### REPORT RESUMES

A BRIEF SUMMARY OF RESEARCH ON INTERCLASS GROUPING AT THE - ELEMENTARY SCHOOL LEVEL. BY- HILLERICH, R. L.

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THENTY-SEVEN STUDIES ON INTERCLASS GROUPING AT THE ELEMENTARY LEVEL ARE SUMMARIZED. IT IS POINTED OUT THAT THE SUMMARY IS NEITHER EXHAUSTIVE NOR DELIBERATELY SLANTED. STUDIES POORLY DONE IN TERMS OF SAMPLE OR TREATMENT WERE NOT INCLUDED. THE STUDIES ARE GROUPED ACCORDING TO TWO QUESTIONS--(1) IS ACHIEVEMENT INCREASED BY GROUPING AND (2) ARE STUDENTS' ATTITUDES AFFECTED BY GROUPING. A SERIES OF QUOTATIONS FROM THE RESEARCH STUDIES IS GIVEN TO PROVIDE A BRIEF SURVEY OF THE LITERATURE. A BIBLIOGRAPHY IS INCLUDED. ·(RH)

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A BRIEF SUMMARY OF RESEARCH ON INTERCLASS GROUPING

AT THE ELEMENTARY SCHOOL LEVEL

R. L. Hillerich

Harold Shane (23) reported that homogeneous grouping was in greatest vogue in the 1920's. His survey of the 1950's revealed it to be the least common pattern, although it continues to crop up--often under pseudonyms of "achievement grouping," "ability grouping," "Joplin plan," "nongrading," "narrow-range grouping," etc.--to divert our attention and energies from the task at hand.

This very brief summary is an attempt to gather the significant research known by the writer into one paper. While it is anything but exhaustive, this summary is also not deliberately slanted. The only known studies omitted are those that were poorly done in terms of sample (e.g., 16 pupils) or treatment (e.g., separate grouping for 3 hours/week or a study extending for six weeks). Incidentally, results of these poor studies were usually not contradictory to findings reported here.

In this paper, "homogeneous" is used as the broad generic term for the various interclass groupings. While not currently popular, it seems better for general use than the more specific "ability" or "achievement grouping," which are used only when appropriate.

In a discussion of grouping, we must recall that whenever more than one student is collected for purposes of instruction, some plan of grouping obviously is in effect. Movement from group to group--promotion, retention, acceleration-- is also a factor in grouping. The most common

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grouping plan is the graded school, with promotion the rule and retention being considered an individual matter. This "graded" plan might more properly be called an age level grouping in most schools today, since many of the traditional and objectionable aspects—grade standards for promotion, lack of individualization, etc.—have been generally discarded. In fact, as Goodlad (13) pointed out, a levels approach to nongrading can have as many "arbitrary sets of learner requirements or prescriptions for advancement" as the graded school.

Grouping plans are usually discussed with reference to adjusting to individual differences. Most often, the various homogeneous plans are proposed as solutions to the range of differences in each classroom.

That this range exists is not to be disputed: in any classroom, the range in achievement, ability, and interests among children is usually about two years more than the number of years they have been in school. Moreover, not only do the children differ widely from each other, each individual differs within himself in ability, achievement, and interest over the various subject areas. Most grouping plans fail to account for this latter fact, and attempt to resolve the former by eliminating the differences, i.e., by putting similar children in the same group. This is the first point of failure.

For example, Wrightstone (27) pointed out that grades with three ability groups have reduced the range about 15-17%; with two groups, only 7-10%.

Balow (3) reported on the range of achievement in six third-grade classes. Three classes were grouped heterogeneously and three homo-geneously on the basis of IS. The range of achievement on the Iowa test

was only 5% less in the "homogeneous" classes.

Clarke (8) studied the effects of grouping by IQ and by Reading Achievement on 621 third grade pupils in 21 classrooms. He found that grouping by reading score reduced the IQ range in each class by only 9%; grouping by IQ did not affect the range in reading achievement scores.

In other words, we cannot significantly reduce the range among children at a grade level by grouping them in terms of IQ, general achievement, or a combination thereof. At best, grouping for reading by reading scores, we reduce the range in reading achievement by about 20%. These facts lead us to consider other reasons for homogeneous grouping. Do we increase achievement by such grouping?

### Grouping and Achievement

Goldberg (11) reported a two-year study of 2200 pupils in New York
City. Beginning at grade 5, pupils were divided by ability (IQ) into
five levels and placed in narrow, medium, and broad range classes.

Achievement gains were "little affected" by the grouping, "In fact, when
all five ability levels were considered together across all subjects, the
broad range appeared to be consistently related to greater increments
than either the narrow or medium range." It is interesting further, to
note that in classes where gifted were present, all other ability levels
made significantly greater gains in science; all made greater gains in
math when slow pupils were present.

In contrast to the latter point, an earlier report (21) suggested that presence of the gifted did not affect achievement of other children, but again broad range classes showed "slightly greater achievement gains than did narrow range classes."

Hopkins and others (16) reported a three-year study of the ungraded primary (achievement grouping in reading). In this study of 45 classrooms, they found no differences in terms of pupil achievement, teacher satisfaction, sociometric constellations, nor pupil attendance.

Caroone (6) matched and compared two graded and two nongraded school systems, one each of high and low socioeconomic level. He found that graded pupils scored significantly higher in all academic areas. Furthermore, graded pupils scored higher in social participation, the only mental health area in which the groups differed significantly.

Koontz (17) studied 100 fourth graders, grouped homogeneously for math, language, and reading. He found that homogeneous groups made less progress than the heterogeneously grouped pupils.

Auld (2) established a comparison of children at the end of four years in graded and non graded organizations. She found that early homogeneous grouping (by reading ability and teacher judgment) was a hindrance to the achievement of average and below average and made no difference for the above average.

Bremer (5) compared first graders in homogeneous and heterogeneous classes. The only difference in the groups was in favor of the heterogeneous classes for the high-readiness pupils.

Probably one of the most significant studies, in terms of scope and design, is that of Goldberg, Passow, and Justman (12). They studied 3,000 pupils in 86 classrooms for two years. Pupils were assigned to one of five ability levels and followed through fifth and sixth grade. There were no significant gross achievement gains among the groups; however, considered by subject area, significantly superior gains were made by

the broad range groups in social studies, reading comprehension, vocabulary, and math. The authors concluded that "the broadest pattern, in which all ability levels were represented, was somewhat more effective for all pupils than any of the combinations of narrower range patterns."

Powell (22) compared fourth, fifth, and sixth grade pupils in two schools, one with heterogeneous groups and one with a Joplin plan. There were no significant differences between the schools in terms of class size, time spent in reading, materials available, amount of recreational reading done, or teacher understanding of reading. He found no significant differences in reading achievement between the groups by sex or by reading level, except that superior readers in the self-contained classrooms were significantly better readers than were their counterparts in the Joplin plan.

A very similar study by Moorhouse (20)--Joplin plan, middle grades, 169 pupils--showed an initial difference (1st semester) in favor of the Joplin plan for all except the slow learners. However, reading tests administered at the end of the second, third, and fifth semesters showed no significant differences.

Of nine studies summarized by Harris (15), most reported no significant differences in achievement between self-contained or heterogeneous grouping plans and interclass grouping plans.

Results such as some of the above have led certain investigators to suggest that deliberate efforts be made to establish truly matched or heterogeneous classes.

## Grouping & Attitudes

The question of attitudes is often discussed in any consideration of homogeneous grouping. A number of studies have found no difference in attitude among students in various kinds of grouping, but other studies contradict this point. For example, Cook and Clymer (10, p. 207) summarized their research by saying. "Acceleration and retardation policies which place fast-learners, who are relatively young, in the same group as slow-learners, who are overage, creates serious social and behavioral problems. This is the serious limitation of such devices as the 'Ungraded Primary School.'" These authors might have gone on to include in their criticism the Joplin plan and overly rigid promotion plans in graded schools.

An interesting fact was reported by Goldberg (11), who found that ability grouping raised the self-assessment of slow pupils and lowered that of gifted. She suggested that the relatively consistent middle-class population might have helped in avoiding more negative attitudes.

Luchins and Luchins (19) interviewed 190 children (every other child) in grades 14 to 6 of a school with homogeneous grouping. Data from the interviews was carefully presented in the report in table form. The authors found that dull pupils felt inferior and ostracized. Social pressure, both pupil and parent, was such that all wanted to be in the bright group, and the ones in that group tended to be snobbish about it. The apparent result was a caste system where attitudes toward learning tended to be superficial, with emphasis on high marks and other externals. Pupils even preferred a poor or disliked teacher if they could be in the "bright" group.

### Summary

Perhaps others, who have studied—and done—the research in this area, can best summarize the situation on grouping:

Clymer & Kearney (9, p. 282): "Only as the teacher utilizes the resources available to him in organizing his class and carrying out an instructional program adjusted to needs of students can we hope to make progress in developing the potential of the students in the public schools."

Wrightstone (27, p. 29): "Available experimental evidence on instructional provisions for meeting individual differences at the elementary-school level favors groups within the class."

Carnegie Quarterly (7, pp. 6-7): "Research data on the educational value of ability grouping are at best mixed and at worst negative with respect to its benefits."

Shores (25, p. 172): "Studies conducted to date do not indicate that grouping by classes either on the basis of measures of verbal intelligence or achievement results in improved achievement."

Abramson (1): "The lack of effect of ability grouping on academic achievement suggests that further research on the education of the high ability student be centered on curriculums and methods of teaching."

Perhaps the best summary statement is that of Harold Shane

(23, p. 427): ". . . an able teacher, given freedom to work creatively,
is more important by far than any mechanical scheme, however ingenious."

One of the frequently mentioned dangers of homegeneous grouping is the implication to the teacher (or the inference she apparently draws) that further (intraclass) individualization is unnecessary: "Although

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many of these [grouping] practices were originally designed to make teaching easier, they seldom have achieved the goal. In fact, by eliminating the obvious deviate, they sometimes obscure the differences which still remain." (18)

A seldom mentioned but very real problem with "flexible" interclass grouping plans is the inordinate amount of time taken from educational planning and devoted to shuffling or pidgeonholing children.

Since evidence is very strong that we cannot "homogenize" kids by ability or achievement, perhaps future efforts at "innovative" grouping—and this is not really new either—might be devoted to grouping in the one way that kids can be alike, i.e., by sex. Serious efforts are being put forth in this direction. Some evidence has been available for a long time. For example, Goodenough and Tyler (14) reported that American and English boys are more alike than the boys and girls of either country are like each other in terms of interests. Terman (26) indicated that high ability boys were more like average boys and high ability girls more like average girls than gifted boys and girls were like each other.

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