Produce research

Large-scale program, policy, and product evaluations on behalf of the U.S. Department of Education

Applied research by the Regional Educational Laboratories (RELS)

Summarize research

Support access to and use of research

Training, coaching, tool development, and technical support from the RELs

What Works Clearinghouse™

National Library of Education

Education Resources Information Center (references and full text)
Primary audiences = Practitioners and policymakers

- Reports and guides (65+ annually)
- Infographics
- In-person events and webinars
- Videos
- Tools
You’re competing for attention
Who repeats algebra I, and how does initial performance relate to improvement when the course is repeated?

Anthony B. Fang
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Neal Finkelstein
WestEd

Key findings

This study in a large high school district in California found that:

- Some 44 percent of students repeated algebra I, and the repetition rates varied with student characteristics. The rates were highest among students in special education (69.6 percent), Hispanic students (61.1 percent), and English language learner students (56.7 percent).

- When repeating algebra I, lower performing students are likely to experience improvements in grades and California Standards Test scores while higher performing students are likely to experience improvements on some measures and declines on others. Overall, student achievement improves on average when students repeat the course.
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What the study found

Rates of repeating algebra I varied based on student characteristics. Not all repeaters were low-performing students. Although achievement in algebra I improved on average when students repeated the course, students who initially performed well in the course improved on some measures but performed worse on others the second time around.

Nearly 45 percent of students repeated algebra I—and percentages were nearly 70 percent for some subgroups.

Some 44.3 percent of students in the study sample repeated algebra I. The rates of repeating algebra I varied by student characteristic (table 1) and were highest among students in special education (69.6 percent), students with more than 18 absences in the year they

<table>
<thead>
<tr>
<th>Table 1. Algebra I repeating rates by student characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student characteristic</strong></td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Race/ethnicity</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>English language learner status</td>
</tr>
<tr>
<td>English language learner student</td>
</tr>
<tr>
<td>Not an English language learner student</td>
</tr>
<tr>
<td>Eligibility for free or reduced-price lunch</td>
</tr>
<tr>
<td>Eligible</td>
</tr>
<tr>
<td>Not eligible</td>
</tr>
</tbody>
</table>

Not all algebra I repeaters were low-performing students

- Simple, two-color
- Low color saturation to conserve printer ink
- Some white space, but not excessive, to conserve paper
- One-column format, optimized for reading online
- Key ideas emphasized in margins
The Regional Educational Laboratory Program produces 7 types of reports:

- **Making Connections**
  Studies of correlational relationships

- **Making an Impact**
  Studies of cause and effect

- **What's Happening**
  Descriptions of policies, programs, implementation status, or data trends

- **What's Known**
  Summaries of previous research

- **Stated Briefly**
  Summaries of research findings for specific audiences

- **Applied Research Methods**
  Research methods for educational settings

- **Tools**
  Help for planning, gathering, analyzing, or reporting data or research
Seek formal peer reviews for usefulness and presentation

- Is it clear what action or decision can be informed by the information in this report?
- Was the time you spent reading this report commensurate with the benefit that you received? Why or why not?
- Would you recommend this product to a colleague? Why or why not?
For large, complex projects: **Summarize the summary**

- Page 1 of Executive Summary contains all major points
- Executive Summary (10-15 pages)
- Study Snapshot (4 pages)

**Full report**
Customize to different audiences

Recognizing and conducting opportunistic experiments in education: a guide for policymakers and researchers

Alexandra South
William Blyth
Laurie Kwon
Mathematics Policy Research

Making the Most of Opportunities to Learn

If you are a school district leader, principal, or other education official, you are always looking for ways to improve the school or district. You want to see those changes in programs that improve outcomes for your students, teachers, and school leaders—programs that have proven effective. Unfortunately, many programs and strategies have no proof of effectiveness, and even when they do, it is often difficult to discern whether or not a program works. This guide offers a solution to this problem by providing key strategies that can help school districts make the most of their opportunities to learn.

School district leaders

Researchers and policymakers
Updated for 2014!

Back to School with the What Works Clearinghouse™

*Video on selecting a math curriculum
*What Works in Math resource page
*Information on Regional Educational Laboratories

Each year we provide educators with new ways the What Works Clearinghouse™ can help start the school year. We review the research to find what works in education. In this feature, find tips based on a variety of WWC products.

Core Subjects
The WWC has quick tips from our practice guides for math, language arts, and behavioral issues to try in your classroom! New from the WWC: Visit What Works in Math, your central source for effective math programs, products, practices, and policies.

Front Office
Looking for the best evidence on math, reading, and other curricula? Use the Find What Works tool to compare the research. Choosing new math programs, policies, or practices? Our new video can show you how the WWC can help.
Connect the dots. Explain. Explain again.

Anticipate and address questions that your audience might have:

• Why is this topic or question important to me?
• How are these findings similar to or different from previous studies?
• Is this part of a larger body of work you’ve done?
• Why do you do things that way?
In new product announcements:

- Explaining how a study conducted in another part of the country can still be useful to you.
- Reminders of previous studies from the same project.
- Highlighting other resources on the same topic.

Wait, we can explain….

WWC Fact Check: Test Your Knowledge...
If no studies meet standards, that means the intervention doesn’t work.
- True
- False

Selecting Math Instructional Materials

Educators want mathematics instructional materials that work. But whether it’s for textbooks, software, or other branded products, the vast research on these materials can overwhelm any decision maker. So when it comes time for your school district to replace math instructional materials, where do you start? The What Works Clearinghouse can help. In this video, find out how the WWC can serve as a resource when selecting math instructional materials.

Video: How to use the WWC to help select math materials for your school
To be a good communicator of research, you need to think like a good teacher.

- Help them make connections.
- Capture interest with graphics & pertinent examples.
- Customize presentation to different interests and learning preferences.
- Be clear what you want them to learn and/or do, and why.
- Anticipate and address likely misunderstandings.
- Use their questions as your opportunity to improve.