

July 10, 2019

LOGIN | REGISTER | SUBSCRIBE

Get 2-Week FREE Trial >>
Sign Up for FREE E-Newsletters

Browse archived issues | Current Issue

TOPICS | BLOGS | REPORTS & DATA | EVENTS | OPINION | VIDEO GALLERY | JOBS

More Education Studies Look at Cost-Effectiveness

By Sarah D. Sparks

April 9, 2019 | Corrected: April 22, 2019

What's more important to a superintendent: a math program shown to give a bigger boost to students' math skills in the next two years or one that gives a smaller improvement but fits the district's budget for five years?

Questions like that have become steadily more common as school leaders grapple with years of shrinking budgets. Still, it can be difficult to understand the expenses that lie beneath an intervention's sticker price or the resources that may mean the difference between a promising intervention working on paper and working in the classroom.

That's why foundations, policymakers, and even the U.S. Department of Education's research agency are pushing for more tools and research to help educators understand the costs of education programs.

"It's a sea change that we have people saying we need to be cost-effective, not just effective," said Lori Taylor, an education researcher with Texas A&M University. Taylor studies cost for the Texas Smart Schools Initiative, which provides tools for school leaders and parents to analyze academic returns to different spending approaches.

"In earlier research, it was seen as kind of sufficient to know that this intervention was working, without really digging down into the numbers to ask, 'Well yeah, but ... how expensive is it and is it going to work better than the other things that also work?' " Taylor said.

- Printer-Friendly
- Email Article
- Reprints
- Comments



REGISTER FREE EDUCATION WEEK

Get more stories and free e-newsletters!

Email

Password

Select your primary connection to education ▼

- Keep me logged in
- Send me Education Week e-newsletters

REGISTER NOW

By clicking "Register" you are agreeing to the [Terms of Service](#) and [Privacy Policy](#).

Correction:

An earlier version of this story used an incorrect pronoun for A. Brooks Bowden. She is an assistant education professor at North Carolina State University.

EDUCATION WEEK EVENTS

Inside EdReports: How Companies Hit or Miss the Mark (Premium EdWeek Market Brief Webinar)

WEBINAR JULY 24, 2:00 P.M. EASTERN
REGISTER NOW.

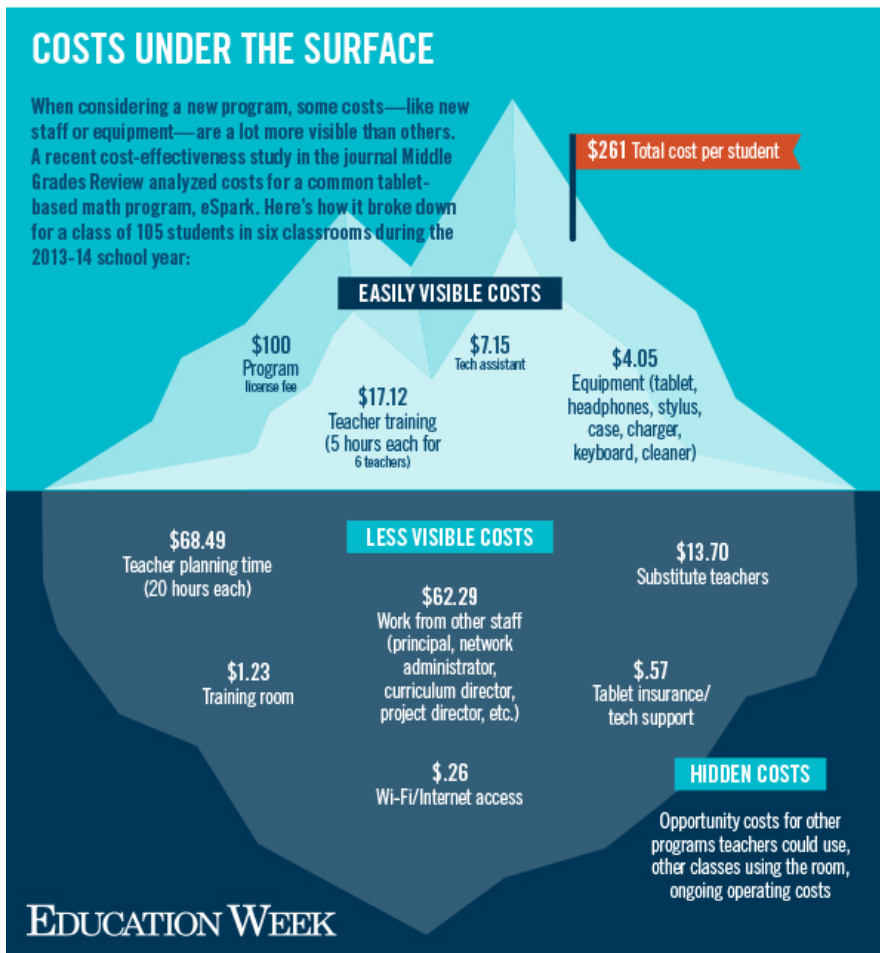
How to Scale Ed-Tech Innovations in Your Schools

WEBINAR AUG. 28, 2:00 P.M. EASTERN
REGISTER NOW.

MOST POPULAR STORIES

Viewed | Emailed | Recommended | Commented

- Teachers at Low-Income Schools Deserve Respect
- 4 Things Teachers Shouldn't Be Asking Their Students to Do



'Putting the Field on Notice'

Beginning this grant cycle, the federal Institute of Education Sciences formally required all future evaluation studies to analyze the costs to implement an intervention, including staff, training, equipment and materials, and other expenses, both at the start of and to maintain the programs over time.

Institute of Education Sciences Director Mark Schneider said he was "putting the field on notice"—half of the proposed intervention studies this year were disqualified because for lack of adequate cost analyses.

"As a field, we have been way, way behind the curve in terms of telling people how much things cost," Schneider said. "We understand this is a challenge for the field, so we're working on that."

The rising interest in cost-effectiveness is partly due to economic necessity. **More than half the states still provide less money for schools than they did** before the 2008 recession, and in 19 states, local funding for schools fell at the same time, according to the latest analysis by the Center on Budget and Policy Priorities. As schools across the country wrestle with years of belt tightening, leaders increasingly struggle to balance the effectiveness of research-based programs with the cost to put them into practice.

But researchers are also discovering that these bottom-line analyses, while being of more practical use to policymakers and practitioners, can begin to answer a question that has bedeviled researchers and educators alike for decades: Why does an intervention that shows great results with students in one district fall flat with a seemingly similar group of students elsewhere?

Accounting for Supports

3. [Advice for New Principals: Be 'Emotionally Vulnerable With Your Staff'](#)

4. [3 Areas to Consider When Faced With an Unwanted Twitter Debate](#)

5. [Complaining About Students Is Toxic. Here Are 4 Ways to Stop](#)

SPONSOR INSIGHTS

[Cloud Security Solutions for K-12 Schools](#)

[10 Ways to Help K12 Students Master Academic Language](#)

[A Dyslexia Toolkit](#)

[Complete Differentiated Instruction: Continuum for Administrators](#)

[Response to Intervention CENTERED ON STUDENT LEARNING](#)

[Alignment Matters: A Framework to Drive Learning](#)

[The Nonnegotiable Attributes of Effective Feedback](#)

[A Practical Guide to Analyzing Data](#)

[The ART of Assessment](#)

[How to Reimagine Classroom Technology for the 21st Century Learner](#)

[Teachers Learn Through Lesson Study](#)

[Establishing a Districtwide Data Culture in Miami-Dade County Public Schools](#)

[The Educator's Guide to Communicating with Video](#)

[The EdTech Efficacy Handbook](#)

[4 Powerful Tips to Implement OER Successfully](#)

[Global Competency You Can See: Evaluating Student Outcomes](#)

[Automated Communication: A Winning Strategy for Low Lunch Balances](#)

[Better Together: A Trauma Informed Approach to SEL](#)

[SEE MORE Insights >](#)

Middle School ELA, Science, & Social Studies Teachers Needed

Huda School and Montessori, Michigan

2019-20 Middle or High School Inclusion Specialist (SpEd) Teacher (\$7,500 signing bonus)

Bright Star Schools, Los Angeles, California

ESE Teacher

Duval County Public Schools, Jacksonville, Florida

Partner Engagement Manager

AVID Center, Southern California

Chief Academic Officer

Middletown Public Schools, Middletown, Connecticut

[MORE EDUCATION JOBS >>](#)

[POST A JOB >>](#)

For example, in an upcoming study, New York University doctoral researcher Jill Gandhi evaluated an inexpensive writing intervention designed to spur a positive academic mindset in low-income Chicago teenagers. Prior studies had found significant, lasting benefits for students who became motivated to learn "to make an impact on the world." But in Chicago, the intervention had no effect or even hurt motivation.

Why? Gandhi suggested the problem may lie not in the cost of the intervention but the lack of subsequent supports, such as access to challenging classes or college planning. "Activating students' motivation for learning and growth mindset with no other support might make students frustrated," she said at a recent discussion of the research.

That's not uncommon, said A. Brooks Bowden, a cost-effectiveness researcher and assistant education professor at North Carolina State University.

"We often say, here's the cost to buy a textbook, and here's the cost to use a new curriculum, without really considering the contrast between that curriculum and what was in place previously, or any other changes and services used to produce [effects on student achievement]," she said. And if one program helps students, it may also change the mix of supports those students need in the future.

"If we understand the resources needed in the programs we are delivering, someone in another state or district has a road map of what they need and what to do ... rather than just a budget figure," she said.

Many programs already have administrative data on the different materials and training needed to implement a particular program, but researchers need to include that information from the start to get an accurate picture of the costs of a program. For example, one district may be able to use parent volunteers as reading tutors, and so may not calculate the cost of hiring and training tutors—but those expenses have to be included for a principal in a school with fewer volunteers to decide whether she can use the program.

That can be complicated, and it is one reason many education researchers have been slow to include cost in their evaluations or implementation studies of interventions.

"Anybody who does policy research understands that cost is important to policymakers. You can't leave it out of the equation," said Larry Hedges, an education professor at Northwestern University. Yet, he added, there has been "very little human capital in the education research world to assess costs in a meaningful way. ... If you asked people, should we be worrying about costs, the answer would have been yes, but when you ask them, 'Well, how are you going to do that?,' they have thrown their hands up very rapidly," Hedges said.

The Center for Benefit-Cost Studies in Education, at Teachers College, Columbia University, looked at intervention studies supported by IES. In 2014, only two of 18

The Language of Money

Proposed new research priorities for the Institute of Education Sciences call for more studies of cost in education research. But different kinds of cost-related measures can provide different information for education leaders and policymakers, such as:

- **Cost 'Ingredients':** These include all resources needed for an intervention, including teachers, volunteers, class space, materials and other items. Regardless of how they're paid for, they must be known to recreate a program elsewhere.
- **Cost-Effectiveness:** This kind of study compares the total cost of resources needed to get a particular result—such as improving the math skills of 3rd graders—to the total cost of other approaches that get equal results. This might be used, for example, by a superintendent trying to decide whether the district should invest in a new math curriculum or instead pay for a new teacher-training program for the existing curriculum.
- **Cost-Benefit:** This kind of study compares costs of implementing a program to the return on the educational investment over time; it requires more data and analysis than a cost-effectiveness study and often looks at longer-term effects. This might be used by a policymaker trying to decide whether the cost of early-childhood education will be returned to society in higher adult taxable income or lower incarceration costs for the children who participated.

research evaluations planned to analyze the costs of their interventions. Two years later, that was up to seven of 22 funded studies, but they included few details.

The Education Department's research agency has trained more than 150 researchers in how to measure cost-benefits and cost-effectiveness in the past five years. But the field has been relatively slow to take up costs.

The benefit-cost studies center has been building an online tool and database of more than 700 prices of educational resources—including 70 teacher-salary levels pulled from federal and state data—to help researchers and school leaders estimate program costs.

"I think there have been misconceptions about the work that goes into identifying and quantifying resources," Bowden said. "I'm not doing this work because I'm ... interested in finance. I want to understand how we can better serve our students, what's working for them, how we make sure they're getting the resources that are effective. And this is a critical piece of that."

Vol. 38, Issue 28, Page 6

Published in Print: April 10, 2019, as **Education Studies Give New Scrutiny to the Bottom Line**

RELATED STORIES

"Education Research Agency Looks to Leverage Big Data, Reduce Costs," (Inside School Research) March 27, 2019.

"For Education Interventions, a Little 'Nudge' Can Go a Long Way," (Inside School Research) June 8, 2017.



Reprint or License This Article

Notice: We recently upgraded our comments. (Learn more [here](#).) If you are logged in as a subscriber or registered user and already have a Display Name on edweek.org, you can post comments. If you do not already have a Display Name, please create one [here](#).

6 Comments

Education Week

Holly Falk-Krzesin... ▾

Recommend

Tweet

Share

Sort by Oldest ▾



Join the discussion...



miriam freedman • 3 months ago

Fascinating article. Thank you. Now, having read it, I can only ask, what took us so long?

I was struck, however, by the lack of any mention of the costs of special education (estimated at 20-25% of school budgets) and the costs of educating students with disabilities which includes the general education services they receive (we don't really know, but estimates are around 40%.) What works for them? What can be replicated? Why are these questions not even being asked?

How can we study costs of education programs without focusing on these costs also?

1 ^ | ▾ • Reply • Share ▸



SarahDSparks → miriam freedman • 3 months ago

I agree, and could write a whole other article on issues around evaluating both effectiveness and cost when comparing the "average" effect to the effect for specific student populations. I do believe there is some research going on for seeing whether effect sizes transfer, but I haven't seen much

RELATED BLOG



[Visit this blog.](#)

going on for seeing whether direct sizes transfer, but I haven't seen much going into detail around the cost effectiveness of one intervention versus another that specifically takes into account the cost to different populations within a school.

-SDS

^ | v • Reply • Share ›



KaMikulka • 3 months ago

The cost to implement new programs promoted by philanthropies also has to be included when districts are considering the real cost. For example, personalized learning, competency-based programs are supported by large sums which will not be available long term.

^ | v • Reply • Share ›



SarahDSparks → KaMikulka • 3 months ago

This is true not just of philanthropic-funded interventions. I was once reporting on a rural intervention that was effective and that the district seemed very pleased to have. But they told me they weren't continuing it after the research grant ran out, because they just didn't have the budget to continue implementing at the level needed to do it properly. That's just such a frustrating thing. -SDS

^ | v • Reply • Share ›



MA Winniford • 3 months ago

I still don't feel like there is real information on the effectiveness of programs, which to me is more important than the cost. We don't know good textbooks from bad, we don't know if PBIS really works or for whom, we don't really know whether using IT to support classroom learning is positive or negative in the long run.

1 ^ | v • Reply • Share ›



SarahDSparks → MA Winniford • 3 months ago

It's interesting, it seems as though we're going through iterations in the ed research field, of experimental design evaluation+implementation studies+cost studies that all hold pieces of the puzzle but on their own don't answer all the questions.

^ | v • Reply • Share ›

✉ [Subscribe](#) [Disqus' Privacy Policy](#)[Privacy Policy](#)[Privacy Policy](#)

Ground Rules for Posting

We encourage lively debate, but please be respectful of others. Profanity and personal attacks are prohibited. By commenting, you are agreeing to abide by our [user agreement](#). All comments are public.

[Back to Top](#) ▲

ACCOUNT MANAGEMENT

- [Register or Subscribe](#)
- [Online Account](#)
- [Print Subscription](#)
- [Manage E-Newsletters/ Preferences](#)
- [Group Subscription](#)

CONTACT US

- [Help/FAQ](#)
- [Customer Service](#)
- [Editor Feedback](#)
- [Letters to the Editor](#)

POLICIES

- [User Agreement](#)
- [Privacy](#)
- [Reprints](#)

ADVERTISE WITH US

- [Display Advertising](#)
- [Recruitment Advertising](#)

EPE INFO

- [About Us](#)
- [Staff](#)
- [Work@EPE](#)
- [Mission and History](#)

EDUCATION WEEK PUBLICATIONS

- [Education Week](#)
- [Teacher](#)
- [Digital Directions](#)
- [Market Brief](#)
- [TopSchoolJobs](#)

© 2019 Editorial Projects in Education

6935 Arlington Road, Bethesda MD 20814 1-800-346-1834 (Main Office) 1-800-445-8250 (Customer Service)