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COMMENTARY

Overcoming Four Barriers to Evidence-Based Education

By Robert E. Slavin

Imagine if we used evidence to guide everything we do and teach in our nation's neediest schools.

As part of this vision, educators would constantly look at their own outcomes and benchmark them against those of similar schools elsewhere. In areas that needed improvement, school leaders could easily identify proven, replicable programs. As part of the learning and adoption process, they would attend regional effective-methods fairs, send delegations to visit nearby schools using the programs, and view videos and websites to see what the programs looked like in operation.

If school leaders chose interventions that met high standards of evidence, the U.S. Department of Education and other agencies would make available modest funding and offer other supports to help schools implement their interventions with fidelity. We have not seen evidence-based reforms implemented nationwide in this manner—or the quality of education available to poor children improve—in the past three decades. This is due to four basic problems:

• Too few rigorous evaluations of promising programs;

• Inadequate dissemination of evidence of effectiveness;

• A lack of incentives for localities to implement proven interventions; and

• Insufficient technical assistance for implementing evidence-based interventions with fidelity.

The federal government can play a productive role in addressing each of these problems. Drawing on lessons from previous initiatives, it is now possible to design a system in which government, developers, researchers, and educators work together to transform educational practice, especially in Title I schools.

On the problem of evidence, the federal Institute of Education Sciences, or IES, and the Investing in Innovation, or i3, program are supporting third-party, randomized, large-scale evaluations of interventions intended to go to scale. Once interventions are identified in randomized controlled trials, federal and state governments can get out of the way in terms of mandating which interventions schools use. When students using innovative methods learned significantly more than those in control groups, policymakers could have confidence that whatever schools chose was likely to make a meaningful difference.

We still need more proven interventions in such priority areas as reading, math, science, and turnaround strategies for struggling schools, but we know a lot more today than we

did several years ago about what works.

Helping schools become informed and intelligent consumers and users of proven interventions is the shortest route to improving essential outcomes for Title I schools. Today, it is easier than ever to find information on proven programs. The **What Works Clearinghouse**, a project of the Education Department; the **Best Evidence Encyclopedia** at Johns Hopkins University; and other review facilities have made a start in this direction. But more work is needed to help educators find practical information and make informed choices among proven approaches. There should also be incentives to encourage the uptake of evidence-based interventions. The federal i3 program is driving funding toward interventions that have a strong evidence base. However, there remains a need for a coherent system of supports for the entire pipeline from development to evaluation to dissemination. In particular, evidence-based reform has not yet had a major impact on major education initiatives, such as Title I or the federal School Improvement Grant, or SIG, program.

The Education Department needs to do more to encourage Title I schools to adopt proven programs in areas of need. For example, the department could award points to grant applicants who propose using programs that possess high levels of effectiveness, as defined in the legislation authorizing i3. Beyond this, federal officials need to nurture the evidence-based-reform process. The department could support various organizations to help state, district, and school leaders learn about proven programs in regional effective-methods fairs, for example.

Finally, a strong evidence base is useless if an intervention is not implemented well. School leaders will need technical assistance to effectively implement and support whatever proven models they choose. The groups creating interventions—especially nonprofits and universities—need help to create and sustain effective organizations that can support the interventions they design with high-quality technical assistance.

> "Helping schools become informed and intelligent consumers and users of proven interventions is the shortest route to improving essential outcomes for Title I schools."

A vigorous effort to develop, promote, and support proven interventions is certain to lead to widespread, measurable, and irreversible improvements in practices and outcomes in Title I schools. Contrary to popular belief, attaining scale for reform strategies need not be a challenge to evidence-based reform.

Since the beginning of the education reform movement, there have been no shortages of interventions, and no shortages of schools eager to embrace them. Experience is clear that, with encouragement and modest resources, very large numbers of schools will adopt externally developed programs.

The **National Diffusion Network** of the 1980s reached thousands of schools with more than 500 programs, using state facilitators to help disseminate promising models. The Obey-Porter comprehensive-school-reform program of the late 1990s enabled thousands of Title I schools to adopt whole-school-reform models.

Those who say that schools will not adopt externally developed programs have been proven wrong many times. What was lacking in these earlier efforts was a strong evidence base for most of the adopted models, but that limitation is being rapidly solved by the i3 and IES investments.

It is clear that developers can create and successfully evaluate replicable models, and that schools will eagerly embrace them if they are offered encouragement and resources. The federal government can play a useful role in ensuring that evaluations are of the highest quality; evidence of effectiveness is easily available to school leaders; incentives exist for states, districts, and schools to adopt proven models; and high-quality technical assistance helps school leaders effectively implement and support whatever models they choose.

Some aspects of this framework are already in place, thanks in particular to the work

being supported by i3 and the IES. With more attention to this pipeline, we could witness a transformation of American schooling into a system in which evidence-based practice and continuous improvement progressively enhance outcomes for vulnerable children.

Robert E. Slavin is the director of the Center for Research and Reform in Education at Johns Hopkins University's school of education, in Baltimore, and the chairman of the Success for All Foundation, which receives federal Investing in Innovation, or i3, funds.

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Robert Lange, Ph.D.

12:39 PM on May 1, 2013

Score: 4   Report Abuse

All of what was written by Slavin is correct but incomplete. As has been true for many many years, evaluations tend to be site specific and staff specific. The staff are prone to burnout. Fidelity of "proven" interventions are almost impossible because few educators will implement without modifications to meet their personal beliefs.

Although I am long retired, over 40 years experience in educational research and evaluation has taught me some true lessons They are
1. Most educators place very little value on research and data produced outside their specific sites.
2 Most people only believe research and evaluations that agree with their prior beliefs..
3. The only people who place even less value on research and evaluations are politicians who write the rules.
R. Lange, PhD.

1 reply

Robert Lange, Ph.D.

4:46 PM on May 1, 2013

Score: 1   Report Abuse

Mark,

If you work with a large number of teachers and school administrators, you should know that very few of them can read and find meaning in educational research and program evaluation. Most educators are "people" persons and are not "rationalist data" persons. They place most of their trust on personal experience. Check the research on educator beliefs

and practice.

Educators tend to prefer "action researc h" which too often no more than a report of their interpretations of what they think they saw .

Long term practice in the classroom seldom changes other for short term blips caused by external pressure that changes frequently. When school leadership frequently changes and every new "leader" has different value beliefs, teachers soon learn to respond in the short term to new demands but soon find ways to return to their "personal preferences".

R. Lange

▶ 1 reply

TMarkham   Score: 5
11:42 AM on May 2, 2013   Report Abuse

Slavin ignores the elephant in the room, as do all the advocates for 'evidence- based' education: What metrics will be used to determine success? The default is always tests scores, because that's the only metric we possess that can be quantified. But you can't quantify the crucial personal strengths and 21st century skills capability that determine if a person is 'educated' these days. In fact, more evidence based education will set back teaching and learning, not improve it.

Roseanne Eckert   Score: 5
6:08 PM on May 2, 2013   Report Abuse

Evidence demonstrates that both music and physical education lead to better cognitive development. However, because of the misguided desire to rely on bubble tests and computer data, like the one suggested in this article, children are routinely denied both. Let's actually go back to what we know works, based on research.

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gilnarrogarcia@comcast.net   Score: 0
10:13 PM on May 2, 2013   Report Abuse

Slavin's brief overview of R&D&E, it's misses,and it's successes is surely not overblown. He states the case well. But, there is one critical issue that gets embedded (and lost) in such overviews quite frequently: "turn around strategies for struggling schools". This fundamental issue trumps all of the others for the simple reason that unless R&D&E are carried out in the context of "school systems", their results will continue, perhaps, to inform isolated aspects of schools and schooling. That's what we've managed to do very nicely. The net result is that in fact we have clearinghouses and encyclopedias full of promising
(and even proven) practices, but no where to hang them together into coherent wholes. Gil Narro Garcia

Laurie Flood

12:57 AM on May 3, 2013

Score: 2

I agree to some extent with the thinking in this article. The problem is that, the whole-scale adoption of research-based, prepackaged alternatives, which this article suggests as being the best reform for Title I schools, is often a bit short-sighted. What may well work in one study in one area of the country may not work well in another area. If a school district decides to adopt a reform that has research backing and is recommended from one of the sources that the author has cited, this is just the beginning of the process. Any such adoption should entail highly trained teacher leaders reviewing the material for suitability with their unique group of students. If the material looks promising, there should be pilot action research studies conducted by teacher leaders to determine the efficacy of the new adoption. It is high time that those in education began to give more credence to the professionalism of trained teacher leaders, instead of treating teachers as though they are simply in the classroom to administer the new curriculum in some robotic fashion. The events of the past few years clearly demonstrate that teachers are tired of the new "churn" of the year, using the terminology of the author. Teacher leaders should be trained by every school district in all disciplines to be able mentors and curriculum evaluators.

I also take exception to the idea stated by one of the respondents that action research is mainly a means of protecting the status quo. Action research is a powerful professional development device that is research-based and allows all teachers, especially experienced ones, to try out new research-based ideas in their own classrooms. Teachers that take all of the time to implement action research are highly unlikely, as the other respondent suggested, to be conducting the research to maintain what they had been doing. These studies begin with a desire to improve curriculum and instruction, utilize a literature review, and are driven by multiple sources of evidence, as opposed to just test scores.

Laurie Flood
Former National Board Certified Teacher

Doug1943

11:35 AM on May 4, 2013

Score: 0

Dr Lange has hit the nail on the head.

"Project Follow Through" evaluated hundreds of thousands of children being educated by a range of methods in the 1970s. Those programs which relied on 'old-fashioned' teaching far outperformed the 'innovative' ones. Some of the latter even did harm.

But the educational establishment didn't like these facts, since they clashed with the prejudices of the time, and so they were completely ignored.

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davekovaka   Score: 0

12:06 PM on May 5, 2013   Report Abuse

"Project Follow Through" is the best example of the problem with evidence based education. Based on the evidence of test scores and rating scales it was the best by far. But since it was completely unacceptable to the world education it has had little effect. Although that program is usually cited as the best proof we have that education based on the science of behavior is superior to those it was tested against, I think it really shows that we are not measuring what matters. Applied Behavior Analysis, which contributes much to the field of evidence based education is gradually realizing that "social validity" is one of the outcome measures they need to consider. This is a pretty soft measure, usually measured by indirect methods such as rating scales, but I think what is is also indirectly measuring is the existence of other important variables which studies like "Project Follow Through" missed.

Eduleadership   Score: 1

10:18 PM on May 6, 2013   Report Abuse

Title I schools have long suffered under the misguided policy that what struggling schools need is interventions, interventions, and more interventions—as if applying enough band-aids can cure any ailment.

What's always missing? Capacity-building. If we want schools to improve, we must invest in the learning and growth of the educators who are working together to make learning happen.

Helping people do smarter and more effective things is a good idea, but it does not take the place of expanding the knowledge, skills, and dispositions of the people actually doing the work.

More to the point, so many of the interventions that are paraded through struggling schools year after year actually undermine efforts to build the professional capacity of the staff, because they take away autonomy and rob educators even of the opportunity to learn from their own experience.

"Do it our way—implement with fidelity!" they're told, and then next year, they're told to implement something else with fidelity—which means starting from scratch.

I think we have plenty of evidence. We have plenty of products, services, models, curricula, and research. What we don't have is nearly enough capacity-building, and purposeful growth over time.

KATHY DYER

10:18 AM on May 22, 2013

Score: 0

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Interventions are just that – interventions. Changing habits, both those of students and teachers is a big part of making change happen in the classroom. I appreciate Slavin's comments about "proven, replicable programs" and "implementing...with fidelity." Learning how to be good consumers of what exists is important. Once decisions have been made, allowing teachers the time to implement with fidelity coupled with the support to do so from school and district leaders is important. The use of formative assessment has research to support it as an "intervention." Supported by the use of teacher learning communities, the "technical support" piece allows teachers to share, give and get feedback, reflect, learn and adapt so that both they and the students are getting better. You can read more about this here - http://www.nwea.org/blog/2013/teacher-professional-development-making-time-for-evidence-based-education/

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