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ABSTRACT

Findings from a study that examined the relationship between two educational movements--effective schools and nongradedness--are presented in this paper. Methodology involved: (1) a research review of studies conducted from January 1968 to June 1991 that compared graded and nongraded student performance using standardized objective measures; and (2) the development of a set on nongradedness assumptions by a panel of experts, which was compared to effective schools correlates. Findings indicate that comparisons of graded and nongraded schools using standardized achievement tests continue to favor nongradedness. Nongraded schools also offer improved chances for good mental health, positive school attitudes, academic accomplishment, and benefits to disadvantaged students. In general, the principles of nongradedness offer a holistic approach that focuses more on the classroom, while the correlates of effective schools provide a strategic approach that emphasizes school management. Despite the differences, the two movements are compatible in their shared goal of improving students' performance. The principles of nongradedness use a different language and are more specific. One table outlines the principles of nongradedness. (12 references) (LMI)

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SCHOOL EFFECTIVENESS  
AND  
NONGRADED SCHOOLS

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## School Effectiveness and Nongraded Schools

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### Objective

Several state legislatures (KY, OR and FL) have mandated nongraded/continuous progress primary units for their elementary schools as a vehicle for school improvement. Other state departments of education (TN, MD) are supporting this by providing training in the implementation process. The school district of Philadelphia is considering making all elementary schools nongraded. Since the last updating of the research on the effectiveness of nongradedness was published in 1977 (Pavan), it would seem useful to do so, again. In addition, the assumptions of nongradedness will be examined along with the correlates of effective schools to determine similarities and differences.

The recent upsurge of interest in nongraded schools has led to the revision of a list of assumptions underlying nongradedness (Pavan 1972). These have been revised to reflect more current language usage and more recent educational practices. At this point in time no one has looked at these two educational movements (effective schools and nongradedness).

## Perspective

Edmonds (1979) concluded that effective schools have the following characteristics:

1. a strong principal
2. high expectations for students and teachers
3. orderly but not rigid atmosphere
4. emphasis on instruction,
5. student progress monitoring system

Two additional correlates have been added:

6. opportunity to learn and time on task
7. positive home/school relations (Taylor, 1990).

Since massive school improvement is such a difficult task the major emphasis by both Taylor (1990) and Levine (1991) has been on how to create effective schools rather than what they are. Both acknowledge that effective schools vary from site to site and should be encouraged to try practices developed elsewhere. Of the twelve case studies published by the National Center for Effective Schools only three: Alma, MI (p.62), Mishawaka, IN (pg. 123) and Spencerport, NY (p.159) present detailed lists of assumptions of schooling in part because this was not requested in the case summary outline.

The Effective Schools movement has had as its major focus the improvement of schools for poor and minority students with Ron Edmonds as the spokesman for these children. As such the emphasis has been on the attainment of basic skills by all children as measured by standardized achievement tests. The heavy reliance on monitoring student progress generally utilizes easy to measure lower order learning objectives rather than critical thinking and decision making as the learning criteria. Inner city schools serving only poor minority children often had been so neglected

that the building was sorely in need of repair, the atmosphere was chaotic, and instructional materials were not available. Not surprisingly, only a strong principal is able to obtain the resources and provide the structure for both teachers and students to turn the school into a place where learning is possible. Even though Lezotte (Taylor, 1990) cautions that there is no recipe for school improvement based on the effective schools research, the cases presented share a values system which stresses mastery of basic skills obtained from district level standardized teaching practices.

In recent years some researchers have re-examined this narrow focus especially as the effective schools research (ESR) has spread from urban areas to both rural and suburban school districts. Bliss (1991) labels the effective school model described previously as "strategic" with testing and monitoring of basic skills instruction dominant. Another model he labels "holistic" with an expanded curriculum in the progressive tradition, indirect teaching and increased teacher and student autonomy. The close relationship between nongradedness and the progressive movement was examined by Pavan in 1973. Teacher knowledge of pedagogy and child development play a larger role in this model as it also does in Comer's (1986) school improvement model. Instructional leadership is as likely to be a teacher function as a principal function. Bliss writes that this model is less supported by the ESR. However, his description of the holistic model has strong parallels with nongradedness and given the nongraded research presented later in this paper this

lack is probably due to the limited data base which was searched for such evidence.

In the same volume (Bliss 1991), Peterson and Lezotte note the shift from basic skill emphasis to include problem solving, creative thinking, and a broader subject area base. While continuing to acknowledge the school as the unit of change, district support is seen as essential. Organizational theory and research on organizational culture, especially the need for new teacher and principal roles, have contributed to better school improvement programs. Purkey and Smith (1983) introduced the process of building an organizational culture as part of effective schools improvement. Research on teaching, curriculum, staff development, and the change process have been addressed more in the later years of ESR than the early years.

Reporting on unusually effective schools, Levine (1990) has provided an expanded list of correlates and subcorrelates, some of which had not been identified in previous case descriptions: active/enriched learning, school wide problem solving orientation, faculty collaboration, higher order learning emphasis, abundance of instructional materials, personal development of students, student sense of efficacy, and sense making (p.579). After a reminder that correlates are not detailed check lists to follow, but are a pattern found in effective schools, Levine reminds the reader of the possible negative effects of homogeneous grouping and retention policies. More heterogenous classes and groups require additional resources to make them operational.

Early, effective schools research relied on a somewhat simplistic set of five correlates from Edmonds. As the movement has matured, a more complex set of correlates and subcorrelates are viewed as varying somewhat from school to school determined by contextual factors. Bliss (1991) speculates that low-SES schools conformed to the strategic image and middle-SES schools to the holistic image. Yet low-SES students in nongraded schools had higher academic achievement than those in graded schools in the research studies reporting SES data in the analysis reported in Anderson and Pavan. Nongradedness is seen as closer to the holistic image reported by Bliss.

#### Method, Data Source

To gather the documents for this research review, Research in Education, Current Indexes to Journals in Education, Dissertation Abstracts, and Educational Index to Periodicals, were searched from January 1968 through June 1991 using these descriptors: nongraded, multigraded, and ungraded. Only studies which compared nongraded and graded students that used some form of standardized objective measures are reported here. This is a comprehensive review which included all studies that meet the above criteria. In some few cases, studies were omitted which appeared to be solely curriculum pilot projects involving one curricular area, few classrooms, and only one grade level. Usually these were described as continuous progress plans even though they were located by descriptors for nongrading.

By following the above search strategy and also using

references from each study, 64 studies were located from schools in the United States and Canada. Academic achievement was compared in 57 studies and 42 studies used mental health measures such as self concept and attitude toward school.

In order to clarify exactly what an ideal model of nongradedness would be, a very careful reading of that literature was made and a list of nongraded principles was developed which was then sent to the leading writers and practitioners in the field. (Pavan, 1972).

The Delphi approach was used with a panel of experts on nongradedness to develop a set of underlying assumptions of nongradedness in 1970 and again in 1987. The principles were developed from the literature and updated in recent seminars and validated by a panel of principals and teachers currently implementing nongradedness in the schools. These will be compared to the correlates of effective schools to assess similarities and differences.

## Results

The conclusions of this meta-analysis of research comparing graded and nongraded schools were very favorable to nongradedness when 37 studies were analyzed in 1977 (Pavan) and this assessment of 64 studies published between 1968 and 1991 indicates that the conclusions of the original analysis stand as noted below:

1. Comparisons of graded and nongraded schools using standardized achievement tests continue to favor nongradedness.



2. Attendance in a nongraded school may improve the chances for good mental health and positive school attitudes.
3. Longitudinal studies indicate that the longer students are in a nongraded program; the more likely positive school attitudes and better academic achievement.
4. A nongraded environment is beneficial for blacks, boys, underachievers, and lower socio-economic students in terms of academic achievement and mental health.
5. Further research is needed that includes an assessment of the actual practices in the allegedly graded or nongraded schools in order to determine if the labels as described are accurate.  
(Anderson and Pavan, Forthcoming)

The research studies on nongraded, multigraded, and ungraded grouping support the viability of this organizational concept. In most cases, students in schools organized in one of the above styles do as well or better than students in traditional self-contained classes in terms of both academic achievement and mental health measures. This is in spite of the fact that the instruments used to measure achievement and mental health often are standardized on students in traditionally structured schools.

In only 9% of the studies did nongraded students have lower academic achievement than graded students, in all other studies they performed better (58%) or the same (33%). As to mental health and school attitudes, 52% of the studies indicated nongraded schools as better; 43% similar; and only 4% worse than graded schools.

The Delphi approach to determining the Principles of Nongradedness resulted in few changes from the 1972 (Pavan) version to the 1992 version. Minor revisions were made to meet the new guidelines for gender bias-free writing and language changes (substituting "cognitive" for intelligence) were needed.

The categories were realigned and some of the items within the categories were reordered for a more logical flow. Item 5 (group skills) and item 15 (integrated themes) are completely new, although item 12 (co-learner teams) was a 1972 item and many curricular items implied the usage of themes and interdisciplinary curriculum in the original principles. New items were possible by removing redundant items. See Table 1 for the complete list of the 36 Principles of Nongradedness.

#### Discussion

The Principles of Nongradedness (PoN) are divided into 6 clusters each with 6 items:

- A. Goals of Schooling
- B. Organization
- C. Curriculum
- D. Instruction
- E. Materials
- F. Assessment

Even when just these categories (PoN) are compared with 7 Correlates of Effective Schools (CES) noted previously, it is obvious that PoN focuses more on the classroom and CES more on management of the school. Nowhere in the 36 PoN is the principal even mentioned, although (I would believe) that there is an implicit assumption that the principal's role is to demonstrate the vision in the 36 PoN. Smith and Anderson (1989) provide portraits

of principals as effective instructional leaders. Item 12 indicates that adults and children work ...together in teams as co-learners in the collaborative school enterprise. Teachers are mentioned directly in these items: as facilitators of learning (20), responsible for providing broad learning experiences (28), and understanding irregular growth patterns (35). Yet it is clear that teachers are mostly responsible for the 36 PoN if they are to become operational.

The goals of schooling for nongradedness speak to individual differences (3), student autonomy (1), maximum potential (2) in many areas beside cognitive (4,5), enjoying learning and positive self concepts (6). Grouping and placement are in mixed age ability groups frequently changed based on tasks and needs (7-12). Curriculum differs as individuals differ (13,14,16,18) and integrated subject matter themes (15) using inquiry methods (17) are stressed. A variety of instructional strategies (19-24) and materials (25-30) are used as children expand their knowledge and skills which are assessed by teacher and pupil using multiple data sources (31-36).

By contrast, the effective schools descriptions, especially when combined with the effective teaching research, imply and in some cases specify: a preplanned curriculum, whole group instruction, productive use of time, classroom routines, lesson objectives, questioning techniques, feedback and incentives, mastery, and monitoring student progress (NWREL, April 1990).

I do not wish to indicate that these are two opposite

educational protocols or that one is correct and the other, not. The holistic and strategic (to use Bliss' terms) appear to be the images on each end of a continuum. A given school program might range all over the continuum on a list of variables with nongradedness closer to holistic and effective schools closer to strategic. As Bliss (1991) argues "we know too little about effective schools to replicate them, but we do know enough to begin a process of modeling and testing alternative pathways to making schools at least more distinctive." (p.51) and thereby more sensitive to a specific school population.

Effective schools are defined as those where all students learn as demonstrated on standardized achievement tests. Research indicates this is possible in some schools which stress basic skills and in others which stress a broader curriculum. The principles of nongradedness describe what would happen in the school, while the effective school correlates indicate what needs to be done to make the school more effective.

The assumptions underlying nongradedness are phrased in quite a different type of language yet appear to be quite compatible with the effective schools characteristics. In addition, the principles of nongradedness appear to be more specific than those of the effective schools.

Researchers, practitioners and especially the general public continue to worry about our school students' performance so we need to review the research on any proposed educational practice. Interest in nongraded primary programs has developed and state-wide

policy is made with very little understanding of what the research indicates or what nongradedness means in practice.

Table 1 PRINCIPLES OF NONGRADEDNESS

## GOALS OF SCHOOLING

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1. The ultimate school goal is to develop self-directing autonomous individuals.
2. The school seeks to develop individual potentialities to maximum possible.
3. Each individual is unique and is accorded dignity and respect. Differences in people are valued. Therefore the school strives to increase the variability of individual differences rather than to stress conformity.
4. Development of the child is considered in many areas: including aesthetic, physical, emotional and social as well as cognitive.
5. Each child needs to develop the skills for productive and responsible membership and leadership in civic, social and work groups.
6. The school environment is designed so that children enjoy learning, experience work effort as rewarding, and develop positive self concepts.

## B. ORGANIZATION

7. Individuals work in varied situations where there will be opportunities for maximum progress. Advancement, retention, and promotion procedures are flexible. Classes or teams of children are identified with labels free of grade-level implications.
8. A child's placement may be changed at any time if it is felt to be in the best interest of the child considering all five phases of development: aesthetic, physical, cognitive, emotional, and social.
9. Grouping and subgrouping patterns are extremely flexible. Learners are grouped and regrouped on the basis of one specific task or interest and groups are disbanded when that objective is reached.
10. Each child has opportunities to work with groups of many sizes, including one-person groups, formed for different purposes.
11. The specific task, materials required, and student needs determine the number of students that may be profitably engaged in any given educational experience.
12. Children and adults of varying personalities, backgrounds, abilities, interests, and ages work together in teams as co-learners in the collaborative school enterprise.

### C. CURRICULUM

13. Children formulate their own learning goals with guidance from their teachers.
14. The unique needs, interests, abilities, learning rates, styles and patterns determine the child's individual curriculum. Conformity and rigidity are not demanded.
15. Broad thematic units integrating several subject matter disciplines are utilized rather than the presentation of isolated bits of information.
16. Sequences of learning are determined for individual students since:
  - a) no predetermined sequence is appropriate to all learners;
  - b) individual differences in level of competence and in interest are constantly in flux;
  - c) there are no logical or inherently necessary sequences in the various curriculum areas.
17. The curriculum is organized to develop understanding of concepts and methods of inquiry, more than retention of specific content learning.
18. Learning experiences based on the child's expressed interest will motivate the child to continue and complete a task successfully much more frequently than will teacher-contrived techniques.

### D. INSTRUCTION

19. All phases of human growth: aesthetic, physical, cognitive, emotional, and social are considered when planning learning experiences for a child.
20. Teachers are the facilitators of learning. They aid in children's development by helping them formulate goals and diagnose problem areas. They suggest alternative plans of action, provide resource materials, and give encouragement or support or prodding as needed.
21. Different people learn in different ways, so multiple learning alternatives should be available.
22. Successful completion of challenging experiences promotes greater confidence and motivation to learn than does fear of failure.
23. The process is more important than the product. The skills of learning to learn especially inquiry, evaluation, interpretation, synthesis, and application are stressed.
24. Children strive to improve their performance and develop their potential rather than to compete with others.

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