

WELCOME! We will begin momentarily.

Note: all participants have been muted. Please use the chat function to ask questions throughout.





J-PAL Education, Technology and Opportunity Innovation Competition Webinar

J-PAL North America (MIT) February 26, 2018 povertyactionlab.org/edtech



Who we are



Vincent Quan Policy Manager J-PAL North America

Initiative Manager



Peter Bergman Professor of Economics and Education Columbia University Teachers College



Vincent Baxter Deputy Chief of Family Engagement DC Public Schools

WebEx housekeeping

- You have all been muted.
- We encourage you to use the chat function!
- We will answer your chat questions at the end of the webinar
- We are recording this presentation and will post it on the website within a week.

Agenda

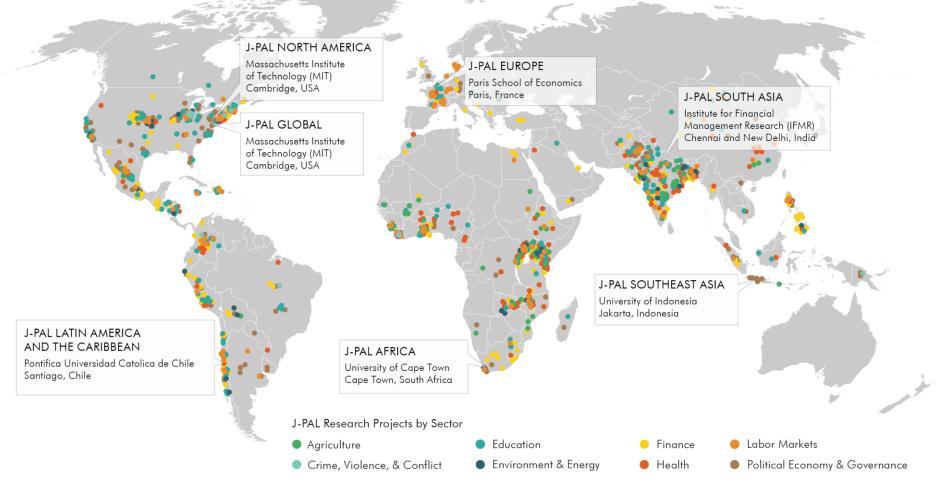
- I. Introduction to J-PAL
- II. The J-PAL Education, Technology, and Opportunity Initiative (ETOI)
- III. Opportunities for Randomized Evaluations
- IV. Randomized Evaluation in Practice
- V. How to Apply
- VI. Q&A

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J-PAL's mission is to reduce poverty by ensuring that policy is informed by scientific evidence



890+ ongoing and completed randomized evaluations in 80 countries

J-PAL | ED TECH INITIATIVE

J-PAL's network of affiliated researchers



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The J-PAL Education, Technology, and Opportunity Initiative



A new initiative at J-PAL North America that supports US education leaders in generating evidence on how and to what extent uses of technology and innovation can improve student learning

Why Education Technology?

Tremendous disparities in educational achievement exist

Technology has the potential to help overcome existing challenges in education

Massive investments in ed tech – projected to reach **\$21 billion** by 2020 (New York Times, June 2017)

But many programs are untested and not everything we try works – evidence is needed to harness potential of ed tech

Important to get it right: Identifying and investing in what works can help us make inroads for student achievement





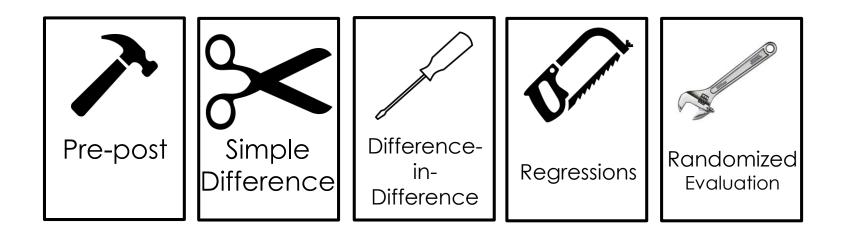
Goals of the J-PAL Education, Technology, and Opportunity Initiative (ETOI)

- Catalyze randomized evaluations of promising uses of education technology and innovation
- Build the capacity of education leaders to use data and evaluation
- Create a cohort of leaders who advance the use of rigorous evidence in education
- Share rigorous evidence with leaders who can act on research to generate solutions to critical challenges in education

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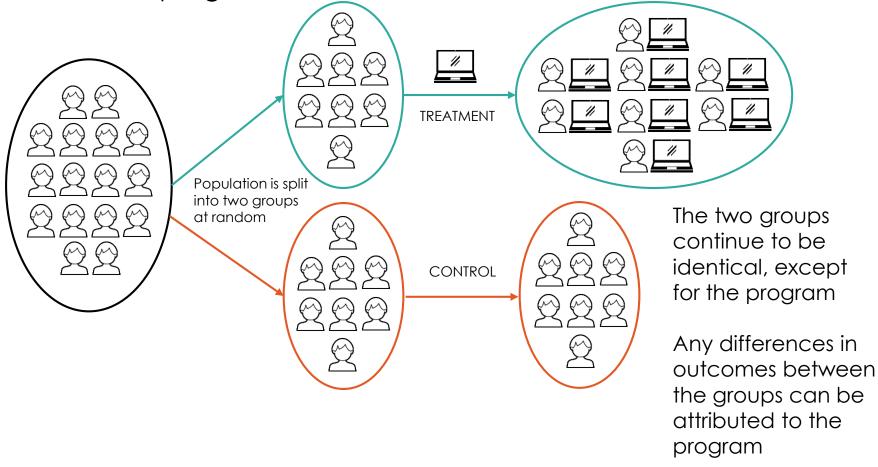
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Methods as tools



What is a randomized evaluation?

Before the program starts, eligible individuals are randomly assigned to two groups so that they are statistically identical before the program.



When to consider randomizing

- An unstudied or understudied program
 - e.g. a program that has not yet been rigorously evaluated
- Program or service is over-subscribed
 - If you can't serve everyone who is eligible, what is the optimal way (e.g. lottery) to allocate spots?
- Program expansion
 - e.g. moving into a new location or target population
- Adding a new feature
 - Can you roll out the new feature to some people and not others in order to measure its impact?
- Program thresholds/cutoffs
 - Those just below the cutoff (e.g. SAT score) could be randomly given a program

When does a randomized evaluation **not** make sense?

- Too small: sample size is too small to detect a meaningful differences in outcomes
- Too early: still ironing out logistics
- Too late: already serving everyone who is eligible, and no random assignment was built in
- When a positive impact has been proven, and we have the resources to serve everyone

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Family Engagement in DCPS

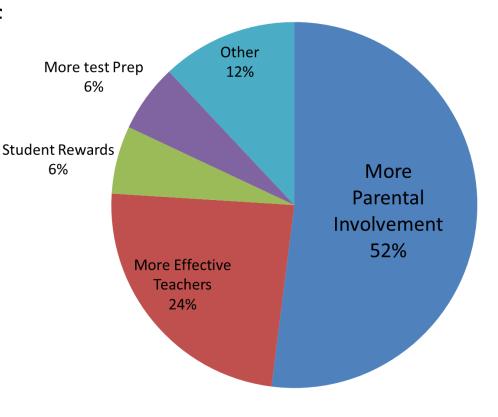




Peter Bergman Professor of Economics & Education Columbia University Vincent Baxter DC Public Schools Deputy Chief of Family Engagement

Need for research on Family Engagement

- Greatest source of educational inequality
- Powerful determinant of student achievement
- Surprisingly little evidence-based practices



Motivation

• Many parents...

...are unsatisfied with school-to-parent communication

- ...don't understand A-F grading system
- ... understate their child's missed assignments

... understate their child's absences

...don't know how many report cards they should get

...hear from their child's school less than 1 time every 3 months

The Technology Intervention

- Provide parents timely, actionable information about child's missed assignments, class absences, and low grades
- Send this information via automated, weekly text messages
- DCPS using this system in 12 schools
- **Issue**: Schools and parents not using it! Can we promote usage and efficacy?

The RCT partnership

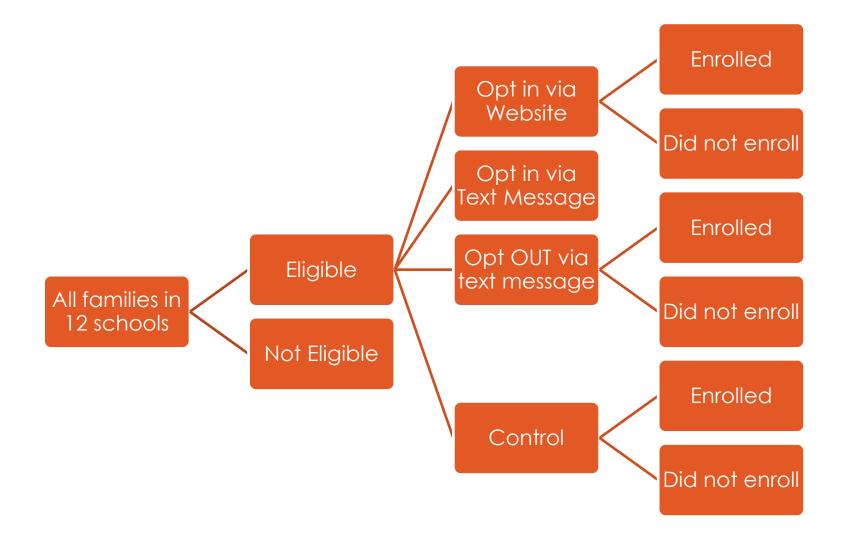


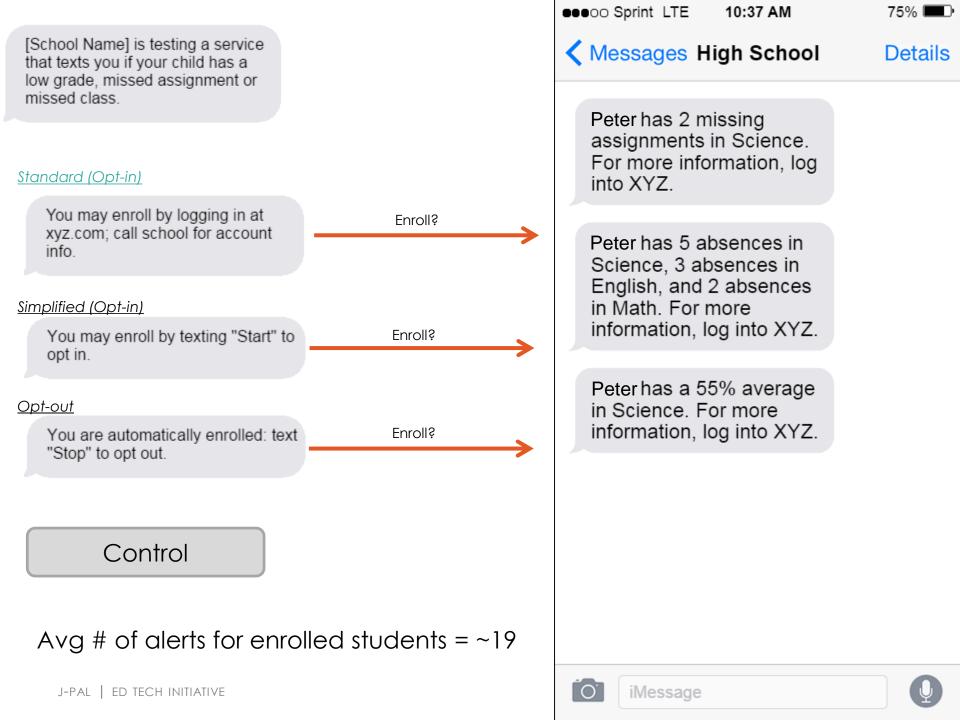
TEACHERS COLLEGE

COLUMBIA UNIVERSITY

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Evaluation design





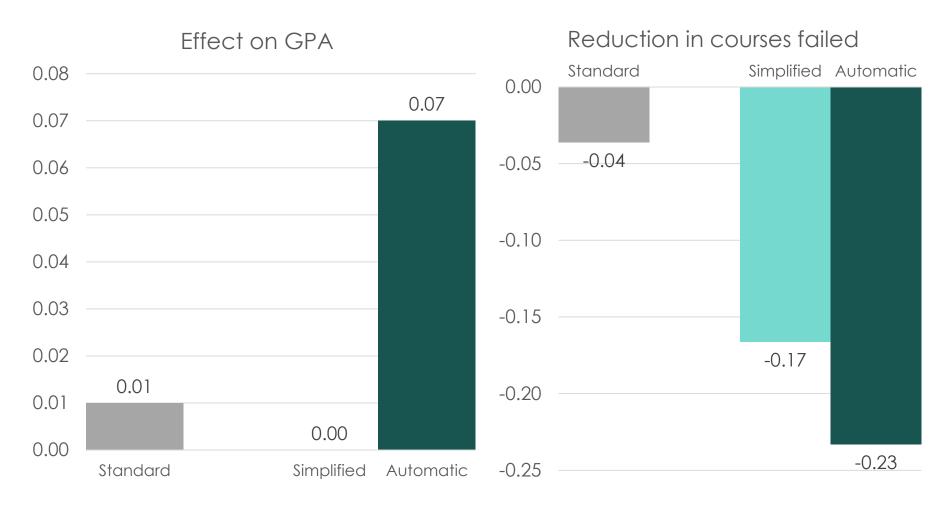
Administrative data

- DCPS Learning Management System
 - Phone numbers
 - Enrollment
 - Text message delivery
 - Course grades
 - One-question follow-up survey

What have we learned?

100%				
90%				
80%				
70%				
60%				
50%				
40%				
30%				
20%				
10%			_	
0%				
070	Standard	Simplified	Opt Out	

Effects on course grades



What have we learned?

- How technologies are rolled out matters
 - Affects both usage and efficacy
- Low usage doesn't necessarily mean low demand!
 - Follow up survey: parents in opt out and simplified groups more likely to want to continue the service than the standard opt in group
- We also surveyed education leaders to assess their beliefs about take up in each group
 - Many overstate opt-in take up and understate opt-out take up
- Next steps: DCPS adopts new LMS—can we adapt our findings to this new system?

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Education, Technology, and Opportunity Innovation Competition

- Education leaders can apply for:
 - Pro-bono technical support to develop an evaluation
 - Trainings about data and evaluation
 - Connections with J-PAL's network of leading academic researchers
- May also be eligible for up to \$50,000 in funding
- Who is eligible to apply? School districts, school networks, local/state education agencies, CMOs, post-secondary institutions, education non-profits

J-PAL is now inviting Letters of Interest from education leaders

- J-PAL defines ed tech and innovation broadly
 - Some potential topics include computer-assisted learning software, low-cost technologies (e.g. mobile apps), learning management systems (LMS), online learning
- To apply, submit a 3-5 page letter of interest describing
 - The policy question or challenge that motivates your application
 - The program you would like to evaluate
 - How many people are currently reached
 - Potential opportunity for a randomized evaluation
 - Access to data for measuring outcomes

Timeline

- April 13, 2018 Deadline to submit letters of interest
- Late April Early May 2018 Finalists invited for interviews and asked to submit additional information (including proposed budget)

- June 2018 Winners announced
- Go to povertyactionlab.org/edtech for more information

Characteristics of a strong application

- Potential to meaningfully improve education through technology and innovation
- Focus on helping disadvantaged students
- Clearly defined program and outcomes of interest
- Feasibility
 - Potential sample size
 - Availability of data, particularly administrative data
 - Willingness and feasibility of randomization
- Organizational capacity and commitment

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Other Resources

Education Technology: An Evidence-Based Review



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News

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Texting, Personalization, Free Computers for All: New Report Tells Where Ed Tech Works — and Fails



REAL-WORLD CHALLENGES TO RANDOMIZATION AND THEIR SOLUTIONS

Kenya Heard, Elisabeth O'Toole, Rohit Naimpally, Lindsey Bressler J-PAL North America, April 2017

povertyactionlab.org/na

www.povertyactionlab.org/edtech

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Thank you

Send any additional questions to: Vincent Quan <u>quanv@mit.edu</u>

