



REVIEW OF *BETTER EVIDENCE, BETTER CHOICES, BETTER SCHOOLS*

Reviewed By

Terri S. Wilson
University of Colorado Boulder

January 2017

Summary of Review

Better Evidence, Better Choices, Better Schools, a recent report from the Center for American Progress and the Knowledge Alliance, focuses on the evidence-based research provisions in the Every Student Succeeds Act (ESSA). ESSA provisions ask districts and schools to consider various sources of evidence, make judgments about the strength and reliability of that evidence, and use that evidence to justify their choices of interventions. Contrasting these new standards with the scientifically based research requirements featured in previous federal legislation, the report aims to provide guidance for the state and local education agencies now tasked with implementing evidence-based school improvement practices. The guidance consists of eight recommendations for implementing evidence-based reform strategies: defining roles, using evidence clearinghouses, supporting robust decision-making, ensuring high-quality service providers, promoting communication, partnering with intermediate organizations, facilitating effective implementation and promoting continuous learning. While helpful general pieces of advice, these recommendations remain relatively vague and are grounded in neither the existing research literature nor the empirical study featured in the report. The nebulous idea of evidence-based policy is easy to agree about, but skims over more challenging questions. For instance, what counts as evidence, and who is able (and authorized) to determine what kinds of evidence are most relevant to local contexts? While this report raises a number of important issues, it leaves these more difficult questions unexplored.



Kevin Welner
Project Director

William Mathis
Managing Director

Alex Molnar
Publishing Director

National Education Policy Center

School of Education, University of Colorado
Boulder, CO 80309-0249
Telephone: (802) 383-0058

Email: NEPC@colorado.edu
<http://nepc.colorado.edu>

This material is provided free of cost to NEPC's readers, who may make non-commercial use of the material as long as NEPC and its author(s) are credited as the source. For inquiries about commercial use, please contact NEPC at nepc@colorado.edu.

This review is one of a series made possible in part by funding from the Great Lakes Center for Education Research and Practice.



<http://www.greatlakescenter.org>
GreatLakesCenter@greatlakescenter.org

REVIEW OF *BETTER EVIDENCE, BETTER CHOICES, BETTER SCHOOLS*

Terri S. Wilson, University of Colorado Boulder

I. Introduction

The 2015 “Every Student Succeeds Act” (ESSA) has been celebrated for returning critical decision-making authority to states and districts.¹ Unlike its earlier predecessor, the 2001 “No Child Left Behind” Act, ESSA grants states more flexibility and control over the design of accountability and assessment systems, teacher certification and evaluation, among other issues. While the consequences of this flexibility remain uncertain, states are now redesigning a range of policies in advance of ESSA’s full implementation in 2017-2018. So far, attention has largely been focused on accountability policies, but another crucial change involves ESSA’s shift in the *standards of evidence* required to justify these state and local policy decisions.

Where NCLB famously required reform strategies be based on “scientifically-based research,” ESSA prioritizes a somewhat more flexible “evidence-based” standard. Under NCLB, the *goal* of “scientifically-based research” was defined in terms of a *single* methodological approach: randomized controlled experiments, the so-called “gold standard” of evidence.² While some advocates saw this change as an overdue corrective to an undisciplined field, the singular focus on randomized controlled trials (RCTs) was widely criticized by the research community as an overly-prescriptive and rigid definition of research quality.³ States will now be able to choose context-relevant interventions, but ESSA requires that these interventions be “evidence-based,” and specifies the kinds of evidence that states can use in justifying their approaches to school improvement.⁴ Although still prescriptive about acceptable *kinds* of evidence, this shift asks states to take on new responsibility for evaluating the relative quality and strength of evidence in support of various reform strategies. This is a different kind of challenge. As Feuer, Towne and Shavelson note, “Almost everyone can appreciate, intuitively, the advantages of evidence-based policy; it is another matter entirely to make this concept clear, operational, and valid.”⁵

This report steps into these debates. “Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act” is a new report jointly released by the Center for American Progress (CAP) and the Knowledge Alliance.⁶ The second in a series of planned reports about the implementation of ESSA, this 25-page paper has two central aims: (1) to clarify the new definition of “evidence-based” employed in ESSA, and (2) to offer guidance to state education agencies in implementing the “evidence-based school improvement practices” called for in ESSA. The authors are Steve

Fleischman, CEO of Education Northwest, and current chairperson of Knowledge Alliance, with co-authors Caitlin Scott, a “practice expert on education policy, research, and evaluation” at Education Northwest, and Scott Sargrad, the Managing Director of K-12 Education Policy at the Center for American Progress.

Although this report underscores the significant challenges facing state education agencies in this new policy climate, it provides relatively thin and unsubstantiated advice to guide policymakers or practitioners. In this review, I summarize the findings and conclusions of the report, review its rationale, use of research, and methodological approach, and evaluate its usefulness for guiding policy and practice.

II. Findings and Conclusions of the Report

The report begins by noting that “ESSA offers state education agencies significant opportunities to use evidence to support the improvement of schools and ensure better outcomes for all students.”⁷ Seeking to help states leverage these new opportunities, the report has two major goals: to clarify the new definition of “evidence-based” in ESSA, and offer guidance to state education agencies in implementing ESSA’s “evidence-based school improvement practices.” As the authors note in the introduction, these decisions come into play with the new flexibility granted to states for funding dedicated to school improvement. Under ESSA, states may now use up to 7 percent of their Title I funds to support school improvement, and can set an additional 3 percent of Title I funds aside for “direct student services,” including tutoring and credit recovery. Where NCLB specified particular school improvement strategies, states now have the flexibility to choose among many reform approaches and interventions, provided that these are “evidence-based.” These choices offer new challenges (and perhaps new opportunities) for states.

A brief introductory “Author’s Note,” makes three moves to limit the scope of the inquiry. The authors first note that they are primarily focused on the use of the term “evidence-based” in relation to “state and district school improvement activities,” and that more detailed definitions of the term can be found in guidance from the U.S. Department of Education. The authors also caution that their report, “does not attempt to provide a detailed list of conceptual and methodological issues related to the implementation of ESSA evidence tiers.” Here, they briefly reference—but do not summarize—a recent RAND report that has raised “some of these early questions and issues.”⁸ Third, while noting that ESSA implementation is in the early stages, their report focuses on “identifying important considerations for state education agencies as they work collaboratively with local districts to implement evidence-based policy and practice.”

My review will focus largely on how well the report does what it *aims* to do: namely, identify some of the considerations facing state education agencies (SEAs) as they move forward with ESSA implementation. Yet, one critical question is how easily such policy concerns can be separated from methodological issues. Part of the difficult work facing SEAs and local districts

involves making complex decisions about which reforms to pursue. These decisions—according to ESSA—must be “evidenced-based,” meaning that methodological issues about the sources and availability of evidence and what counts as evidence cannot be as easily bracketed from issues of decision-making. While “Better Evidence, Better Choices, Better Schools” largely skims over methodological questions about evidence, such questions are crucial to informing state-level decision-making.

The report begins with a brief summary of the evidence-based approaches defined in the Every Student Succeeds Act. The report quickly recaps the three “levels of evidence to use when choosing an approach to school improvement” (p. 4). These evidence levels, the authors note, are “commonly referred to” as: Tier I, “strong evidence”; Tier II, “moderate evidence” and Tier III, “promising evidence.” A text box on the next page helpfully reprints a key passage (Section 8101), from the federal legislation that offers more detail. Indeed, each tier of evidence in ESSA is linked to a specific methodology. The law notes that the term “evidence-based” means:

“an activity, strategy, or intervention that (i) demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on—(I) strong evidence from at least 1 well-designed and well-implemented experimental study; (II) moderate evidence from at least 1 well-designed and well-implemented quasi-experimental study; or (III) promising evidence from at least 1 well-designed and well-implemented correlational study with statistical controls for selection bias; or (ii) (I) demonstrates a rationale based on high-quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes; and (II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.”⁹

ESSA’s definition, while technical, is actually quite a bit more specific than the report about the kinds of methodological approaches that qualify as “evidence-based” and to what degree. The authors note that, “the creation of these tiers implies that—all things being equal—districts and schools should use improvement approaches with the strongest level of evidence.”¹⁰ Indeed, ESSA actually *requires* states to do so. Recent non-regulatory guidance from the Department of Education underscored that state decision-makers should consider the “entire body of relevant evidence,” but prioritize “strong evidence,” defined as significant and positive results from at least one “well-designed and well-implemented experimental study (e.g., a *randomized controlled trial*)” or “moderate evidence,” defined as significant and positive results from at least one well-designed and well-implemented *quasi-experimental study*.¹¹

Only if there is no available “strong” or “moderate” evidence should states and districts consider “promising” evidence, defined by ESSA as “at least one well-designed and well-implemented correlational study with statistical controls for selection bias on the intervention.” In addition to these three tiers of evidence, ESSA does include another category, for use in limited circumstances. This new category requires that states or districts offer an evi-

dence-based “rationale” for an intervention, along with an ongoing commitment to evaluate that intervention. This is indeed the most flexible and intriguing of the new categories, but the authors note that approaches supported by “fourth tier” evidence cannot be used for the purpose of measuring school improvement supported by Title I school improvement funds under Section 1003(a).

After outlining the new model of “evidence-based” in ESSA, the report contrasts this view with the definition of “scientifically based research” (SBR) posed in NCLB. The authors note—while not citing other researchers—that SBR “limited acceptable evidence to well-conducted randomized control trials, or RCTs—also known as experiments—and certain high-quality studies with quasi-experimental designs, or QEDs.” The authors refer to some of the difficulties posed by this narrower definition of research: in their analysis, these challenges include few available studies, limited effect sizes, and that SBR asked policymakers to focus “too narrowly” on research design issues. While not cited by the report, a number of scholars have pointed to specific challenges associated with the single-minded focus on RCTs in educational research. For instance, in an intriguing recent study, Allan Ginsburg and Marshall Smith (both strong advocates of experimental methodology) outlined a variety of non-selection bias threats in the RCT studies of math curricula that are featured on the What Works Clearinghouse.¹² These threats include flaws in implementation, uneven implementation between control and experimental classrooms, as well as the fact that several studies were sponsored by the developers of the curriculum being evaluated. The authors underscore that random samples cannot fully account for “the reality that complex social systems such as classrooms and schools often create major challenges for applying RCTs.”¹³ While researchers have noted some of the challenges involved in RCTs in education, this research is largely not noted in the report.

While the authors pose a strong contrast between NCLB’s view of “scientifically based research” and the new “evidence-based” standard in ESSA, it is important to note that, in practice, there is not much difference between the two approaches. While ESSA does add a new tier of “promising” evidence, it still prioritizes and preserves NCLB’s emphasis on a small band of accepted research methods: RCTs (the new Tier I) and QEDs (the new Tier II). It is likely that encouragement (and enforcement) of acceptable evidence levels will rest with the states; perhaps they will be more open to drawing on Tier III evidence, and, in some cases, exploring Tier IV evidence. But at this point, the changing standards of evidence in ESSA look quite thin indeed, and are much more modest than the ones celebrated in the report. This calls into question some of the sweeping contrasts made in the report. Indeed, in places, the report veers into evangelism for advances in evidence-based research. For example, the authors write in the introduction:

The Center for American Progress and Knowledge Alliance *believe* that the evidence-based provisions of ESSA are a significant advancement in promoting the use of evidence to support schools in need of improvement and to achieve better student outcomes. CAP and Knowledge Alliance also *believe* that the shift away from federal mandates and toward greater state and local autonomy is a move in

the right direction. Together, these changes have the potential to drive a new era of school improvement in the United States. (p. 2, emphasis added)

In order to support some of the contrasts they develop between NCLB and ESSA, the authors reference researchers Kara Finnigan and Alan Daly who, they write, “have pointed out that the No Child Left Behind-era emphasis on scientifically based research has not resulted in a unified approach to ensuring that all students have effective schools.” The specific source by Finnigan and Daly is not included or cited in the report. Finnigan and Daly have indeed pointed to ways in which NCLB’s focus on scientifically based research has not led to wide school improvement. But their research underscores the complex, socially constructed ways that district and school leaders share and use data, and the importance of relationships of trust in school reform efforts.¹⁴

The authors, rather than taking up these claims, simply state, “Improving education will require that policymakers and educators alike reject whims, fads, and promotional claims in favor of reliable evidence.”¹⁵ This is a troubling over-simplification of Finnigan and Daly’s position, but also misses the significance of their research—and other scholarly work—on how stakeholders use and evaluate research in school reform efforts.¹⁶ This emerging research underscores that it is not so simple as urging policymakers and educators to “reject whims” in favor of “reliable evidence.” In contrast, Michael McPherson summarizes the complexity and depth of this process:

“This problem of how research becomes effective in practice is itself a social science question of considerable depth and complexity that deserves study in its own right. The paths by which research knowledge winds its way into the daily life of educational organizations, the paths by which practitioner knowledge is brought to bear and made to count in the research process, and the paths by which researchers become interested in problems of genuine importance to practice are complex and hard to understand and warrant systematic analysis and reflection.”¹⁷

While favoring flexibility for local decision-makers earlier in the report,¹⁸ the authors shift gears in this middle section, arguing that “struggling schools should not be left to their own devices to improve by trial and error—not when there are approaches that have a legitimate evidence base and not when time and resources are at a premium.”¹⁹ To make this point, they quote Rebecca Herman and colleagues, but do not name or cite a particular source. This argument is left undeveloped and unsubstantiated, but raises a number of questions about the report’s support for expanding the criteria of acceptable evidence and supporting states and districts to design context-specific school improvement strategies.

After these very general arguments, the latter part of the report focuses on a series of recommendations (geared to SEAs) that depart somewhat sharply from the discussion of evidence in the first part of the report. The recommendations are derived from a focus group con-

ducted with former state and local education agency employees, informal interviews, and “the reflections of the authors based on their school improvement work over the past two decades.”²⁰ The recommendations include the following points:

1. Define roles in the policy implementation process and create a theory of change
2. Support the use of evidence clearinghouses to identify promising approaches, rather than creating new state-approved lists
3. Encourage robust decision-making processes
4. Help ensure high-quality services from improvement providers
5. Promote and provide frequent, accurate, and timely communication
6. Partner with intermediaries to promote and support effective implementation
7. Facilitate effective implementation in districts, schools and classrooms
8. Promote continuous improvement and collective learning.

In addition, a separate text box in the report summarizes a 2013 paper by Education Northwest staff that looked closely at the flawed implementation of an intervention in one district.²¹ This earlier paper’s literature review, focusing on the factors that contribute to implementation success, is briefly summarized in bullet points in the new report.²² The authors also note three issues raised by district stakeholders in this previous study, including the importance of following district procedures for adopting new programs, reviewing evidence on program effectiveness and ensuring that a new program aligns with district policies and goals.

After short summaries of each recommendation, a brief two-paragraph conclusion restates the authors’ faith in evidence-based approaches, especially ones that can be flexible to local needs. The report concludes: “It cannot be known with absolute certainty what results will be achieved when school leaders select evidence-based school improvement approaches because no one can predict the future with 100 percent accuracy. What is known, however, is that evidence-based approaches—when wisely chosen and implemented to meet specific local needs—offer the best chance of success.”²³

III. The Report’s Rationale for its Findings and Conclusions

The report has two distinct aims and sections, which have slightly different flaws. The first section of the report aims to clarify the new definition of “evidence-based” employed in ESSA for policymakers and practitioners. The report does, indeed, reproduce the relevant sections from the new law, but does little to explicate the relevance of these definitions for practice. More so, the brief explanation offered minimizes the significance of the *tiers* of evidence: for ESSA, some forms of evidence should be prioritized above others. The authors do

note, “that—all things being equal—districts and schools should use improvement approaches with the strongest level of evidence.” This implies that districts and schools have considerably more autonomy over these decisions than may be the case. While ESSA does include a third tier of evidence (reserved for correlational studies with acceptable controls), it also underscores that such studies should only be used if other forms of evidence are unavailable.

In this sense, the report exaggerates the distinctions between NCLB’s standard of scientifically-based research and ESSA’s guidance on evidence-based practice. The use of the term “evidence-based” in ESSA is not actually a significant departure from recent federal education policy. Indeed, in a post-NCLB era, the Department of Education has prioritized the use of the term “evidence-based” in many of its discretionary grant programs and funding competitions, including “Race to the Top,” which asked for states to employ “evidence-based” interventions and approaches to school improvement. In many ways, the “new” definition of evidence-based research is a continuation of previous requirements from the Department of Education, including its i3 grant programs, as well as other federal programs.²⁴ Federal efforts to convert evidence-based concepts into policy were detailed in the 2014 book, *Show Me The Evidence: Obama’s Fight for Rigor and Results in Social Policy*.²⁵ While ESSA does rewrite policy in decisive ways, the law’s shifting standards of evidence are both more gradual and mild than presented in this report.

The report exaggerates the distinctions between NCLB’s standard of scientifically-based research and ESSA’s guidance on evidence-based practice.

The second major part of the report turns to practice. Here, the report makes eight very general recommendations about the collaborative implementation of intervention programs. While the authors note that these findings are based on a focus group and informal interviews, little to no direct evidence is included to support these recommendations. The recommendations often read as relatively non-con-

troversial aphorisms (e.g., “states should communicate about the importance of using evidence for improvement,” or “state education agencies should reach out to their education service agencies”). While not bad advice, certainly, the recommendations are disconnected from any data sources, research evidence, or many of the difficult complexities of practice that—while mentioned—remain unexplored.

Chief among these unaddressed complexities is how districts and schools will be able to wade through various sources of evidence, make judgments about the strength and reliability of that evidence, and use that evidence to justify their choices of interventions. The authors do briefly note the existence of various resources designed to help practitioners evaluate the effectiveness of educational interventions, such as the What Works Clearinghouse (WWC) and the Regional Education Laboratories (RELs). They also argue that states should help support local decision-making, not create lists of approved programs. Yet, beyond exhorting practitioners to make use of these existing resources, they offer little advice for how local decision-makers might evaluate these available resources in light of these changing standards of evidence. More interestingly, the authors contend that schools and districts should not only consider the strength of the available evidence, but also think about the fit and alignment of an intervention in its local context. Here, their position moves away—at

least to some degree—from the specific tiers of evidence posed by ESSA, and encourages local stakeholders to make decisions that might incorporate a *wider* view of evidence. Yet this shift raises real challenges for local decision-makers: how should they integrate the available evidence base with insights from their local contexts? When and how might it be appropriate to move away from the Tier I and Tier II evidence base, and to what degree?

These are challenging questions, and ones that call for more detailed analysis. At the start of the report, the authors briefly reference one of the major challenges facing SEAs and districts. They ask, somewhat rhetorically, “Entering the era of evidence-based school improvement, state education agencies are asking: Will the evidence-based policy elements of ESSA be any different, or will education product and service providers simply replace “scientifically based” with “evidence based” in their promotional materials? Will anything change for the better?”²⁶ Here, the authors raise—but do not address—a key new challenge for schools and districts: considering a huge amount of possible interventions in a highly marketized environment, where curriculum developers have strong incentives to establish themselves as “evidence-based.” District and school officials are often bombarded with marketing materials for various curricula and intervention programs; this material is, of course, often simpler and easier to understand than studies about the relative effectiveness of materials available from research-based sources, including the WWC. Beyond being able to evaluate the strength of evidence, an additional challenge may be helping local decision-makers become critical and skeptical consumers of research. In addition to effect sizes, they may also need to think about the sponsorship of research studies, as well as distinctions between scholarly research and advocacy pieces. Without such conversations, the new—and complex—landscape of choices may merely advantage private curriculum developers and intervention models.

IV. The Report’s Use of Research Literature

While noting the importance of research evidence, the report’s use of research literature is weak. As noted earlier, the authors do reproduce key sections from ESSA, but do not explain or contextualize these passages with any secondary literature. While seeking to distinguish the new “evidence-based” standard from NCLB’s focus on “scientifically based research,” the authors do not draw on the sustained and thoughtful considerations of these differences that have been posed by researchers. Instead, the authors make claims that rest on conjecture and supposition (e.g., “It seemed over the past decade that decision-makers were constantly hearing from researchers and experts that almost nothing works,” or “This new strategy for using evidence seems more suited to the reality of the existing research base in education and the choices available to decision-makers”).²⁷

In general, there are very few research-based sources cited to support the claims in this report. Only 18 end notes are provided, drawn from 11 unique sources. Four of the notes sim-

ply refer to laws and two more are explanatory notes to the text. Only a few research-based articles are cited. Also troubling were the numerous references to authors who are either not cited in the bibliography, or are cited to a secondary source. For example, the authors quote Sam Stringfield and Rebecca Herman, but without citing the sources of those quotations. Likewise, researchers are invoked with citation (e.g., Finnigan and Daly), or only through a secondary source (e.g., Dobbie and Fryer's work is noted, but the source cited is a CAP report).²⁸ Without a stronger basis in the available literature, many of the report's conclusions remain assertions, rather than arguments supported by evidence.

V. Review of the Report's Methods

The authors state that they based their eight recommendations “on a March 2016 focus group of former state and local education agency employees; informal interviews with education administrators and improvement experts, also conducted in March 2016; and the reflections of the authors based on their school improvement work over the past two decades.”²⁹ Beyond this sentence, however, there is no explanation of the methods they used. For instance, how many participants were part of the focus group? The informal interviews? How were such participants identified and recruited? How were these interviews and the focus group conducted, and by who? What kinds of data were gathered and how was this data analyzed? In what ways do the recommendations draw on this data?

Beyond these questions, there is little to any mention of any of the results from these interviews or focus groups. There are no direct quotes from participants, references to key examples, or any summary of the findings from these efforts. Here, it is worth returning to the standards of evidence championed throughout the report. The methods employed by the researchers would certainly not qualify in any of the tiers of evidence, and also fall short of well-recognized standards for quality research, regardless of design.

VI. Review of the Validity of the Findings and Conclusions

As noted earlier, the major findings of the report include eight general recommendations for how state and local decision-makers might implement interventions in light of the changes proposed in ESSA. The recommendations lack a grounding in both the available research base and in the empirical study conducted by the report's authors. Beyond a lack of evidence, the conclusions remain curiously disconnected from the first part of the report, which reviews the shifting standards of research evidence. The report's recommendations and conclusions might have been stronger and more specific if tied to the specific changes posed in ESSA. As is, the report is organized into two separate and disconnected pieces, which do not logically connect to one another.

VII. Usefulness of the Report for Guidance of Policy and Practice

It's important to underscore that this is a preliminary report and the future directions of ESSA are still very much up in the air. Indeed, the details of implementation will continue to develop—and vary by state—throughout this year. For this reason, some of the uncertainty or vagueness in the report's recommendations quite likely (and legitimately) reflect the uncertainty of the policy field. Yet, it is worth thinking about the usefulness of the report against its own two main aims: (1) to clarify the new definition of “evidence-based” employed in ESSA, and (2) to offer guidance to practitioners in making evidence-based decisions. As noted above, the report does not offer much clarity on the definition of evidence posed by ESSA, and—in some cases—overplays its contrast with previous standards of evidence offered in NCLB and subsequent federal programs. In addition, the guidance offered to practitioners is vague and unsubstantiated.

The report also brushes over—and at times conflates—two very different views of how evidence interacts with policy and practice. These different narratives are not made explicit in the report, but it is worth noting how the two may in fact come into conflict with one another. In one view, the goal of research is to develop unbiased and rigorous evaluations of interventions, often through experimental or quasi-experimental designs.³⁰ Here, the goal is to find “proven strategies” to address educational challenges. Not all strategies will produce results; indeed, many interventions evaluated by the WWC have been found to have null effects on student outcomes.³¹ The goal, however, is to find at least a few positive interventions and then replicate—or take them “to scale” across different educational contexts. This rationale has been broadly influential in shaping the design and policies of federally-sponsored educational research, including the investment in the What Works Clearinghouse (WWC). While successful interventions have been identified through these efforts, other evaluations have pointed to the complexity of evaluating curricular interventions and the need for more replication studies across unique contexts.³²

A contrasting perspective challenges the paradigm of moving from research *to* practice, and calls instead for thinking about the *interaction* between research and practice, as well as for the diverse ways that research is acquired and used.³³ As Nancy Cartwright argues, “the project needs to be approached from the point of view of the evidence user, not the evidence producer.”³⁴ Scholars have pointed to the deeply contextual nature of policy and program implementation, and how local contexts can be powerful sources of research evidence and educational improvement. Fred Erickson and Kris Gutiérrez, for instance, have argued that rigorous evaluation must involve careful, qualitative documentation of what actually happens in a given intervention, and, more importantly, how students and teachers adapt to—and also creatively alter—interventions in dynamic local contexts.³⁵ Building on these insights, a number of scholars and federal programs have started to explore these “persistent problems of practice,” focusing on how interventions become relevant to specific local contexts.³⁶

This alternate perspective has shaped emerging research into the complex and interactive

relationship between research and practice. For instance, experiments in design-based implementation research (DBIR) and Research Practice Partnerships (RPPs) have explored how to design context-specific and embedded forms of research that work with practitioners to evaluate programs and continuously improve implementation. These initiatives, while promising, pose a very different view of research—and its connection to practice—than the expert-driven model. As Bill Penuel and Caitlin Farrell contend:

...While traditional research and development imagines a one-way path from research to practice, partnerships are a two-way endeavor, with practice informing the questions researchers ask and making research more relevant. In partnerships, researchers and educators work together to search for and test solutions to practice, blending ideas and evidence from research with the wisdom of practice.³⁷

Such partnerships, they argue, offer ways to reimagine ESSA's commitment to evidence-based practice. These partnerships also focus on the *use* of evidence, understood as an “an interactive process that is most likely to take place when there are sustained opportunities for interactions between researchers and educators.”³⁸

ESSA, while still wedded to very particular research designs, does transfer considerable authority for the design and implementation of evidence-based practice to states and districts. As implementation unfolds over the coming year, these groups will indeed need guidance for how to navigate the complex—and at times conflicting—views of the relationship between research evidence and practice. Evidence-based policy is an easy thing to agree about: who is against evidence? But the harder conversations—and the questions to come—involve what counts as evidence, and who gets to determine the evidence that is most relevant to local contexts. While this report raises a number of important issues, it leaves this difficult and important work undone. But, new models and research *do* offer considerable insights for practitioners, in ways that may better address the challenges identified in this report.

Notes and References

- 1 Every Student Succeeds Act. (Public Law No: 114-95). (2015). Washington, D.C.: United States Congress. Retrieved October 25, 2016, from <https://www.congress.gov/bill/114th-congress/senate-bill/1177/text>
- 2 For context on the development of this definition of “scientifically based research,” and efforts by the scientific community to influence this process, see: Eisenhart, M., & Towne, L. (2003). Contestation and change in national policy on “scientifically based” education research. *Educational Researcher*, 32(7), 31-38.

David Berliner (2002, p. 18) has noted that NCLB’s definition of scientifically based research “confuses the methods of science with the goals of science.” See: Berliner, D C. (2002). Comment: Educational research: The hardest science of all. *Educational Researcher*, 31(8), 18-20.
- 3 For an advocate’s position, see: Slavin, R.E. (2002). Evidence-based education policies: Transforming educational practice and research. *Educational Researcher*, 31(7), 15-21.

For a description of central criticisms, see: Feuer, M.J., Towne, L., & Shavelson, R.J. (2002). Scientific culture and educational research. *Educational Researcher*, 31(8), 4-14.

These definitions of scientifically based research (SBR) were the focus of the National Research Council’s 2002 publication, *Scientific Research in Education*, which underscored six broad principles for high-quality, scientific research in education. See, Shavelson, R.J., & Towne, L. (Eds.). (2002). *Scientific research in education*. Washington, D.C.: National Academies Press.
- 4 See discussion in: Lam, L., Mercer, C., Podolsky, A., & Darling-Hammond, L. (2016). *Evidence-Based Interventions: A Guide for States*. Palo Alto, CA: Learning Policy Institute.
- 5 Feuer, M J., Towne, L., & Shavelson, R.J. (2002). Scientific culture and educational research. *Educational Researcher*, 31(8), 4-14.
- 6 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>
- 7 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 1
- 8 The authors cite the 2016 Rand Report, *School Leadership Interventions Under the Every Student Succeeds Act*. Note: this report was recently updated and expanded (the link cited in the CAP report is no longer active). The most recent version (released December 13, 2016) is: Herman, R., Gates, S.M., Arifkhanova, A., Bega, A., Chavez-Herrerias, E.R., Han, E., Harris, M., Tamargo, J. & Wrabel, S. (2016). *School Leadership Interventions Under the Every Student Succeeds Act: Evidence Review. Updated and Expanded*. Retrieved December 13, 2016, from http://www.rand.org/content/dam/rand/pubs/research_reports/RR1500/RR1550-1/RAND_RR1550-1.pdf

- 9 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*, Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 5
- 10 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 5
- 11 US Department of Education. (2016, September 16). *Non-Regulatory Guidance: Using Evidence to Strengthen Educational Investments*. Passages cited from p. 8. Retrieved October 25, 2016, from <https://www2.ed.gov/policy/elsec/leg/essa/guidanceusesinvestment.pdf>
- 12 Ginsburg, A. & Smith, M.S. (2016) *Do Randomized Controlled Trials meet the Gold Standard? A Study of the Usefulness of RCTs in the What Works Clearinghouse*. Washington: American Enterprise Institute. Retrieved October 15, 2016, from <https://www.aei.org/wp-content/uploads/2016/03/Do-randomized-controlled-trials-meet-the-gold-standard.pdf>
- 13 Ginsburg, A. & Smith, M.S. (2016) *Do Randomized Controlled Trials meet the Gold Standard? A Study of the Usefulness of RCTs in the What Works Clearinghouse*. Washington: American Enterprise Institute. Retrieved October 15, 2016, from <https://www.aei.org/wp-content/uploads/2016/03/Do-randomized-controlled-trials-meet-the-gold-standard.pdf>, page 6
- 14 See, for instance, these examples:

 Daly, A.J., & Finnigan, K.S. (2011). The ebb and flow of social network ties between district leaders under high-stakes accountability. *American Educational Research Journal*, 48(1), 39-79.

 Daly, A.J., Finnigan, K.S., Jordan, S., Moolenaar, N.M., & Che, J. (2014). Misalignment and perverse incentives: Examining the politics of district leaders as brokers in the use of research evidence. *Educational Policy*, 28(2), 145-174.

 Finnigan, K.S., & Daly, A.J. (2014). *Using Research Evidence in Education*. Cham, Switzerland: Springer International Publishing.
- 15 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 8
- 16 For examples of different scholarship on the complexities of “research use” see:

 Finnigan, K.S., & Daly, A.J. (2014). *Using Research Evidence in Education*. Cham, Switzerland: Springer International Publishing.

 Lubieniski, C., Scott, J., & DeBray, E. (2014). The politics of research production, promotion, and utilization in educational policy. *Educational Policy*, 28(2), 131-144.

 Penuel, W.R., Fishman, B.J., Cheng, B.H., & Sabelli, N. (2011). Organizing research and development at the

intersection of learning, implementation, and design. *Educational Researcher*, 40(7), 331-337.

Tseng, V. (2012). The Uses of Research in Policy and Practice. Social Policy Report. *Society for Research in Child Development*, 26(2).

Tseng, V., & Nutley, S. (2014). Building the infrastructure to improve the use and usefulness of research in education. In K.S. Finnigan & A.J. Daly (Eds.), *Using Research Evidence in Education* (pp. 163-175). Cham, Switzerland: Springer International Publishing.

- 17 McPherson, M.S. (2004). President's comments: The continuing relevance of Lyle Spencer's vision. The Spencer Foundation 2003–2004 Annual Report. Chicago, IL: The Spencer Foundation, p. 8–9. Cited in Tseng, V. (2012). The Uses of Research in Policy and Practice. Social Policy Report. *Society for Research in Child Development*, 26(2).
- 18 Consider their claim, on page 7 (the immediately previous page): “This broader array of choices may help them find approaches that are best suited to local needs and improvement plans.”
- 19 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 8
- 20 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 10
- 21 The source for the information in the textbox, while referencing “studies,” cited the following paper as the sole source: Caitlin Scott, Jason Greenberg Motamedi, and Angela Roccograndi, *Making Lemonade: Learning from Program Selection and Implementation Challenges*, Paper presented at the annual meeting of the American Education Research Association, San Francisco, California, April 27, 2013. Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, pages 18-19
- 22 The points from the literature review are fairly general, and include advice to obtain strong buy-in, schedule adequate planning time, provide strong leadership, remain adaptable and evaluate the initiative.
- 23 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 22
- 24 The Obama administration has created five “evidence-based innovation programs” that employ similar tiers of evidence standards. While these have not been subject to extensive research, these initiatives were described by an advocacy group: Results for America (2015). *Federal Evidence-Based Innovation Programs*. Retrieved October 15, 2016, from <http://results4america.org/wp-content/uploads/2015/10/Innovation-fact-sheet.pdf>

- 2 Haskins, R., & Margolis, G. (2014). *Show me the evidence: Obama's fight for rigor and results in social policy*. Washington, D.C.: Brookings Institution Press.
- 26 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 2
- 27 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, pages 2 and 7, respectively
- 28 Daly & Finnigan are mentioned on p. 8; the Dobbie & Fryer study (not cited directly, but referenced in a secondary source) is mentioned on p. 9. Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, pages 8-9
- 29 Fleischman, S., Scott, C. & Sargrad, S. (2016). *Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act*. Washington, DC: Center for American Progress (CAP) and the Knowledge Alliance. Retrieved September 17, 2016, from <https://www.americanprogress.org/issues/education/report/2016/08/31/143223/better-evidence-better-choices-better-schools/>, page 10
- 30 Dynarski, M. (2006). Advancing the Use of Scientifically Based Research in Forming Policy: A Response to Mahoney and Zigler. *Applied Developmental Science* 27: 295-97. Cited in Penuel & Farrell (in press). Research-practice partnerships and ESSA: A learning agenda for the coming decade. In E. Quintero-Corrall (Ed.), *The social side of reform*. Cambridge, MA: Harvard Education Press.
- 31 See Coalition for Evidence-Based Policy. (2013). *Randomized Controlled Trials Commissioned by the Institute of Education Sciences Since 2002: How Many Found Positive Versus Weak or No Effects*. Retrieved October 15, 2016, from <http://coalition4evidence.org/wp-content/uploads/2013/06/IES-Commissioned-RCTs-positive-vs-weak-or-null-findings-7-2013.pdf>
- 32 See Ginsburg, A. & Smith, M.S. (2016) *Do Randomized Controlled Trials meet the Gold Standard? A Study of the Usefulness of RCTs in the What Works Clearinghouse*. Washington: American Enterprise Institute. Retrieved October 15, 2016, from <https://www.aei.org/wp-content/uploads/2016/03/Do-randomized-controlled-trials-meet-the-gold-standard.pdf>, pages 1-2

Ginsburg & Smith (2016) also reference other evaluations of the What Works Clearinghouse efforts, including:

Confrey, J., & Stohl, V. (2004). National Research Council. *On Evaluating Curricular Effectiveness: Judging the Quality of K–12 Mathematics Evaluations*. Washington, DC: National Academies Press. Retrieved October 1, 2016, from <http://www.nap.edu/catalog/11025.html>, p.191

Confrey, J. (2006). Comparing and Contrasting the National Research Council Report ‘On Evaluating Curricular Effectiveness’ with the What Works Clearinghouse Approach,” *Educational Evaluation and Policy Analysis* 28(3): 195-213.

Schoenfeld, A.H. (2006). What doesn't work: The challenge and failure of the What Works Clearinghouse to conduct meaningful reviews of studies of mathematics curricula. *Educational Researcher*, 35(2), 13-21.

Cheung, A.C., & Slavin, R.E. (2013). The effectiveness of educational technology applications for enhancing mathematics achievement in K-12 classrooms: A meta-analysis. *Educational Research Review*, 9, 88-113.

- 33 Tseng, V. (2012). The uses of research in policy and practice. *Social Policy Report*, 26(2), 1-24.
- 34 Cartwright, N. (2012). Presidential address: Will this policy work for you? Predicting effectiveness better: How philosophy helps. *Philosophy of Science*, 79(5), 973-989.
- 35 Erickson, F., & Gutiérrez, K. (2002). Culture, rigor, and science in educational research. *Educational Researcher*, 31(8), 21-24.
- 36 For a thoughtful summary of these shifts, and the need to account for such "problems of practice," see: Gutiérrez, K.D., & Penuel, W.R. (2014). Relevance to practice as a criterion for rigor. *Educational Researcher*, 43(1), 19-23.
- 37 Penuel, W.R., & Farrell, C. (in press). Research-practice partnerships and ESSA: A learning agenda for the coming decade. In E. Quintero-Corrall (Ed.), *The social side of reform*. Cambridge, MA: Harvard Education Press.
- 38 Penuel, W.R., & Farrell, C. (in press). Research-practice partnerships and ESSA: A learning agenda for the coming decade. In E. Quintero-Corrall (Ed.), *The social side of reform*. Cambridge, MA: Harvard Education Press.

DOCUMENT REVIEWED:

Better Evidence, Better Choices, Better Schools: State Supports for Evidence-Based School Improvement and the Every Student Succeeds Act

AUTHORS:

Steve Fleischman, Caitlin Scott & Scott Sargrad

PUBLISHERS/THINK TANKS:

Center for American Progress and the Knowledge Alliance

DOCUMENT RELEASE DATE:

August 31, 2016

REVIEW DATE:

January 12, 2017

REVIEWER:

Terri S. Wilson, University of Colorado Boulder

E-MAIL ADDRESS:

terri.wilson@colorado.edu

PHONE NUMBER:

(303) 492-5785

SUGGESTED CITATION:

Wilson, T.S. (2016). *Review of "Better Evidence, Better Choices, Better Schools."* Boulder, CO: National Education Policy Center. Retrieved [date] from <http://nepc.colorado.edu/thinktank/review-CAP>