



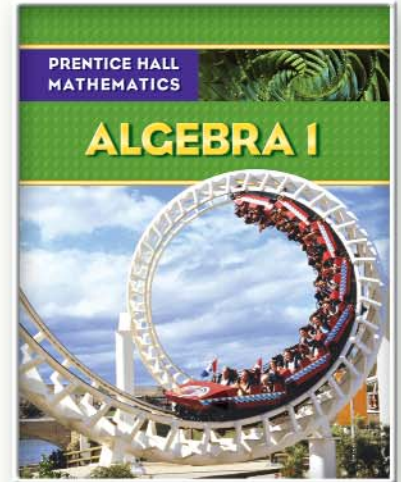
New Research Results

Prentice Hall Algebra 1

Independent research confirms Prentice Hall Algebra 1 helps students achieve significant gains in mathematics test scores

Results of independent research show **Prentice Hall Algebra 1** is helping students to succeed in mathematics. The randomized control trial, conducted by PRES Associates, Inc., a national educational evaluation firm with central offices in Jackson, WY, showed that student performance increased significantly from pre- to post-tests as measured by three different standardized assessments. Significant improvements were also observed in several key diagnostic areas.

The study is part of a multi-year research effort commissioned by the publisher and is one of many slated to evaluate the effectiveness of Prentice Hall's educational materials across disciplines and grade levels. Participants represented a mix of urban and suburban districts with diverse socio-economic and ethnic backgrounds.



Among the key findings, PRES Associates reported:

- Student performance significantly improved from the beginning to the end of the school year as measured by a battery of three different standardized assessment measures, chosen because they are aligned to national NCTM standards and have proven reliability and validity.
- Assessment results suggest that the Prentice Hall Algebra 1 program may be particularly effective with providing necessary enrichment to high-performing students as evidenced by the significant gains in student performance demonstrated by high-performing students.
- Subgroup analyses suggests that the Prentice Hall Algebra 1 program works equally well with students of Limited English Proficiency (LEP), special education students, and females as compared to non-LEP students, non-special education students, and males, respectively.
- 53% of students performing at below average at the beginning of the year improved to average or advanced by the end of the year.
- 43% of students performing at average at the beginning of the year improved to advanced by the end of the year.
- Students using Prentice Hall Algebra 1 were more satisfied with their textbook, ancillary resources, and technology support and had higher mathematics aspirations than those using other programs.
- One hundred percent of teachers participating in the study reported that use of Prentice Hall Algebra 1 was attributed to an increase in students' skills and knowledge, preparation for state testing, and a decrease in teacher planning time.

The study was designed to fully meet the evidence criteria put forth by the What Works Clearinghouse, the Federal agency established in 2002 to provide the educational community and the public with a trusted source of scientific evidence of what works in education. This study was designed so that accurate and appropriate inferences could be made regarding the effectiveness of the Prentice Hall Algebra 1 program.

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Executive Research Summary

Background

PRES Associates, Inc., an external, independent research firm with over 15 years of experience was commissioned to conduct a randomized control trial (RCT) on the effectiveness of the 2004 edition of Prentice Hall Algebra 1 in helping middle and high school students attain critical mathematics skills.

Study Design

Commencing in fall 2004, an RCT was designed to address the quality criteria as put forth by the What Works Clearinghouse. The final sample consisted of 731 eighth through twelfth grade students in four geographically diverse schools located in New Jersey, Ohio, and Nevada. The following types of information were part of the study:

- Pre/post student surveys collected information on student attitudes towards math;
- Pre/post teacher surveys gathered data on classroom practices and teacher perceptions of their math program(s);
- A battery of pre/post standardized assessment measures were administered to collect data on student learning. These assessments were aligned to national and NCTM standards and had proven reliability and validity;
- Classroom observations collected data on instructional activities occurring in treatment and control classrooms;
- Weekly teacher logs monitored fidelity of treatment implementation and what was occurring in control classrooms.

Goals

The main goal of the study was to quantify the comparative impact of Prentice Hall Algebra 1 on student achievement for eighth through twelfth grade students. The results may be used to answer critical questions for potential users such as:

- Does mathematics ability improve as a result of participating in the Prentice Hall Algebra 1 program?
- How well does the program work with various subgroups?
- Does using the program result in increased student achievement as compared to other types of mathematics programs?

Results

- Algebra performance significantly improved from pre- to post-test as measured by overall scores from three assessments.
- Results showed that the program worked equally well with students of Limited English Proficiency (LEP), special education students and females as compared to non-LEP students, non-special education students and males, respectively. Results indicated that the program worked especially well with advanced students.
- Users of the program consistently performed as well as students who used other programs.
- Students in classrooms using Prentice Hall Algebra 1 had significantly better attitudes towards math and planned to take more higher level math classes (e.g., Algebra 2, Calculus, Statistics) as compared to students in classrooms employing other curricula.
- Teachers indicated that the Prentice Hall Algebra 1 program provided significantly more assistance than other Algebra 1 curriculum programs in the areas of assessment of prerequisite knowledge, provision of intervention, and preparation of students for state or national exams.

Pearson Prentice Hall mathematics programs are backed by rigorous, independent research that supports their effectiveness in today's classrooms.

Visit PHSchool.com/Research for the full report and additional research in support of Prentice Hall Algebra 1.