Sixty-first Yearbook. (Chicago: University of Chicago Press), 1962.
- Larmee, Roy A. "A Strategy for the Development of Nongraded Schools," in Beggs, David W. III and Buffie, Edward G., *Nongraded Schools In Action: Bold New Venture*, (Bloomington and London: Indiana University Press), 1967.
- McCarthy, Robert J. and Goldman, Samuel. *How to Organize and Operate an Ungraded Middle School*. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc.), 1967.
- McLaughlin, William P. *The Nongraded School A Critical Assessment*. (Albany: The University of the State of New York The State Education Department Office of Research and Evaluation), 1967.
- Miller, Richard I. *The Nongraded School Analysis and Study*. (New York: Harper & Row, Publishers), 1967.
- Muck, Ruth E. S. "The Effect of Classroom Organization on Academic Achievement in Graded and Nongraded Classes," Doctoral Dissertation. State University of New York at Buffalo, 1966.
- National Commission on Teacher Education and Professional Standards *The Year of the Non-Conference* (Washington, D.C.: NCTEPS), 1967.
- National Education Association Projection Instruction. *Schools for the Sixties*. (New York: McGraw Hill Book Co.), 1963.
- Noar, Gertrude, *Teaching and Learning the Democratic Way*. (Englewood Cliffs, N. J.: Prentice Hall, Inc.), 1963.
- Parker, James Robert. "A Comparison of Organizational and Instructional Practices in Graded and Nongraded Schools", Doctoral Dissertation, University of California, Berkeley, 1967.
- Rehwoldt, Walter H. "An Analysis of Some of the Effects of Interage and Intergrade Grouping in an Elementary School," Doctoral Dissertation, Los Angeles: University of Southern California, January, 1957.
- Ritzenhein, Betty A., "Survey of Personnel Perceptions of Selected Factors in Nongraded Programs in Eight Detroit Elementary Schools. Unpublished Doctoral Dissertation, Wayne State University, 1963.
- Roberts, George M., *Case Studies of Two Nongraded Elementary School Programs*, Unpublished Doctoral Dissertation, University of Tennessee, 1964.
- Ross, Geneva Armenia. "A Comparative Study of Pupil Progress in Ungraded and Graded Primary Programs," Doctoral Dissertation, Indiana University, 1967.
- Saylor, J. Galen, and William M. Alexander, *Curriculum Planning for Modern Schools*. (New York: Holt, Rhinehart, and Winston), 1966.
- Scanlon, Robert G., and Trachtenberg, David. *The Non-Graded School: Its Background and Current Status*. (New York: Mid-Hudson School Study Council), 1965.
- Shane, Harold G. and Wilbur A. Yaugh, *Creative School Administration*. (New York: Henry Holt and Company), 1954.
- SPACE Guidelines. Titusville, Florida: Brevard County Board of Public Instruction, 1966.
- Tewksbury, John L., *Nongrading in the Elementary School*. (Columbus, Ohio: Charles E. Merrill Books, Inc.), 1967.

Periodicals

- "Achievement Levels Are A Comfortable Half-Step to a Nongraded Plan." *Nation's Schools*. July, 1964, pp. 32-33.
- Anderson, R. H. "Organizational Characteristics of Educational Staff Utilization and Deployment; Nongraded." *Review of Educational Research*. October, 1964.
- , and J. I. Goodlad, "Self-Appraisal in Nongraded Schools: A Survey of Findings and Perceptions." *Elementary School Journal*, Vol. 62. February, 1962, pp. 261-69.
- Austin, K. C., "The Ungraded Primary School." *Childhood Education*, Vol. 33. February, 1957, pp. 260-63.
- Bennett, H. K., "Making the Transition Requires Administrative Planning Courage and Patience." *Nation's Schools*. Vol. 49, January, 1952, pp. 60-65.
- Bradley, Philip A., "Individualized Instruction Through Cooperative Teaching and a Programmed Text." *National Elementary Principal*, Vol 43, No. 6. May, 1964, pp. 46-49.
- Brooks, F. E., "A Faculty Meets the Needs of Pupils." *Educational Leadership*, II. December, 1953, pp. 174-8.
- Buffie, E., "A Comparison of Mental Health and Academic Achievement, The Graded vs. The Ungraded School." *Dissertation Abstracts*, 23:4255. May, 1963.
- Buford, F., "We Looked at Our School." *National Elementary Principal*, Vol. 34. December, 1954, pp. 20-22.
- Carbone, R. F., "A Comparison of Graded and Nongraded Elementary Schools." *Elementary School Journal*, Vol. 62. November, 1962, pp. 82-88.
- Chadwick, R. E., and others, "Report Card in the Nongraded School." *National Elementary Principal*. May, 1966, pp. 22-8.
- Christian, Mary T. "A Study of the Dimensions of the Nongraded School Concept", Doctoral Dissertation, Michigan State University, October, 1967.
- Collier, C. C., "Nongraded School." *School and Society*. January 22, 1966, p. 324.
- Dean, Stuart, *Elementary School Administration and Organization*. U. S. Dept. of Health, Education, and Welfare, Bulletin 1960, No. 11. Washington: Government Printing Office, 1960.
- , "The Nongraded School: Is There Magic In it?" *School Life*, Vol. 47. December, 1964, pp. 19-23.
- "Design of Team Teaching and A Nongraded Program." *Nation's Schools*, Vol. 79, No. 3. March, 1967.
- DiLorenzo, Louis T., and Ruth Salter, "Cooperative Research on the Nongraded Primary." *Elementary School Journal*, Vol. 65. Feb., 1965, pp. 269-77.
- Eldred, D. M., and M. Hillson, "The Nongraded School and Mental Health." *Elementary School Journal*, Vol. 63. January, 1963, pp. 218-22.
- Enevoldsen, C. L., "An Evaluation of the Ungraded Primary Program in Selected Schools in the Lincoln, Nebraska Public School System." *Dissertation Abstracts*, 22:3054-5. March, 1962.

- Ferguson, D. A. and N. Neff, "The Nongraded School Administers to the Dull-Normal Child." *School and Community*, Vol. 47. October, 1960, pp. 16-17.
- Franklin, M. P., "Nongraded Schools." *Education Forum*. March, 1966, pp. 331-4.
- Frymier, Jack R. "Teachers: Not Will but Can They Change?" *SEC Newsletter*, Vol. 2, No. 6, November, 1968, The Ohio State University, pp. 1-4.
- Gaier, Eugene L., "The Grade Society." *National Elementary Principal*, Vol. 45, No. 6. May, 1966, pp. 43-47.
- Garritz, E. M., "Advanced Placement." *National Education Association Journal*. January, 1965, pp. 22-4.
- Glogau, Lillian, "Make Me A Nongraded." *National Elementary Principal*, Vol. 54, No. 6. May, 1965, pp. 51-4.
- Goodlad, John I., "Diagnosis and Prescription in Educational Practices," *Educational Digest*. May, 1966, pp. 8-11.
- , "In Pursuit of Visions." *Elementary School Journal*, Vol. 59. October, 1958, pp. 1-17.
- , "More About the Ungraded Unit Plan." *NEA Journal*, Vol. 44. May, 1955, pp. 295-6.
- , "Toward Improved School Organization." "Elementary School Organization." *National Elementary Principal*, Vol. 41. December, 1961, pp. 60-12.
- , "Upgrading the Elementary Grades." *NEA Journal*, Vol. 44. March, 1961, pp. 170-1.
- , "What About Nongrading Our Schools?" *Instructor*, Vol. 70. May, 1961, p. 6.
- , and R. H. Anderson, Educational Practices in Nongraded Schools: A Survey of Perceptions," *Elementary School Journal*, Vol. 63. October, 1962, pp. 33-40.
- , and R. H. Anderson, "1958 Progress Report: The Nongraded Elementary School." *NEA Journal*, Vol. 47. December, 1958, pp. 642-3.
- , et al. "Reading Levels Replace Grades in the Nongraded Plan." *Elementary School Journal*, Vol. 57. November, 1957, pp. 253-6.
- , and Robert H. Anderson, "Self Appraisal in the Nongraded Schools: A Survey of Findings and Perceptions." *Elementary School Journal*, Vol. 62. February, 1962, pp. 261-9.
- Gore, L., "The Nongraded Primary Unit." *School Life*, Vol. 44. March, 1962, pp. 9-12.
- Haas, Arthur, "First-year Organization of Elmcrest Elementary School: A Nongraded Team-Teaching School." *The American School Board Journal*, Vol. 151. October, 1965, pp. 22-70.
- Halliwell, Joseph W., "A Comparison of Pupil Achievement in Graded and Nongraded Primary Rooms." *The Journal of Experimental Education*, Vol. 32. February, 1963, pp. 59-64.
- Hart, H. C., "Classroom Structure Changing Rapidly: Nongraded Instruction." *Education*, 1965, pp. 200-1
- Hart, Richard H., "The Nongraded Primary School and Arithmetic." *The Arithmetic Teacher*. March, 1962, pp. 130-33.

- Heathers, Glen, "Guidelines for Reorganizing The School and Classroom." *Rational Planning in Curriculum and Instruction: 8 Essays*. Washington, D. C.: Center for the Study of Instruction, National Educ. Assn., 1967.
- Hefferman, Helen, "Freedom For Development of Individuality." *National Education Association Journal*. May, 1955, pp. 282-4.
- Hickey, Sister Mary Paul, "An Analysis and Evaluation of the Ungraded Primary Program in the Diocese of Pittsburgh." *Dissertation Abstracts*. 23:2817, February, 1963.
- Hillson, Maurie J., Charles Jones, and J. William Moore. "A Controlled Experiment Evaluating the Effects of a Nongraded Organization on Pupil Achievement." *Journal of Educational Research*, Vol. 57. August, 1964, pp. 548-50.
- Hopkins, Kenneth D., Oldridge, O. A., and Williamson, Malcolm L., "An Empirical Comparison of Pupil Achievement and Other Variables in Graded and Ungraded Classes." *American Educational Research Journal*, 2 (November, 1965), pp. 207-15.
- Hunter, M. C., "Teachers in the Nongraded School." *National Education Association Journal*. February, 1966, pp. 12-15.
- , "The Dimensions of Nongrading." *The Elementary School Journal*, Vol. 65. October, 1964, pp. 20-25.
- Ingram, Vivian, "Flint Evaluates Its Primary Cycle." *Elementary School Journal*. November, 1960, pp. 77-80
- Jones, Daisy Marvel, "An Experiment in Adaptation to Individual Differences." *Journal of Educational Psychology*, Vol. 39. May, 1948, pp. 257-72.
- Kelly, Florence C., "A Ten-Year Report: Ungraded Primary Schools Make The Grade." *NEA Journal*, Vol. 40. December, 1951, pp. 645-6.
- Koontz, W. F. "A Study of Achievement as a Function of Homogeneous Grouping", *Journal of Experimental Education*, XXX (December, 1961), pp. 249-53.
- , "Doing Away With Grade Levels." *NEA Journal*, Vol. 37. April, 1948, pp. 222-3.
- Moore, Daniel I., "Pupil Achievement and Grouping Practices in Graded and Ungraded Primary School." *Dissertation Abstracts*. 24:3233, February, 1965.
- Morgan, E. F., and Stucker, G. R. "The Joplin Plan of Reading vs. a Traditional Method," *Journal of Educational Psychology*, LI (April 1960), pp. 69-73.
- National Education Association, Department of Elementary School Principals, *The National Elementary Principal* (two issues devoted to non-grading), Vol. XLVII, No. 2, November 1967 and Vol. XLVII, No. 3, January, 1968.
- National Education Association, Research Division. "Nongraded School Organization." Vol. 43, No. 3, October, 1965, pp. 93-5.
- "Nongraded School Organization: Summary of Nongraded Schools." *National Education Association Research Bulletin*. National Education Association Division. October, 1965, pp. 93-5.

- "Plan Takes Lockstep and Buries It." *Nation's Schools*, Vol. 72, No. 4. October, 1963, pp. 86-9.
- Polkinghorne, Ada R., "Parents and Teachers Appraise Primary-Grade Grouping." *Elementary School Journal*, January, 1951, pp. 271-8.
- Provus, Malcolm M. "Ability Grouping in Arithmetic," *Elementary School Journal*, LX (April, 1960), pp. 391-98.
- Rollins, Sidney P., "Ungraded High Schools: Why Those Who Like Them, Love Them." *Nation's Schools*. April, 1964, pp. 110+.
- Sand, Ole, "Schools for the 70's: Opus Two." (An Address by Ole Sand at the Annual Meeting of the Department of Elementary School Principals, NEA, Boston, Mass., 9:30 AM, Tues., April 11, 1967.)
- "School Within A School: Better Way to Organize A High School?" *School Management*. August, 1959, pp. 33-6.
- Schottman, Thomas, "Still Groping in Grouping?" *National Elementary Principal*, Vol. 41, No. 1. September, 1961, pp. 53-4.
- Skapski, Mary King, "Ungraded Primary Reading: An Objective Evaluation." *Elementary School Journal*. October, 1960, pp. 41-5.
- Sloan, Fred A., Jr., "A Nongraded Social Studies Program for Grades Four, Five, and Six." *National Elementary Principal*, Vol. 45, No. 3. January, 1966.
- Studler, Cecelia B., "Grouping Practices." *The National Elementary Principal*, Vol. 40. September, 1960, pp. 147-58.
- Suttle, John E., "The Nongraded Elementary School." *Curriculum Bulletin*, 18. 1962, pp. 12-19.
- "Teachers in the Nongraded School." *National Education Association Journal*. February, 1966, pp. 12-15.
- Thompson, E., "Ungraded Plan Helps Provide For Continuity of Learning." *NEA Journal*, Vol. 47. January, 1958, pp. 16-18.
- Tillman, Rodney and J. H. Hull. "Is Ability Grouping Taking Schools In The Wrong Direction?" (Yes and No). *Nation's Schools*, Vol. 73, No. 4. April, 1964, pp. 70-73.
- Tucker, M. B., "The Shoe Didn't Fit." *NEA Journal*, Vol. 45. March, 1956, pp. 159-61.
- Ultican, T., "Ungraded Primary Plan." *School and Community*, Vol. 48, October, 1961, p. 22.
- Zerby, John Richard. "A Comparison of Academic Achievement and Social Adjustment of Primary School Children in the Graded and Nongraded School Program." *Penn State Review of Educational Research*. Vol. 13. March, 1961, p. 33.