National Center for Education Evaluation and Regional Assistance
Institute of Education Sciences

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

What Works Clearinghouse™

Support access to and use of research

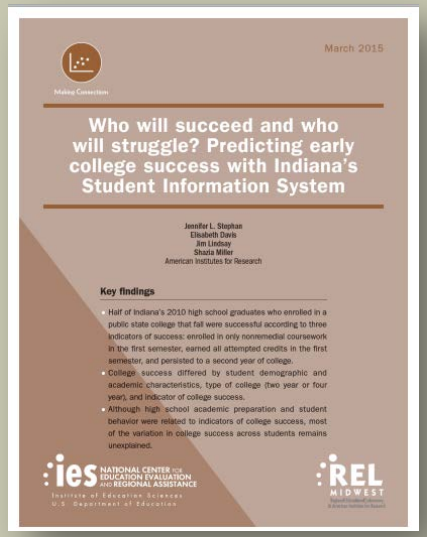
Training, coaching, tool development, and technical support from the RELs

National Library of Education

Education Resources Information Center (references and full text)

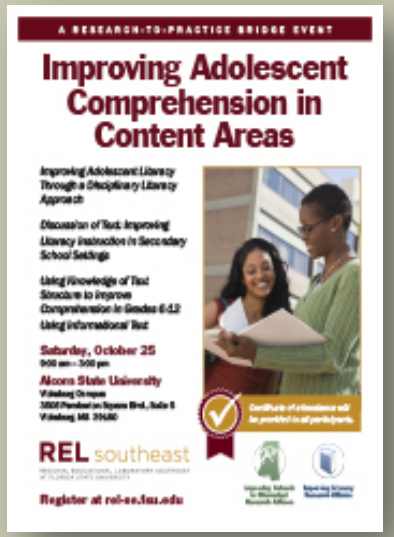
ERIC
Institute of Education Sciences

Primary audiences = Practitioners and policymakers



Reports and guides (65+ annually)

Infographics



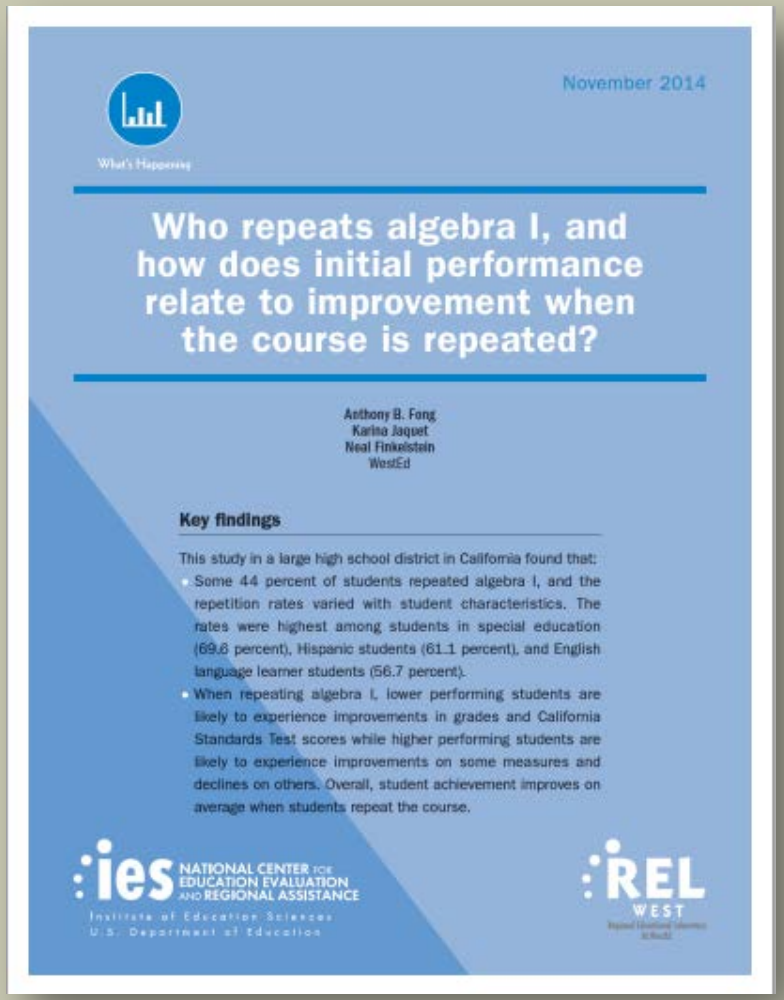
In-person events and webinars

Videos

Tools

You're competing for attention

Short. Organized.



November 2014

What's Happening

Who repeats algebra I, and how does initial performance relate to improvement when the course is repeated?

Anthony B. Fong
Karina Jaquet
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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Contents

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

Not all algebra I repeaters were low-performing students

Table 1. Algebra I repeating rates by student characteristic

Student characteristic	Number of repeaters	Percent repeating
Total	1,505	44.3
Race/ethnicity		
American Indian/Alaska Native	*	*
Asian	307	24.0**
Black	*	*
Hispanic	1,005	61.1**
White	126	35.7**
Gender		
Female	691	41.2**
Male	814	47.3**
English language learner status		
English language learner student	548	56.7**
Not an English language learner student	957	39.3**
Eligibility for free or reduced-price lunch		
Eligible	1,106	51.3**
Not eligible	399	32.1**
Special education status		

- 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

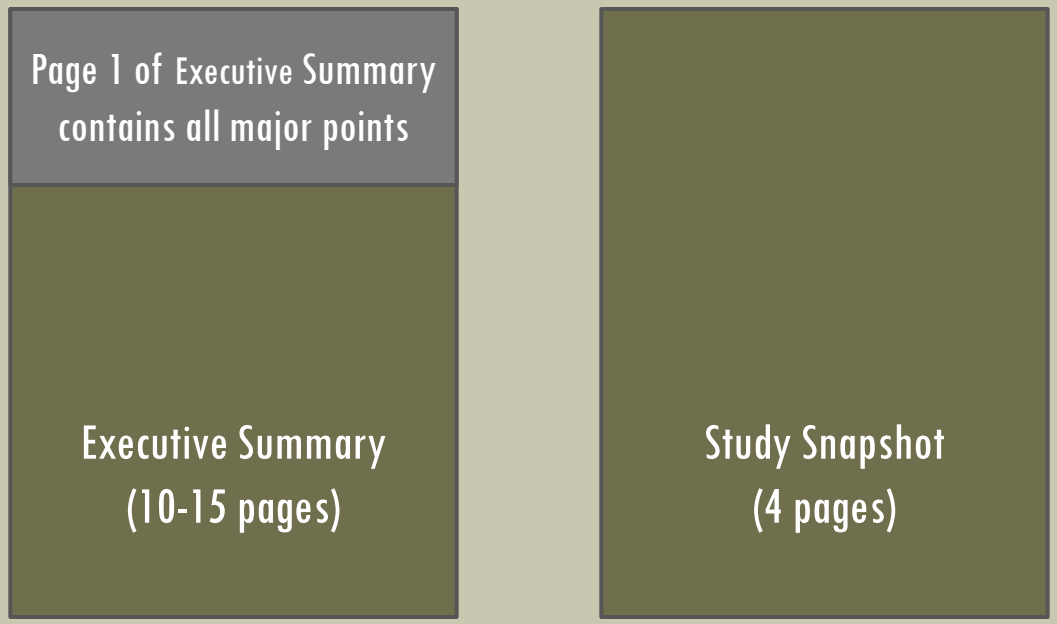
It's iconic


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

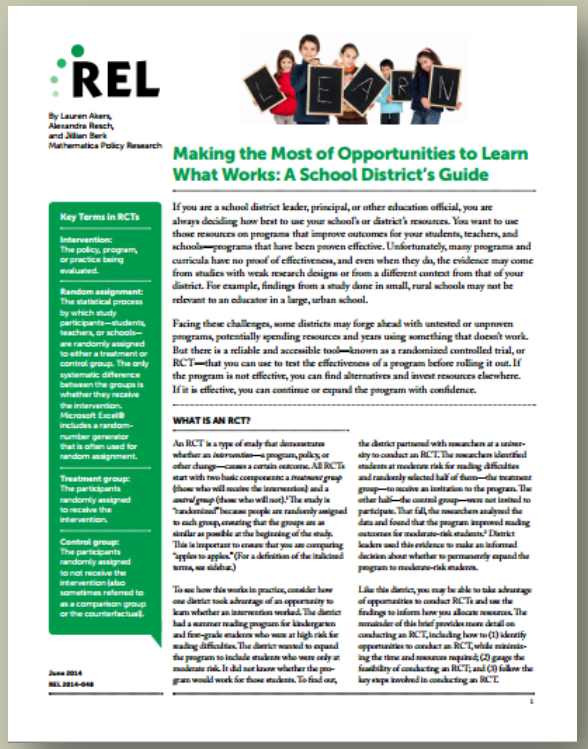
- Is it clear what action or decision can be informed by the information in this report?
- Was the time you spent reading this report commensurate with the benefit that you received? Why or why not?
- Would you recommend this product to a colleague? Why or why not?

For large, complex projects: **Summarize the summary**



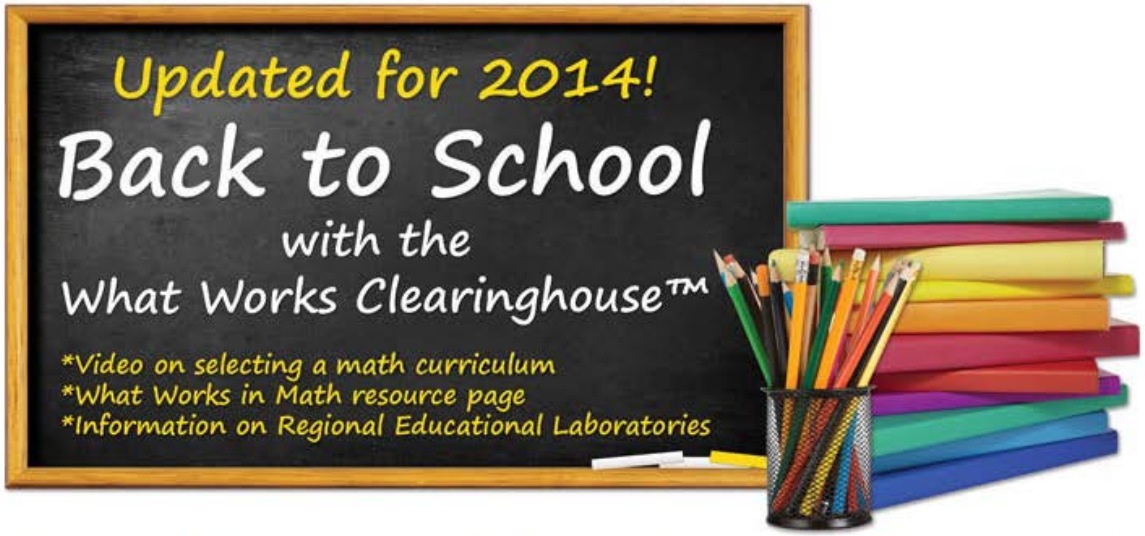
Customize to different audiences

Researchers and policymakers



School district leaders

If you haven't read it before, it's new to you



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.

Announcements

Get the latest from the WWC! Subscribe to our NewsFlash.
Follow us on Facebook or Twitter.

Assembly

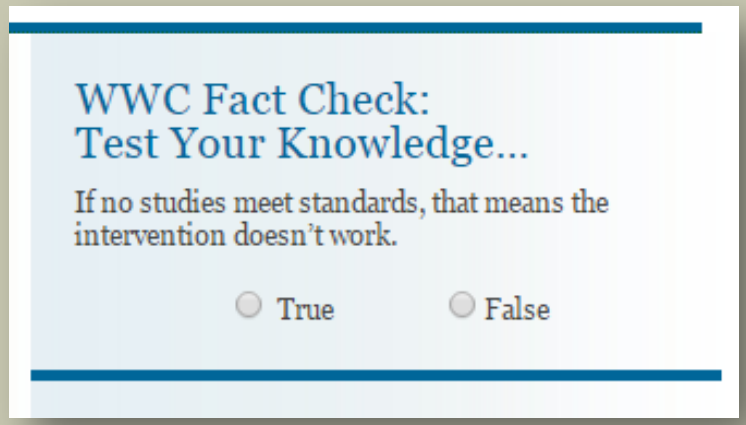
Meet John Woodward, Distinguished Professor and Dean of the School of Education at the University of Puget Sound, in Tacoma, Washington. John served as the panel chair for the practice guide *Improving Mathematical Problem Solving in Grades 4 through 8*. Watch video materials based on the guide!

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?

Wait, we can explain. . . .



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.

Selecting Math Instructional Materials

Click the image to play the presentation (04:13 minutes)

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 <u>your</u> opportunity to improve

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