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STRENGTHENING STUDENT LEARNING THROUGH INNOVATION & FLEXIBILITY

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NEW DIRECTIONS FOR K-12 EDUCATION

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IMPROVING TARGETING & FLEXIBILITY FOR TITLE I FUNDING

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Increasing Targeting and Flexibility in Title I ESEA to Help Disadvantaged Students

Nora Gordon

Georgetown University and NBER

What is Title I ESEA

- $14 billion of federal aid to school districts based on child poverty, for compensatory education

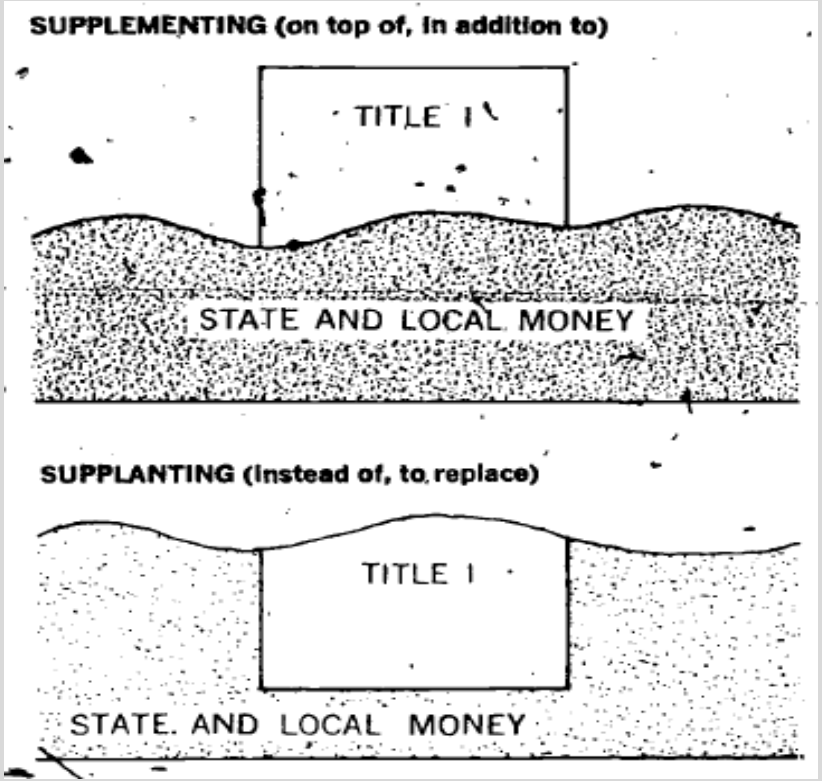
What's the problem?

- How states and districts think they can or can't use Title I and other federal funds
- How the money is distributed

The tension over district flexibility

- ESEA 1965: no safeguards led to misuse of funds

Supplement not supplant



Source: “Title I ESEA: How it Works. A Guide for Parents and Parent Advisory Councils.” 1978. U.S. Department of Health, Education, and Welfare.

Supplement not supplant before and after ESSA

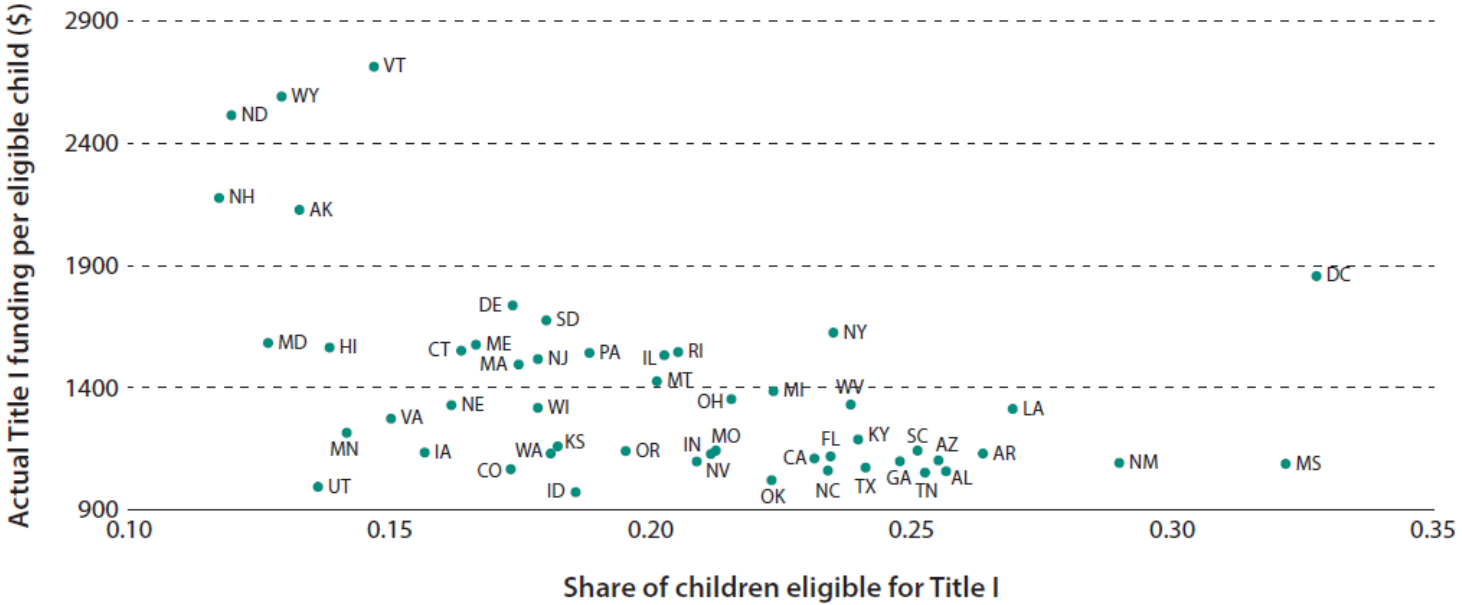
- Before: test for supplemental spending
  - Schoolwide programs could test for supplemental funds, but rarely did
  - Misunderstanding of law at SEA and LEA levels
- After: test for supplemental funds

What to do now?

- Provide clear regulations and guidance (ED and SEAs)
- Reach beyond the Title I community
- Help SEAs and LEAs revamp policies and practices around federal grants with pilot grants for technical assistance
- Revisit single-audit quality

How current Title I formulas distribute Title I funds per eligible, by share of students eligible

Share of Children Eligible for Title I vs. Title I Grant per Eligible Child, State Level, 2015 projected



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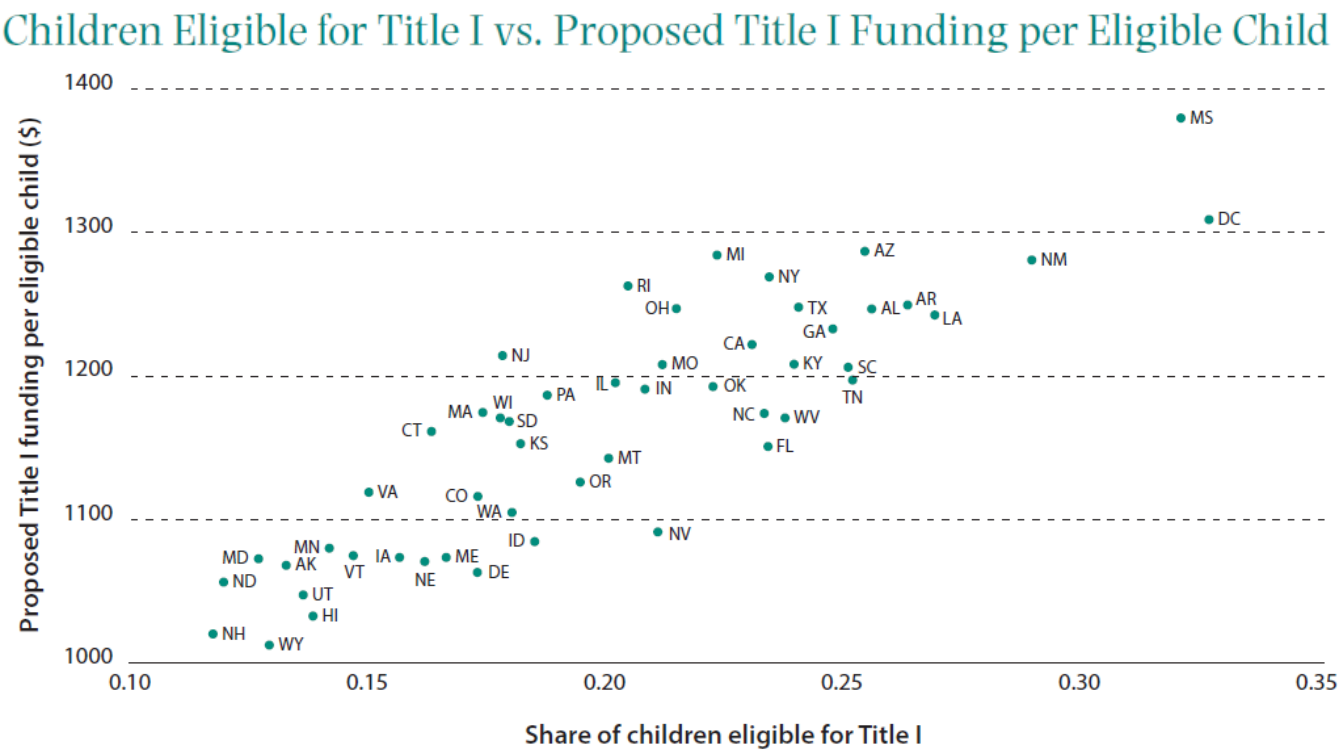
Source: Department of Education (2015).

Proposed formula changes

- Keep basic grant
- Eliminate concentration grants and EFIG
- Expand targeted grants
  - Eliminate “number weighting”
- For basic & targeted grants
  - Eliminate small state minimum
  - No longer adjust allocations based on state PPE
  - Phase out hold harmless over 4-year period
  - Keep maintenance of effort

How proposed formulas would distribute 2015 Title I grant per eligible, by share of students eligible



Source: Department of Education (2015); author's calculations.

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Surmounting political challenges

- Independent commission to recommend formula changes
- Congress votes recommendation up or down without amendment

Why now? ESSA

- Regulation, implementation
- IES must study formulas
- Prepare for next reauthorization

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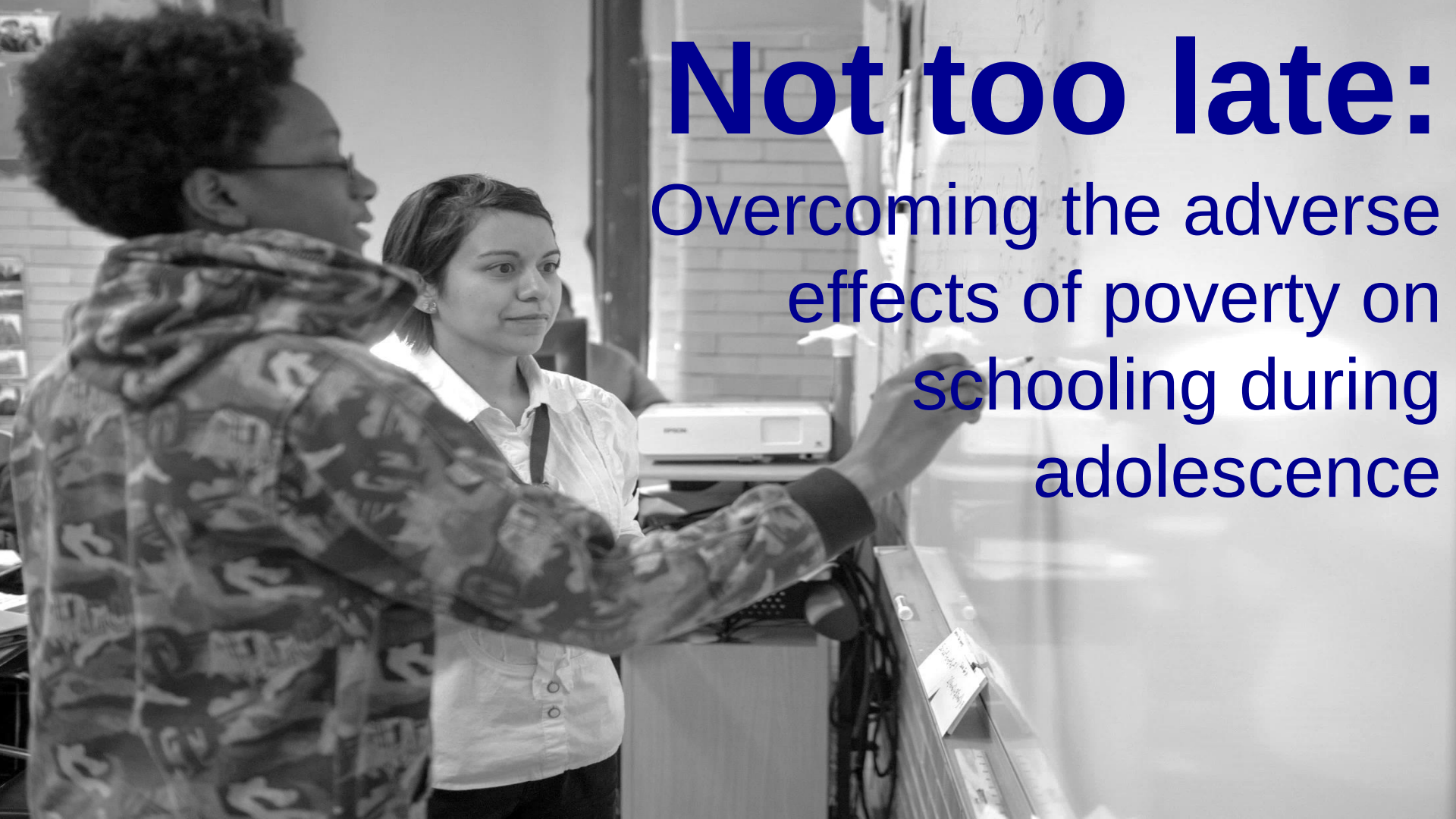
Improving Academic Outcomes for Disadvantaged Students: Scaling Up Individualized Tutorials

Roseanna Ander
University of Chicago
Jonathan Guryan
Northwestern University
Jens Ludwig
University of Chicago



Not too late:

Overcoming the adverse effects of poverty on schooling during adolescence

For all a and b,

$6a^2b^3 - 3a^2b$ is equivalent to which of the expressions?

If $3x - 10 = 24$, then $x = ?$

$$8 + 14 - 7$$

$$7 \times 4$$

$$\frac{1}{2} + \frac{3}{4}$$

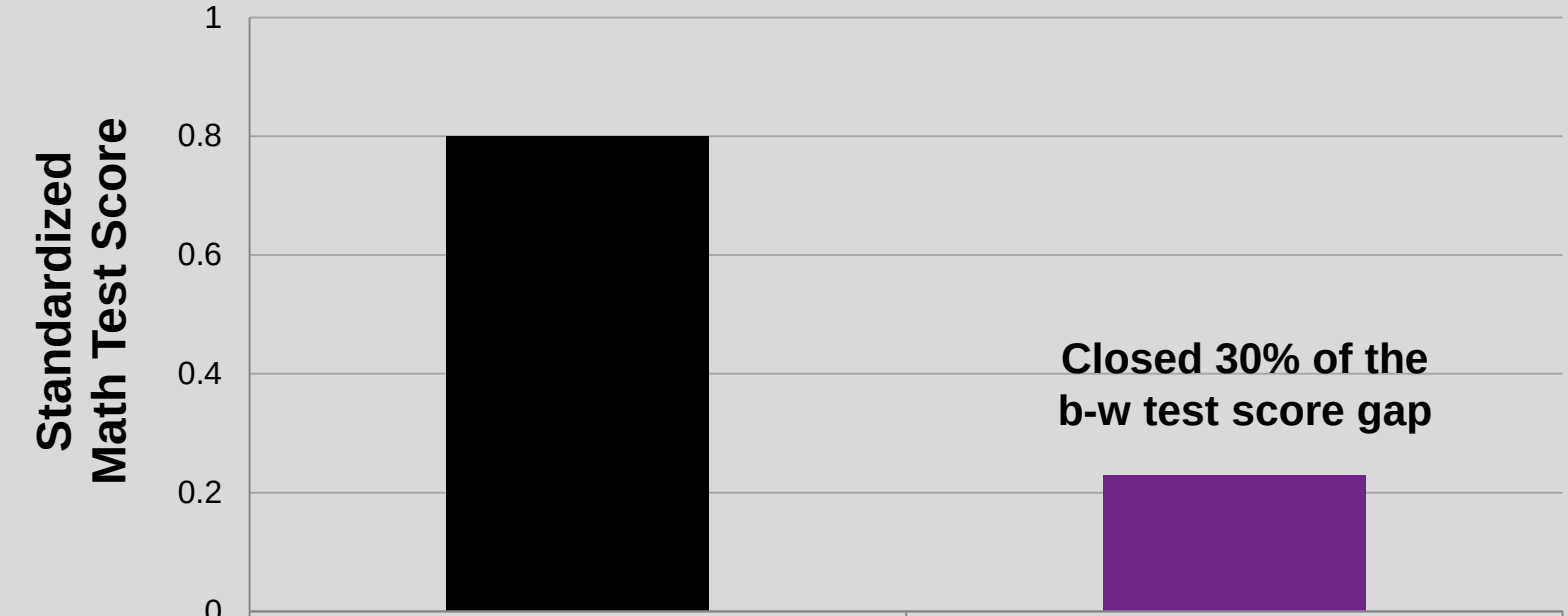
Implication for new intervention

- If mismatch is the problem, an intervention needs to be individualized and intensive
- Goal: bring students back up to grade level so they can re-engage with regular classroom instruction

Individualized Math Tutorials

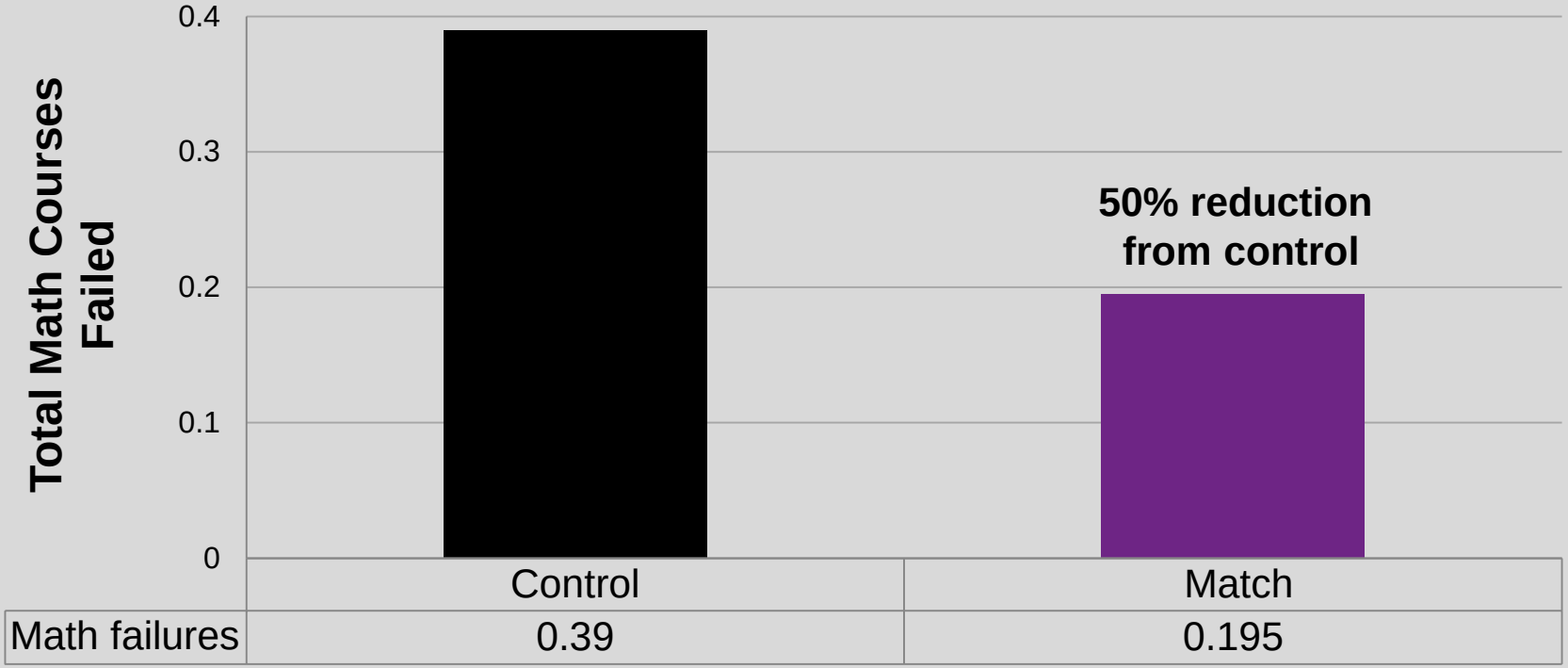
- Designed by Match Education, now delivered by SAGA innovations
- 2 on 1
- Frequent assessment
- In school, 55 min per day, every day

Gain in math scores by 30% of B-W gap (equal to 1 to 2 years of extra math learning, in 1 year)

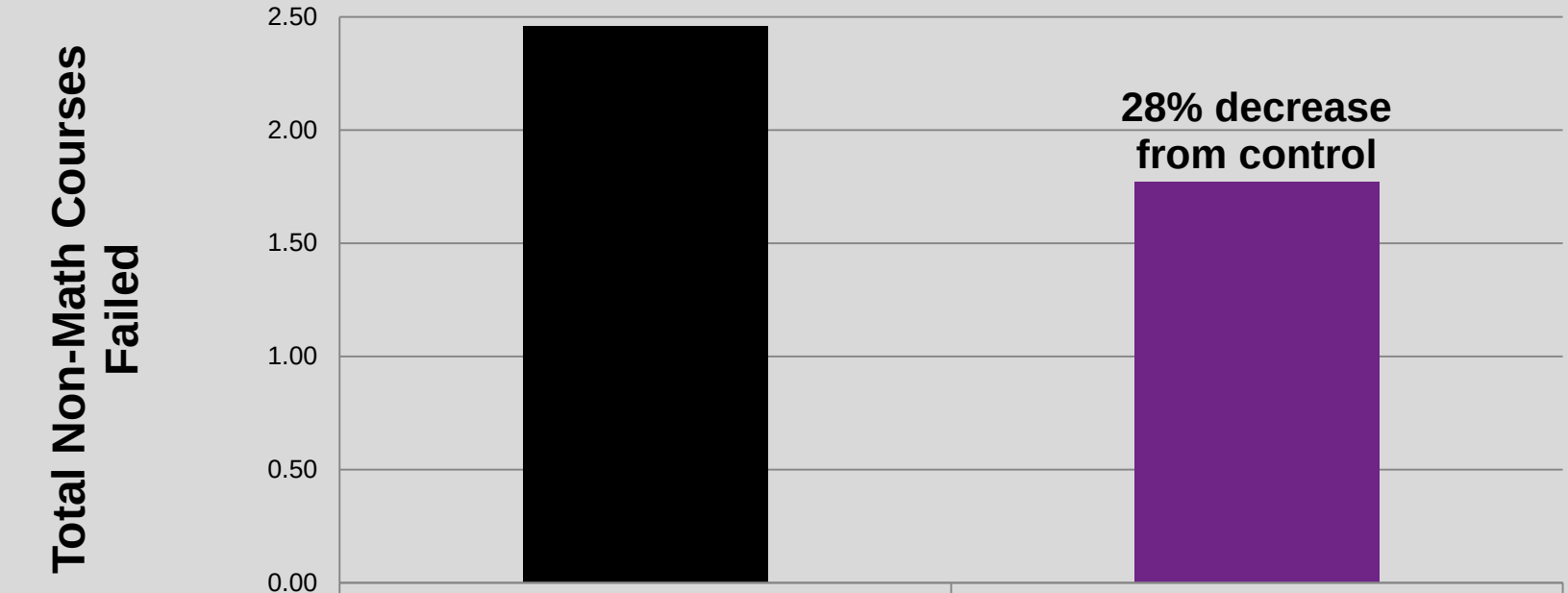


	Black-white gap in math scores, US 13 year olds	Effects of Match on math test scores
Math scores	0.8	0.23

Math Course Failures, AY 2013-14



Non-Math Course Failures, AY 2013-14



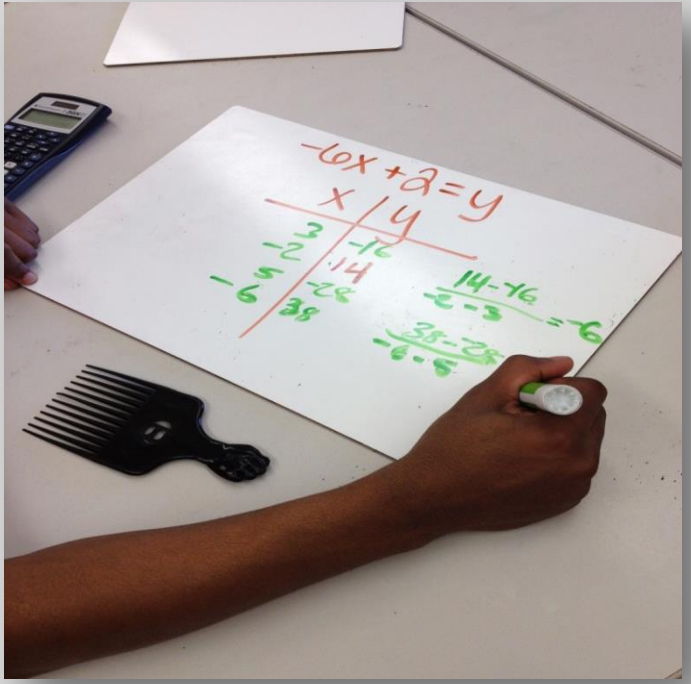
	Control	Match
Non-math failures	2.457	1.77

The Proposal

- Schools receiving Title I funding
- Every 3rd – 10th grade student at least two grade levels behind in math
- Two-to-one ratio math tutorial
- In school, every day

The Proposal

- Could be funded using Title I funds
- Goal: Get kids back to grade level
- Complementary to classroom teacher and classroom instruction


-6x+2=y
x | y
3 | -16
-2 | 14
5 | -28
-6 | 38
14-16 / -2-3 = -6
38-28 / -6-5

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Learning What Works in Educational Technology with a Case Study of EDUSTAR

Aaron K. Chatterji
Duke University

Benjamin F. Jones
Northwestern University

My local school…and yours too.

But which digital learning activities actually work?

We have little idea, creating large barriers to unlocking the potential of educational technology.

If we do not know what really works and for whom:

- Students and teachers are being poorly served
- There is less incentive for entrepreneurs to create new products
- Ed tech is unlikely to raise outcomes significantly

But rigorous evaluation is traditonally time-consuming and expensive!

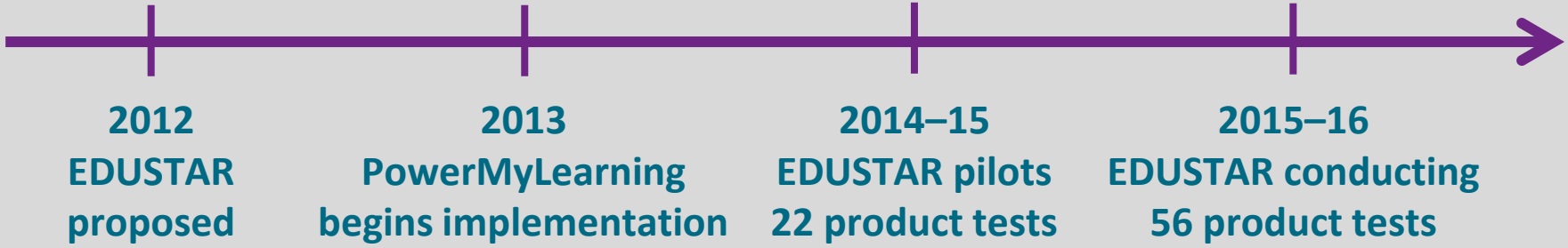
The opportunity:

- Create a low-cost platform for rigorous and rapid evaluation of educational technologies
- Use the evidence to put the right content in front of the right student at the right time

EDUSTAR aims to address this opportunity.

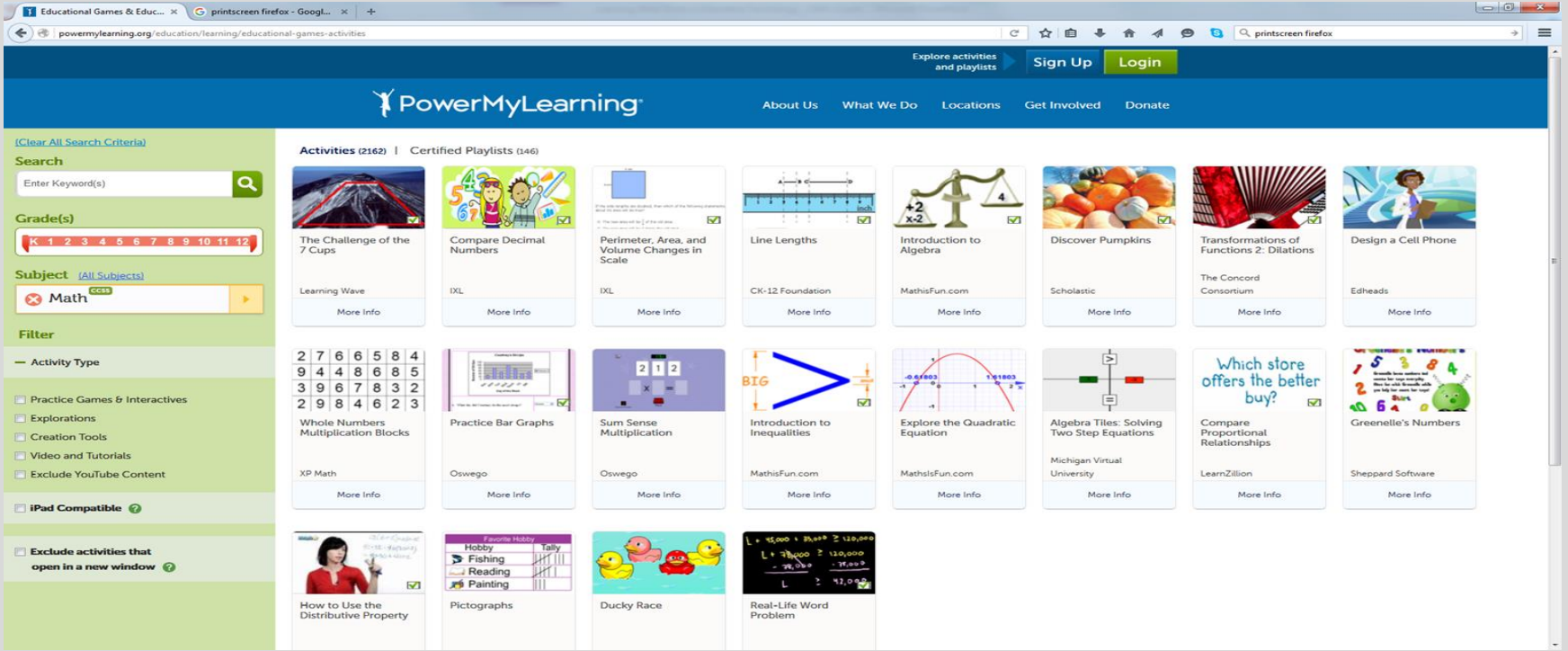
EDUSTAR is a platform for evaluating digital learning activities

The platform performs rapid, randomized-control trials (RCTs)

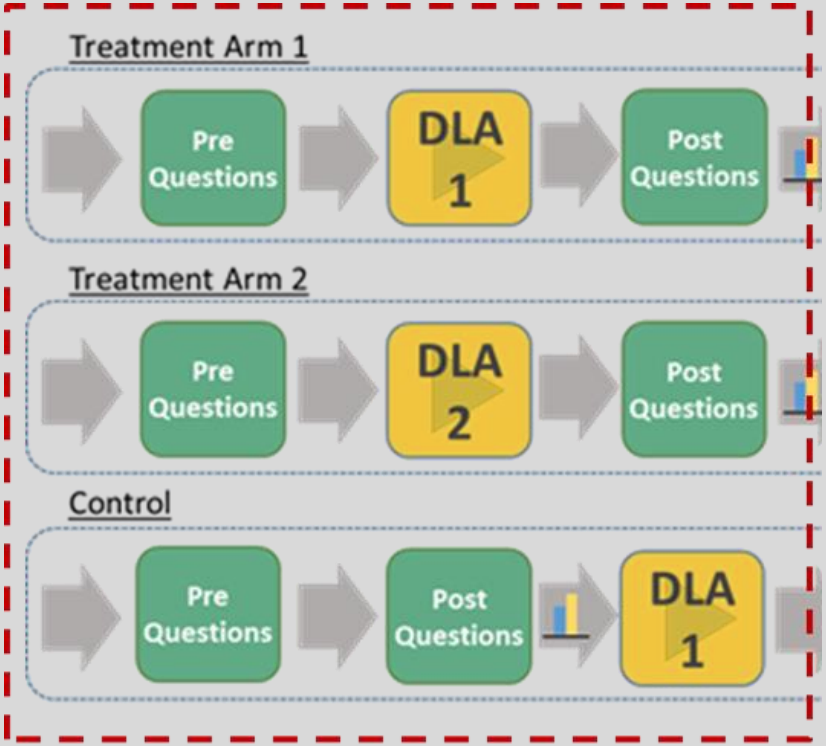


EDUSTAR is built on PowerMyLearning Connect, an online library of digital learning activities for K-12 students

PowerMyLearning Connect works with 40 partner schools and has 8 million page views per month.



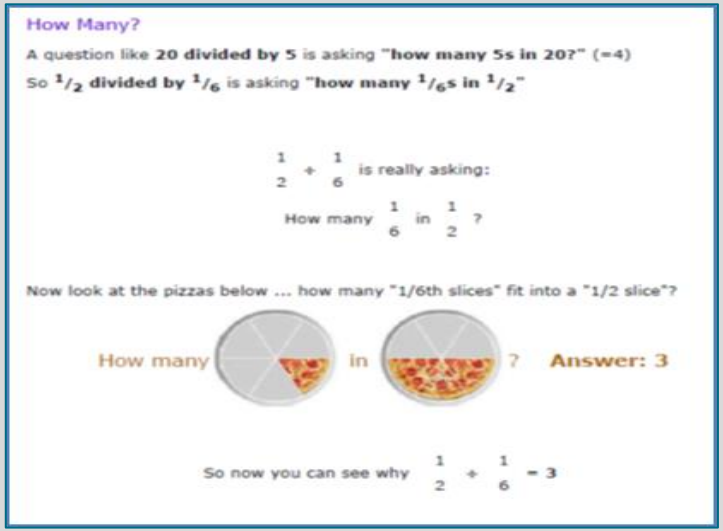
We apply the same method that companies like Google and Amazon use every day—rapid RCTs.



Example 1: Two activities that teach the same skill

Skill: Dividing Fractions (Common Core Standard 6.NS.A.1)

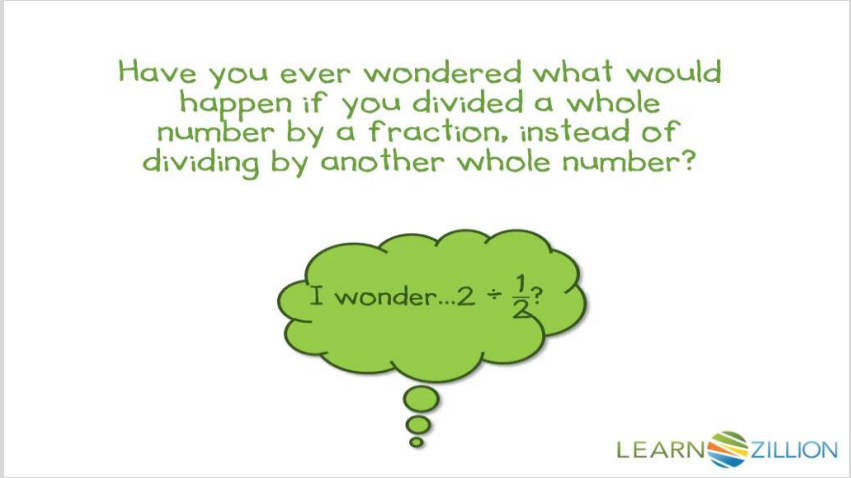
"Dividing Fractions"



"Basketball Dividing Fractions"

Example 2: Two versions of the same digital learning activity

Baseline video



Baseline video + section on "common mistakes"

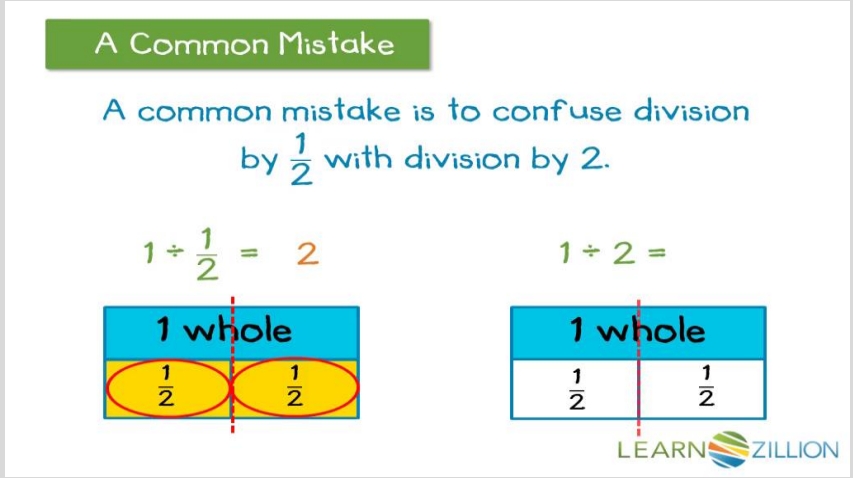
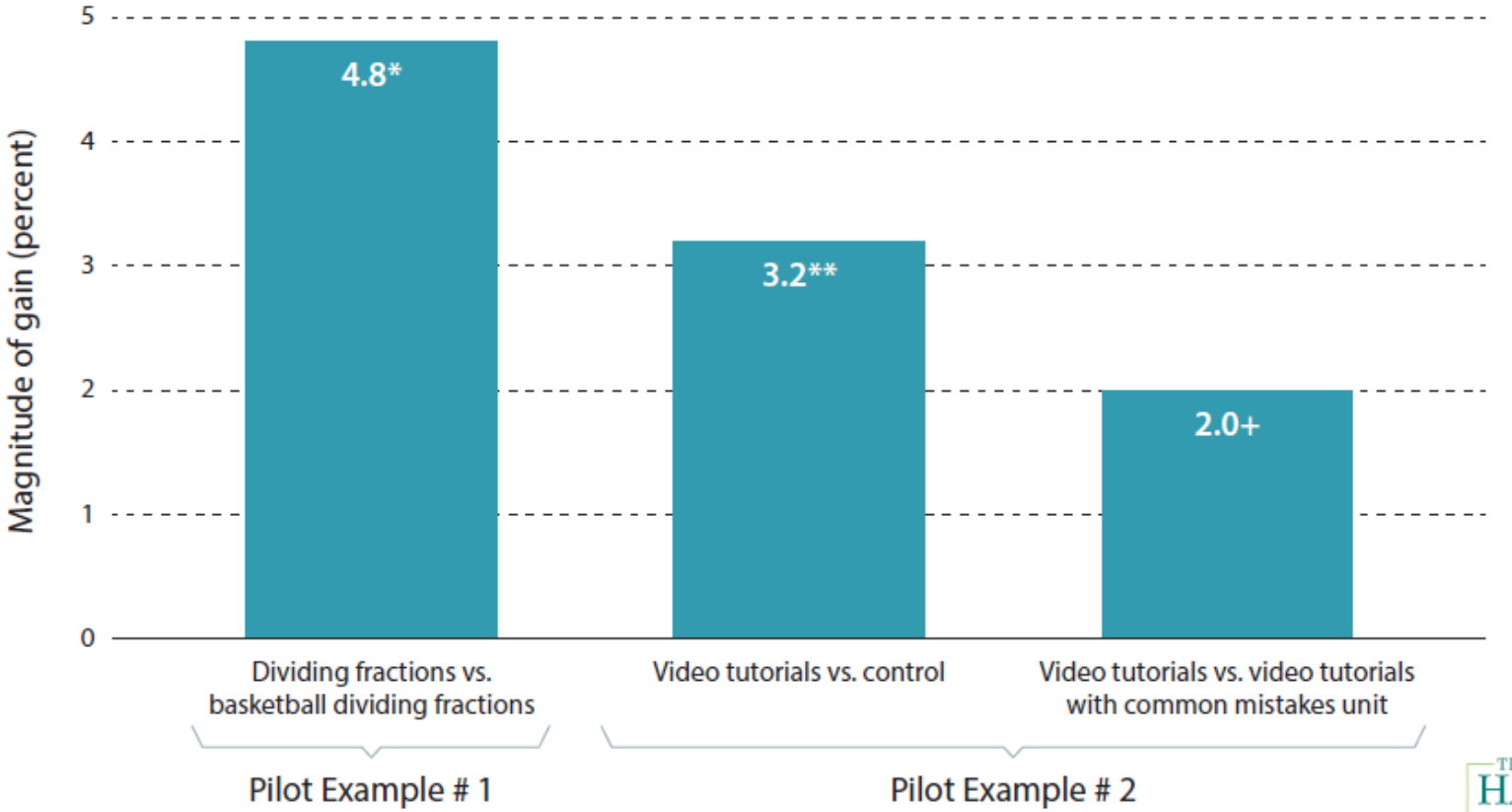


FIGURE 1.

EDUSTAR Results for Two Pilot Examples



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What did we learn?

Teachers in PowerMyLearning partner schools provided essential feedback

- Improved alignment of EDUSTAR goals with classroom needs

Platform can be useful to multiple groups

- Students, teachers, parents, school administrators
- Content creators
- Education researchers

Guiding Principles

- Evaluation must be rigorous, continuous, conducted by a trusted party, and preferably built on an existing large platform

What's next?

At scale, EDUSTAR can provide systematic information about digital learning activities

Provide teachers and their students the very best educational technology available

- Target the right content to the right student at the right time
- Personalize learning for all kinds of learners
- Enhance access to high quality content for students who lack financial resources and supporting infrastructure

The smart application of educational technology is a promising opportunity to improve our K-12 education system

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