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Nongradedness: Relevant Research for Decision Making

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

This "all system" organization, which has existed since the Quincy Grammar School, eventually caused some educators to begin questioning the congruency of the graded structure with the wide range of differences among children. During the 1950's a movement started in many schools and districts to move back to a less regimented organization in the form of nongraded schools. This movement continued into the sixties, reaching its highest "excitability" stage around 1965.

But now, like so many pedagogical efforts, the "Excitability Factor" or Hawthorne effect is fading and nongradedness may be entering a dormant period. Before we allow this attempt to individualize education to pass into oblivion, we should examine one probable reason for the lack of acceptance and enthusiasm which educators earlier held for nongradedness,

Leaders and implementors of nongradedness have always stressed that it provides an

organizational framework which will allow higher achievement, improved mental health and attitudes, and other probable benefits. Yet the advocates continually fail in providing the needed punch for acceptance of the innovation—evidence. The advocates seemingly do not realize that teachers and administrators are professionals, people requiring evidence before forming a conviction and expending the necessary energy for developing and implementing a new curriculum. Educators rightfully ask, "Where are the evaluative studies of nongraded schools? Do they exist, and if so, what are the results?"

There *are* such studies, and the remainder of this article is an attempt to fulfill the need for making them known. It is a summarization of research studies which statistically evaluated various nongraded programs.

A nongraded plan initiated in Milwaukee in 1942 is now the oldest nongraded system in operation. Carbone's study¹ reports that a 1952 comparison was made of 99 nongraded students with a control group of 123 students. It was found that reading achievement and personality adjustments were

¹ R. F. Carbone. "Achievement, Mental Health, and Instruction in Graded and Ungraded Elementary Schools." Unpublished doctoral dissertation, Department of Education, University of Chicago, 1961. p. 16.

slightly better for nongraded students, even though the nongraded students were slightly lower on mental maturity.

During the 1955-56 school year the Appleton, Wisconsin, Public Schools compared 11 fifth-grade rooms with three non-graded intermediate groups of similar mental and chronological ages. The results favored the nongraded pupils in both reading and spelling.^{2, 3}

A comparison of achievement scores in the Mansfield, Ohio, Public Schools showed the average grade placement scores were .29 years higher following nongrading. "Apparently, the nongraded plan consisted of re-grouping pupils in ungraded classes and comparing their achievement after one year under the new plan."⁴

Carbone also reported a comparison in Bellevue, Washington, of two graded classes with two nongraded classes. This comparison, which was made at the end of a three-year period, indicated that the nongraded pupils showed greater achievement in reading.

The St. Louis Archdiocesan parochial schools compared the reading achievement scores of 5,169 pupils who had attended

graded schools for three years with the scores of 8,281 pupils who had attended nongraded schools. The results indicated significantly greater reading achievement for the non-graded students.⁵

Vivien Ingram reports a study from Flint, Michigan, where 68 nongraded students were compared to 337 students in the same school prior to initiating the nongraded plan. Results revealed a significantly higher mean score for the nongraded students in the language arts and reading tests.⁶

Two elementary schools organized under the graded plan were compared with two nongraded schools in a study by Carbone in 1961. Both groups were composed of students in the fourth, fifth, or sixth year. The sampling procedure employed resulted in the selection of 122 nongraded students, who were then matched for age and sex with 122 graded pupils. Analysis of covariance was used to compensate for the difference in the mean intelligence quotient of the two groups. The results indicated that the graded students scored significantly higher in one of the five mental health factors and in all six areas of achievement.⁷

Bufe matched 117 students from a non-graded school with the same number from a graded school in a different community. He found the nongraded children to have made the greater gains in the two areas of achievement and mental health.⁸

In Hillson's study,⁹ one group of children were assigned to experimental nongraded classes, while others composed the control

² *Ibid.*

³ R. H. Anderson and J. I. Goodlad. *The Non-graded Elementary School*. New York: Harcourt, Brace and World, Inc., 1963. p. 57.

⁴ Carbone, *op. cit.*, p. 17.

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⁵ M. B. Bockrath. "An Evaluation of the Ungraded Primary as an Organizational Device for Improving Learning in St. Louis Archdiocesan Schools." Unpublished doctoral dissertation, St. Louis University, 1958.

⁶ V. Ingram. "Flint Evaluates Its Primary Cycle." *Elementary School Journal* 61 (2): 76-78; November 1960.

⁷ Carbone, *op. cit.*, p. 91.

⁸ E. G. Bufe. "A Comparison of Mental Health and Academic Achievement: The Nongraded School vs. the Graded School." Unpublished doctoral dissertation, School of Education, Indiana University, 1962.

⁹ M. Hillson *et al.* "A Controlled Experiment Evaluating the Effects of a Nongraded Organization on Pupil Achievement." *Journal of Educational Research* 57 (10): 548-50; July-August 1964.

groups. The performance of the nongraded students was significantly higher than the control group on reading, word meaning, and paragraph meaning at the end of three years.

Two groups of 146 students each, one nongraded and one graded, were studied by Halliwell. The nongraded group scored slightly higher, but the differences were not statistically significant except in third grade spelling.¹⁰

Gilbert found that in Chicago's Telsa School only nine percent of the students required a period of four years in the primary classes under the nongraded plan, as compared to thirty percent before the nongraded plan went into effect. Telsa School, which enrolls mostly disadvantaged youth, raised its ranking from eleventh in its district in 1960 to fifth in 1963 in the number of children reading at or above the expected level for their mental age.¹¹

A comparative study was made of 62 Melbourne, Florida, High School seniors to determine whether this sample differs significantly from a matched sample of seniors from another school. The Melbourne seniors outperformed their matched pairs at the 0.05 level of significance in English and mathematics and at the 0.01 level in science and on attitudes of students toward their school. In addition, the middle range (level 2) of seniors from Melbourne outperformed significantly their matched pairs on the critical thinking appraisal.¹²

A first-year nongraded school was compared to a control high school in the same Nevada city. Sixty-three hypotheses, based on the assumption that the type of vertical and horizontal organizations of the nongraded school would significantly influence students' achievement, attitudes, and critical thinking ability, were tested. Only one proved

¹⁰ J. W. Halliwell. "Comparison of Pupil Achievement in Graded and Nongraded Primary Classrooms." *Journal of Experimental Research*, Fall 1963, pp. 59-64.

¹¹ National Education Association. *Research Memo: Nongraded Schools*. Washington, D.C.: NEA Research Division, May 1965.

¹² S. L. Besvinick and J. Crittenden. "Melbourne High School Pilot Study." USOE Cooperative Research Project No. S412. Coral Gables, Florida: University of Miami, 1966.

to be significant from the pattern expected. The gain in mathematics reasoning in one subgroup of graded students was significantly greater than that of the nongraded students.¹³

A suburban school in Pennsylvania was the site of a study in which 60 elementary children progressed through a graded plan and 57 other children were assigned to an experimental group and progressed through the same school under a nongraded organization. Both groups in this study had mean IQ's of approximately 115. There were eight levels in the nongraded primary (Stage I). The children moved from group to group within the class or were assigned to another class as needed to ensure proper learning conditions. Stage II of the study involved the same students in a post-experimental period (grades 4 and 5) in which both groups were exposed to similar instructional procedures. The research found that the absence of grade barriers resulted in significantly better achievement during the primary grades and during grades 4 and 5.¹⁴

The research into the effectiveness of nongradedness reported here is far from exhaustive. Yet it clearly indicates that a nongraded school organization has the potential for breaking the shackles which wantonly bind children of the same chronological age and force a lockstep movement of youth through a rigid curriculum.

Nongradedness may not be the answer to our pedagogical ills. However, before we allow it to enter a state of quiescence, it behooves each of us carefully to examine the research relative to its worth and also reexamine our professional responsibilities to students. We may find the two to be very compatible.

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¹³ B. F. Steere. "A Comparative Study of a Nongraded and Graded Secondary School as to Achievement, Attitude, and Critical Thinking Ability." USOE Project No. 7-8080. Unpublished doctoral dissertation, Department of Educational Administration, Utah State University, 1967.

¹⁴ V. R. Morris, B. B. Proger, and J. E. Morrell. "Pupil Achievement in a Nongraded Primary Plan After Three and Five Years of Instruction." *Educational Leadership* 28 (6): 621-24; March 1971.

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