Ability Grouping

Why Is This Strategy Useful?

Ability grouping is the practice of placing students into groups based on their abilities, needs and/or previous achievement. Teachers may use structural or situational grouping strategies, by which teachers limit the range of student needs, and thus reduce the instructional demand within a given group. Ability grouping may be contrasted to whole class grouping in which heterogeneous groups of students are taught in a self-contained setting. Studies suggest that grouping students by ability level improves teachers’ ability to monitor student learning, adapt instruction to needs, and conduct immediate interventions. The strategy is often used in teaching mathematics in the elementary grades.

Description of Strategy

There are different approaches to ability grouping. Structural grouping is when a teacher assigns students to a group and maintains the group. Situational grouping is when a teacher frequently changes and alters groups in a more ad-hoc manner based on immediate needs of groups of students. Students may be grouped within a class, or regrouped within a grade or across grades.

When grouping students by ability level, teachers are encouraged to be active decision makers and use the models flexibly depending on lesson context. Because the whole-class ad hoc model emphasizes the daily formation of small groups for remedial instruction and enrichment, these should be accompanied by on-going assessment of student understanding.

Historically, there was been some controversy with regard to the appropriate use of ability grouping. The studies below demonstrate positive results, readers may want to refer to some of the websites cited in the additional resources section as well.

Research Evidence

At least two randomized controlled trial designed study supports this strategy. In one study, 4th through 6th grade students (n=1736) and teachers (n=81) from nine elementary schools were randomly assigned to one of three groups: 1) control group, 2) two-group, within-class ability groups; and 3) ad hoc small groups and whole class (by elementary school). Findings suggest a significantly positive effect for the whole class ad hoc treatment group in terms of quantity of instruction (individual and whole class time with students), the quality of instruction (e.g., students’ higher order thinking), the amount of time assessing student learning, and the amount of time spent on classroom management issues (teachers spent less time on these issues).

A second randomized controlled trial study consisted of two separate experiments. The subjects in Experiment 1 were 345 students in 15 grade 4-6 classes. Classes and their teachers were randomly assigned to one of three experimental treatments: Missouri Mathematics Program (MMP), Ability Grouped Active Teaching (AGAT), or Team Assisted Individualization (TAI). Results of the first experiment indicated that AGAT students showed increased computational skills compared to students in the MMP group. Experiment 2 participants were 480 students in grades 3-5. In this experiment, there were 4 randomized groups, 3 were the MMP, AGAT and TAI and the fourth was an untreated control group, in which teachers used traditional whole-class instructional methods. Also in experiment 2, AGAT and TAI produced students with increased computational skills over those students in the traditional whole-class instruction group.
Sample Studies Supporting this Strategy


Available at: [http://aer.sagepub.com/cgi/content/abstract/30/2/328](http://aer.sagepub.com/cgi/content/abstract/30/2/328)

The effects of two models of active teaching and active learning on the mathematics achievement of 1,736 fourth-, fifth-, and sixth-grade students in 81 classrooms in which teachers used within-grade regrouping were compared: a whole-class model that provided for student diversity through ad hoc remediation and enrichment on a daily basis with small groups (referred to as whole-class ad hoc teaching) and a two-group model that accommodated diversity through fixed within-class ability groups. Nine schools from a Midwestern district were matched and randomly assigned to treatment conditions. Treatment teachers received three 90-minute workshops on an active teaching and active learning model consisting of 16 key instructional behaviors. Dependent variables consisted of computation, concepts, problem-solving, and mental mathematics measures. Results showed that students in whole-class ad hoc classes scored significantly higher in mathematics computation than control-group students taught using within-class ability grouping. Observational data explaining these differential effects are presented and discussed.


Available at: [http://aer.sagepub.com/cgi/content/abstract/22/3/351](http://aer.sagepub.com/cgi/content/abstract/22/3/351)

This randomized controlled trial studied the achievement and attitudinal effects of three mathematics instruction methods, which are all directed at accommodating students’ diversity in performance, in two field experiments. Treatments included an individualized model, Team Assisted Individualization (TAI); an ability grouped model, Ability Grouped Active Teaching (AGAT); a group-paced model, the Missouri Mathematics Program (MMP); and, in Experiment 2 only, untreated Control classes. Participants in the two experiments were 825 students ranging in grades from 3rd-6th. Analysis of Comprehensive Test of Basic Skills (CTBS) Computations scores adjusted for pretests indicated that in both experiments, TAI and AGAT exceeded MMP. TAI, AGAT, and MMP also exceeded Control. No effects on CTBS Concepts and Applications were found, and there were no treatment by prior achievement interactions on either scale. Effects on Liking of Math Class and Self-Concept in Math generally favored TAI.

Additional Resources

Ability Grouping in Elementary Schools: ERIC Digest. Available at: [http://www.ericdigests.org/pre-927/grouping.htm](http://www.ericdigests.org/pre-927/grouping.htm)

Hot Topic: Does Ability Grouping Help or Hurt? Available at: [http://teacher.scholastic.com/professional/classmqmt/abilitygroup.htm](http://teacher.scholastic.com/professional/classmqmt/abilitygroup.htm)

Is ability grouping the way to go – or should it go away? Available at: [http://www.education-world.com/a_issues/issues002.shtml](http://www.education-world.com/a_issues/issues002.shtml)

What is ability grouping? Available at: [http://learningdisabilities.about.com/od/ac/a/ability_groups.htm](http://learningdisabilities.about.com/od/ac/a/ability_groups.htm)